

REQUEST FOR PROPOSAL FOR

“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area” under implementation of Smart City Mission.

The detailed RFP including EMD, TOR, Eligibility criteria etc., can be downloaded from website of www.apecurement.gov.in from **14TH October 2018 onwards. *The last date for online submission of bids is 14TH December 2018 up to 5.00 PM.***

For more details contact:

Greater Visakhapatnam Smart City Corporation Ltd.

E-mail: PMC: Email: Prabhu.Sheelavantha@aecom.com

Cc: visakhapatnamsmartcity@gmail.com, commissioner_gvmc@yahoo.co.in

Tel No./Fax 0891-2746300

Mobile No. 09901472092, 07729995934

**Sd/-
MD & CEO,
GVSCCL**

CONTENTS OF BID DOCUMENTS

1. INVITATION FOR BIDS (IFB)
2. INSTRUCTION TO BIDDERS (ITB)
3. GENERAL CONDITIONS OF CONTRACT (GCC)
4. SPECIAL CONDITIONS OF CONTRACT (SCC)
5. TECHNICAL SPECIFICATIONS (TS)
6. FORMS AND FORMATS

DISCLAMIER:

1. Though adequate care has been taken while preparing the Bidding documents, the Bidders/Applicants shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within twenty (20) days from the date of notification of RFP/Issue of the RFP documents, it shall be considered that the RFP documents complete in all respects has been received by the Bidder.
2. Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) (The Employer), reserves the right to modify, amend or supplement this RFP documents including all formats and Annexures.
3. While this bidding documents have been prepared in good faith, neither GVSCCL or its authorized representatives or their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this bidding documents, even if any loss or damage is caused by any act or omission on their part.
4. The specification mentioned for all the equipment in the present bidding documents is for the reference minimum requirement only. It may be subject to revision/alteration as per the design/ planning/Good engineering practices etc., to be carried out by the selected bidder, to the satisfaction of the Employer or its authorized representatives. It is advised that the bidders must satisfy himself with the prevailing site conditions before design/ plan. The design must be optimized for the site conditions and directed to achieve the maximum output form the installed capacity at all times. Moreover, the components not separately mentioned, but required to complete the Project for successful operation is also deemed to be included in the scope of bidder and shall be vetted by the Employer or its authorised representatives.

Managing Director & CEO,

GVSCCL

Place:

Declaration by Bidder:

The bidding document has been read by me and it is confirmed that all condition/provision of RFP have been understand & taken care in the bid proposal.

Date:

(Signature)

Name and Designation of bidder

SECTION - I

REQUEST FOR PROPOSAL (RFP)

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

GREATER VISAKHAPATNAM SMART CITY CORPORATION LIMITED, VISAKHAPATNAM

RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018

BID DOCUMENTS

FOR THE WORK of **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission.

1. Project Overview:

Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) (hereinafter called as “Employer”) invites online bids from eligible bidders on Single stage - Two envelop bid system in the prescribed forms and formats, for **Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area**, as per the Scope of Work mentioned hereinafter.

2. Brief Scope of Work:

The Brief Scope of the Work shall include, but not limited to Survey, Design, Engineering, Procurement & Supply, Packing & Forwarding, Transportation, Unloading, Storage, Construction, Erection & Installation of equipment, Testing & commissioning and comprehensive O&M for 5 (Five) years of the All in One Solar LED Street Light and maintaining the required lux levels thereafter.

- 2.1. Site Survey and feasibility.
- 2.2. The bidder shall have to design, install and commission All in One Solar LED Street Lights at various locations in ABD, each of which shall comply with the IS standards.
- 2.3. All the civil and mechanical works with materials required for installation of All in One Solar LED Street Light including excavation, RCC work for making pedestal and mounting structure for the solar street light fixture.
- 2.4. Testing and measuring the lumen of street light after successful completion of work.
- 2.5. Comprehensive operation & maintenance of the All in One Solar LED Street Lights for 5 (Five) years after successful commissioning and performance demonstration, as technical specification including supply and storage of all spare parts, consumables, repairs/ replacement of any defective equipment etc.
- 2.6. Obtaining all associated statutory and regulatory compliances and approvals for successful

construction, commissioning, operation of Solar Street Lights.

2.7. The detailed scope of work is given in Section V: Technical specifications of this bidding documents.

3. Bid Information:

3.1. The bidding documents which include detailed scope of work, Instruction to bidders, Specifications, Terms & conditions, formats etc., can be downloaded from www.apecurement.gov.in.

No hard copies of bidding documents shall be issued for this RFP.

3.2. Brief details of the project are as follows:

SL.NO	DETAILS	PARTICULARS
1	Name of the Office	Managing Director & CEO, Greater Visakhapatnam Smart City Corporation Limited
2	RFP Notice	<u>GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018</u>
3	Name of the Work	“ Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works” under implementation of Smart City Mission.
4	Location	ABD Area, Visakhapatnam District.
5	Estimated Contract Value	N.A
6	Period of Contract	Twelve (12) Months from the date of award/LOI
7	Form of Contract	L.S. as per schedules provided
8	Tender Type	OPEN
9	BID SECURITY(EMD)	Rs.15.00 Lakhs(Rupees Thirteen Lakhs Only)
10	Form of BID Security	In the Form of Bank Guarantee. The Bank Guarantee shall be obtained from a Nationalized/Scheduled Bank in the prescribed Proformae (enclosed Appendix). The BG should have Validity Period of 180 Days
11	RFP Download Start Date & Time	14-11-2018, 5.00 PM onwards
12	Last date of receipt of queries on Tender	By Electronic submission/Physical Submission 27-11-2018, 5.30 PM. Replies to the Pre-Bid addendum queries will be uploaded in E-Procurement Platform as corrigendum/addendum. NOTE: The Bidders shall check the addendum before final submission of bids.
13	Pre- Bid Meeting & Date & Time	03-12-2018, 04.00 PM
14	RFP Download End Date & Time	14-12-2018, 3.00 PM

15	Bid Submission Closing Day & Time	14-12-2018, 5.00 PM
16	Bid Validity	180 Days from Bid Submission Closing Date.
17	Pre-Qualification/Opening of Technical Bid	14-12-2018, 5.30 PM
18	Price Bid Opening Date & Time	17-12-2018, 5.00 PM
19	Transaction Fee Payable to 'APTS' payable @	(As per G.O.Ms.No.4 dated 17-02-2015 IT & C Dept.) Rs.10000 (Cap Fixed as per G.O)
20	Officer Inviting Bids	Managing Director, Greater Visakhapatnam Smart City Corporation Limited(GVSCCL), Visakhapatnam
21	Bid Opening Authority	Managing Director (GVSCCL)
22	Department Address for Submission of Documents	ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin:530003 Telephone: +91-891-2746301-7 Facsimile No: +91-891-2568545 Electronic mail address: visakhapatnamsmartcity@gmail.com Web page: www.apecprocurement.gov.in (for downloading, Uploading and submission of Bids). PMC: Email: Prabhu.Sheelavantha@aecom.com
23	Submission of Hard Copies	Within 2 Days from the Bid Submission Closing Day along with the original BG of EMD and copies of the uploaded documents.

Procedure for Bid Submission:

The bidder shall submit his response through Bid Submission to the tender on eProcurement platform at www.apecurement.gov.in by following the procedure given below. The bidder would be required to register on the e-procurement market place www.apecurement.gov.in or <https://tender.apecurement.gov.in> and shall submit their bids online only. The bidders shall submit their eligibility and qualification details, Technical bid, Financial bid etc., in the online standard formats displayed in e Procurement web site. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria/technical bids and other certificate/documents in the eProcurement web site. The bidder shall sign on the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. Two hard Copies of uploaded technical documents shall be submitted as per the requirement of RFP. If Financial Bid/Proposal is submitted in hard copy, the bid shall be rejected. Failure to submit the hard copies of technical proposal shall be treated as non-responsive.

The bidder shall attach all the required documents for the specific tender after uploading the same during the bid submission as per the tender notice and bid document. Registration with eProcurement platform:

For registration and online submission bidders may contact HELP DESK www.apecurement.gov.in or <https://tender.apecurement.gov.in>

Digital Certificate authentication: The bidder shall authenticate the bid with his Digital Certificate for submitting the Bid electronically on eProcurement platform and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-procurement platform. For obtaining Digital Signature Certificate, you may please Contact: Andhra Pradesh Technology Services Limited BRKR Bhavan, B-Block, Tank bund Road, Hyderabad-500022. Phone: +91-40-23220305, Fax: +91-40-23228057 (OR) you may please contact Registration Authorities of any Certifying Authorities in India. The list of CA's available can be viewed by clicking the link <https://tenderapecurement.go.in/digital-signature.html>

Hard copies: (i) vide ref. G.O.Ms. No174, I& CAD dept. dated 1-9-2008, and submission of original hardcopies of the uploaded scanned copies of Proof of online payment (Remittance) /BG towards EMD/Bid Security by participating bidders to the tender inviting authority before the opening of the price bid is dispensed forth with. (ii)All the bidders shall invariably upload the scanned copies of Proof of Online Payment (remittance)/BG in eProcurement system and this will be the primary requirement to consider the bid responsive. (iii)The department shall carry out the technical evaluation solely based on the uploaded certificates/documents, Proof of Online Payment. (Remittance/BG towards EMD in the eProcurement system and open the price bids of the responsive bidders. (iv)The department will notify the successful bidder for submission of original hardcopies of all the uploaded documents, Proof of online Payment (Remittance)/BG towards EMD prior to entering into agreement. (v)The successful bidder shall invariably furnish the original proof of online Payment (remittance/BG towards EMD, Certificates/Documents of the uploaded scan copies to the Tender Inviting Authority before entering into Agreement either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The department will not take any responsibility for any delay in receipt/non-receipt of original Proof of online Payment (Remittance/BG towards EMD, Certificates/Documents from the successful bidder before the stipulated time. On receipt of Documents, the department shall ensure the genuinity of the Proof of online Payment (Remittance)/BG towards EMD and all other certificates/documents uploaded by the bidder in eProcurement System. In support of the qualification criteria before concluding the agreement. The GO.Ms. No. 174-I&CAD dated 1-9-2008, Deactivation of Bidders, if any successful bidder fails to submit the original hard copies of uploaded certificates/documents, Proof of online Payment (Remittance)/BG towards EMD within stipulated time or if any variation is noticed between the uploaded documents and the hard copies submitted by the bidders the successful bidder will be suspended from participating in the Tenders in eProcurement platform for a period of 3 Years. The eProcurement system would deactivate the user ID of such defaulting bidder Based on the trigger/recommendation by the Tender Inviting Authority in the system. Besides this the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government. Other conditions

as per tender document are applicable. The bidder is requested to get a confirmed acknowledgement from the Tender Inviting Authority a proof of Hard Copies submission to avoid any discrepancy.

Payment of EMD: It is mandatory for all participant bidders to electronically pay EMD online by utilizing the “Payment Gateway Services on E-Procurement Platform”. The electronic payment Gateway accepts all Master and Visa-Credit Cards issued by any bank and Direct Debit facility/Net Banking/NEFT payment modes through ICICI Bank and /or Axis Bank Payment Gateways to facilitate the transaction. This is in compliance as per G.O. Ms. No.8 dated 8-05-2016. A service Tax of 15.00%+Bank charges on the transaction amount payable to APTS shall be applicable. In addition to this, Bidders can also pay the EMD through Download of PDF format of RTGS Challan for respective Payment Gateway and Pay the EMD through their Parent Bank account. Once the EMD is received by the E-Procurement application, Bidders can automatically continue with their BID Submission online.

IMPORTANT NOTE REGARDING EMD PAYMENT:

Bidders are encouraged to use only net banking facility for payment of EMD's as far as possible for faster refunds in case of unsuccessful Bids for the Tender.

Bidders are advised not to use RTGS Challan downloads at their penultimate hour of Bid submission closing as any delay by the banker would not enable Bid submission on the Platform. Please allow a minimum of 60 minutes for enabling “Continuation of Bid Submission” from the time the Pool Account receives credit of the EMD from the Bidder's Bank for both NEFT and RTGS transfers. For RTGS transfers, the Pool Account may be immediate credit whereas NEFT transfers would follow RBI payment cycle time.

Bidders are advised to pay the EMD online at least T-1or T-2 days before Bid submission closing date (T= Bid submission closing date) to avoid last minute delays and denials of successful Bid submission and to take care of any delays in banking procedures.

Unsuccessful Bidder EMD Refund Process: -The Bid is declared unsuccessful, under the following circumstances. Bid submitted by the bidder is not the lowest Bid. Upon finalisation of the L1 Bid. Technical Disqualification of the Bid in case of 2 cover system. EMD paid but bid not submitted. EMD refund will be initiated by the Tender Inviting Authority directly and through online only and through the same payment channels as EMD received by the Department. (RTGS/NEFT/Credit Card/Debit Card Refund), within 30 days from the date of publishing the Decision/Result. However, Vupadhi/GOAP will not be held responsible for the delays occurring due to banking channels/procedures/processes of the respective vendor.

IMPORTANT NOTE REGARDING EMD REFUNDS: Bidders are requested to use discretion in their choice of payment channel for remittance of EMD. Time taken for Refunds under Ideal conditions (1). Net Banking/NEFT/RTGS Challan: One (1) Banking Business Day from time of initiation of refund by Tender Inviting Authority subject to RTGS/NEFT timings of RBI. (2) Credit Card/Debit Card: 7-10 working days from time of initiation of refund of Tender by the Tender Inviting Authority. However, this may be longer in case of certain Bank Cards. In case of delays, Bidders are requested to contact the card issuing bank for faster resolution.

Payment of Transaction Fee: It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a Non-refundable Transaction Fee to M/s. APTS, the service providers through “Payment Gateway Service on E-Procurement Platform”. The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any Band and Direct Debit facility/Net Banking of ICICI Bank, Axis Bank to facilitate the transaction. This is in compliance as per G.O. Ms. 13 dated 07-05-2006. A service Tax of 15.00 % plus (+) Bank charges on the transaction amount payable to APTS shall be applicable.

Corpus Fund: As per G.O.Ms.No. 4 User Departments shall collect 0.04% of ECV (Estimated Contract Value) with a cap of Rs.10000/-(Rupees Ten Thousand only) for all works with ECV up to Rs.50.00 crores, and Rs.25000 (Rupees Twenty-Five

Thousand Only) for works with ECV above Rs.50.00 crores, from successful bidders on e-Procurement Platform before entering into agreement/issue of purchase orders towards e-procurement fund in favour of Managing Director APTS. There shall not be any charge towards e-procurement fund in case of works, goods and services with ECV less than and up to Rs.10.00 Lakhs.

Tender Document: The bidder is requested to download the tender/RFP document and read all the terms and conditions mentioned in the tender Document and seek clarification/s from **any from** the Tender Inviting Authority. Any offline bid submission clause in the tender document could be neglected. The bidder has to keep track of any changes by viewing the Addendum/Corrigendum issued by the Tender Inviting Authority on time- to- time basis in the E-procurement platform. The Department calling for tenders shall not be responsible for any claims /problems arising out of this.

Bid Submission Acknowledgement: The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. User may also note that the bids for which an acknowledgement is not generated by the E-procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the Tender Inviting Authority for processing the bids. The Govt. of AP is not responsible for incomplete bid submission by users.

3.3. All bids must be accompanied by

- 3.3.1. A Bid Security of INR 15,00,000/- [Rupees Fifteen lakhs only] in the form as stipulated in the Bidding Documents.

ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE BID SECURITY IN A SEPARATE SEALED ENVELOPE SHALL BE REJECTED AS BEING NON-RESPONSIVE AND RETURNED TO THE BIDDERS WITHOUT BEING OPENED.

4. Qualifying Requirements (QR) for Bidders:

Bidder shall meet the qualifying requirement stipulated hereunder:

4.1. General

- 4.1.1. The Bidder should be a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto and engaged in the business of Solar Power/lighting. A copy of certificate of incorporation shall be furnished along with the bid in support of above.
- 4.1.2. The bidder should have a valid GST Registration. A copy of GST registration certificate shall be furnished along with the bid in support of above.
- 4.1.3. In case of a Bidding in JV/Consortium the Financial Eligibility criteria like Annual turnover or Net Worth and the Technical Eligibility Criteria shall be fulfilled by all the JV/Consortium Members. However each member should have minimum 30 % of required financial and technical eligibility criteria.
- 4.1.4. In case bidder submitting bid through JV/Consortium, a JV/Consortium Agreement shall be furnished along with the bid. The maximum number of members allowed in a Consortium is 3 (three).
- 4.1.5. Any domestic bidder, as per IFB Clause 4.1.1, having their installations in India and abroad are allowed to bid.

4.2. Technical Eligibility Criteria:

- 4.2.1. The intending bidder must have internal and third party test reports/certificates from a government accredited NABL/MNRE test laboratories for the products to be supplied. Internal and third party test reports/certificates from a government accredited NABL/MNRE test laboratories for the products to be submitted.
- 4.2.2. The bidder should have designed, procured, supplied, erected, commissioned and

- maintained
- i. 3 (Three) different Projects of Standalone Solar Street Lights/Street Lights - Minimum quantity of lights not less than 1000 Nos, in last 10 financial years ending with 2017-18.
OR
 - ii. 2 (Two) different Projects of Standalone Solar Street Lights/Street Lights - Minimum quantity of lights not less than 1300 Nos, in last 10 financial years ending with 2017-18.
OR
 - iii. 1(One) Project of Standalone Solar Street Lights/Street Lights Minimum quantity of lights not less than 2000 Nos, in last 10 financial years ending with 2017-18.
 - iv. The reference projects must have been in successful operation prior to the date of techno-commercial bid opening as per appendix 16.
- 4.2.3. Bidder shall submit, in support to the above, the list of projects commissioned along with their work order/ LOI and the commissioning certificates along with the letter confirming successful operation & maintenance and satisfactory performance from the Employer/client.
 - 4.2.4. The bidder should upload Photometry Test (LM 79 Report) and LM80 compliance certificate to be adhered by the LED manufacturer. LED data sheet should comprise of lumen output, junction temperature, pad temperature, thermal resistance, and LED drive current. Test Compliance for LED is LM 80 (IS-16105) and Test Compliance for Fixture is LM 79 (IS-16106, IEC 60598/IS:10322). The bidder shall submit test compliance at the time of submission of the bid.
 - 4.2.5. Bidder should upload Lighting design report indicating the Average illuminance (lux), uniformity, maximum and minimum values. Polar curve of the light fitting indicating the light distribution capability of luminaire as per the conditions.
 - 4.2.6. Luminaire should be tested as per BIS 10322 standards and following Test Reports should be submitted: Heat Resistance Test, Thermal Test, Ingress Protection Test, Drop Test, Vibration Test, Electrical / Insulation Resistance Test, Endurance Test, Humidity Test, Photometry Test (LM 79 Report), Electronics Test.
 - 4.2.7. Bidder should upload detailed architecture of Integrated Wireless Remote Monitoring & Control System. Compliance report with brief description of the proposed System to be uploaded.
 - 4.2.8. Prior to the opening of the Price Bid, the bidder shall give
 - i. Presentation on Understanding of the project and requirement
 - ii. Demonstration of Integrated Wireless Remote Monitoring & Control System
 - iii. Demonstration of Visual appearance of All in One Street Light Fixture

4.3. Financial Eligibility Criteria:

- 4.3.1. The average annual turnover of the Bidder in the preceding three (3) financial years as on the date of Technical bid opening, shall not be less than INR 8 Crores (Indian Rupees Eight Crores only) or in equivalent foreign currency (mention FOREX rate).
- 4.3.2. The bidder shall have access to line (s) of credit and availability of other financial resources facilities for Rs. 4 Cr (Four Crores). Solvency certificate, certified by the Bankers for proposed work shall be provided.
- 4.3.3. The net worth for the last financial year should be positive, "Net Worth" of the Bidder shall be calculated as follows:

Net Worth = Paid up share capital

Add: Free Reserves and surplus

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses

Subtract: Intangible Assets

Free reserves mean's reserves created out of profits and securities premium account but does not include reserves created out of revaluation of profits, write back of depreciation and amalgamation or any capital reserve. Securities Premium will be considered to be part of net worth only in those cases where it has been realized/received in the form of cash. However, this may not be applicable in case of listed companies.

- 4.3.4. The Bidder shall provide a copy each of audited annual report of previous three financial years. CA certificate shall be provided for ascertaining their turnover and Net Worth for the purpose of verification.
- 4.3.5. The Net Worth of the Bidder as on the last day of the preceding financial year should be positive and “should not be less than paid up share capital”. However, in case, the bidder is subsidiary of a holding company, the net worth of the bidder as on the last day of the preceding financial year shall not be less than 75% of total paid-up share capital and in such case, bidder has to submit a board resolution of the holding company indicating that “holding company shall support the bidder financially or otherwise, to execute the project successfully”. Also, the Net Worth of the Holding Company of the Bidder, as on the last day of the preceding financial year shall not be less than total paid-up share capital.

NOTE:

- ❖ Paid up share capital will include
 - Paid up equity share capital
 - Fully, compulsorily and mandatorily convertible preferential shares
 - Fully, compulsorily and mandatorily convertible Debentures
 - ❖ Share premium will form an integral part of the net worth provided it is realized in cash or cash equivalents
 - ❖ Other income shall not be considered for arriving at annual turnover.
- 4.3.6. The bidders who have applied for / availed Corporate Debt Restructuring (CDR) or who have been subjected to Strategic Debt Restructuring (SDR) in the last FIVE financial years (2013-14, 2014-15, 2015-16, 2016-17 and 2017-18) shall not be considered. A certificate has to be issued from the registered Chartered Accountant.
- 4.4. Notwithstanding anything stated above, the Employer reserves the right to assess the capabilities and capacity of the Bidder / his collaborators / associates / subsidiaries / group companies to perform the contract, should the circumstances warrant such assessment in the overall interest of the Employer.
- 4.5. Employer reserves the right to reject any or all bids or cancel/ withdraw the Notice Inviting e-Tender (RFP) without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.
- Issuance of Bidding Documents to or downloading by any Bidder shall not construe that such Bidder is considered to be qualified. Bids shall be submitted online along with the requisite copy (of originals) of documents and will be opened at the address given below in the presence of Bidder's representatives who choose to attend the bid opening.**

5. Address for communication:

The Managing Director & CEO (GVSCCL),
ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA,
Pin:530003

Telephone: +91-891-2746301-7

Facsimile No: +91-891-2568545

Electronic mail address: visakhapatnamsmartcity@gmail.com

Web page: www.apecurement.gov.in (for downloading and submission of Bids).

PMC: Email: Prabhu.Sheelavantha@aecom.com

Note: Bidders are requested to keep themselves updated with the website of www.apecurement.gov.in on regular basis for any Amendment / Clarification / Notification in respect to this RFP. No separate notification or information will be issued in print media or individually.

SECTION - II

INSTRUCTIONS TO BIDDER (ITB)

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

Contents

1. Introduction	15
1.1. Company	15
1.2. Project	15
1.3. Local Conditions	17
2. Instructions to Bidder	18
2.1. General Instructions.....	18
2.2. Cost of Bidding	19
2.3. Understanding the Bid document.....	19
2.4. Clarification of bidding document	19
2.5. Amendment of Bidding Documents.....	19
2.6. Withdrawal of Invitation to Bid.....	20
2.7. Authorized Representative of Bidder	20
2.8. Financial Proposal and Currencies	20
2.9. Bank Guarantees	20
2.10. Third Party Inspection Agency	22
2.11. Applicability of Labour Laws	22
2.12. Right to accept and to reject any or all Bids.....	22
2.13. Eligibility Criteria /Qualifying Requirements (QR)	23
3. Preparation and Submission of Bid.....	23
3.1. Language of the bid.....	23
3.2. General Terms	23
3.3. Format and Signing of Bid	24
3.4. Documents Comprising the Bid	24
3.5. Bid Due Date/ Last date of submission	26
3.6. Late Bids	26
3.7. Confidentiality.....	26
3.8. Correspondence with the Bidder	26
3.9. Bid Opening and Evaluation of Bid.....	26
3.10. Tests of Responsiveness.....	27
3.11. Modification and Withdrawal of Bids	28
3.12. Contacts during Bid Evaluation	28
3.13. Employment of Officials/ Ex-Official of the Employer	28
3.14. Declaration on Bidder's Relation to Directors	28
3.15. Letter of Intent ("LOI") and Notification to Proceed	28
3.16. Performance Bank Guarantee.....	29
3.17. Fraudulent Practices	29

1. Introduction

1.1. Company

With the India Smart Cities Challenge, the Government of India took the first step towards realising its vision of building 100 smart cities in the country. As part of the India Smart Cities Challenge, Visakhapatnam is one of the cities that were selected amongst top 20, in a nationwide competition between 100 cities (ranked 8th).

The Smart City Plan for Vizag has been envisioned with the objective of making the city a leader in healthy living, equality, resilience, sustainability and vibrancy.

Vizag is now working on an implementation plan to convert the Smart City Proposal (SCP) ideas into reality, beginning with retrofitting a designated area within the city known as the Area Based Development (ABD) that will catalyse future scalability to entire city. The ABD is around 6 sq.km in area and has a population of around 80,000.

The Smart City Plan for Vizag revolves around becoming a leader in sustainability, clean & healthy living and innovation.

Vizag is making every effort to minimize its environmental footprint by focusing on drawing electricity from renewables, in line with its goal of transforming itself into a Clean and Sustainable City. As a start, Vizag Smart City will increase the share of solar energy by at least 10% by 2020 in ABD.

The Greater Visakhapatnam Smart City Corporation Limited has taken up different projects for implementation and Replacement of existing street lights with All in One Solar LED Street Lights is one such project. As a part of the Smart City Vision, Vizag is specially emphasising combating greenhouse gas emissions and reduces its collective dependence on fossil fuel and become energy efficient city.

1.2. Project

1.2.1. The All in One Solar LED Street Lights are to be set up in ABD, under smart city mission in Visakhapatnam. The Project shall be funded and owned by Greater Visakhapatnam Smart City Corporation Limited {GVSCCL} (hereinafter called as “Employer”).

1.2.2. The Bidder selected based on this RFP (hereinafter referred as “Contractor”) shall execute the Project on turnkey basis. The details of the facilities to be set up by the Contractor in the present instance and for which Bids are hereby invited are described in this bidding document. The overall responsibility of complete “Scope of Works” as mentioned in this bidding document as per the specification mentioned in the Section V: Technical Specifications (TS), and are required for successful installation, commissioning and operation of the project in all respect including those which are not mentioned explicitly in this bidding document, but are required for successful operation of the project rests with the Bidder.

1.2.3. Online Bids are invited in the prescribed Bid Formats as defined under Section VI: Forms and Formats, for the Scope of Work described in the RFP document. Following are the details:

Item	Description
RFP No	GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018
Brief description of the Project	Providing All in One Solar LED Street Lights including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area, Visakhapatnam.
Date & time of Pre-Bid Meeting and Venue	03-12-2018, 04.00 PM At ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin: 530003.
Last date and time for submission of Bids	14-12-2018, 05.00 PM

(Online)	
Date of opening of Technical Bid (Online)	14-12-2018, 05.30 PM
Bid validity	180 days from the Bid Submission Closing Date
Bid Security (in form of BG only)	INR 15,00,000 (Rupees Fifteen Lakhs Only)
Bid Security validity	180 days from the Bid Submission Closing Date
Bank guarantee against Mobilization Advance, if required by the contractor,	Mobilization advance shall be 10% of EPC Contract Value excluding O&M Cost for which the Contractor shall furnish an unconditional and irrevocable bank guarantee of 110% of mobilization advance (if required)-to be drawn, which is interest bearing, the Rate of interest being the SBI base rates prevailing on the day of request, as per Format attached with the validity of 360 days and extendable if not recovered.
Performance bank guarantee for EPC Contract and Operation & Maintenance	<p>i. The Contractor shall furnish within 14 days from the date of issue of Letter of Intent (LOI), an unconditional and irrevocable bank guarantee for due Performance as per Format attached and which shall be for 10% of the total Contract Value (i.e., total sum of all the supply contract, erection contract and civil works contract) and shall be valid upto 90 days beyond defect liability period as mentioned in GCC clause 35.4.</p> <p>ii. The Contractor shall furnish within 14 days from the date of issue of Operational Acceptance, an unconditional and irrevocable bank guarantee towards Performance Guarantee as per Format attached and which shall be for 5% of the total Contract Value (i.e., total sum of all the supply contract, erection contract and civil works contract) and valid for 30 months from the date of Operational Acceptance.</p> <p>iii. The Contractor shall furnish within 14 days prior to the date of expiry of the bank guarantee mentioned at (ii) above, an unconditional and irrevocable bank guarantee for due Performance as per Format attached and which shall be for 2% of the total Contract Value (i.e., total sum of all the supply contract, erection contract and civil works contract) and valid for 30 months from the date of expiry of bank guarantee mentioned at (ii).</p>
Address for correspondence	<p>ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin:530003</p> <p>Telephone: +91-891-2746301-7</p> <p>Facsimile No: +91-891-2568545</p> <p>Electronic mail address: visakhapatnamsmartcity@gmail.com</p> <p>Web page: www.apeprprocurement.gov.in (for downloading, Uploading and submission of Bids).</p> <p>PMC: Email: Prabhu.Sheelavantha@aecom.com</p>

1.3. Local Conditions

- 1.3.1.** The Bidder is advised to visit the Project site and examine the site conditions, for assessment traffic and transportation requirements, location, surroundings, climate, solar radiation data, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather and insolation data, applicable laws and regulations, and obtain for itself on its own responsibility all information, as per their understanding, as may be necessary for preparing the Bid and entering into the Contract Agreement. All the expenses of visiting the Site and its associated costs shall be borne by the Bidder.
- 1.3.2.** The Bidder and any of its personnel or agents shall be granted permission by the Employer or its authorized representatives to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the Bidder, its personnel or agents, shall release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof and shall be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses.
- 1.3.3.** Failure to visit the Project Site or failure to study the Bidding documents shall in no way relieve the successful Bidder from furnishing any material or performing any work in accordance with the Bidding documents.
- 1.3.4.** The Time for Completion of the project as specified in the bidding documents shall not be extended unless otherwise agreed by the Employer or its authorized representatives.
- 1.3.5.** The Bidder must conduct its own inspection of the Project Site, access to the Project Site and surroundings at its own cost in order to make a proper estimate of the works to be performed under consideration of site-specific constraints. This applies in particular to the transportation of equipment to the Project site and the scope of site works. The Bidder shall also inspect the site and the access to site from the point of manufacturer to make sure that its equipment is suitable for the available access and the site terrain. The bidders shall judiciously decide on making the price-bid accordingly.
- 1.3.6.** It shall be deemed that by submitting a Bid, the Bidder has:
- i. Made a complete and careful examination of the Bidding documents;
 - ii. Received all relevant information requested from the Employer;
 - iii. Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the Bidding documents or furnished by or on behalf of the Employer relating to any of the matters referred to in Clause 1.2 above;
 - iv. Satisfied itself about all matters, things and information including matters referred to in the Abridged Bid Information, necessary and required for submitting an informed Bid, execution of the Project in accordance with the bidding documents and Performance of all of its obligations mentioned there under;
 - v. Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bid documents or ignorance of any of the matters referred to in Clause 1.3.2 herein shall not be a basis for any claim for compensation, damages, extension of time for Performance of its obligations, loss of profits etc., from the Employer, or a ground for termination of the Contract Agreement; and
 - vi. Agreed to be bound by the undertakings provided by it under and in terms hereof.
- 1.3.7.** Any data provided by the Employer to the bidder is for information only. The Employer shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the Bid documents or the Bidding Process, including any error or mistake therein or in any information or data given by the Employer. It is the bidder's

responsibility, with his expertise and experience, to satisfy himself with the correctness of the data and prevailing site conditions.

1.3.8. Local Regulatory Frame Work:

It shall be imperative for each Bidder to fully inform itself of all local conditions, laws and factors which may have any effect on the execution of the Contract as described in the Bidding Documents. The Employer shall not entertain any request for clarification from the Bidder, regarding such local conditions.

- 1.3.9.** It is the responsibility of the Bidder that such factors have properly been investigated and considered while submitting the Bid proposals and that no claim whatsoever including those for financial adjustment to the Contract awarded under the Bidding documents shall be entertained by the Employer and that neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the Employer.

2. Instructions to Bidder

2.1. General Instructions

- 2.1.1.** The current documents with all sections, annexures and formats form the bidding document, which is open to all prospective Bidders, requesting a proposal for implementation of the Project from the eligible bidders on a fixed price basis. A Contractor would be selected through competitive bidding process for execution of the Project.
- 2.1.2.** The Employer expects Bidders to confirm compliance to RFP terms, conditions and specifications at the time of submission of Bids, failing which the Bids are liable to be rejected. Hence, the Bidders in their own interest are advised to submit their Bids complete in all respects conforming to all terms and conditions of this Bidding documents.
- 2.1.3.** Bids shall be evaluated GVSCCL, based on the information/ documents furnished in the Bids submitted by the Bidders. Hence, Bidders are advised to ensure that they submit appropriate and relevant supporting documentation along with their proposal in the first instance itself. Bids not complying with the requirements of this RFP are liable to be rejected without any further opportunity.
- 2.1.4.** Bidders need to ensure that in the event the Project is awarded to it, and during execution of the Project, it shall not seek to alter any agreed contractual terms, conditions and specifications.
- 2.1.5.** All Bids must be accompanied by a Bid processing fees and Bid security of value as specified in the ITB Clause no. 1.2.3, in the form and manner as specified in the RFP document and must be delivered along with Bids.
- 2.1.6.** It is mandatory for every bidder to submit their bid online. However, the bidder must also submit all the requisite original specified documents in hard form (Technical bid only) to the address specified in IFB Clause 5 on or before the date of bid submission specified at ITB Clause 1.2.3, along with the online submission of the documents. In case of any discrepancy between the online and offline submitted documents, the documents uploaded online shall prevail.

Note: * The financial bid is to be submitted online only.

- 2.1.7.** The specification provided with this bidding documents outlines the functional

requirements. The Bidder must submit a Proposal based upon their own design, meeting the functional requirements specified in the bidding documents.

- 2.1.8.** Bidders shall deploy the latest state-of-the-art technology and must ensure that the goods supplied are new, unused and of most recent or current models and incorporate all recent improvements in design and materials for the implementation of the Project.
- 2.1.9.** The Bidder shall submit the duly signed and stamped 'Bid document' copy online as token of acceptance along with the other prescribed documents. Bids received without the prescribed Bid document and not complying with the terms and conditions of bidding documents shall be ignored.
- 2.1.10.** Mere submission of bid does not construe that the Bidder has been short-listed or qualified.
- 2.1.11.** This is a ZERO deviation bidding documents. The Bidders shall ensure compliance of all provisions of the bid documents and submit their bid accordingly and shall submit an undertaking that they have not taken any deviations. Bids with any deviation to the bid conditions shall be liable for rejection.
- 2.1.12.** The Employer reserves the right to reject any Bid submitted with deviations beyond the one that is specified and mentioned in the RFP and no time shall be given in any circumstance after opening of Financial Proposal for submission of documents which are missing with Bid.
- 2.1.13.** In case of change in ownership of the Contractor after bid submission and during the currency of contract, all the Agreements and Contracts signed with the Employer will stand true and valid with the new Ownership of the Contractor.

2.2. Cost of Bidding

The Bidder shall bear all costs in relation to its Bid and consequent bidding process activities. The Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process. Bid processing fees to be submitted along with the bid shall be in the form of DD drawn in favour of MD & CEO, GVSCCL, payable at Visakhapatnam.

2.3. Understanding the Bid document

- 2.3.1.** The Bidder shall be deemed to have carefully examined the general conditions, specifications and schedules and also to have satisfied himself as to the nature and character of the equipment to be supplied and installed under the Contract, for the proposed Facilities, site conditions and all relevant matters & details.
- 2.3.2.** The Bidder should ensure that all information listed under this IFB has been attached/enclosed in appropriate envelopes. Failure to furnish relevant information and documentary evidences as stipulated in the Bid documents or submission of Bid that is not substantially responsive to the IFB document in all respects may be summarily rejected.

2.4. Clarification of bidding document

A Bidder requiring any clarification of the Bidding documents may notify GVSCCL in writing or by facsimile or by e-mail at the GVSCCL contact details as indicated in this document latest by last date of submission of pre – bid query as specified in ITB Clause No. 1.2.3.

2.5. Amendment of Bidding Documents

- 2.5.1.** The Employer may, for any reason, whether at his own initiative or in response to a

clarification requested by a particular Bidder, modify the Bidding documents as revision 1 or 2 or as applicable.

2.5.2. Amendments, Revisions of Bid Documents if any, will be notified on website www.apecprocurement.gov.in.

2.5.3. Employer at its discretion, may extend the deadline for the submission of Bids with reasonable time, in order to allow the prospective Bidder(s) to prepare their Bids.

2.6. Withdrawal of Invitation to Bid

While the Employer has floated this RFP and has invited prospective Bidders to submit their proposals, the Employer shall always be at the liberty to withdraw this invitation to bid at any time before its acceptance.

2.7. Authorized Representative of Bidder

2.7.1. All the Bidders are requested to mention the name of their authorized representative, if any, with full address in the Bid. Power of attorney (PoA) in the prescribed Format shall be submitted along with the bid.

2.7.2. In case the representative is changed during the bidding process such changes shall be notified by the Bidder, failing which, Employer shall not accept any responsibility. Any change in name of the authorized signatory shall be accompanied by revised PoA in proper format only.

2.8. Financial Proposal and Currencies

2.8.1. The Bidders shall quote the prices inclusive of all the taxes, duties and levies etc. The bidder shall provide the breakup as per formats given under "Appendix 5: Format for Financial Proposal".

2.8.2. The Bidder shall indicate the price in Financial Proposal in Indian National Rupee (INR) only, in both figure and words.

2.8.3. Arithmetical errors, if any, shall be rectified on the basis described as: If there is any discrepancy found between unit price and mentioned total price, then the unit price will prevail and the total price shall be corrected. The total price will be obtained by multiplying the unit rate and quantity. If there is any discrepancy in the words and figure quoted, price mentioned in words will prevail.

2.8.4. In case the bidder has quoted the taxes wrongly in the financial bid format other than the applicable taxes, prevailing rates of the applicable taxes, duties and levies will be considered for the purpose of evaluation.

2.8.5. In case, any of the item/ component from the entire supplies, is imported by the bidder, then the price break-up of those items shall be mentioned separately along with the applicable taxes and duties. Further, in case any concession/ exemption is desired to be availed by the bidder in accordance with the provisions of GCC Clause 8.5 and as per applicable law/ rules/ regulations, then same shall be mentioned by the bidder in their financial bid.

2.9. Bank Guarantees

2.9.1. Bidder shall be required to submit Bid Security as specified in the ITB Clause No.1.2.3. The Bank Guarantee (s) shall be in favour of MD & CEO, GVSCCL, payable at

Visakhapatnam from any Nationalized Bank or the banks specified in the “Schedule 1: List of Banks” enclosed at SCC of this Bidding documents. The Employer shall not be liable to pay any interest on the Bid security.

- 2.9.2.** The Bank Guarantee submitted should have the clear time validity in all respect as specified in respective clause (s). If, by any reason, it is required to extend the Bank Guarantee, bidder shall undertake to renew the Bank Guarantee at least one month before the expiry of the validity failing which Employer will be at liberty to encash the same. Employer shall notify the bidder for submission of renewal of bank guarantee.
- 2.9.3.** Bid submitted without the Bid processing fees and Bid security shall not be considered and shall be summarily rejected.
- 2.9.4.** The validity of Bid security shall be as per ITB Clause 1.2.3.
- 2.9.5.** The Bid Security shall specifically bind the Bidder to keep its Bid valid for acceptance and to abide by all the conditions of the RFP documents in the event of the Employer desiring to award the work to the said Bidder.
- 2.9.6.** The Employer shall, however, arrange to release the Bid Security in respect of unsuccessful Bidders, without any interest, only after issue of LOI to the successful bidder and their acknowledgement of the same.
- 2.9.7.** The Bid Security in respect of the Successful Bidder shall be released on bidder’s request after receipt of the Performance Bank Guarantees as per ITB Clause 1.2.3 in the format prescribed under Section VI at “Format for Performance Bank Guarantee” and after confirmation received by Employer from the issuing bank.
- 2.9.8.** The Bidder shall also undertake that, in the event of the Bidder becoming the Successful Bidder, the validity of the Bank guarantee for Bid security shall be extended suitably until it furnishes to the Employer, a bank guarantee towards mobilization advance bank guarantee, if mobilization advance is required and Performance Bank Guarantee for the specified value.
- 2.9.9.** The Employer shall have an unqualified discretion not to release the Bid security and forfeit the full value in case:
 - i. If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, or restrictive practice;
 - ii. The bidder withdraws the bid after opening of bids by Employer.
 - iii. In the event where the Bidder, is chosen as the Successful Bidder, fails to provide following within the specified time limit under ITB clause 1.2.3
 - Unconditional acceptance of Letter of Intent (LOI) issued by Employer.
 - To sign the Contract Agreement within 21 days from release of LOI and/or
 - To furnish the Performance Bank Guarantee

Successful Bidder shall furnish the Bank Guarantees required as per the ITB Clause No. 1.2.3 upon issue of Letter of Intent (LOI) as per the prescribed formats under Section VI: Forms and Formats – “Format of Performance Bank Guarantee” with a validity as specified in ITB Clause No.1.2.3.

- iv. Performance Bank Guarantee for O&M: The Successful Bidder has to carry out comprehensive O&M for 05 (Five) years w.e.f. date of Operational Acceptance (i.e., after successful commissioning and performance demonstration). The Successful Bidder shall submit a Bank Guarantee at the time and of amount as specified in ITB Clause No. 1.2.3 against the “O&M Performance Guarantee” and which the Contractor has to maintain for the specified period of O&M.

2.10. Third Party Inspection Agency

- 2.10.1.** A third party inspection agency ("Third Party Inspectors" or "TPI") may be appointed by the Employer, at its sole discretion, to conduct any kind of inspection regarding procurement, fabrication, installation, hook-up and commissioning during the execution of the Project. The Contractor shall provide necessary access and coordination to conduct such inspections. The extent of third party inspectors' involvement shall be finalized after mutual discussions between the Contractor and the Employer.
- 2.10.2.** Employer or its authorised representatives, reserve the right to inspect the components before dispatch for site. Employer at its own discretion will visit the premises for inspection. It is the responsibility of the contractor to inform Employer at least 14 days prior to the despatch of the major project equipment. All administrative expenses for Employer or its authorised representatives, will be borne by Employer for above inspections. However, all other expenses related to testing and inspection at manufacturer/ supplier premises or at project site shall be borne by the contractor only.

2.11. Applicability of Labour Laws

- 2.11.1.** The Successful Bidder i.e., Contractor shall furnish valid Employee Provident Fund (EPF) code number together with supporting relevant document duly notarized by notary public to this effect within 30 days from the date of issue of LOI.
- 2.11.2.** The Contractor shall obtain license under Contract Labour (Regulation & Abolition) Act 1970 and amendments till date, read with rules framed there under and furnish the same to the Employer before mobilization, failing which the detailed order of contract may be cancelled/ terminated without any further notice and its Bid Bond and/ or Performance bank guarantee will be forfeited.
- 2.11.3.** The Bidder shall ensure payment of minimum wages as per labour laws, and shall comply with all labour laws applicable to it under Indian law.

2.12. Right to accept and to reject any or all Bids

- 2.12.1.** Notwithstanding anything contained in this RFP, the Employer reserves the right to accept or reject any Bid and to annul the bidding process and reject all Bids at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons there for.
- 2.12.2.** The Employer reserves the right to reject any Bid and forfeit the Bid Security at any time if a material misrepresentation is made or uncovered.
- 2.12.3.** Such misrepresentation/ improper response shall lead to the disqualification of the Bidder. If such disqualification / rejection occurs after the Bids have been opened and the lowest Bidder gets disqualified / rejected, then the Employer reserves the right to:
 - I. Invite the remaining Bidders to submit Bids; or
 - II. Take any such measure as may be deemed fit in the sole discretion of the Employer, including annulment of the bidding process.
- 2.12.4.** In case, it is found during the evaluation or at any time before signing of the Contract or after its execution and during the period of subsistence thereof, that one or more of the pre-qualification conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith, if not yet appointed as the Contractor either by issue of the LOI or entering into of the Contract Agreement, or if the Successful Bidder has already been issued the LOI or has entered into the Contract Agreement, as the case may be, the same shall, notwithstanding anything to the

contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Employer to the Successful bidder, without the Employer being liable in any manner whatsoever to the Bidder or Contractor, as the case may be. In such an event, the Employer shall forfeit and appropriate the Bid Security / Performance Bank Guarantee (PBG), without prejudice to any other right or remedy that may be available to the Employer.

- 2.12.5.** The Employer reserves the right to verify all statements, information and documents submitted by the Bidder in response to the Bid documents. Failure of the Employer to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Employer there under.

2.13. Eligibility Criteria /Qualifying Requirements (QR)

Bidders are required to fulfil the qualifying criteria for both technical and financial as specified the “Section - I: IFB clause 4” of this RFP.

3. Preparation and Submission of Bid

3.1. Language of the bid

The bid prepared by the Bidder and all correspondence and documents related to the bid exchanged between the Bidder and the Employer shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language, as long as such literature is accompanied by a translation of its pertinent passages in English language in which case, for purposes of interpretation of the bid, the translation shall govern.

3.2. General Terms

- 3.2.1.** A Bidder is eligible to submit only one Bid for the Project. A Bidder shall not be entitled to submit another Bid.
- 3.2.2.** Notwithstanding anything to the contrary contained in this RFP, the detailed terms specified in the draft Contract Agreement shall have overriding effect; provided, however, that any conditions or obligations imposed on the Bidder hereunder shall continue to have effect in addition to its obligations under the Contract Agreement.
- 3.2.3.** The Bid should be furnished in the formats mentioned in the RFP document which shall be duly signed by the Bidder’s authorized signatory.
- 3.2.4.** The Bidder should submit a power of attorney as per the format at “Power of Attorney for signing of Bid” authorizing the signatory of the Bidder for signing and submission of the Bid.
- 3.2.5.** As this is zero deviation bidding process, any condition or qualification or any other stipulation contained in the Bid may render the Bid liable to rejection as a non-responsive Bid. The complete Bid shall be without alterations, interlineations or erasures, except those to accord with instructions issued by the Employer, or as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the Bid.
- 3.2.6.** The bidding document including annexures, if any, are transmitted to the Bidders solely for the purpose of preparation and the submission of a Bid in accordance herewith. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. The Employer will not return any Bid or any information provided along therewith.

- 3.2.7.** The Successful bidder i.e., Contractor, shall ensure submission of PF code number allotted by Regional PF Commissioner along with the Performance bank guarantees. Failure to do so is likely to result in the offer being rejected.
- 3.2.8.** Bidder to note that Price Bids of those bidders shall be opened who are found technically qualified (as per IFB Clause 4) and are found reasonably responsive to Employer's tender terms and conditions and scope of Works.

3.3. Format and Signing of Bid

- 3.3.1.** The Bidder shall provide all the information sought under this RFP. The Employer will evaluate only those Bids that are received in the required formats and complete in all respects.
- 3.3.2.** The Bid shall be typed or written in indelible ink and signed by the authorized signatory of the Bidder who shall also initial each page, in blue ink. All the alterations, omissions, additions or any other amendments made to the Bid shall be initialled by the person(s) signing the Bid.

3.4. Documents Comprising the Bid

- 3.4.1.** Single Stage-Two Envelope Bidding procedure shall be followed through online e tendering for the subject package as under:
Cover - I / Envelope - I: Techno-Commercial Bid
Cover - II / Envelope - II: Price Bid
- 3.4.2.** The following documents shall be submitted in the mode defined as per below: Offline original and Online (Scan Copy of original) both:
 - i. Original Bid Security [as per format 12(a)]
 - ii. DD towards tender processing fees
 - iii. Board resolution
 - iv. Power of Attorney

Offline:

- i. Duly signed Techno-Commercial Bid Documents properly marked.

Online Only:

- i. Financial bid as per the online form and relevance to Format 5 of Section VI of RFP.
- ii. Signed complete bid document including ITB
- iii. Appendix 1: Format for Bid Letter
- iv. Appendix 2: Format for Details of Bidder
- v. Appendix 3: Bid Evaluation Criteria (BEC)
- vi. Appendix 4: Performance Test
- vii. Appendix 5: Performa for Financial Proposal
- viii. Appendix 6: Details of qualified technical staff for EPC and O&M separately.
- ix. Appendix 7: Format for Declaration of Compliance
- x. Appendix 8: Format for No Deviation Certificate
- xi. Appendix 9: Format for Declaration on Bidder's relation to Directors
- xii. Appendix 10: Format for Execution Timeline
- xiii. Appendix 12(a): Format of Bank Guarantee for Bid Security
- xiv. Appendix 12 (e): Checklist for Bank Guarantee Verification
- xv. Appendix 13: Terms of payment
- xvi. Appendix 14: Format for Contract Agreement

- xvii. Appendix 15: Format for Power of Attorney for signing of Bid
- xviii. Appendix 16: Format for Satisfactory Operation
- xix. Documents relevant to Eligibility of the bidder (including list of projects commissioned, commissioning certificates, details of reference project, financial eligibility documents etc.)
- xx. Technical document with all relevant enclosures as mentioned in the Section V - Technical Specifications (TS)
 - a) Guaranteed Technical Particular/ Data Sheet for Solar PV Module
 - b) Guaranteed Technical Particular/ Data Sheet for Batteries
 - c) Guaranteed Technical particulars/ Data Sheet of Charge Controller
 - d) Guaranteed Technical Particulars/ Data Sheet of LED lights
 - e) Guaranteed Technical Particulars/ Data Sheet FRP/GRP Poles

3.4.3. Envelope - II: Price Bid

It contains only price bid in the prescribed format mentioned at Appendix 5: Format for Financial Proposal under Section VI - Forms and formats. The bid shall have to be filled online in the Electronic Form provided at the ap-e-procurement portal only.

3.4.4. All the requisite originals must be supplied in hard form along with their online submission of the scanned copy of the documents. In case of any discrepancy among the online and hard copy submitted by the bidder, the document uploaded online shall prevail.

3.4.5. Envelope markings

Each envelope shall clearly mark the name of the bidder. The Bid Security, DD towards the tender processing fees and other relevant documents must be supplied in original along with the bid,

- i. The outer/ common envelope shall clearly bear the following identification:
 "Bid Documents for Installation of All in One Solar LED Street Lights in ABD, under smart city mission in Visakhapatnam on Turnkey basis"
- ii. Cover-I / Envelope -I shall bear the following identification:
 "Cover-I / Envelope-I: Techno - Commercial Bid for Installation of All in One Solar LED Street Lights in ABD, under smart city mission in Visakhapatnam on Turnkey basis"

3.4.6. All the envelopes must be marked properly. The signed bid document, techno-commercial enclosures and the price bid must be submitted online with every page bearing sign and stamp by the authorized representative of the bidder. In case of any discrepancy between online and hard copy submitted, scan copy submitted online shall prevail.

3.4.7. Each of the envelopes shall be addressed to:
 The MD & CEO,
 Greater Visakhapatnam Smart City Corporation Limited (GVSCCL),
 Visakhapatnam, Andhra Pradesh, INDIA, Pin: 530003

- 3.4.8.** If the envelopes are not sealed and marked as instructed above, the Employer assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted. If bids are found in open condition or not in sealed condition, the bids may be rejected and returned unopened to the bidder.
- 3.4.9.** Bids submitted by fax, telex, telegram or e-mail shall not be entertained and shall be rejected.
- 3.4.10.** Detailed process for submission of e - tender/ e - bid is detailed under ITB clause 3.10.

3.5. Bid Due Date/ Last date of submission

- 3.5.1.** Bids should be submitted on or before the bid due date as specified in ITB Clause No.1.2.3 at the address provided in ITB Clause 1.2.3 in the manner and form as detailed in this RFP.
- 3.5.2.** The Employer may, in its sole discretion, extend the bid due date by issuing an Amendment/ Addendum in its website in accordance with ITB Clause No. 2.5.3, uniformly for all Bidders.

3.6. Late Bids

Bids received by the Employer after the specified time on the bid due date shall not be eligible for consideration and shall be summarily rejected. In case of an unscheduled holiday being declared on the prescribed closing/ opening day of the Bid, the next working day shall be treated as the scheduled prescribed date of closing/ opening of the Bid with same timings.

3.7. Confidentiality

Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process of evaluation and selection or is not a retained professional advisor advising the Employer in relation to or matters arising out of, or concerning the bidding process. The Employer will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. The Employer may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Employer.

3.8. Correspondence with the Bidder

The Employer shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

3.9. Bid Opening and Evaluation of Bid

- 3.9.1.** The Employer shall open, examine and evaluate the Bids in accordance with the provisions set out in this RFP document.
- 3.9.2.** To facilitate evaluation of Bids, the Employer may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid.
- 3.9.3.** After the receipt of Bid's the Employer may, at its discretion, send a team of engineers, if necessary, to inspect the engineering facilities, to ensure suitability and satisfactory working conditions at the Bidder's works/ yards(s) and equipment listed to be used by the Bidder for the work. The Bidder shall ensure

that the aforesaid team shall at all the times have access to visit and inspect works, equipment etc. All the administrative expenses for Employers' personnel shall be borne by the Employer. However, all other expenses for such inspections shall be borne by contractor only.

- 3.9.4.** The Employer will examine the Bid to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether the documents have been properly signed, and whether the bid is generally in order.
- 3.9.5.** Prior to the detailed evaluation, the Employer will determine the substantial responsiveness of each Bid to the bidding documents. A substantially responsive Bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Bid Bond, Applicable Law and Taxes and Duties will be deemed to be a material deviation. The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.
- 3.9.6.** If the Bid is not substantially responsive as per the conditions stated under ITB Clause 3.10, it will be rejected by the Employer and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
- 3.9.7.** The Employer will evaluate and compare Bids which have been determined to be substantially responsive.
- 3.9.8. The following steps will be undertaken in the selection of Bidder:**
 - i. The evaluation will be based on Quality Cost Based System (QCBS).
 - ii. The Tendering Authority will select the bidder by giving 80% weightage on the Technical Marks scored and 20% weightage to the Price Bid.
 - iii. The Bids will be evaluated in accordance with the provisions set out in Appendix 3: Bid Evaluation Criteria (BEC) of this RFP document.

3.10. Tests of Responsiveness

- 3.10.1.** Prior to evaluation of Bids, the Employer shall determine whether each Bid is responsive to the requirements of the RFP. A Bid shall be considered responsive only if:
 - i. Bid is received as per the formats specified in Appendices of the RFP;
 - ii. Bid is received by the bid due date and time including any extension thereof;
 - iii. Bid is accompanied by the DD for Tender processing fees and Bid Security as specified in ITB Clause 1.2.3
 - iv. It is accompanied by the power(s) of attorney and Board Resolution as specified in Appendices, as the case may be;
 - v. It contains all the information (complete in all respects) as requested in this RFP (in formats same as those specified);
 - vi. It does not contain any condition or qualification or deviations and has "No Deviation Certificate" required as per the format (Appendix 8: No Deviation Certificate)
- 3.10.2.** The Employer reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Employer in respect of such Bid.

3.11. Modification and Withdrawal of Bids

- 3.11.1.** The Bidder may modify or withdraw its Bid after the Bid's submission, provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline prescribed for submission of Bids.
- 3.11.2.** A withdrawal notice may also be sent by fax/ Email but followed by a signed confirmation copy by post not later than the deadline for submission of Bids.
- 3.11.3.** No Bid shall be modified after the scheduled time of Bid Submission or any time thereafter
- 3.11.4.** No Bid shall be withdrawn in the interval between the scheduled date of opening of Techno-Commercial bid and the expiration of the period of Bid validity specified by the Bidder. Withdrawal of a Bid during this interval will result in the Bidder's forfeiture of its EMD / Bid Security /Bid Bond.

3.12. Contacts during Bid Evaluation

Bids shall be deemed to be under consideration immediately after they are opened and until such time the Employer makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain from contacting by any means, the Employer and/ or their employees/representatives on matters related to the Bids under consideration.

3.13. Employment of Officials/ Ex-Official of the Employer

Bidders are advised not to employ serving employees of the Employer. It is also advised not to employ ex-personnel of the Employer within the initial two years period after their retirement/resignation/severance from the service without specific permission of the Employer. The Employer may decide not to deal with such firm(s) who fail to comply with the above advice.

3.14. Declaration on Bidder's Relation to Directors

The Bidders are required to certify in prescribed format "Appendix 7: Declaration of Compliance", whether he/they is/are related to any of the Directors/Senior Personnel of the Employer in any of the ways mentioned in the Certificate. It is clarified that any such affirmative certificate shall not, by itself, prejudice consideration of the Bid.

3.15. Letter of Intent ("LOI") and Notification to Proceed

- 3.15.1.** After selection of the Successful Bidder, a Letter of Intent (the "LOI") shall be issued, in duplicate, to the Successful Bidder and the Successful Bidder shall acknowledge the LOI within seven (07) days of the issuance of the LOI. The Successful Bidder shall not be entitled to seek any deviation from the Contract, except as may have been amended by the Employer prior to the bid submission date.
- 3.15.2.** On receipt of the acknowledgement of the LOI by the Successful Bidder and compliance with the conditions specified in ITB Clause 3.9, the Employer shall sign the Contract with the Successful Bidder. Non- Receipt of acknowledgement letter or non-willingness to sign the contract will result in forfeiture of their Bid Security.

3.16. Performance Bank Guarantee

- 3.16.1.** The Successful Bidder shall, within fourteen (14) days of the issue of LOI, submit the Bank Guarantees as per ITB Clause 1.2.3 for the Project. The Performance Guarantee of the Successful Bidder payable in favour of the Employer should be submitted in the form of a bank guarantee as prescribed in “Appendix 12(b): Format of Bank Guarantee for Performance Bank Guarantee”, as specified in ITB Clause 1.2.3
- 3.16.2.** The bank guarantee by the Contractor will be given from bank specified in “Schedule 1: Specified list of banks” only.

3.17. Fraudulent Practices

- 3.17.1.** The Bidders may please note that the Employer shall not entertain any correspondence or queries on the status of the Bids received against this RFP. Bidders are advised not to depute any of their personnel or agents to visit the Employer’s office for making such inquiries.
- 3.17.2.** Any effort by a Bidder to influence the Employer on the Bid evaluation, Bid comparison or Contract award decision may result in the rejection of the Bidder's Bid.

Section - III

General Conditions of Contract

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

Contents

A. CONTRACT AND INTERPRETATION.....	33
1. Definitions and Abbreviations	33
2. Use of Contract Documents & Information.....	35
3. Interpretation	36
4. Notices	37
5. Governing Laws	38
6. Settlement of Disputes.....	38
B. Subject Matter of Contract:.....	40
7. Scope of Facility.....	40
8. Contractor's responsibility	40
9. Employer's responsibility.....	42
C. Payments.....	42
10. Contract Price	42
11. Terms of Payment	42
12. Bank Guarantees	43
13. Taxes and Duties.....	44
D. Intellectual Property	44
14. Copyright & Patent.....	44
15. Confidential Information	44
16. Geological discoveries	45
17. Representatives.....	45
18. Project Implementation	47
19. Subcontracting	48
20. Design and Engineering.....	48
21. Procurement	49
22. Materials and Workmanship	50
23. Installation.....	50
24. Inspection & Testing.....	52
25. Authorized Test Centre's for test certificates.....	53
26. Commissioning and Completion of the Facilities.....	53
27. Guarantee Test and Operational Acceptance.....	54
28. Inter-changeability	56
29. Power to Vary or Omit Work	56
30. Negligence.....	57
31. Statutory Responsibility.....	57

32.	Insolvency.....	57
33.	Delay in Execution or Failure to Supply	57
34.	Liquidated Damages	58
35.	Defect Liability	58
36.	Termination by default and Breach of Contract	60
37.	Breach & Cancellation of the Contract	60
38.	Force Majeure	60
39.	Insurance.....	61
40.	Statutory Acts, Rules and Standards.....	62
41.	Hazardous Material	62
42.	Stoppage of Work.....	63
43.	Hindrance Register	63
44.	Manuals.....	63
45.	Delivery of Equipment.....	63
46.	Liabilities during Transit.....	63
47.	Deduction from Contract Price.....	63
48.	Warranty / Guarantee	64
49.	Final Bill/ Final Due Payment	64
50.	Operation and Maintenance	65
51.	Risk Purchase.....	65
52.	Unforeseen/ Differing site Conditions	65
53.	Change in Laws and Regulations	66
54.	Extension of Time for Completion	66
55.	Care of Facilities	67
56.	Contractor Performance & Feedback and Evaluation System.....	67
57.	Documents constituting the Contract	67
58.	Fraud Prevention Policy.....	68

A. CONTRACT AND INTERPRETATION

1. Definitions and Abbreviations

The following words and expressions shall have the meanings hereby assigned to them:

“ABD” means Area Based Development

“Adjudicator” means the person or persons named as such in the SCC to make a decision on or to settle any dispute or difference between the Employer and the Contractor.

“Applicable Law” means any statute, law, regulation, ordinance, notification, rule, regulation, judgment, order, decree, bye-law, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision of, or determination by, or any interpretation or administration having the force of law in the Republic of India and the State Government, by any Government Authority or instrumentality thereof, whether in effect as of the date of this Contract or thereafter.

“Affected Party” means Employer or the Contractor whose performance has been affected by an event of Force Majeure.

“Bid” shall mean the Techno Commercial and the Financial Proposal submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this IFB, in accordance with the terms and conditions hereof.

“Bidder” shall mean Bidding Company submitting the Bid including its successors, executors and permitted assigns.

“CEA” shall mean Central Electricity Authority.

“Chartered Accountant” shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;

“Commissioning” A project shall be considered commissioned if all equipment as per rated capacity has been installed and in operation.

“Completion of facilities” means that the Facilities (or a specific part thereof where specific parts are specified in the SCC) have been completed operationally and structurally and put in a tight and clean condition, and that all work in respect of Pre-commissioning of the Facilities or such specific part thereof has been completed; and Commissioning has been attained as per Technical Specifications.

“Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in the Form of Contract Agreement.

“Contract Value” means the firm value of the quoted price by the successful bidder specified in its financial proposal as the sum of individual contract value of supply, erection, civil works and O&M under different work packages specified in the financial proposal, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract including taxes, duties levies etc., as applicable.

“Contractor” means the Bidder whose bid to perform the Contract has been accepted by the Employer and is named as such in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.

“Contractor’s Equipment” means all facilities, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include the Equipment, or other things intended to form or forming part of the Facilities.

“Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer to perform the duties delegated by the Contractor.

“Day” means calendar day of the Gregorian calendar.

“Month” means calendar month of the Gregorian calendar.

“Defect Liability Period” means the period of twenty four (24) months from the date of completion of the Facilities or a part thereof, during which the Contractor must repair any defect identified by the Project Manager / Engineer In charge after commissioning of the facilities. All the expenses to repair the defects shall be borne by the contractor and no additional cost charged to the Employer.

“Effective Date” means the date of issue of LOI/ NTP/ Date mentioned in contract agreement from which the Time for Completion shall be determined.

“Employer” means GVSCCL, Visakhapatnam and includes the legal successors or permitted assigns of the Employer and also its authorized representative.

“Facilities” means All in One Solar LED Street Light with Poles which includes the Equipment to be supplied and installed, as well as all the Installation Services including all infrastructure as mention in scope of works mentioned in detail under Section V: Technical Specification of this IFB, to be carried out by the Contractor under the Contract.

“Final Acceptance” means acceptance of Facilities by the Employer at the end of O&M period, as stated in this RFP, which certifies the Contractor’s fulfilment of the Contract in respect of Functional and Performance Guarantees of the Facilities.

“GCC” means the General Conditions of Contract hereof.

“GHI” means Global Horizontal Irradiance

“Guarantee Test(s)” means the test(s) specified in the Technical Specifications to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Technical Specifications.

“IEC” means International Electro-technical Commission

“Installation Services” means all those services ancillary to the supply of the Equipment for the Facilities, to be provided by the Contractor under the Contract; e.g., transportation and provision of marine or other similar insurance (s), inspection, expediting, site preparation works (including the provision and use of Contractor’s Equipment and the supply of all use structural and construction materials required), installation including civil and allied works etc., testing, pre-commissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training of Employer’s Personnel etc.

"kWh" means Kilo-Watt-hour.

“LOI” means Letter of Intent.

“MW” means Mega-Watt.

"MWp" means Mega-Watt Peak.

“NIT” means Notice inviting Tender.

“NTP” means Notice to Proceed.

“O&M” means Comprehensive Operation and Maintenance of the Facilities

“Operational Acceptance” means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor’s fulfilment of the Contract in respect of Functional and Performance Guarantees of the Facilities. O&M period shall commence after Operational Acceptance of the Facilities by the Employer.

“Equipment” means permanent equipment, machinery, apparatus, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts), but does not include Contractor’s Equipment.

“Pre-commissioning” means the testing, checking and other requirements specified in the Technical Specifications that are to be carried out by the Contractor in preparation for Commissioning.

“Project Manager/Engineer-in-Charge (EIC)” means the person appointed by the Employer to perform the duties delegated by the Employer.

“RFP” means Request for Proposal.

“RMS” means Remote Monitoring & Control System.

“SCC” means the Special Conditions of Contract.

“Site” means the area and other places upon which the Facilities are to be installed, and such other area or places as may be specified in the Contract as forming part of the Site.

“Subcontractor,” including vendors, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Equipment, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.

“Tax” means the GST/ duties/ levies/ octroi etc. as applicable and put in force by the state Government / central Government/ Local Bodies/ Statutory bodies etc. from time to time.

“Time for Completion” means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained in accordance with the stipulations in the SCC and the relevant provisions of the Contract.

“TS” means Technical Specifications

2. Use of Contract Documents & Information

- 2.1. All documents, as mentioned in the GCC Clause 57, forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.
- 2.2. The Contract (s) will be signed in three (3) originals and the Contractor shall be provided with one signed original and the rest will be retained by the Employer.

- 2.3. The Contractor shall provide/ submit, free of cost to the Employer all the engineering data, drawings and descriptive materials with the bid, in at least two (2) copies to form a part of the Contract immediately after LOI.
- 2.4. The Contractor shall not, without the Employer's prior written consent, disclose the Contract or any provision thereof or any specification, plan, drawing, pattern therewith to any person other than person employed by the Contractor in Performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend strictly for purpose of Performance only.
- 2.5. The Contractor shall not, without Employer's prior written consent, make use of any document or information except for purpose of performing the Contract. Any document other than the Contract itself, shall remain the property of the Employer.

3. Interpretation

3.1. Language

The bid prepared by the Bidder and all correspondence and documents related to the bid exchanged between the Bidder and the Employer shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language, as long as such literature is accompanied by a translation of its pertinent passages in English language in which case, for purposes of interpretation of the bid, the translation shall govern.

3.2. Singular and Plural

The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3. Headings

The headings and marginal notes in the General Conditions of Contract are included for ease of reference, and shall neither constitute a part of the Contract nor affect its interpretation.

3.4. Persons

Words importing persons or parties shall include firms, corporations and government entities.

3.5. Entire Agreement

The Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract. The various documents forming the Contract are to be taken as mutually explanatory.

3.6. Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party hereto.

3.7. Independent Contractor

3.7.1. The Contract does not create any agency, partnership, joint venture or other joint relationship between the parties hereto.

3.7.2. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or Sub contractors engaged by the Contractor in connection with the Performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer. Nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual

relationship between any such employees, representatives or Sub-contractors and the Employer.

3.7.3. Under no circumstances the sub-contractor shall claim or shall put any binding to the Employer and at all times the sub-contractor must be managed by the Contractor. The Employer shall not be responsible for any claims at any time by the Contractor in relation to the sub-contractor.

3.8. Non-Waiver

3.8.1. Subject to GCC Clause 3.9.2 below, no relaxation, forbearance, delay or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.8.2. Any waiver of a party's rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

3.9. Severability

3.9.1. If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

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

3.10. Country of Origin

"Origin" means the place where the materials, equipment and other supplies for the facilities are mined, grown, produced or manufactured and from which the services are provided.

4. Notices

4.1. Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing, and shall be sent by personal delivery, airmail post, special courier, facsimile or e-mail to the address of the relevant party by the authorized representative of the party set out in contract coordination procedure to be finalized and mutually agreed for the execution of the contract and all the communication pertaining to project shall be in accordance with the procedure with the following provisions.

4.1.1. Any notice sent shall be confirmed within two (2) days after receipt.

4.1.2. Any notice sent by facsimile or e-mail shall be deemed to have been delivered on date of its dispatch and personal delivery deemed to have been delivered on date of delivery.

4.1.3. Either party may change its postal, cable, telex, facsimile or e-mail address or addresses for receipt of such notices by ten (10) days' notice to the other party in writing.

4.2. Notices shall be deemed to include any approvals, consents, instructions, orders and certificates to be given under the Contract.

5. Governing Laws

- 5.1. The Contract shall be governed by and interpreted in accordance with laws in force in India. The Courts of Visakhapatnam shall have exclusive jurisdiction in all matters arising under the Contract.
- 5.2. The contract must be interpreted and read under the influence of Indian Contracts Act, 1872 and all amendments as on date.

6. Settlement of Disputes

6.1. Adjudicator

- 6.1.1. If any dispute of any kind whatsoever shall arise between the Employer and the Contractor 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-parties shall seek to resolve such a 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.
- 6.1.2. The dispute adjudication board (DAB) shall consist of either one or three suitably qualified members ("the Members").
- 6.1.3. If the DAB consists of three members, each party shall nominate one member for the approval of the other party. The parties shall consult both the members and shall agree upon third member, who shall be appointed as Chairman of DAB.
- 6.1.4. 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 Employer or the Contractor within fifty - six (56) days of such reference, the decision shall become final and binding upon the Employer and the Contractor. Any decision that has become final and binding shall be implemented by the parties forthwith.
- 6.1.5. Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling its functions in accordance with the provisions of the contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. Failing agreement between the two within twenty eight (28) days, the new Adjudicator shall be appointed at the request of either party or by the Appointing Authority specified in 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 Employer and the Contractor.

6.2. Arbitration

- 6.2.1. If either the Employer or the Contractor 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 Employer or the Contractor may, within fifty-six (56) days of such reference, give notice to the other party, 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.
- 6.2.2. Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Sub-Clause 6.2, shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Facilities.

In case the Contractor is a Public Sector Enterprise or a Government Department:

- 6.2.3. In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprise to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary /Additional Secretary, when so authorized by the Law Secretary, whose decision, shall bind the Parties finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

In case the contractor is not a Public Sector Enterprise or a Government Department:

- 6.2.4. 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.
- 6.2.4.1. GVSCCL and the Contractor shall make every effort to resolve amicably, by direct informal negotiations, any disagreement or dispute arising between them in connection with the contract. In case of failure of negotiation between the executing Department and the Contractor, the parties shall refer their present and future disputes relating to the contract itself or arising out of or concerning or in connection with or in consequence of the contract to the MD & CEO, GVSCCL whose decision shall be final and binding on both parties. The contract shall be governed by The Indian Contract Act, 1872. All disputes are subject to exclusive jurisdiction of courts at Hyderabad only.
- 6.2.4.2. 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 GCC Clause 5 (Governing Law) and a substitute shall be appointed in the same manner as the original arbitrator.
- 6.2.4.3. Arbitration proceedings shall be conducted in accordance with the Arbitration and Conciliation Act, 1996. The venue of arbitration shall be Hyderabad.
- 6.2.4.4. 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.
- 6.2.4.5. The arbitrator(s) shall give reasoned award.
- 6.3. Reference to arbitration
Not with standing any reference to the arbitration herein,
- 6.3.1. The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree.
- 6.3.2. The Employer shall pay the Contractor any payment due to the Contractor.

B. Subject Matter of Contract:

7. Scope of Facility

- 7.1. Unless otherwise expressly limited in the Technical Specifications, the Contractor's obligations cover the Survey, Design, Engineering, Procurement & Supply, Packing & Forwarding, Transportation, Unloading, Storage, Construction, Erection & Installation of equipment, Testing & commissioning and comprehensive O&M for 5 (Five) years of the Solar Street Light thereafter. Provision of all Equipment including spares and the Performance of all services required for the design, the manufacture (including procurement, quality assurance, construction, installation, associated civil, structural and other construction works, Pre-commissioning and delivery) of the Equipment and the installation, commissioning, completion of facilities and carrying out guarantee tests for the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Technical Specifications. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labour, materials, equipment, spare parts (as specified in GCC Sub-Clause 7.3 below) and accessories; Contractor's Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, loading, unloading and hauling to, from and at the Site); insurance and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in GCC Clause 9.
- 7.2. The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.
- 7.3. Bidder is requested to provide the list of all the spares required to maintain the facility for O&M period. Contractor agrees to supply such spare parts, as recommended or otherwise required for the effective and hassle free operation and maintenance of the Facilities. However, the contractor, with its previous experience, is to provide a list of spares including specifications, supplier details and indicative price, as recommended by him and OEM. The contractor shall keep and maintain the inventory of such spares for the hassle free operation during the complete O&M period without additional cost to Employer. Also, at the end of penultimate year of the O&M contract, contractor shall supply a list of all recommended spares as per the operational requirement of the street lights and with reference to the mean time between failures (MTBF), along with detailed specifications, supplier details and tentative cost for future purchase. The price of such spare parts shall include the breakup of taxes and duties as applicable towards purchase and supply of spare parts. Employer, at its discretion, will purchase the spare as required for future operation.

8. Contractor's responsibility

- 8.1. The Contractor shall survey, design, procure, manufacture (including associated purchases and/or subcontracting), install, commission and complete the Facilities, carry out the Guarantee tests with due care and diligence in accordance with the Contract including the O&M for the prescribed period.
- 8.2. The contractor shall pay fees for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located for the facilities establishment, which such authorities or undertakings require the Employer to obtain them in the Employer's name, are necessary for the execution of the Contract (they include those required for the Performance by both the Contractor and the

Employer of their respective obligations under the Contract), including those specified in “Scope of Works and Supply by the Employer” at the Contract Agreement on providing the proper demand note letter. However, such demand notes must be provided to the Employer at least 7 days prior to the submission.

- 8.3. The Contractor confirms that it has entered into this Contract on the basis of proper examination of the data relating to the Facilities provided by the Employer and assessed by himself at the site location, after proper due diligence relating to the Facilities prior to bid submission. The Contractor acknowledges that any failure to obtain or acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Scope of Work.
- 8.4. The Contractor shall acquire, on behalf of Employer, in the employers’ name, all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located that are necessary for the setting up of the facilities mentioned under the Contract, including, but not limited to, entry permits for all imported Employer’s Equipment (if any). In this regard, any document required from Employer shall be intimated at least 10 days prior to submission. Contractor has to ensure safe keeping of the documents and diligent use. It is the responsibility of the contractor to safe keep and return all the approvals, permits, licenses, certificates and other relevant document generated as a result of the setting up of project and O&M process to the Employer.
- 8.5. The Contractor shall acquire in its name all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located that are necessary for the Performance of the Contract, including, but not limited to, the right of way for the access to site and related works as applicable, visas for the Contractor’s and Subcontractor’s personnel and entry permits for all imported Contractor’s Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GCC Sub-Clause 9 hereof and that are necessary for the Performance of the Contract.
- 8.6. Contractor shall also seek for any exemption applicable for the project as per the orders released from GOI time to time. In this regard, contractor shall be responsible to take all necessary certificates as a proof of exemptions on behalf of Employer. However, all the documents required from Employer, as needed for the process, will be provided by Employer. The demand of such documents shall be made to the Employer in at least 10 days advance.
- 8.7. The Contractor shall comply with all laws in force at the place, where the Facilities are installed and where the Installation Services are carried out. The laws will include all national, provincial, municipal or other laws that affect the Performance of the Contract and binding upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Sub-Clause 9.1 hereof.
- 8.8. Any equipment, material, spares & spares inventory and services that will be incorporated in or be required for the facilities and other supplies shall have their origin as defined under GCC Clause 3.11 (Country of Origin)
- 8.9. Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Contractor shall provide/ deploy sufficient, properly qualified operating and maintenance personnel; shall supply and make available all raw materials, spares, other materials and facilities; and shall perform all work and services of whatsoever nature, to properly carry out Pre-commissioning, Commissioning and Guarantee Tests, all in accordance

with the provisions of “Scope of Works and Supply by the Employer” to the Contract Agreement at or before the time specified in the program furnished by the Contractor under GCC Clause 18 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.

9. Employer’s responsibility

- 9.1. The Employer shall be responsible for acquiring and providing legal and physical possession of the Site thereto required for the proper execution of the Contract. The Employer shall give full possession or phased possession of site and accord all rights of access thereto on or before the date(s) of LOI/ NTP or as agreed in contract agreement.
- 9.2. The Employer shall facilitate the contractor in obtaining all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located for the facilities establishment, which such authorities or undertakings require the Employer to obtain them in the Employer’s name, are necessary for the execution of the Contract (they include those required for the Performance by both the Contractor and the Employer of their respective obligations under the Contract), including those specified in “Scope of Works and Supply by the Employer” at the Contract Agreement on providing the proper demand note letter. However, such demand notes must be provided to the Employer at least 7 days prior to the submission.
- 9.3. If requested by the Contractor and up- on Employer’s sole discretion, the Employer shall use its best endeavours to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings required for the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain.
- 9.4. The Employer shall be responsible for the operation of the Facilities after Completion and proper hand over of the site by contractor, in accordance with GCC Clause 26 and 27. However, the Contractor, under the O&M Contract, shall be responsible for the care and custody of the facility as per GCC Clause 26.9.

C. Payments

10. Contract Price

- 10.1. The contract price mentioned under Appendix 5: Format for Financial proposal shall be firm and shall not be subject to price variation.
- 10.2. Subject to GCC Sub-Clauses 8.2 and 9.1 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
- 10.3. Contract price will be, if needed, adjusted in accordance with the provisions of GCC Clause 29.

11. Terms of Payment

- 11.1. The terms of Payment shall be as specified in SCC Clause 14. The procedures to be followed in making application for and processing payments shall be those outlined in the same SCC Clause.
- 11.2. No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.

12. Bank Guarantees

12.1. Issuance of Bank Guarantees

The Contractor shall provide the Bank Guarantees specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

12.2. Mobilization Advance Bank Guarantee

12.2.1. The Contractor shall, if required, provide a Bank Guarantee in an amount of 110% to the advance mobilization payment calculated in accordance with ITB Clause 1.2.3 of this RFP, and in the currency mentioned in ITB Clause 2.9.2, with an initial validity of up to 365 days from the date of request for the Facilities in accordance with GCC Clause 26. However, in case of delay in completion of facilities under the package, the validity of the security shall be extended by the period of such delay.

12.2.2. The security shall be in the form of an unconditional and irrevocable bank guarantee as per the Format provided in "Appendix 12 (a): Format of Bank Guarantee for Mobilization Advance". The Mobilization Advance shall be interest bearing. The rate of interest being the SBI base rates prevailing on the day of request. The Mobilization Advance against Bank Guarantee shall be reduced pro- rata from every Running Account Bill/ Stage Payment under the Contract based on the value of equipment/ facilities received. The total amount of mobilization advance, including the interest levied, shall deemed to be adjusted from the running bills on pro - rata basis till the commissioning of the Project as specified in SCC Clause 14. It should be clearly understood that adjustment in the value of Bank Guarantee for Mobilization Advance shall not in any way dilute the Contractor's responsibility and liabilities under the Contract including in respect of the Facilities for which the adjustment in the value of Bank Guarantee is allowed.

12.2.3. The Bank Guarantee submitted against the Mobilization advance shall be essentially from any nationalized Bank or the Banks listed at "Schedule - 1: List of Banks" supplemented at SCC of the Bidding Documents

12.3. Performance Bank Guarantee during EPC

12.3.1. The Contractor shall, within fourteen (14) days of the issue of LOI, provide Bank Guarantee(s) for the due Performance of the Contract for an amount and validity mentioned under ITB Clause 1.2.3. However, in case of delay of Operational Acceptance, the validity of all the contract Performance Bank Guarantees shall be extended by the period of such delay plus ninety days.

12.3.2. The Performance Bank Guarantee shall be denominated in the currency as mentioned in the ITB Clause 2.9.2 of this RFP and shall be in the form of unconditional and irrevocable bank guarantee in the prescribed Format provided in Appendix 12(c): Format of bank guarantee for Performance security during EPC under Section-VI: Forms and formats.

12.3.3. The Bank Guarantee submitted against the Performance Bank Guarantee shall be essentially from any Nationalized Bank or the Banks listed at "Schedule - 1: List of Banks" supplemented at SCC of the Bidding Documents.

12.4. Performance Bank Guarantee during O&M or "O&M Bank Guarantee"

12.4.1. The contractor shall, at the time of Operational Acceptance and at the end of 30th Month of O&M, provide Bank Guarantee for the due performance under the Operation and Maintenance of the facilities. The value and validity of the O&M Bank Guarantee shall be as per ITB Clause 1.2.3. The Bank Guarantee must be submitted in

the “Format 12(d): Format of Bank Guarantee for the Performance during O&M” specified under Section VI: Forms and Formats.

- 12.4.2. The Bank Guarantee submitted against the O&M Bank Guarantee shall be essentially from any of the Nationalized Banks or the Banks listed at “Schedule - 1: List of Banks” supplemented at SCC of the Bidding Documents.

13. Taxes and Duties

- 13.1. Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Sub-contractor or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.
- 13.2. The Contractor shall further ensure that he endorses the GR/LR/RR in the name of Employer during transit of the equipment before the delivery of equipment is taken by Employer.
- 13.3. All taxes, duties and levies on Works Contract or civil works, if any, shall be to the contractor’s account and no separate claim in this regard will be entertained by the Employer.
- 13.4. GST shall be to the contractor’s account and no separate claim in this regard will be entertained by the employer for EPC portion of the contract.
- 13.5. Any variation in GST after the date of techno - commercial bid opening shall be adjusted, paid/reimbursed by the employer subject to submission of requisite documentary evidence by the bidder.
- 13.6. As regards the income tax, surcharge on income tax and any other corporate tax; the employer shall not bear any tax liability whatsoever. The Contractor shall be liable and responsible for payment of such tax, if attracted under the provisions of the law present or future and employer will make deductions at source as applicable.

D. Intellectual Property

14. Copyright & Patent

- 14.1. The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party. The Employer shall however be free to reproduce all drawings, documents, specification and other material furnished to the Employer for the purpose of the contract including, if required, for operation and maintenance of the facilities.
- 14.2. The Contractor shall indemnify the Employer against third party claims of infringement of patent, trademark or industrial design rights arising from use of goods or any part thereof in India.

15. Confidential Information

- 15.1. The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer

to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GCC Clause 15.

- 15.2. The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Equipment, construction or such other work and services as are required for the Performance of the Contract.
- 15.3. The obligation of a party under GCC Sub-Clauses 15.1 and 15.2 above, however, shall not apply to that information which
- 15.3.1. Now or hereafter enters the public domain through no fault of that party
- 15.3.2. Can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto.
- 15.3.3. Otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 15.4. The above provisions of this GCC Clause 15 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.
- 15.5. The provisions of this GCC Clause 15 shall survive termination, for whatever reason, of the Contract.

16. [Geological discoveries](#)

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site where the services are performed, be deem to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent the personnel or any other persons from removing or damaging any such article or thing and shall immediately upon the discovery thereof and, before removal, acquaint the Employer of such discovery any carry out, at the expense of the Employer, the Employer's orders as to the disposal of the same.

17. [Representatives](#)

17.1. Project Manager / Engineer- In -Charge (EIC):

If the Project Manager/ EIC is not named in the Contract, then within seven (7) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager/ EIC. The Employer may from time to time appoint some other person as the Project Manager/ EIC in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. The Employer shall take reasonable care, unless unavoidable to see that no such appointment is made at such a time or in such a manner as to impede the progress of work on the Facilities. The Project Manager/EIC shall represent and act for the Employer at all times during the currency of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Project Manager/ EIC, except as herein otherwise provided. All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager/ EIC, except as herein otherwise provided.

17.2. Contractor's Representative & Construction Manager

- 17.2.1. If the Contractor's Representative is not named in the Contract, then within seven (07) days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within seven (07) days of submission, the Contractor's Representative shall be deemed to have been approved. If the Employer objects to the appointment within seven (07) days giving the reason therefor, then the Contractor shall appoint a replacement within seven(07) days of such objection, and the foregoing provisions of this GCC Sub- Clause 17.2.1 shall apply thereto.
- 17.2.2. The Contractor's Representative shall represent and act for the Contractor at all times during the tenure of the Contract and shall give to the Project Manager/ EIC all the Contractor's notices, instructions, information and all other communications under the Contract.
- 17.2.3. All notices, instructions, information and all other communications given by the Employer or the Project Manager/ EIC to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.
- 17.2.4. The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in GCC Sub-Clause 17.2.1.
- 17.2.5. The Contractor's Representative may, subject to the approval of the Employer (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager/EIC.
- 17.2.6. Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Sub-Clause 17.2.5 shall be deemed to be an act or exercise by the Contractor's Representative.
- 17.2.7. Notwithstanding anything stated in GCC Sub-clause 17.1 and 17.2.1 above, for the purpose of execution of contract, the Employer and the Contractor shall finalize and agree to a Contract Co-ordination Procedure and all the communication under the Contract shall be in accordance with such Contract Co-ordination Procedure.
- 17.2.8. From the commencement of installation of the Facilities at the Site until Final Acceptance, the Contractor's Representative shall appoint a suitable person as the construction manager (hereinafter referred to as "the Construction Manager"). The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper Performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as his or her deputy.
- 17.2.9. The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be in- competent or negligent, or may commit a serious breach of the Site regulations and safety. The

Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

- 17.2.10. If any representative or person employed by the Contractor is removed in accordance with GCC Sub-Clause 17.2.4, the Contractor shall, where required, promptly appoint a replacement.

18. Project Implementation

18.1. Work Schedule

Within fourteen (14) days after the date of Issue of NTP, the Contractor shall prepare and submit to the Project Manager/ EIC a detailed program of Performance of the Contract, made in the form of PERT Chart and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and pre-commission the Facilities. The program so submitted by the Contractor shall accord with the Time Schedule indicated in SCC and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager/EIC, but without modification in the Time for Completion given in the SCC and any extension granted in accordance with clause for extension of time, and shall submit all such revisions to the Project Manager/ EIC.

18.2. Progress Report

- 18.2.1. The Contractor shall monitor progress of all the activities specified in the work schedule referred in GCC Sub-Clause 18.1 above, and submit the progress report to the Project Manager as per the Contract Co-ordination procedure.
- 18.2.2. The progress report shall be in a form acceptable to the Project Manager/EIC and shall also indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.
- 18.2.3. If at any time the Contractor's actual progress falls behind the scheduled program, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager/ EIC, prepare and submit to the Project Manager/ EIC a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager/ EIC, of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion. If any extension thereof entitled under GCC Sub-Clause 54.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor, Contractor shall submit the revised plan for completion of Facility accordingly.

18.3. Maintenance of Records of Weekly Progress Review Meeting at Site

The Contractor shall be required to attend all weekly site progress review meetings organized by the 'Project Manager/ EIC' or his authorized representative. The deliberations in the meetings shall inter-alia include the weekly program, progress of work (including details of manpower, tools and facilities deployed by the Contractor vis-à-vis agreed schedule), inputs to be provided by Employer, delays, if any and recovery program, specific hindrances to work and work instructions by Employer. The minutes of the weekly meetings shall be recorded in triplicate in a numbered register available with the 'Project Manager/ EIC' or his authorized representative. These recordings shall be jointly signed by the 'Project

Manager/ EIC' or his authorized representative and the Contractor and one copy of the signed records shall be handed over to the Contractor.

19. Subcontracting

- 19.1. The Contractor shall not, without the prior consent in writing of the Employer, assign or sublet or transfer its Contract in whole or in part, its obligations to perform under the Contract or a substantial part thereof, other than raw materials, or for any part of the work of which makers are named in the Contract, provided that any such consent shall not relieve the Contractor from any obligation, duty or responsibility under the Contract.
- 19.2. The Contractor shall notify the Employer in writing of all sub contracts awarded under the Contract if not already specified in his Bid. Such notification in its original Bid or later shall not relieve the Contractor from any liability or obligation under the Contract.
- 19.3. In case, the Contractor engages any Sub-Contractor to carry out a part of the work, the Sub-Contractor should have requisite Government License for carrying out such part of the work.

20. Design and Engineering

20.1. Specifications and Drawings

- 20.1.1. The Contractor shall execute the basic and detailed design and engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good and sound engineering practice.
- 20.1.2. The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager/ EIC or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.
- 20.1.3. The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager/EIC.

20.2. Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date of bid submission shall apply unless otherwise specified.

20.3. Approval / Review of Technical Documents by Project Manager

The Contractor shall prepare list of documents as per technical specifications and furnish to the Project Manager for Approval of the same and Review of work schedule. Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof.

- 20.3.1. Within ten (10) days after receipt by the Project Manager of any document requiring the Project Manager's approval, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes.
- 20.3.2. The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good engineering practice.

- 20.3.3. If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), and upon resubmission with the required modifications the document shall be deemed to have been approved.
- 20.3.4. The procedure for submission of the documents by the Contractor and their approval by the Project Manager shall be as per the Contract Co-ordination procedure.
- 20.3.5. If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the parties within a reasonable period, then such dispute or difference may be settled in accordance with GCC Clause 6.0 (Settlement of Dispute) hereof. If such dispute or difference is referred as per GCC clause 6.0, the Project Manager shall give instructions as to whether and if so, how, Performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Arbitration upholds the Contractor's view on the dispute, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Arbitration shall decide, and the Time for Completion shall be extended accordingly.
- 20.3.6. The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.
- 20.3.7. The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager's approval thereof, pursuant to the provisions of this GCC Sub-Clause 20.3.
- 20.3.8. If the Project Manager requests any change in any already approved document and/or in any document based thereon, generally shall be taken care by the contractor if the change is not causing any major financial impact.

21. Procurement

21.1. Equipment

The Contractor shall procure and transport all the Equipment in an expeditious and orderly manner to the Site to achieve completion of activities as per schedule to enable commissioning of the Project by the scheduled commissioning date.

21.2. Transportation

The contractor shall ensure that all the equipment required to complete the Facility at site, are procured and dispatched on FOR site basis. The Contractor shall at its own risk and expense transport all the Equipment and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

21.3. Packing and Marking

- 21.3.1. The Contractor shall be responsible for securely protecting and packing the equipment as per prescribed standards in force to withstand the journey and ensuring safety of

materials and also arrival of materials at destination in original condition and good for contemplated use. Packing case size & weight shall take into consideration the remoteness of the goods final destination and absence of heavy material handling facilities at all points in transit.

21.3.2. Packing lists of materials shall be provided in each package to facilitate checking up of the contents at the destination.

21.3.3. In order to import any items, associated with the Project, from abroad or from any other state in India, Contractor shall have to arrange any clearance, permission, if required at his own risk, from any Government (Government of State & Government of India) or any Government (Government of State & Government of India) controlled organization for transportation of materials from manufacturing shop to delivery at Site. Necessary certificates, if so required, shall be issued by the Employer within reasonable time after getting written request from the Contractor along with the necessary documents substantiating necessity of such approvals. Contractor shall take necessary insurances to ensure safe transit. All packing material is the property of the Employer and shall be immediately deposited by the Contractor to the Employer's Store at project Site.

21.4. Storage of Equipment

The equipment thus procured under the scope of the contract must be kept in safe custody till put under operation. All the spares, as required for the trouble free O&M of facilities, must be kept under secure storage during O&M period.

22. Materials and Workmanship

22.1. All materials shall be of the best quality and workmanship capable of satisfactory operation under the operating and climatic conditions as may be specified. Unless otherwise specified, they shall conform in all respect to the latest edition of the relevant IS codes specifications wherever Indian specifications apply or IEC codes or equivalent internationally accepted standards.

22.2. The Contractor shall supply & deliver all equipment and materials for installation at site. The Contractor shall arrange for transportation, loading & unloading and safe storage of materials at project site at his own cost & risk.

22.3. If the Contractor offers equipment manufactured in accordance with other international well recognized standards (mentioned above), he shall, in that case, supply a copy in English of the Standard Specification adopted and shall clearly mention in what respect such standard specification differs from Indian Standard Specifications. The equipment, and materials offered by the Contractor should comply with one consistent set of Standards only to make the system compatible and work in harmony as far as possible, except if mentioned otherwise.

23. Installation

23.1. Tools & Tackles

The Contractor shall provide technically suitable tools and tackles for installation & erection of the facilities conforming to relevant BIS safety and technical standards for proper execution of work. The Employer, in no way, shall be responsible for supply of any tools and tackles for implementation of the work and also to carry out operation & maintenance activities.

23.2. Setting up/Supervision/Labour

23.2.1. Bench Mark:

The Contractor shall be responsible for the true and proper setting-up of the Facilities in relation to bench marks, reference marks which are mutually agreed upon by the contractor and employer. If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the satisfaction of the Project Manager.

23.2.2. Contractor's Supervision:

The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

23.2.3. Labour:

The Contractor shall provide and employ on Site in the installation of the Facilities such skilled, semi- skilled and unskilled labor as is necessary for proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills. Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation, first aid facility and catering of all labor, local or expatriate, required for the execution of the Contract and for all payments in connection therewith. The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labour and personnel to be employed by contractor on the Site. The Contractor shall at all times during the progress of the Contract use its best endeavours to prevent any unlawful, riotous or disorderly conduct or behaviour by or amongst its employees and the labour of its Subcontractors. The Contractor shall, in all dealings with its labour and the labour of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

23.3. Contractor's Equipment

23.3.1. All equipment brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager's consent that such Contractor's Equipment is no longer required for the execution of the Contract.

23.3.2. Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site.

23.4. Site Regulations and Safety

The Contractor shall have to provide necessary and adequate safety measures including personal protective equipment and precautions to avoid any accident, which may cause damage to any equipment / material or injury to workmen. The contractor, if required, will

provide necessary safety training to workmen. The Employer shall not be responsible for any such accidents. Also, contractor shall engage sufficient security guards to protect Facility from any theft and unauthorized access to Site.

23.5. Site Clearance

23.5.1. Site Clearance in Course of Performance

In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, packaging material, rubbish & debris and temporary installations from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.

23.5.2. Site Clearance after Completion

After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, packaging material, rubbish & debris and temporary works & installations of any kind from the Site, and shall leave the Site and Facilities clean and safe.

23.5.3. Disposal of Scrap

The Contractor shall with the agreement of the Employer promptly remove from the site any 'Scrap' generated during Performance of any activities at site in pursuance of the Contract. The term 'Scrap' shall refer to scrap/ waste/ remnants arising out of the unpacking of equipment, construction debris, breakage, fabrication of structural steel work and piping work at the project site in the course of execution of the contract and shall also include any wastage of cables during the termination process while installing the cables. The disposal of such Scrap shall vest with the Contractor for the items supplied by the Contractor and issued by Employer under this contract for installation and construction without any additional cost to the Employer. The removal of scrap shall be subject to the Contractor producing the necessary clearance from the relevant authorities (Custom, Excise etc.), if required by the law, in respect of disposal of the scrap. The liability for the payment of the applicable taxes/duties shall be that of the Contractor. The Contractor shall also indemnify to keep the Employer harmless from any act of omission or negligence on the part of the Contractor in following the statutory requirements with regard to removal/disposal of scrap. The Indemnity Bond shall be furnished by contractor as per Format enclosed as Appendix 17 of Section- VI: Forms and Formats. Further, in case the laws require the Employer to take prior permission of the relevant Authorities before handing over the scrap to the Contractor, the same shall be obtained by the Contractor on behalf of the Employer.

23.5.4. Watch & Ward and Lighting

The Contractor shall provide and maintain at its own expense all lighting, fencing, watch and ward wherever necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

24. Inspection & Testing

24.1. The Employer or its authorized representative shall have, at all time, access to the Contractor's premises and also shall have the power, at all times, to inspect and examine the

materials and workmanship of project work during its manufacture, shop assembly and testing. If part of the facilities is required to be manufactured in the premises other than the Contractor's, the necessary permission for inspection shall be obtained by the Contractor from the Employer or his duly authorized representative.

- 24.2. The Employer shall have the right to serve notice in writing to the Contractor on any grounds of objections, which he may have in respect of the work. The Contractor has to forthwith take necessary actions to remove the cause to the complete satisfaction of the Employer otherwise, the Employer at its liberty may reject all or any component or workmanship connected with such work.
- 24.3. The Contractor shall issue request letter to the Employer or its authorized representative for testing of any component, which is ready for testing at least 07 days in advance from the date of actual date of testing at the premises of the Contractor or elsewhere. However, the Employer at its own discretion may waive the inspection and testing in writing under very special circumstances. In such case, the Contractor may proceed with the tests which shall be deemed to have been made in the Employer presence, and it shall forthwith forward two sets of duly certified copies of test results and certificates to the Employer for approval. The Contractor, on receipt of written acceptance from the Employer, may dispatch the equipment for erection & installation.
- 24.4. For all tests to be carried out, whether in the premises of the Contractor or any Sub-Contractor, the Contractor, shall provide labor, materials, electricity, fuel, water, stores, apparatus and instruments etc. free of charge as may reasonably be demanded to carry out such tests of the facilities in accordance with the Contract. The Contractor shall provide all facilities to the Employer or its authorized representative to accomplish such testing.
- 24.5. The Employer or his authorized representative shall have the right to carry out inward inspection of the items on delivery at Site and if the items have been found to be not in line with the approved specifications, shall have the liberty to reject the same.
- 24.6. If Employer desires, testing of any component(s) to be carried out by an independent agency. The inspection fee, if any, shall be paid by the employer. However, the contractor shall render all necessary help to Employer whenever required free of charge.
- 24.7. The Contractor has to provide the necessary testing reports to the Employer as and when required.
- 24.8. Neither the waiving of inspection nor acceptance after inspection by the Employer shall, in anyway, absolve the Contractor of the responsibility of supplying the equipment strictly in accordance with specification and drawings etc.

25. Authorized Test Centre's for test certificates

The PV modules/ charge controllers/ inverters/ cables and other Balance of system equipment deployed in the All in One Solar LED Street Lights shall have valid test certificates for their qualification as per above specified IEC/ IS Standards by one of the NABL Accredited Test Centers in India. In case of module types/ equipment for which such Test facilities may not exist in India, test certificates from reputed ILAC Member body accredited Labs in abroad (with proof of accreditation) will be acceptable.

26. Commissioning and Completion of the Facilities

- 26.1. As soon as installation of the Facilities has, in the opinion of the Contractor, been complete as specified in the Technical Specifications, excluding minor items not materially affecting

- the operation or safety of the Facilities, the Contractor shall so notify the Employer (Project Manager/ EIC) in writing to witness the pre- commissioning of the facility.
- 26.2. As soon as all works in respect of Pre-commissioning are completed and, in the opinion of the Contractor, the Facilities is ready for Commissioning, the Contractor shall so notify the Project Manager in writing. The Contractor shall commence Commissioning of the facilities as per the GCC Sub - Clause 26.3.
- 26.3. Commissioning of the Facilities shall be completed by the Contractor as per procedures detailed in the Technical Specifications and in the presence of the Project Manager or the representatives of the employer.
- 26.4. If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub- Clause 26.2.
- 26.5. If the Project Manager is satisfied that the Facilities have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeat notice, issue a Completion Certificate stating that the Facilities have reached Completion as at the date of the Contractor's repeat notice.
- 26.6. If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeat notice, and the above procedure shall be repeated.
- 26.7. If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 26.2 or within seven (7) days after receipt of the Contractor's repeated notice under GCC Sub-Clause 26.3, or if the Employer makes use of the Facilities, then the Facilities shall be deemed to have reached Completion as of the date of the Contractor's notice or repeated notice, or as of the Employer's use of the Facilities, as the case may be.
- 26.8. As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.
- 26.9. Upon Completion, commissioning and successful demonstration, the contractor shall be responsible for the care and custody of the Facilities, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof for the agreed duration of operation and maintenance as stipulated and mutually agreed terms and conditions.

27. Guarantee Test and Operational Acceptance

27.1. Functional Guarantees

- 27.1.1. The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified under Technical Specifications, subject to and upon the conditions therein specified.
- 27.1.2. If, for reasons attributable to the Contractor, the guaranteed level of the Functional Guarantees specified under Technical Specifications are not met either in whole or in part, the Contractor shall, within a mutually agreed time, at its cost and expense make such changes, modifications and/ or additions to the Facilities or any part thereof as may be necessary to meet such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall seek the Employer's consent to repeat the Guarantee Test. If the level of the specified

Functional Guarantee parameters, as demonstrated even during repeat of the Guarantee Test(s), are outside the acceptable shortfall limit, the Employer may at its option, either

- Reject the Equipment and advise immediate replacement to suit the provisions of Technical Specification without any additional cost or;
- Reject the Equipment and recover the payments already made, or;
- Terminate the Contract and recover the payments already made, or;
- Accept the equipment after levy of liquidated damages in accordance with the provisions specified.

27.2. Performance Test

The Performance Test shall be conducted by the Contractor after Commissioning of the Facilities to ascertain whether the Facilities or the relevant part(s) can attain the Functional Guarantees specified in the Contract Documents. The Contractor's and Project Manager's advisory personnel shall attend the Test. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Test (and any repeats thereof). The detailed procedure for Performance Test shall be carried out as per procedure laid down in Section V - Technical Specifications.

27.3. Operational Acceptance

27.3.1. Operational Acceptance shall occur in respect of the Facilities when:

- The Performance Test in accordance with the procedure specified in Section V - Technical Specifications has been successfully completed and the Functional Guarantees are met; or
- The Contractor has paid the liquidated damages, if any, specified in GCC Clause 34 hereof;

27.3.2. At any time after any of the events set out in GCC Sub- Clause 27.3.1 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in the form provided in the Bidding Documents or in another form acceptable to the Employer in respect of the Facilities or the part thereof specified in such notice as at the date of such notice.

27.3.3. The Project Manager shall, after consultation with the Employer, and within thirty (30) days after receipt of the Contractor's notice, issue an Operational Acceptance Certificate.

27.3.4. If within thirty (30) days after receipt of the Contractor's notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities shall be deemed to have been accepted as at the date of the Contractor's said notice.

27.3.5. Subsequent to Operational Acceptance of the Facilities by the Employer and within 10 days of the commencement of the O&M period, the Contractor shall furnish an Indemnity Bond as per Appendix 18 of Section VI: Forms and Formats which is to be executed by the contractor for the facilities handed over by Employer for performance of its O&M Contract.

27.4. Final Acceptance

27.4.1. Final Acceptance shall occur in respect of the Facilities when:

- The facilities have achieved the Operational acceptance and served the O&M for the period stipulated under the contract agreement; and
 - All the contractors' liabilities under the O&M contract have been satisfied; and
 - Contractor has provided the list of recommended spares with detailed specification, source and price for further procurement; and
 - The Contractor has paid the liquidated damages, if any, as specified in SCC Clause 25 thereto;
- 27.4.2. At any time after the events set out in GCC Sub - Clause 27.4.1 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of Final Acceptance Certificate in the form provided in the Bidding Documents or in another form acceptable to the Employer in respect of the Facilities or the part thereof specified in such notice as at the date of such notice.
- 27.4.3. The Project Manager shall, after consultation with the Employer, and within thirty (30) days after receipt of the Contractor's notice, issue Final Acceptance Certificate.
- 27.4.4. If within thirty (30) days after receipt of the Contractor's notice, the Project Manager fails to issue the Final Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Final Acceptance Certificate, the Facilities shall be deemed to have been accepted as at the date of the Contractor's said notice.
- 27.4.5. The O&M contract period may further be extended for minimum period of 5 years as per mutually agreed terms and conditions. The contractor is allowed to submit his intent at the time of Final acceptance.
28. **Inter-changeability**
All the parts shall be made accurately to applicable Standards and specification so as to facilitate replacement and repairs. All corresponding parts of similar apparatus shall be inter-changeable.
29. **Power to Vary or Omit Work**
- 29.1. No alterations, amendments, omissions, additions, subtractions, or variations of the work (hereinafter referred to as "variation") under the contract shall be made by the Contractor except as directed by the Employer.
- 29.2. If any suggested variations would, in the opinion of the Contractor, if carried out would prevent it from fulfilling any of its obligations or guarantees under the Contract, it shall notify the Employer thereof in writing and the Employer shall decide forthwith whether or not the same shall be carried out and if Employer confirms its instruction, the Contractor shall carryout the work as per the instructions.
- 29.3. The differences in cost, if any, occasioned by such variations, shall be added to or deducted from the specific Contract Price i.e., Supply, Erection and Civil Works, as the case may be.
- 29.4. In the event of the Employer requiring any variations; reasonable and proper notice shall be given to the Contractor as well, to enable it to make arrangements accordingly, and in cases where goods or materials are already prepared/ procured, or any designs, drawings or patterns made or work done that require to be altered, a reasonable sum in respect thereof shall be allowed by the Employer.
- 29.5. In every case in which the contractor shall receive instructions from the Employer for carrying out any work, which either then or later, will in the opinion of the Contractor involve a claim for additional payment, the Contractor shall as soon as reasonably possible, not later than 15 days after the receipt of such instructions, inform in writing to the Employer of such claim for additional payment.

- 29.6. The quantity of earthwork is to be assessed as per the actual site requirement. The bidder has to assess the earthwork and associated work involved and make his bid judiciously. No extra claim on account for the same shall be admissible under any circumstances.
- 29.7. In any case, if the Bidder deviates from the design or specification as defined in the RFP document, the Bidder has to submit the deviation sheet along with the Bid.

30. Negligence

- 30.1. If the Contractor neglects to manufacture or supply or construct the facilities and equipment with due diligence and with expeditiousness or refuses or neglects to comply with any reasonable order given to it in writing by the Employer or contravenes any provisions of the Contract, the Employer may give (7) seven days' notice in writing to the Contractor, to make good the failure, neglect or contravention complained of. If the Contractor fails to comply with the notice within reasonable time depending on the nature of affected work, which is evaluated by the Project Manager from the date of serving thereof, in the event of failure, neglect or contravention capable of being made good within that time, then in such case, if the Employer thinks fit it may get the work done at the risk and cost of the contractor
- 30.2. If the cost of executing the work as aforesaid shall exceed the balance due to the Contractor and the Contractor fails to make good such deficiency, the Employer shall take action in the manner it may consider deemed fit in terms of the Contract.

31. Statutory Responsibility

The Contractor shall comply with all applicable laws or ordinances, codes, approved standards, rules, and regulations and shall procure and maintain their validity along with all necessary Municipal, Panchayat and Government permits & licenses etc. at its own cost.

32. Insolvency

The Employer may at any time, by notice in writing, summarily terminate the Contract without compensation to the Contractor in the following events:

If the Contractor being an individual or a firm or any partner thereof shall at any time, be adjudged insolvent or shall have a receiver appointed from administration against it or shall take any proceeding for compensation under any Insolvency Act for the time being in force or make any conveyance or assignment with its creditors or suspend payment or if the firm be dissolved under Partnership Act, or court or a Receiver, Liquidator or manager on behalf of the Debenture holder is appointed or circumstances have arisen which entitle the Court or debenture holder to appoint a Receiver, Liquidator or Manager.

33. Delay in Execution or Failure to Supply

- 33.1. Any delay in completion of the work, shall attract liquidated damage, for late completion as per Liquidated Damage GCC Clause 34.
- 33.2. If the Contractor fails to deliver the facilities or fails to start the work within specified time frame after signing of Contract Agreement or leave the work Site after partial execution of the work, Employer shall have the right to get the work done through any other agency at the risk and cost of the Contractor. Further to this, Employer may, without prejudice to the right of the Employer to recover damages for breach of trust of the Contract, may impose liquidity damages on the contractor as per GCC Clause 34.

34. Liquidated Damages

- 34.1. The project is scheduled to be commissioned within the period specified in SCC from the date of issue of LOI/ NTP.
- 34.2. In case the Contractor fails to achieve successful commissioning of facilities by the due date indicated in schedule as mentioned in SCC Clause 8, the Employer shall levy Liquidated Damages on the Contractor in the following lines:
- a) For first 45 days: @ 0.1% of the Contract Value of the remaining work per day of delay, as assessed in accordance with the certified payments subtracted from the total contract value.
 - b) For delay beyond 45 days mentioned at (a) above from the scheduled commissioning date, LD shall be levied @ 0.1% of the total Contract Value per day. However, total amount on account of LD shall be limited to maximum of 10% (ten percent) of the total contract value.
- 34.3. The project is to be commissioned within the stipulated time period mentioned at SCC. In case of delay for more than the maximum time period allowed (including LD), the Employer after due assessment may initiate the appropriate action including cancellation and getting the work completed by other suitable agency at the risk and cost of the contractor. For calculation of liquidated damages, the month shall be considered consisting of 30 days and date of LOI/ NTP as reference date

35. Defect Liability

- 35.1. The Contractor must warrant that the Facilities shall be free from defects in the design, engineering, materials and workmanship of the facilities and Equipment supplied and of the work executed.
- 35.2. If it shall appear to the Project Manager that any supplies have been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any materials or articles provided by the Contractor for the execution of Contractor are unsound or otherwise not in accordance with the Contract, the Contractor shall on demand in writing inform the Project Manager or its authorized representative specifying the item, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for. The Contractor shall forthwith rectify or remove and replace that item so specified and provide other proper and suitable materials or articles at its own charge and cost, and in the event of failure to do so within a period to be specified by the Project Manager in its demand aforesaid, the Project Manager may on expiry of notice period rectify or remove and re-execute the time or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respects of the Contractor. The decisions of the Project Manager in this regard shall be final and binding.
- 35.3. The Contractor shall also be undertaking the operation and maintenance of the Facility and consequently shall be required to rectify any defects that emerge during the operation of the Facilities for the entire term of this Contract.
- 35.4. The Defect Liability Period shall be of twenty four (24) months from the date of completion of the Facilities, during which the Contractor must repair any defect identified by the Project Manager/ EIC after commissioning of the facilities. All the expenses to repair the defects shall be borne by the contractor and no additional cost charged to the Employer ("Defects Liability Period").
- 35.5. If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the facilities and Equipment supplied or of the work executed

by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good (as the Contractor shall, at its discretion, determine) such defect as well as any damage to the Facilities caused by such defect.

35.6. Furthermore, without prejudice to the generality of the foregoing, it is clarified that the Contractor shall also be responsible for the repair, replacement or making good of any defect, or of any damage to the Facilities arising out of or resulting from any of the following causes:

- Improper operation or maintenance of the Facilities by the Contractor during operation and maintenance of the Facility; and
- Operation of the Facilities outside specifications of the Facilities.

35.7. The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.

35.8. The Employer shall provide the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this Clause 35 (Defect Liability). The Contractor may, with the consent of the Employer, remove any Equipment or any part of the Facilities that are defective from the Site, if the nature of the defect and/or any damage to the Facilities caused by the defect is such that repairs cannot be expeditiously carried out at the Site.

35.9. If the repair, replacement or making good is of such a nature that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

35.10. If such part fails the tests, the Contractor shall carry out further repair, replacement or making good (as the case may be) until that part of the Facilities passes such tests. The tests, in character, shall in any case be not inferior to what has already been agreed upon by the Employer and the Contractor for the original equipment/part of the Facilities.

35.11. If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than seven (7) days), the Employer may, following a notice to the Contractor, proceed to do such work, and the costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due to the Contractor or claimed under the Performance Guarantee, without prejudice to other rights, which the Employer may have against the Contractor in respect of such defects.

35.12. If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons. Upon correction of the defects in the Facilities or any part thereof by repair/replacement, such repair/replacement shall have the defect liability period of twenty four (24) months from such replacement.

35.13. In addition, the Contractor shall also provide an extended warranty for any such component of the Facilities and for the period of time. Such obligation shall be in addition to the defect liability specified under Clause 35.2.

36. Termination by default and Breach of Contract

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 in part:

- 36.1. If the Contractor fails to deliver or execute any or all of the goods within the time period(s) under the Contract or any extension thereof granted by the Employer pursuant to the clause for Delay in Execution or Failure to Supply or, if the Contractor fails to perform any other obligations(s) under the Contract.
- 36.2. In the event the Employer terminates the contract in whole or in part, pursuant to above, the Employer may procure, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered, the Contractor shall be liable to the Employer for any excess costs for such similar goods. However, the Contractor shall continue the Performance of the Contract to the extent not terminated.
- 36.3. In case of termination of the Contract due to breach of contract, the Contractor may be debarred from participation in future tenders by Employer, through a communication in writing for a period to be specified therein.
- 36.4. In case the termination of contract in accordance with GCC Clause 32 thereto.

37. Breach & Cancellation of the Contract

- 37.1. In case of non-Performance, in any form or change of the covenant and conditions of the Contract by the Contractor, Employer shall have the power to annul, rescind, cancel or terminate the order and upon its notifying in writing to the Contractor that it has so done, this Contract shall absolutely determine. The decision of the Employer in this regard shall be final and binding.
- 37.2. The following conditions shall contribute to the breach of contract:
 - If the Contractor fails to deliver any or all of the Goods within the period(s) specified in the Contract; or
 - If the Contractor fails to perform any of their obligations(s) under the Contract, and
 - If the Contractor, in either of the above circumstances does not rectify his failure within a period of 30 (Thirty) days (or such longer period as the Employer may authorize in writing) after receipt of the default notice from the Employer

38. Force Majeure

- 38.1. A 'Force Majeure' means any event or circumstance or combination of events those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:
 - Act of God, including, but not limited to lightning, fire not caused by contractors' negligence and explosion (to the extent originating from a source external to the site), earthquake (above 7.0 magnitude on Richter Scale), volcanic eruption, landslide, unprecedented flood, cyclone, typhoon or tornado;
 - Any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action, quarantine;
 - Radioactive contamination or ionizing radiation originating from a source in India or resulting from another Force Majeure Event mentioned above.
- 38.2. Force Majeure Exclusions

Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

- Unavailability, late delivery, or changes in cost of the machinery, equipment, materials, spare parts or consumables for the Project;
- Delay in the performance of any contractor, sub-contractor or their agents;
- Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;
- Strikes at the facilities of the Contractor / Affected Party;
- Insufficiency of finances or funds or the agreement becoming onerous to perform; and
- Non-performance caused by, or connected with, the Affected Party's:
 - Negligent or intentional acts, errors or omissions;
 - Failure to comply with an Indian Law; or
 - Breach of, or default under this Contract Agreement.
- Normal rainy seasons and monsoon

- 38.3. In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under this Contract, relative obligation of the party affected by such Force Majeure shall be treated as suspended during the period which the Force Majeure clause last.
- 38.4. Upon occurrence of such causes, the party alleging that it has been rendered unable as aforesaid, thereby, shall notify the other party in writing by registered notice within 48 (forty eight) hours of the alleged beginning thereof giving full particulars and satisfactory evidence in support of its claim. Further, within 7 (seven) days, the Contractor will furnish a detailed Contingency Plan to overcome the effects of the incident and bring the project on its schedule after cessation of the effect of Force Majeure.
- 38.5. The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.
- 38.6. Time for Performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such Force Majeure clause lasts.
- 38.7. If works are suspended by Force Majeure conditions lasting for more than two months, the Employer shall have the option of cancelling this Contract in whole or part thereof, at its discretion.
- 38.8. The Contractor will not be entitled to claim any compensation for Force Majeure conditions and shall take appropriate steps to insure its men and materials utilized by it under the Contract.

39. Insurance

- 39.1. During the Contract period, i.e., during Construction, all insurance related expenses shall be borne by the Contractor. The goods supplied under the Contract shall be fully insured against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in such a manner that Employer shall not incur any financial loss, as long as the facilities continues to remain under the custody of the Contractor. Contractor has to provide a seamless insurance for the contract duration.
- 39.2. In case of any loss or damage or pilferage or theft or fire accident or combination of the said incidents etc. under the coverage of insurance, the Contractor shall lodge the claim as per

rules of insurance. Any FIR required to be lodged to local Police Station shall be the responsibility of the Contractor.

- 39.3. The Contractor shall arrange to supply/ rectify/ recover the materials even if the claim is unsettled for timely completion of the project. The final financial settlement with the insurance company shall rest upon the Contractor.
- 39.4. In case of any delay of the project attributable to the Contractor, the Contractor himself in consultation with Employer should take the extension of insurance. Any financial implications shall, however, be borne by the Contractor.
- 39.5. The Contractor should arrange for providing insurance coverage to its workmen under Workmen's Compensation Act or similar Rules and Acts as applicable during execution of work for covering risk against any mishap to its workmen. The Contractor shall also undertake a Third Party Insurance. The Employer will not be responsible for any such loss or mishap.
- 39.6. All other insurance like In - transit insurance (Marine/ Cargo/ others as applicable), Contractor All Risk, Erection All Risk, workmen compensation , third party liability, insurance against theft and acts of GOD and others as required for the Construction and O&M of the facilities and to indemnify the Employer/ equipment/ material and resources shall be borne by the Contractor. Fire insurance is to be arranged by the Contractor up to the years of O&M of the Contract.
- 39.7. Employer shall be named as co - insured under all insurance policies taken out by the contractor pursuant to GCC Clause 39, except for the workmen compensation, third party liability and Employer's liability insurances. Also, Contractors' sub - contractor shall be named as co - insured under all insurances taken out by the contractor pursuant to GCC Clause 39 except for Cargo insurance, workmen compensation insurance and Employer's liability insurance. All insurers' rights of subrogation against such co - insured for losses or claims arising out of the performance of the contract shall be waived under such policies.
- 39.8. All the insurance cover taken for the construction and O&M period shall be seamless in nature.
- 39.9. The insurance are to be suitably taken for the activity/ act which is required to cover all the risks associated to the activity / act. The contractor shall be responsible to take suitable insurance till the completion of the O&M contract and indemnify the Employer from all associated risks whatsoever.
40. **Statutory Acts, Rules and Standards**
The work shall be executed in conformity with the relevant standard of Bureau of Indian Specification (or equivalent International Standard), Indian Electricity Act 2003, Indian Electricity Rules 2005 (as amended up to date), Explosive Act 1948, Petroleum Act 1934, National Building Code, Hazardous Waste Management Rules 2009, e - waste (Management & Handling) rules 2011 and relevant Rules/ acts in vogue at the time of execution including operation & maintenance period.
41. **Hazardous Material**
Any hazardous material used during construction or used as part of the facilities has to be taken back by the supplier for recycling or dumping purpose after its operating / working life, so that it may not affect the environment or any living being. Bidder(s) have to comply with State Pollution Board regulation.

42. **Stoppage of Work**
Employer shall not be responsible and not liable to pay any compensation due to stoppage of work as a reaction from local public due to any undue action on the part of the Contractor causing annoyance to local people.
43. **Hindrance Register**
The Contractor may also maintain a Hindrance Register where reasons for delay/ fault may be recorded from time to time and at the time of occurrence of the hindrance and get it duly certified by the Project Manager or his authorized representative.
44. **Manuals**
The Contractor shall supply all necessary erection and commissioning manuals, O&M manuals etc. as and when required. Six sets of test results, manuals etc. shall be submitted by the Contractor on completion of the work to the employer.
45. **Delivery of Equipment**
45.1. The Contractor shall deliver the equipment and machineries in accordance with the terms of the Contract at the time(s) to the place(s) and in the manner specified in the Contract. The Contractor shall comply with instructions that may be given by the Employer from time to time regarding the transit of the material.
45.2. Notification of delivery or dispatch in regard to each and every consignment shall be made to the Employer immediately after dispatch or delivery from the manufacturing works. The Contractor shall supply to the consignee Invoice in triplicate and packing account of all stores delivered or dispatched by him.
45.3. In case of any occurrence of loss or damage in transit, it shall be the liability of the Contractor to initiate or pursue the claim with insurance company. It should take immediate steps to repair the damaged apparatus or replacement thereto.
46. **Liabilities during Transit**
All the supplies mentioned/ required under this RFP shall be FOR destination basis. The Contractor shall be responsible for loss, damages or depreciation to goods or of equipment, and machineries up to delivery at Site. The replacement of the affected item shall also to be carried out by the contractor to meet the performance of the contract within the specified time.
47. **Deduction from Contract Price**
47.1. All costs, claims, damages or expenses, which the Employer may have paid for which the Contractor is liable, will be deducted by the Employer from deposited Performance Bank Guarantee (s) or from any money due or which become due to him under this Contract or any contract are being executed elsewhere with the Employer.
47.2. Any sum of money due and payable to the Contractor, as per the Contract Agreement, may be appropriated by the Employer and set off against any claim of the Employer, for the payment of a sum of money arising out of or under any other contract made by the Contractor with the Employer. It is an agreed term of the Contract that the sum of money, withheld or obtained under this clause by the Employer, will be kept withheld or retained as such by the Employer or till the claim arising out of in the same Contract is either mutually settled or determined by the arbitrator, or by competent court, as the case may be, and that the Contractor shall have no claim for interest or damages whatsoever on this account or any other account in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

- 47.3. The generation LD is to be recovered from the payment due. If the LD is greater than the payment due, then O&M performance BG will be encashed for balance amount. It will be the responsibility of the contractor to have the desired performance BG for O&M to be made available at the end of every year till the completion.

48. Warranty / Guarantee

- 48.1. All in One Solar LED Street Light shall be warranted for at least 5 years for failures due to material defects and workmanship.
- 48.2. The mechanical structures, electrical works and overall workmanship of must be warranted for a minimum of 5 years.
- 48.3. The Contractor must ensure that the goods supplied under the Contract are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- 48.4. The warranty / guarantee period shall be as follows:
- 48.4.1. All in One Solar LED Street Light shall be warranted for a minimum period of 5 years in the Bidder's detailed Warranty / Guarantee certificate or guarantee period provided by the OEM, whichever is higher.
- 48.4.2. The mechanical structures, electrical works and overall workmanship of must be warranted for a minimum of 5 years or guarantee period provided by the OEM, whichever is higher.
- 48.4.3. Associated switch gear and others: Bidder must furnish in detail its warranties / guarantees for these items.
- 48.5. During the period of Warranty / Guarantee the Contractor shall remain liable to replace any defective parts, that becomes defective in the facilities, of its own manufacture or that of its sub-Contractors, under the conditions provided for by the Contract under and arising solely from faulty design, materials or workmanship, provided such defective parts are not repairable at Site. After replacement, the defective parts shall be returned to the Contractors works at the expense of the Contractor unless otherwise arranged.
- 48.6. At the end of guarantee period, the Contractor's liability shall cease. In respect of goods not covered by the GCC Sub Clause 48.5, the Employer shall be entitled to the benefit of such guarantee given to the Contractor by the original Contractor or manufacturer of such goods.
- 48.7. During the Operation & Maintenance and guarantee period, the Contractor shall be responsible for any defects in the work due to faulty workmanship or due to use of sub-standard materials in the work. Any defects in the work during the guarantee period shall therefore, be rectified by the Contractor without any extra cost to the Employer within a reasonable time as may be considered from the date of receipt of such intimation from the Employer failing which the Employer reserves the right to take up rectification work at the risk and cost of the Contractor.
- 48.8. If any extended warranty/guarantee is required beyond the warranty/guarantee period as parts of terms and conditions of the bid, the same has to be arranged by the bidder at their cost, if necessary.

49. Final Bill/ Final Due Payment

The final bill relating to the EPC Contract or its parts viz. Supply, Erection and Civil Works contract, shall be prepared only after the Performance of the facilities has been observed. It will include the adjustments of all claims against the Contractor by the Employer and awarded in its favor by the adjudicator or arbitrator, as the case may be, up to the date of preparation of the final bill.

50. Operation and Maintenance

50.1. The Operation and Maintenance shall be comprehensive. The maintenance service provided shall ensure proper functioning of the facilities as a whole. All preventive / routine maintenance and breakdown / corrective maintenance required for ensuring maximum uptime shall have to be provided. Accordingly, the Comprehensive Operation & Maintenance shall have two distinct components as described below:

50.1.1. Preventive / Routine Maintenance:

This shall be done by the Contractor regularly and shall include activities such as cleaning and checking the health of the battery, cleaning of module surface, tightening of all electrical connections, and any other activity including the associated civil works, as mentioned in TS Clause 3, wear and tear that may be required for proper functioning of the Solar PV system as a whole. Necessary maintenance activities, Preventive and Routine for associated switch gears.

50.1.2. Breakdown / Corrective maintenance:

Whenever a fault occurs, the Contractor has to attend to rectify the fault & the fault must be rectified within the 24 hours from the time of occurrence of fault, failing which the Contractor will be liable for additional liquidated damages of 0.02 % of the contract value per day till the date of rectification. The contractor must maintain all the records pertaining to all such faults and necessary measures taken.

50.2. The date of Comprehensive Operation & Maintenance Contract period shall begin on the date of Successful demonstration of guaranteed performance i.e., Operational acceptance. However, operation of the facilities means operation of system as per bid and workmanship in order to keep the project trouble free covering the guarantee period.

51. Risk Purchase

If the Contractor fails, on receipt of the LOI, to take up the work within a reasonable period or leave the work Site after partial execution of the work, the Employer shall have the liberty to get the work done through other agency at the Contractor's own risk and additional cost if any has to be borne by the Contractor. If the situation, so warrants, to compel the Employer to cancel the LOI placed on the Contractor, the Contractor shall be liable to compensate the loss or damage, which the Employer may sustain due to reasons of failure on Contractor's part to execute the work in time.

52. Unforeseen/ Differing site Conditions

52.1. If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions (other than climatic conditions) or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Facilities, and on the basis of information that it could have obtained from a visual inspection of the Site (if access thereto was available) or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Equipment or Contractor's Equipment, notify the Project Manager in writing of

- The physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen

The additional work and/ Equipment and/ or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions

- The extent of the anticipated delay
- The additional cost and expense that the Contractor is likely to incur and the breakup of the same.

On receiving any notice from the Contractor under this GCC Sub- Clause 52.1, the Project Manager shall consult and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor of the actions to be taken.

52.2. Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Sub-Clause 52.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.

52.3. If the Contractor is delayed or impeded in the Performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Sub-Clause 52.1, the Time for Completion shall be extended in accordance with GCC Clause 54.

53. Change in Laws and Regulations

If, after the date seven (7) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the Performance of any of its obligations under the Contract. However, these adjustments would be restricted to direct transactions between the Employer and the Contractor/assignee of Foreign Contractor (if applicable). This adjustment shall not be applicable on procurement of raw materials, intermediary components etc. by the Contractor and shall also not be applicable on bought out items dispatched directly from sub- vendor works to site. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable.

54. Extension of Time for Completion

54.1. The Time(s) for Completion specified in the SCC shall be extended if the Contractor is delayed or impeded in the Performance of any of its obligations under the Contract by reason of any of the following:

- 54.1.1. Any occurrence of Force Majeure as provided in GCC Clause 38 (Force Majeure), unforeseen/ differed site conditions as provided in GCC Clause 52 (Unforeseen/ differed site Conditions).
- 54.1.2. Any changes in laws and regulations as provided in GCC Clause 53 (Change in Laws and Regulations) or by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

54.2. Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together

with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, then the matter will be settled in accordance with the provisions of GCC Sub-Clause 6.1 (Adjudicator).

54.3. The Contractor shall at all times use its reasonable efforts to minimize any delay in the Performance of its obligations under the Contract.

54.4. The Contractor shall be required to attend all weekly site progress review meetings organized by the 'Project Manager' or his authorized representative. The deliberations in the meetings shall include the weekly program, progress of work (including details of manpower, tools and equipment deployed by the Contractor vis-à-vis agreed schedule), inputs to be provided by Employer, delays, if any and recovery program, specific hindrances to work and work instructions by Employer. The minutes of the weekly meetings shall be recorded in triplicate in a numbered register available with the 'Project Manager' or his authorized representative. These recordings shall be jointly signed by the 'Project Manager' or his authorized representative and the Contractor and one copy of the signed records shall be handed over to the Contractor.

55. Care of Facilities

The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 18 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Subcontractors in the course of any work carried out, pursuant to GCC Clause 35 (Defect Liability).

56. Contractor Performance & Feedback and Evaluation System

The Employer has in place an established 'Contractor Performance and Feedback System' against which the Contractor's Performance during the execution of Contract shall be evaluated on a continuous basis at regular intervals. In case, the Performance of the Contractor is found unsatisfactory on any of the following four parameters, the Contractor shall be considered ineligible for participating in future tenders for a period as may be decided by the Employer:

- Financial Status
- Project Execution and Project Management Capability
- Engineering & QA Capability
- Claims & Disputes

57. Documents constituting the Contract

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read construed as an integral part of the contract:

- a) Contract Agreement
- b) Letter of Intent / Notice to proceed
- c) Special Conditions of Contract

- d) General Conditions of Contract
- e) Technical Specifications and Drawings
- f) The Bid and Price schedules submitted by the contractor

58. [Fraud Prevention Policy](#)

The Contractor along with their Associate/Collaborator/Sub-contractors/Sub-vendors/Consultants/Service Providers shall observe the highest standard of ethics and shall not indulge or allow anybody else working in their organization to indulge in fraudulent activities during execution of the Contract. The Contractor shall immediately apprise the Employer about any fraud or suspected fraud as soon as it comes to their notice.

Section - IV

Special Conditions of Contract

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

Contents

1. Project description	71
2. Project Site	71
3. Appointing Authority	71
4. Project Manager/ Engineer in - Charge	71
5. Scope of Works	71
6. Training of Employer's Personnel	71
7. Performance Guarantee	71
8. Project Time lines:.....	72
9. Mode of Execution	72
10. Programme of Work	72
11. Starting of Work.....	72
12. Completion Schedule	72
13. Site Inspection & Basis of Bid.....	72
14. Terms of Payment	73
15. Price Escalation	75
16. Taxes and Duties:	75
17. Procurement of Materials.....	76
18. Notice of Operation	76
19. Rejection of Materials.....	76
20. Construction Power & Water Supply	76
21. Labour Engagement	77
22. Handing Over -Taking Over	77
23. Liquidated Damages.....	77
24. Liquidated Damages (LD) - During O&M.....	77
25. Miscellaneous	77

1. Project description

Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05 Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area, under smart city mission in Visakhapatnam.

2. Project Site

Project site shall be at Visakhapatnam. Details of the Project Site is mentioned under Section V: Technical Specifications and Annexure 1: Details of site.

3. Appointing Authority

Appointing Authority of Adjudicator and arbitrator shall be as per directives of High Court, Hyderabad.

4. Project Manager/ Engineer in - Charge

Project Manager/ Engineer in - Charge will be appointed and will be intimated after award of the contract.

5. Scope of Works

The detailed scope of works under this contract shall be referred at Section V: Technical Specifications.

6. Training of Employer's Personnel

On successful commissioning of the facilities, the Bidder shall provide training on operations and maintenance to a team of 5 - 10 personnel (Engineers and Technician/ Operators) as nominated by Employer.

7. Performance Guarantee

- 7.1. The performance will be evaluated through calculation of AVERAGE LEVEL OF ILLUMINATION on road surface (Lux Levels).
- 7.2. The minimum acceptable average level of illumination is 8 Lux as per IS-1944(1&2)-1970.
- 7.3. Minimum lux should be at least 3 lux in between two poles, with Uniformity minimum lux/average lux should be > 0.4 & minimum lux/maximum lux should be > 0.33 , the longitudinal uniformity to be minimum 0.7 & all these uniformities parameters need to be same at the dimmed stage.
- 7.4. The initial acceptance of the facilities will be evaluated during commissioning by measuring Lux Levels.
- 7.5. Remote Monitoring & Control System shall be integrated/embedded for the monitoring and controlling the system remotely.
- 7.6. The contractor shall operate and maintain the Facilities with full reliability and up keep.
- 7.7. During the O&M period, the bidders need to maintain 99% uptime of the facilities. Any repair, replacement, overhauling, etc. are to be performed during day times. On account of uptime less than 99%, as certified by the competent authority, shall attract no separate LD. GCC Clause 50.1.2 shall be read in addition to the breakdown maintenance.
- 7.8. Bidders are expected to make their own study of solar radiation profile and other related parameters of the area & make sound commercial judgment about the Performance of the facilities.
- 7.9. The bidders are free to install additional equipment any time during O&M period, with proper consent by the Employer, to meet the desired performance parameters with no additional

cost to the Employer. Such additional equipment installed to meet the desired performance level will be considered a part of the project assets and will remain as property of GVSCCL.

8. Project Time lines:

The time lines for execution of the contract is 180 days from the date of award of LOI / NTP and as per the indicative milestones mentioned below.

Timelines for Scope of work		
S. No.	Stage	Reference from D
1	Date of Agreement	Zero Date (D)
2	Site Survey & Feasibility Report	D+40
3	Approval of Designs & Major drawings	D+80
4	Completion of Civil work	D+200
5	Completion of supply of equipment	D+240
6	Installation of all equipment	D+300
7	Completion of installation	D+340
8	Completion, testing and commissioning of Facilities	D+365
9	Operational Acceptance	D+390

9. Mode of Execution

The entire work shall be executed on turnkey basis. Any item(s) not included in the schedule but essentially required for completion of the work shall have to be carried out/ supplied without any extra cost. Such works, not listed in the schedule of works but elaborately described to perform or to facilitate particular operation(s) required for completion of the project shall deemed to have been included in the scope of this work and the Contractor shall supply, install the same without any extra cost.

10. Programme of Work

The Contractor shall submit the detailed programme of work within 15 days from the date of receipt of Letter of Intent. The programme shall include a Bar/ Gantt chart indicating there in the starting position and completion date of each of the major items of work.

11. Starting of Work

The Contractor shall be required to start the work within 10 (Ten) days from the date of issue of LOI / NTP and shall thereof, report to the Employer accordingly.

12. Completion Schedule

- 12.1. The Contractor shall inform the Employer through advance information at least 30 days in advance in written notice, and a final notice 7days in advance to enable the Employer inform the commissioning committee of the date on which it intends to commission the Project.
- 12.2. The Contractor shall prepare the completion schedule accordingly and in conformity with provisions of technical specifications and carry out the work as per this schedule subject to “Force Majeure” conditions. The Contractor shall mobilize resources keeping in view, the above scheduled completion period.

13. Site Inspection & Basis of Bid

The volume and quantity of work indicated in schedule of works may vary. The Contractor should visit and make his own assessment of the Site before quoting rate. After taking in to

consideration all aspects of the site and according to site condition etc., the Contractor should quote for the works. No extra claim will be entertained at post bidding stage. The lighting design, civil foundations design and structural design shall have to be approved by the Employer. In case of any defects arising in the facilities during guarantee period, the Contractor shall have to rectify the same at its own cost.

14. Terms of Payment

Payments shall be released against each component of Price Bid in the following manner after submission by the contractor and acceptance of Security cum Performance Bank Guarantee by Employer and signing of Agreement as per provisions of bidding document.

14.1. In accordance with the provisions of GCC Clause 11 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times:

14.1.1. For Supply of Facilities and Equipment including BOS up to site (FOR basis) including transportation and insurance along with mandatory spares

- i. 50% of the total price of supplies of Equipment shall be paid against delivery of supplies on pro-rata basis against receipt of material at site under the Contract.
- ii. 40% of the total price of supplies of Equipment shall be paid on Operational Acceptance of the Facility pursuant to successful demonstration of Performance and submission of all as - built documentation.
- iii. 10% of the total price of supplies of Equipment shall be paid after the successful first year of operation.

14.1.2. For Erection, Testing and Commissioning

- i. 50% of the total price of Erection, Testing and Commissioning shall be paid on pro-rata basis on completion of installation of equipment on certification by the Engineer-In-Charge/ Project Manager for the quantum of work completed after successful clearance of quality check points involved in the quantum of work billed.
- ii. 40% of the total price of Erection, Testing and Commissioning shall be paid on Operational Acceptance of the Facility pursuant to successful demonstration of Performance.
- iv. 10% of the total price of Erection, Testing and Commissioning shall be paid after the successful first year of operation.

14.1.3. For Civil Works

- i. 50% of the total price of Civil Works shall be paid progressively on certification by the Project Manager/ Engineer In - Charge for the quantum of work completed/ Milestones achieved after successful clearance of quality check points involved in the quantum of work / Milestones billed.
- ii. 40% of the total price of Civil Works shall be paid on completion of all the civil works including finishing and debris removal.
- iii. 10% of the total price of Civil Works shall be paid after the successful first year of operation.

14.1.4. Operation & Maintenance

On successful Operation and Maintenance of the Facilities on quarterly basis at the end of every quarter for each year till 5 years. The O&M of the facilities starts after Operational Acceptance.

1. Year 1: OM -1
2. Year 2: OM -2
3. Year 3: OM -3
4. Year 4: OM -4
5. Year 5: OM -5

14.2. Recovery of interest bearing Mobilization advance:

Recovery of the mobilization advance and interest component on the advance amount shall be adjusted from the bills of the contractor in equal instalments from the progressive payments released to the Contractor. The amount of interest to be recovered from a particular bill shall be calculated at SBI base rate (per annum) prevailing on the date of request on the value of advance corresponding to the percentage of total progressive payment being released. The period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums deductible therefrom, the balance outstanding shall be recovered from the next payments immediately falling due from the BG submitted by the bidder against mobilization advance will be returned to the contractor after adjustment of mobilization advance in full including interest thereof.

14.3. Notes:

- i. All the transactions shall be made directly between the Employer and the Contractor. Hence for every consignment, the consignee must be in the name of "GVSCCL, Visakhapatnam".
- ii. The bidder shall furnish a detailed break-up, including bill of materials, for the Price Component of all the packages which shall be mutually discussed and finalized with the Employer "before signing of Contract Agreement matching with the price quoted by the successful bidder". Progressive payment for Erection and Civil works will be made against monthly bills based on certification by the Project Manager/ Engineer In - Charge for the work completed.
- iii. The release of first progressive payment for Civil Works shall also be subject to submission of documentary evidence by the Contractor towards having taken the insurance policy (ies) in terms of relevant provisions of GCC Clause 39 (Insurance) and acceptance of same by the Project Manager/ Engineer-In-Charge.
- iv. Contract Value (CV):
The firm sum quoted by the Successful Bidder in its Financial Proposal is the sum of individual contract values for supply, erection, civil Works under different work packages as mentioned below:
 - a) Supply Contract Value: Total value mentioned against the Supply package mentioned at SCC clause 14.1.1 and Bill of Quantities.

- b) Erection Contract Value: Total value mentioned under the Erection Testing and commissioning works package mentioned at SCC clause 14.1.2 and Bill of Quantities.
 - c) Civil Works Contract Value: Total value mentioned under the Civil Works package mentioned at SCC Clause 14.1.3 and Bill of quantities.
 - d) O&M Contract Value: Total value mentioned under the Operation & Maintenance works mentioned at SCC clause 14.1.4 and Bill of Quantities
- 14.4. Mobilisation Advance, if requested, shall be payable against submission of unconditional and irrevocable Mobilization 110% of the advance payment bank guarantee as per format in Appendix 12 (d) of Section VI: Forms and Formats issued by any nationalized bank or the banks enlisted at Schedule-1. This bank guarantee shall be valid as per ITB Clause 1.2.3 from the date of issue of LOI. The recovery of the mobilization advance shall be made in accordance with SCC Clause 14.2.
- 14.5. "OM" indicates the O&M Contract Value quoted by the Successful Bidder for each individual year in its Financial Proposal.
- 14.6. The Employer will withhold / deduct /under this Contract, and or to any additions or deductions provided for in this Contract, the statutory deductions as per provisions of the laws in force before making payments. Accordingly the Contractor shall submit Bills / Invoices after incorporating and in compliance of the following:
 - 14.6.1. All payments shall be made in Indian Rupees, unless otherwise specified in the Contract Agreement. All payment shall be made on the basis of actual measurement for the quantified items as per schedule of works and approved by Project Manager/ EIC within 30 days of submission of certified invoice by the contractor.
 - 14.6.2. The Contractor shall submit the bill / invoice for the work executed showing separately Taxes and any other statutory levies in the bill / invoice.
 - 14.6.3. All taxes and deductions shall be applicable as per prevailing income tax and other statutory rules and provisions in force. Employer will not issue C - Form etc. in order to get tax concession. Bidders are requested to take in account while quoting their bids.
- 14.7. The Contractor, while raising Bills / Invoices shall raise separate Bills / Invoices against individual contracts with reference to the LOI/ Contract number and indicating applicable taxes / duties on the contract. Bills / Invoices for more than one contract package shall not be clubbed together.

15. Price Escalation

No Price escalation is allowed. The rate(s) quoted against the work shall remain firm during the entire Contract period. Any change in Forex rate shall not be considered for price variation.

16. Taxes and Duties:

- 16.1. Proper tax invoices, raised against the different work packages viz. Supply, Erection, Civil Works must be submitted mentioning the tax component clearly and separately.
- 16.2. Bidder will quote the rates of taxes & duties based on the concessional rate or exemption in the same (as applicable) that can be availed by the bidder on its own. Statutory variations in the tax shall be permitted as under:
 - A. Statutory variations during original contractual completion period:

- i. If any increase takes place in taxes and duties due to statutory variation, then Employer shall consider the same on production of documentary evidences and Tax Invoices.
 - ii. If any decrease takes place in taxes and duties due to statutory variation, the same shall be passed on to Employer and Employer shall consider the reduced rate of taxes and duties while making the payment.
- B. Statutory variations beyond original contractual completion period:
- i. If reasons for extension of contractual completion period is attributable solely to Employer, the provisions of (A) above shall apply.
 - ii. If reasons for extension of contractual completion period is attributable to Bidder, then:
 - a) Increase in taxes and duties due to statutory variation, shall not be admissible. However, taxes and duties at the rate prevailing original contract completion period will be payable.
 - b) If any decrease takes place in taxes and duties due to statutory variation, the same shall be passed on to Employer or Employer shall consider the reduced rate of taxes and duties while making the payment.
- C. Variation on account of foreign exchange rate will not be payable. Also, no statutory variation shall be payable on the input items i.e., raw materials etc.
- D. No statutory variation shall be admissible if the excise duty becomes payable because of exceeding the prescribed limits for turnover of the Bidder.
- E. Notwithstanding anything contained in this document at any other place, all the taxes on account of bought out items or any other transaction between the Contractor and his sub-Contractor/supplier, will be to the account of the Contractor. Employer will not be liable for any other taxes on this account.

17. Procurement of Materials

The Contractor shall procure all necessary material required for the project work and arrange to store them properly. Test certificate in accordance with the specifications are to be furnished by the Contractor to the Employer for approval in respect of the materials procured by the Contractor. Contractor shall furnish all the documents related including GR/LR/RR along with the supplier invoices as a proof of the purchase along with the bill / invoice raised by the contractor.

18. Notice of Operation

The Contractor shall not carry out important operation without the consent in writing of the Employer or his representative. For carrying out such important activity, the Contractor shall intimate to the Employer at least 72 hours before starting of the job.

19. Rejection of Materials

The Project Manager's decision in regard to the quality of the material and workmanship will be final. The Contractor at its own cost and risk without any compensation shall immediately remove any material rejected by the Project Manager from the Site of work.

20. Construction Power & Water Supply

- 20.1. The Contractor has to arrange Construction Power and water at the site for construction purpose at its own cost.

- 20.2. The Employer shall not provide facility for storage of material, and accommodation for labours at site. The Contractor shall make his own arrangement for the above.

21. Labour Engagement

The Contractor shall be responsible to provide all wages and allied benefits to its labours engaged for execution of the project work and also to carry out Operation & Maintenance service.

The Contractor shall remain liable to the authorities concerned for compliance of the respective existing rules and regulations of the government for this purpose and shall remain liable for any contravention thereof.

The contractor is encouraged to use local manpower as per the local statutory (labour) requirement, if any.

22. Handing Over -Taking Over

The work shall be taken over by the Employer upon successful completion of all tasks to be performed at Site(s) on equipment supplied, installed, erected and commissioned by the Contractor in accordance with provision of RFP. During handing over complete project work, the Contractor shall submit the following for considering final payment:

- 22.1. All as- Built Drawings and documents as per the contract coordination procedure set out for the successful completion of the project.
- 22.2. Detailed Engineering Document with detailed specification, schematic drawing, circuit drawing, cable routing plans and test results, manuals for all deliverable items, Operation, Maintenance & Safety Instruction Manual and other information about the project.
- 22.3. Bill of material.
- 22.4. Inventory of recommended and mandatory spares at project Site.
- 22.5. Immediately after taking over of complete facilities (s), the same will be handed over to the Contractor for Operation & Maintenance for a period of as mentioned in the bidding document.

23. Liquidated Damages

Liquidity damages for the delay in construction of the facilities shall be as per the GCC Clause 34.

24. Liquidated Damages (LD) - During O&M

- 24.1. Liquidity Damages during O&M period shall be charged at a rate of:
- Whenever a fault occurs, the Contractor has to attend to rectify the fault & the fault must be rectified within the 24 hours from the time of occurrence of fault, failing which the Contractor will be liable for additional liquidated damages of 0.02 % of the contract value per day till the date of rectification and the same shall be deducted from their payments due / Performance Bank guarantee for O&M period submitted to the Employer.

25. Miscellaneous

- 25.1. Based on reviewing the Project, if the progress is below expectation as demanded by the Employer then, the employer reserves right to reduce the Scope of the Contractor in part or full and assign the same to other contractor(s) and get the work done at the risk and cost of the existing Contractor.

- 25.2. The Contractor shall continue to provide all the monitoring services, licenses, software, access to all information (real-time or stored) that were being used during the O&M to the Employer.
- 25.3. Provision for installing any additional monitoring equipment to facilitate on- line transfer of data shall be provided by the Contractor.
- 25.4. In case of discrepancy between GCC Clause and SCC Clause on a particular subject, SCC conditions will prevail.

Schedule 1: List of Banks

SCHEDULED COMMERCIAL BANKS		OTHER PUBLIC SECTOR BANKS	
1	SBI AND ASSOCIATES	1	IDBI Bank Ltd.
2	State Bank of India	FOREIGN BANKS	
NATIONALISED BANKS		1	Bank of America NA
1	Allahabad Bank	2	Bank of Tokyo Mitsubishi UFJ Ltd.
2	Andhra Bank	3	BNP Paribas
3	Bank of India	4	Calyon Bank
4	Bank of Maharashtra	5	Citi Bank N.A.
5	Canara Bank	6	Deutsche Bank A.G
6	Central Bank of India	7	The HongKong and Shanghai Banking Corpn. Ltd.
7	Corporation Bank	8	Standard Chartered Bank
8	Dena Bank	9	Societe Generale
9	Indian Bank	10	Barclays Bank
10	Indian Overseas Bank	11	ABN Amro Bank N.V.
11	Oriental Bank of Commerce	12	Bank of Nova Scotia
12	Punjab National Bank	13	Development Bank of Singapore (DBS, Bank Ltd.)
13	Punjab & Sind Bank	SCHEDULED PRIVATE BANKS	
14	Syndicate Bank	1	Federal Bank Ltd.
15	Union Bank of India	2	ING Vysya Bank Ltd.
16	United Bank of India	3	Axis Bank Ltd.
17	UCO Bank	4	ICICI Bank Ltd.
18	Vijaya Bank	5	HDFC Bank Ltd.
19	Bank of Baroda	6	Yes Bank Ltd

SECTION - V

TECHNICAL SPECIFICATIONS

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

Contents

A. Introduction	83
1. Site Description	83
B. System Design and Philosophy	83
2. Design Philosophy	84
C. Scope of Supply and Work	85
3. Detailed Scope of Work.....	85
D. Technical Specification of All in One Street Lights	90
4. Bill of Material:.....	90
5. All in One Solar LED Street Light	90
6. Pole/Mounting Structure & Remote Monitoring & Control System (RMS).....	91
E. Performance Measurement procedure	92
7. Performance Test Procedure	92
F. Civil Works.....	93
8. General.....	93
G. Inspection & Testing.....	102
9. Inspection:.....	102
10. Load Trials & Reliability test at Site.....	102
11. Quality Considerations.....	102
12. Performance and Functional Warranty / Guarantees	103
SHEET-1	105
GUARANTEED TECHNICAL PARTICULAR DATA SHEET FOR SOLAR PV MODULE.....	105
SHEET-2	106
TECHNICAL PARTICULAR DATA SHEET FOR BATTERY	106
SHEET -3	107
TECHNICAL PARTICULARS OF POLE.....	107
SHEET- 4	108
Guaranteed Technical Particulars of LED lights	108

DISCLAMIER:

1. Though adequate care has been taken while preparing the Bidding documents, the Bidders/Applicants shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within twenty (20) days from the date of notification of IFB/Issue of the IFB documents, it shall be considered that the IFB documents are complete in all respects has been received by the Bidder.
2. GVSCCL, The Employer, reserves the right to modify, amend or supplement this IFB documents including all formats and Annexures.
3. While this bidding documents have been prepared in good faith, neither Employer or its authorized representatives nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this bidding documents, even if any loss or damage is caused by any act or omission on their part.

The specification mentioned for all the equipment which include Solar modules, mounting structures, switch gears & other associated equipment etc., to complete the Facilities & related works, in the present bidding documents is for the minimum reference requirement only. It may be subject to revision/alteration as per the design/ planning/Good engineering practices etc., to be carried out by the selected bidder, to the satisfaction of the Employer or its authorized representatives. It is advised that the bidders must satisfy himself with the prevailing site conditions before design/ planning. The design must be optimized for the site conditions and directed to achieve the maximum output form the installed capacity at all times. Moreover, the components supply and installation works not separately mentioned, but required to complete the Project for successful operation is also included in the scope of bidder.

Managing Director & CEO,

GVSCCL

Declaration by Bidder:

The bidding document has been read by me and it is confirmed that all condition/provision of RFP have been understand & taken care in the bid proposal.

(Signature)

Date:

Name and Designation of bidder

A. Introduction

1. Site Description

1.1. The area for the proposed project is located at

ABD Area,
Visakhapatnam.
(Ward No: 17, 18, 19, 20)

1.2. Proposed Project Details:

Particulars	Description
Details of the Project	Providing All in One Solar LED Street Light including the pole.
20 W LED Street Lights	Existing Quantity - 2135 Nos
40 W LED Street Lights	Existing Quantity - 193 Nos
State	Andhra Pradesh
District	Visakhapatnam District
Location	ABD (Ward No: 17,18,19,20)
Minimum average level of illumination on road surface.	8 Lux as per IS-1944(1&2)-1970
Water and Power for Construction	To be arranged by the Contractor

B. System Design and Philosophy

With the India Smart Cities Challenge, the Government of India took the first step towards realising its vision of building 100 smart cities in the country. As part of the India Smart Cities Challenge, Visakhapatnam is one of the cities that were selected amongst top 20, in a nationwide competition between 100 cities (ranked 8th).

Vizag is now working on an implementation plan to convert the Smart City Proposal (SCP) ideas into reality, beginning with retrofitting a designated area within the city known as the Area Based Development (ABD) that will catalyse future scalability to entire city. The ABD is around 6 sq.km in area and has a population of around 80,000.

The Smart City Plan for Vizag revolves around becoming a leader in sustainability, clean & healthy living, equality and innovation.

Vizag is making every effort to minimize its environmental footprint by focusing on drawing electricity from renewables (solar), in line with its goal of transforming itself into a Clean and Sustainable City. The city wishes to align with India's pledge CoP21 where the country offered to draw 40% of its electricity from renewables by 2030. As a start, Vizag Smart City will increase the share of solar energy by at least 10% by 2020 in its area based development while aligning with Solar City Mission.

The Greater Visakhapatnam Smart City Corporation Limited has taken up different projects for implementation and 'Replacement of Existing LED Street Lights' is one such project. As a part of the Smart City Vision, Vizag is specially emphasising on making streets safe for all citizens to walk and drive, by providing abundant light through installation of standalone Solar LED Street lights with back up, so that the streets do not go dark in the event of a power outage.

2. Design Philosophy

In line with the vision of Vizag Smart City, GVSCCL wishes to take up replacement of existing LED Street Lights in the city's ABD (The Project).

Street lighting is a key public service provided by local authorities in urban areas. Ambient street lighting is essential for road safety and personal safety.

Street lighting ensures visibility in the dark for motorists, cyclists and pedestrians, thereby reducing road accidents. Street lighting also facilitates crime prevention by promoting the security.

All in One Solar LED street lights provide reliable and quality lighting to the users of streets. Adoption of All in One Solar LED Street lighting is rapidly increasing, driven by technical innovation and drastic reduction in prices of LED, PV module, and battery components in the recent past.

All in One Solar LED Street Light has been envisaged as the preferred system for the implementation of the Project. A standalone solar photovoltaic street lighting system (SLS) is an outdoor lighting unit used for illuminating a street or an open area. The benefits of this off-grid solar technology are:

- Long-lasting and consistent high performance
- High-quality, white, flicker-free light emitted by LED of high luminous efficacy
- No permitting, line voltage, trenching, wiring, transformer, and meter costs; and
- Lighting remains on in case of power outage.

The **All in One Solar LED Street Lighting system** consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole. The Solar Panel, LED Light and battery are merged into one single fixture. The luminaire is based on White Light Emitting Diode (W-LED), battery is of lithium ion/ferro phosphate. The fixture is mounted on the pole at a suitable angle to maximize illumination on the ground. Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

The ABD of Visakhapatnam has around 70 km of streets. It comprises of 4 wards (ward numbers 17,18,19 and 20 of the city), has a population of around 80,000 (Eighty Thousand) and a total area of around 6 (Six) sq.km. There are over 6,000 street lights illuminating the streets in the ABD.

The Authority intends to replace 20 W and 40 W LED Street lights **only**, that aggregates to **2,328** in number of which **2,135** street lights are of 20 W and **193** street lights are of 40 W.

2.1. The main objective of the design philosophy is to construct the facilities within-built Quality and appropriate redundancy to achieve high availability and reliability with minimum maintenance efforts. In order to achieve this, the following principles shall be adopted while designing system.

- 2.1.1. Use of equipment and systems with proven design and performance that have a high availability track record under similar service conditions.
- 2.1.2. Selection of the equipment's to ensure ease of maintenance.

- 2.1.3. Strict compliance with the approved and proven quality assurance systems and procedures during the different stages of the project starting from designing, selection of make, shipment, storage (at site) , during erection, testing and commissioning.
- 2.2. The basic and detailed engineering of the street lights shall aim at achieving high standards of operational performance. The All in One Solar LED Street Light Fixture shall be installed over an appropriately designed modular and pre-fabricated FRP/GRP Pole with appropriate strength to support the weight of the fixture and wind load. The pole and the fixture shall be designed for simple mechanical on-site installation. There shall be no requirement of welding, masonry or complex machinery at the installation site.
- 2.3. The specifications provided with this bid document are a functional ones; any design provided in this document is only meant as an example. The Bidder must submit a proposal based upon their own design. Bidder must optimize their own design for All in One Solar LED Street lighting system with best proven technology so that it shall meet to guaranteed performance factors as it is a part of the acceptance criteria given in this bid document. The bidders are advised to visit the site before designing.
- 2.4. Successful Bidder (Contractor) shall prepare the detailed project report & design basis report and submit a copy to Employer for evaluation within 2 weeks from the date of issue of LOI.
- 2.5. Component and equipment reliability: Each component offered by the bidder shall be of established reliability. The minimum target reliability of each equipment shall be established by the bidder considering its failure, mean time between failures and mean time to restore, such that the availability of complete system is assured. The guaranteed annual system availability shall not be less than 99%. Bidder recommendation of the spares shall be on the basis of established reliability.
- 2.6. Bidder shall design the equipment and facilities in order to have sustained life of 10 years with minimum maintenance efforts.
- 2.7. The supply, erection, commissioning and all other allied works for said facilities shall be completed as per timelines under SCC Clause 8.

C. Scope of Supply and Work

3. Detailed Scope of Work

- 3.1. Scope of Supply & Work includes site survey, design & engineering, procurement & supply of equipment and materials, testing at manufacturers works, inspection, packing and forwarding, supply, receipt, unloading and storage at site, preparation of site, associated civil works, services, permits, licences, installation and incidentals, insurance at all stages, erection, testing & commissioning, clearing the site of any debris after completion and performance demonstration with associated equipment and materials on turnkey basis and 05 (Five) years comprehensive operation and maintenance from the date of commissioning or Operational Acceptance, whichever is later.
- 3.2. The bidder shall have to design, install and maintain All in One Solar LED Street Lighting systems at various locations in ABD, each of which shall comply with the technical standards to be set by the Authority.
- 3.3. The bidder is required to operate and maintain the All in One Solar LED Street Lighting systems during the O&M period which will be decided by the Authority.
- 3.4. To prepare & submit Bill of Material to the Authority or approval before supply of material at site as per the requirement meeting International quality standards/MNRE's guidelines.

- 3.5. To deliver the material and proper storage of all the equipment before erection shall be the responsibility of the bidder. The location wise proposed quantity of facilities will be provided in the next stage of bidding. In some locations, actual number of systems to be installed may vary to some extent hence contractor/supplier is required to seek confirmation in this regard from the concerned office of the Authority, prior to dispatch of the Systems.
- 3.6. The bidder is required to establish the required machinery, equipment and vehicles for the operation and maintenance of the installed facilities.
- 3.7. To ensure satisfactory performance of the systems during warranty period as well as during the maintenance period.
- 3.8. The bidder is required to bear all expenses towards the operation and maintenance of the system during the warranty period.
- 3.9. The bidder is required to provide real-time data on operation and maintenance to authorized representatives, to third parties authorized by the Authority.
- 3.10. Materials, wherever supplied, shall be of good quality. Workmanship shall be neat & clean without any blemish.
- 3.11. Ensuring the satisfactory performance of the items/works carried out for the O&M period. In case of any defect the party shall immediately replace/repair the part at their own cost for smooth operation of the facilities.
- 3.12. Conducting training program for users during installation & commissioning and O&M period.
- 3.13. Bidder has to provide suitable wireless Remote Monitoring & Control System (RMS) for each individual street light for remotely controlling the luminary, monitoring the battery health and other parameters.
- 3.14. Obtaining statutory approvals /clearances on behalf of the Employer from various Government Departments, in addition to Central/State Electricity Authorities/ APEPDCL/Industrial Development Corporation and including but not limited to, the following-
 - 3.14.1. Pollution control board clearance, if required
 - 3.14.2. Mining Department, if required
 - 3.14.3. Forest Department, if required
 - 3.14.4. All other approval, as necessary for setting up of facilities as per the suggested guidelines.
 - 3.14.5. All other statutory approvals and permissions, not mentioned specifically but are required to carry out hassle free Construction and O&M of the facilities prevailing at Site.
- 3.15. The Bidder shall arrange deployment of qualified and suitable manpower and required necessary consumables & spares during commissioning.
- 3.16. Construction Power & construction Water as required for construction and completion of this contract are to be arranged by the Bidder.
- 3.17. Total Operation & Maintenance of All in One Solar LED Street lights for the 05 year's period including deployment of engineering personnel, technicians and security personnel after the commissioning till final acceptance, during this period, the responsibility of O&M shall be with contractor.
- 3.18. All approvals, equipment, item and works which are not specifically mentioned in this document but are required for completion of work including construction, commissioning, O&M of All in One Solar LED Street lights in every respect and for safe and efficient construction & erection, operation and guaranteed performance are included in the scope of this bid.

- 3.19. Submission of following documents, drawings, data design, and engineering information to Employer or its authorized representative for review and approval in hard copy and soft copy from time to time as per project schedule.
 - 3.19.1. Layout drawing
 - 3.19.2. Design basis Report along with relevant standards (list of standards and respective clause description only)
 - 3.19.3. Design calculations and sheets.
 - 3.19.4. Detailed technical specifications of all the equipment.
 - 3.19.5. General arrangement and assembly drawings of all major equipment.
 - 3.19.6. Schematic diagram for entire electrical system.
 - 3.19.7. G.A. drawings for all types of structures/ components
 - 3.19.8. Quality assurance plans for manufacturing and field activities
 - 3.19.9. Detailed risk assessment and mitigation plan.
 - 3.19.10. Test reports (for type, acceptance, and routine tests).
 - 3.19.11. O&M Instruction's manuals and its drawings.
 - 3.19.12. As-built drawings / documents and deviation list from good for construction (GFC)
 - 3.19.13. O&M plans, schedules and operational manuals for all equipment etc. Daily/ Weekly site work progress report with catch-up plan(s), as necessary to monitor actual timelines of the project during construction period along with the real time snap shots during the time of construction.
 - 3.19.14. Weekly/ Monthly O&M reports after commissioning of the project.
- 3.20. All drawings shall be fully corrected to agree with the actual "as built" site conditions and submitted to Employer after commissioning of the project for record purpose. All as-built drawings must include the Good for Construction deviation list.
- 3.21. The contractor shall forward the following to Employer within four (4) weeks from issue of LOI:
 - 3.21.1. Schedule for various activities in the form of PERT Chart.
 - 3.21.2. Detailed engineering calculations, Design basis report and complete layout.
 - 3.21.3. Equipment data sheets, guaranteed technical particular of equipment and GA drawings of major equipment like lighting fixture and mounting structure.
- 3.22. Providing a detailed training plan for all operation, maintenance procedures, which shall after approval by Employer form the basis of the training program. The contractor, shall also provide training to Employer's nominated staff.
- 3.23. Establishing a system to maintain an inventory of spare parts, tools, equipment, consumables and other supplies required for the facility's hassle free operation.
- 3.24. Adequate and seamless insurance coverage during EPC and O&M period to cater all risks related to construction and O&M of facilities to indemnify the Employer.
- 3.25. Perform or contract for and oversee the performance of periodic overhauls or maintenance required for the facility in accordance with the recommendations of the original equipment manufacturer (OEM).
- 3.26. Procurement for spares parts, overhaul parts, tools, equipment, consumables, etc. required to operate and maintain the project in accordance with the prudent utility practices and having regarded to warranty recommendations during entire O&M period.

3.27. Operation and Maintenance

- 3.27.1. The contractor shall be entrusted to carry out the total O&M activities of the Facilities for the next 05 (Five) years after commissioning w.e.f. from the date of operational acceptance.
- 3.27.2. The Turnkey contractor shall be responsible for all the required activities for the successful running, committed performance & maintenance of the Facilities covering:
- Deputation of qualified and experienced engineers and technicians
 - Successful running of the All in One Solar LED Street lights.
 - Monitoring, controlling, troubleshooting maintaining of logs & records, registers.
 - Supply of all spares, consumables and fixing / application as required.
 - Supply & use of consumables such as grease, oil etc. throughout the maintenance period as per recommendations of the equipment manufacturers.
 - Conducting periodical checking, testing, overhauling, preventive and corrective action.
 - Submission of periodical reports to Employer on the operating conditions of the facilities.
 - Periodic cleaning of solar modules as per the recommendations of OEM
 - Replacement of Luminaries, Modules and other equipment as and when required.
- 3.27.3. Continuous monitoring the performance of the facilities and regular maintenance of the whole system including poles, foundations etc. are necessary for extracting and maintaining the maximum efficiency from the facilities.
- 3.27.4. Preventive and corrective O&M of the facilities including supply of spares, consumables, wear and tear, overhauling, replacement of damaged equipment and insurance covering all risks (Fire & allied perils, earth quake, terrorists, burglary and others) as required, for a period of 05 (Five) years from the date of start of O&M of the project shall be carried out at fixed annual cost.
- 3.27.5. The period of Operation and Maintenance will be deemed to commence from the date of completion of performance demonstration/Operational acceptance and successively the facilities to be handed over to the O&M contractor for operation and maintenance of the same. O&M contract shall further be extended on the mutually agreed terms and conditions for the period of minimum 5 years or as required.
- 3.27.6. All the equipment required for Testing, Commissioning and O&M for the healthy operation of the facilities must be calibrated, time to time, from the NABL accredited labs and the certificate of calibration must be provided prior to its deployment.

3.28. Maintenance

- 3.28.1. The contractor shall carry out the periodical maintenance as given in the manufacturer's service manual.
- 3.28.2. Regular periodic checks of the Luminaries, Modules and other equipment's shall be carried out as a part of routine corrective & preventive maintenance. In order to meet the maintenance requirements stock of consumables are to be maintained as well as various spare as recommended by the manufacturer at least for 5 years to be kept for usage.
- 3.28.3. According to the recommendations stock of special tools and tackles shall be maintained for the equipment.

- 3.28.4. A maintenance record is to be maintained by the operator/engineer-in-charge to record the regular maintenance work carried out as well as any breakdown maintenance along with the date of maintenance reasons for the breakdowns steps have taken to attend the breakdown duration of the breakdown etc.
- 3.28.5. The Contractor will attend to any breakdown jobs immediately for repair/replacement/adjustments and complete at the earliest working round the clock. During breakdowns (not attributable to normal wear and tear) at O&M period, the Contractor shall immediately report the accidents, if any, to the Engineer In-charge showing the circumstances under which it happened and the extent of damage and or injury caused.
- 3.28.6. The Contractor shall comply with the provision of all relevant acts of Central or State Governments including payment of Wages Act 1936, Minimum Wages Act 1948, Employer's Liability Act 1938, Workmen's Compensation Act 1923, Industrial Dispute Act 1947, Maturity Benefit Act 1961, Mines Act 1952, Employees State Insurance Act 1948, Contract Labour (Regulations & Abolishment) Act 1970, Electricity Act 2003, MNRE guidelines or any modification thereof or any other law relating thereto and rules made there under or amended from time to time.
- 3.28.7. The contractor shall at his own expense provide all amenities to his workmen as per applicable laws and rules.
- 3.28.8. The Contractor shall ensure that all safety measures are taken at the site to avoid accidents to his or his sub-contractor or Employer's Workmen.
- 3.28.9. If negligence / mal operation of the contractor's operator results in failure of equipment such equipment should be repaired replaced by contractor at free of cost.
- 3.28.10. If any jobs covered in O&M Scope as per O&M Plan are not carried out by the contractor during the O&M period, the Engineer-In-Charge can issue a notice to the Contractor. Repetition of such instances for more than 2 times a year may lead to the Termination of the O&M Contract by the Employer.

3.29. Quality Spares & Consumables

In order to ensure longevity and safety of the core equipment and optimum performance of the system the contractor should use only genuine spares of high quality standards.

3.30. Testing Equipment, Tools and Tackles

The Contractor shall arrange for all the necessary testing equipment, tools and tackles for carrying out all the construction, operation and maintenance work covered under this contract. All the instruments are required to be calibrated from NABL accredited lab before put in use. The certificate of the same shall be submitted to Employer for verification.

D. Technical Specification of All in One Street Lights

4. Bill of Material:

The equipment and material for said All in One Street Lights shall include, but not limited to the following:

Item Details	Unit
All in One Solar LED Street Light which includes Luminary, SPV Module, Battery.	Nos.
FRP/GRP Poles for mounting of the street light fixture including required hardware.	Nos.
Remote Monitoring & Control System (RMS)	Set

All the information shown here is indicative only and may vary as per design and planning by the bidder. The bidder must provide the BOM as per the design during the time of bidding. The technical features of major equipment are described hereunder.

5. All in One Solar LED Street Light

The **All in One Solar LED Street Lighting system** consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole. The Solar Module, LED Light and battery are merged into one single fixture. The luminaire is based on White Light Emitting Diode (W-LED), battery is of lithium ion/ferro phosphate. The fixture is mounted on the pole at a suitable angle to maximize illumination on the ground. Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically. The equipment should comply with the specifications given below:

- 5.1. Minimum system lumen output shall be 2500 lumen for replacement of existing 20 W LED fixture and 4500 lumen for 40 W LED fixture.
- 5.2. System shall have inbuilt PIR sensor & Dimming Profile which can be controlled through wireless Remote Monitoring & Control System (RMS).
- 5.3. Life expectancy shall be minimum 50,000 hours with 70% lumens.
- 5.4. Overall system efficiency shall be more than 150 Lumens per Watt.
- 5.5. PV module shall have Mono/Poly crystalline solar cells and a test certificate conforming to IEC 61730/UL/ MNRE Edition II/BIS 14286 or latest BIS/ International standards from an NABL or IECQ accredited laboratory. In case the certificate for the offered module is not available, a test certificate of higher capacity module produced by the same PV module manufacturer should be available.
- 5.6. 12.8V inbuilt, Lithium ion/Ferro Phosphate battery should be used for hassle free operations. The Battery should conform to the latest BIS/ International standards.
- 5.7. The battery shall be minimum 20 AH for replacement of existing 20 W LED fixture and 30 AH for 40 W LED fixture.
- 5.8. The system should have Autonomy of minimum 02 days.
- 5.9. The system shall be Microcontroller based Integrated with MPPT charge controller and driver on same board.
- 5.10. High Grade single piece Aluminum die-cast housing for excellent heat dissipation and flexibility of Installation with Post Top & lateral mounting options shall be used.
- 5.11. The fixture/mounting structure should have provision to adjust its angle of inclination to the horizontal between 0° to 15°, for better light distribution.

- 5.12. The installed system shall have Smart self-diagnosis feature with LED Indicators along with Battery charging & deep discharging cut-off Indications.
- 5.13. Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year. (System Voltage: 12 V DC)
- 5.14. The colour temperature of LED used should be above 5700⁰K. LEDs should not emit ultraviolet light.
- 5.15. Charge Controller shall be Microprocessor based, with minimum Efficiency of > 90%.
- 5.16. The system should have an integrated wireless RMS (Remote Monitoring & Control System) for controlling the lighting level and monitoring the battery status.
- 5.17. The complete system should be IP65, CLASS I and CRI should be >70.
- 5.18. Thermal management of LED: Good thermal management system should be provided and LED must be mounting on heat sink conductive aluminum with suitable large areas surface by means of fins to dissipate the heat to ambient air.
- 5.19. The bidder should upload Photometry Test (LM 79 Report) and LM80 compliance certificate to be adhered by the LED manufacturer. LED data sheet should comprise of lumen output, junction temperature, pad temperature, thermal resistance, and LED drive current.
- 5.20. Luminaire should be tested as per BIS 10322 standards and following Test Reports should be submitted: Heat Resistance Test, Thermal Test, Ingress Protection Test, Drop Test, Vibration Test, Electrical / Insulation Resistance Test, Endurance Test, Humidity Test, Photometry Test (LM 79 Report), Electronics Test.
- 5.21. Bidder should upload Relevant LED Luminaire data sheets and Type test certificates indicating compliance to the technical specifications.
- 5.22. Bidder should upload Lighting design report indicating the Average illuminance (lux), uniformity, maximum and minimum values. Polar curve of the light fitting indicating the light distribution capability of luminaire as per the conditions.
- 5.23. The All in One Solar LED Street Light should comply with standards given below and respective certificates should be submitted as proof of compliance.
 - i. IEC60598-2-3: Safety of Luminaire for Road and Street Lighting
 - ii. IEC 62109-1: Safety of Power Converters used in solar Panel
 - iii. EN 50530: Performance Evaluation of Maximum Power Point (**MPPT**)
 - iv. IEC 61547: EMC immunity requirements
 - v. CISPR 15: Radio disturbance characteristics
 - vi. IEC 61730-1,2 & IEC 61215: Safety of Solar Panel Module
 - vii. CE certified

6. Pole/Mounting Structure & Remote Monitoring & Control System (RMS)

FRP/GRP Poles shall be used for mounting the street light fixture and the height of the pole should be minimum 6 meters from the ground level after grouting and final installation. The distance between two poles should be minimum 20 meters.

- 6.1. The poles should be easy to assemble at site, Maintenance Free, Eco Friendly and Durable.
- 6.2. The surface shall be free from crack or bubbles, damage, any exposed fiber & smooth. Surface shall be uniformly coloured.
- 6.3. The pole should comply to the following standards
 - i. AASHTOLTS-4: Standard specification for structural support for highway signs, luminaries & traffic Signals.
 - ii. ANSI C 136. 20-1990: Fiberglass Reinforced Plastic Lighting Pole.

- iii. IS 875 (part 3) 1987: Code of practice for design Loads for building & structures WIND LOAD.
 - iv. BS EN 40-7:2002 - Requirements for fibre reinforced polymer composite lighting columns
- 6.4. Deflection of the pole as per the AASHTO LTS- 4 shall not exceed a 15% (Depends upon requirement of the length of the pole above the ground line. When subject to maximum wind loading & shall not have more than 1% permanent deflection).
 - 6.5. Bidder must submit the complete quality documents i.e. test certificates for all tests conducted starting from raw material stage, in process, final testing.
 - 6.6. Details of Pole/Mounting Structure specifications and data sheet, including all components, shall be provided with the Bid document. Bidder shall submit all the test reports/ test certificates and compliance certificates before installation at site.

Remote Monitoring & Control System

- 6.7. A wireless Remote Monitoring & Control System (RMS) shall be integrated/embedded into the system for controlling the lighting levels as well as monitoring battery charging & discharging levels remotely.
- 6.8. RMS should be able to communicate the status of the luminary, battery levels and should be able to control the luminary from central monitoring station.
- 6.9. Apart from monitoring voltage and current, RMS should be able to monitor impedance, which gives a more accurate picture of the health and charging status of the battery.

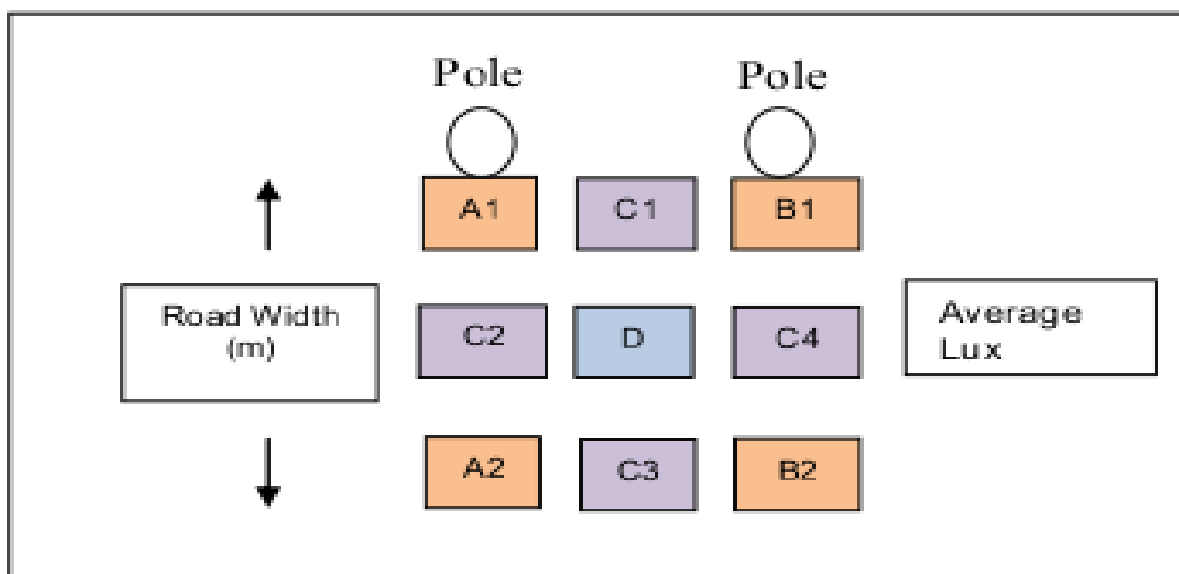
Note: All in One Solar LED Street Lights without integrated Wireless RMS will not be considered. Integrated Wireless RMS is mandatory.

E. Performance Measurement procedure

7. Performance Test Procedure

7.1. Illumination Level (lux levels) Measurement

- 7.1.1. After Commissioning of the facilities and after receiving all the satisfactory results regarding the correct operation of the facilities, there will be continuous monitoring of the performance for 30 days. This monitoring will be performed on the site under the supervision of the Employer / Employer's engineer.
- 7.1.2. The final tests to prove the guaranteed performance parameters shall be conducted at site by the Contractor in presence of the Employer. The Contractor's Engineer shall make the facilities ready to conduct such tests.
- 7.1.3. Illumination level (lux levels) shall be measured using a calibrated lux meter by the following "Nine Point Method". The layout of a 9 point measuring grid (for one span) should be as below. The same methodology would be followed for all types of roads.



$$\text{Average illuminance, } E_{av} = (A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$$

- 7.1.4. Average level of illumination (LUX Level) on the road surface should be minimum of 8 Lux as per IS-1944(1&2)-1970 – Classification of Lighting Installation and Levels of Illumination.
- 7.1.5. Minimum lux should be at least 3 lux in between two poles, with Uniformity minimum lux/average lux should be > 0.4 & minimum lux/maximum lux should be > 0.33 , the longitudinal uniformity to be minimum 0.7 & all these uniformities parameters need to be same at the dimmed stage.
- 7.1.6. The lux meter being used to measure the Average level of illumination (LUX Level) should be calibrated and the latest calibration report has to be submitted.

7.2. Protections & System Requirements:

- 7.2.1. Wind speed resistance of 250 km/hr.
- 7.2.2. Electronics should have temperature compensation for proper charging of the battery throughout the year.
- 7.2.3. The system should have protection against battery overcharge.
- 7.2.4. Components and parts used in the System should conform to the latest BIS specifications, wherever such specifications are available and applicable.

F. Civil Works

8. General

This section of Technical Specifications describes detailed technical and functional requirements of all civil works which are covered under a separate chapter.

All design and construction of civil works shall conform to relevant Indian standards such as BIS, IRC, MORST, NBC etc. Design of steel structures shall conform to IS: 800, 801 or 802 as applicable

with working stress method (WSD) of design. Design of concrete structure shall conform to IS: 456. For design of liquid retaining structure IS: 3370 shall be followed. Only in case of non-availability of Indian standard, equivalent American or British standard may be used for design with prior approval of the Employer and the contractor shall submit proper justification along with his request to the Employer for his review. All the design/ drawings shall be prepared/ approved by the chartered structural engineer. The design calculations for Mounting Structure, RCC structure, steel structure, foundation, road work, drainage work, etc. shall be submitted for prior approval of Employer before commencement of construction.

The design calculations shall be supplemented with a neat sketch showing the structure geometry, node and member nos., Lengths of various typical members, support points and type of supports, types of materials with design properties considered, type of sections used in analysis & design. The report shall also include back-up calculations for various loads adopted in design, brief write-up on primary load cases and load combinations considered and conclusions on design results with supporting sketches for easy reference and clarity. Where a computer program (other than STAAD Pro) is used for analysis and design, the contractor shall also include a write-up on the computer program used along with validation check. Input and output file shall also be given in the design report to facilitate its review and approval by the Employer.

The construction methodology for Foundations and pile load test procedure shall also be submitted for prior approval of Employer before start of works.

1.1. The construction shall be done only as per approved drawings.

1.2. Topographical Survey

The contractor shall be responsible for detailed Topographical Survey of the proposed project site. The work shall be carried out through an agency with relevant experience and shall have qualified survey team.

The Topographical survey shall be conducted with the help of digital surveying instruments for accuracy.

The contractor is responsible for making the site ready and easily approachable by clearing bushes, felling of trees (Mandatory permissions/ licenses/ statutory clearances from competent authorities if required for cutting of trees, blasting or mining operations, disposal of waste material etc. shall be obtained by the contractor), cutting, filling with selected excavated earth or borrowed earth including identifying borrow areas. The bidders shall judiciously decide on making the price-bid accordingly.

1.3. Geotechnical Investigations:

The contractor shall be responsible for detailed soil investigations at the proposed project site for the purpose of foundation design for mounting structures and other design/ planning requirements. The investigation work shall be carried out through any Govt. approved/ NABL accredited agency. The contractor shall submit the credentials of the proposed agency along with relevant certificates in support thereof for verification/approval by the Employer.

The scope of work includes execution of complete soil exploration including boring and drilling, standard penetration test (SPT), collecting disturbed(DS) and undisturbed samples (UDS), collecting ground water samples, electrical resistivity tests (ERT) and conducting

laboratory tests on collected samples of soil, ground water analysis, preparation and submission of report.

No foundation shall rest on filled up ground.

The report shall also include ground water analysis to ascertain its suitability for construction purposes, recommendations for type of cement, grade of concrete & minimum cement content as per prevalent soil characteristics with respect to presence of aggressive chemicals, environment exposure conditions as per relevant BIS specifications. However, minimum grade of concrete shall be M25 for all RCC works except liquid retaining structures like underground water tank etc. where minimum grade of concrete shall be M30.

1.4. Other Investigations:

The contractor shall also obtain and study other input data at proposed project site for design of the project. This shall include data related to earthquake and wind, rainfall, maximum & minimum ambient temperature, humidity, high flood level (HFL) etc. The contractor shall carry out Shadow Analysis at proposed site and accordingly design the layout with optimum use of space, material and man power. In case of large and steep variations in topography the study shall also include the effect of topographical variations on the layout. The contractor shall submit all the details/ design to the Employer for review/ approval.

1.5. Layout:

The contractor shall submit drawing showing proposed Layout. The layout shall be a comprehensive drawing showing various requirements of the project. The Layout drawing shall be in suitable scale to have proper representation of the information.

The layout drawing shall be submitted by the contractor for review/ approval by the Employer.

1.6. Design Loads:

Unless otherwise specified elsewhere, Dead load, Live load, Wind load and Seismic load for buildings and structures shall be considered as per provisions of relevant IS standards. The following minimum imposed load as indicated for some of the important areas shall, however be considered for the design. If actual expected load is more than the specified minimum load, then actual load is to be considered.

S. No.	Area	Imposed Load
a)	Roof	150 kg/ Sqm
b)	Building floors	1000 kg/ Sqm
c)	RCC Floors (General)	500 kg/ Sqm
d)	Outdoor platforms, Stairs, Landing and Balconies, Walkway, Chequered plate & Grating floor	500 kg/ Sqm
e)	Road	As per IRC Standard
f)	Road culverts & allied structures over drain & pipe crossings	Design for Class - 'AA' loading (Wheeled & Tracked

		both) and check for Class - 'A' loading as per IRC Standard
g)	Underground structures such as Sumps, Pits, Trench, Drain etc.	In addition to Earth pressure and Ground water table at FGL, a surcharge of 1 T/Sqm shall also be considered
h)	Pre-cast cover over cable trench	400 kg/ Sqm

I. Primary Loads

1. Dead Load (DL)
2. Live Load (LL)
3. Wind Load (WL) - Both along X & Z directions
4. Seismic Load (EL) - Both along X & Z direction

WL for Mounting Structure design

- (i) Load due to fair (positive pressure) wind direction on design tilt angles of MS members
- (ii) Load due to adverse (negative pressure) wind direction on design tilt angles of MS members
- (iii) Load due to wind on side face of MS members

II. Design Load combinations

1. 1. DL+LL
2. DL+LL ± WLx
3. DL +LL± WLz
4. DL+LL ± ELx
5. DL+LL ± ELz

Note - For MS design, WL corresponding to (iii) shall be considered along with (i) & (ii) as applicable in calculation of WL under Primary Load (3).

All buildings, structures and foundations shall be designed to withstand loads corresponding to worst design load combinations.

Unless otherwise specified elsewhere in the specifications, the DL, LL, WL and EL shall be estimated as per provisions of relevant BIS standards.

Basic wind speed (V_b) = 250 km/hr

(Note-In case of project site within 60 km of sea coast the provisions of IS 15498 for suitable enhancement of wind load to account for cyclonic effects shall be considered for Pole/Mounting Structure design)

Wind Load Factors K_1 , K_2 and K_3 - As per IS 875 (Part-3). However, minimum value for K_1 , K_2 and K_3 shall be 1.0.

Unless otherwise specified elsewhere in the specifications, the Seismic Load shall be considered corresponding to Earth quake zone at site as per IS: 1893 - (Part- 4)

1.7. Foundations:

Contractor shall design all foundations as per relevant BIS standards and recommendations of Geotechnical investigation report.

All design drawings shall be submitted to the Employer for approval before execution.

In case the contractor proposes to provide pile foundation; the type, dia. and length of pile shall be as per recommendations of Geotechnical Investigation Report corresponding to prevalent soil characteristics at site, however the min. dia. and depth of the pile shall be 300 and 1500mm respectively except when very hard strata/ rock ($N > 100$) is encountered at a higher level, the pile shall be extended in to the hard strata minimum 1 times the diameter of the pile or shall have total min. length of 1500 mm. The pile shall project minimum 250mm above grade level to avoid any damage to the column/sub support due to direct contact of rain water/ surface run-off. In case collapse of foundation strata during drilling of the pile bore, removal steel liner shall be used to maintain design depth and diameter of the pile for proper concreting. The design pile capacity under direct compression, lateral load and pull out shall be verified through field trials by conducting initial load tests on test piles to be specially cast for this purpose. The tests shall conform to IS 2911 - Part 4. The no. and location of such tests shall be as discussed and finalized with Engineer-in-charge. However, min. 3 no. of Tests shall be conducted under each category.

Contractor shall also carry out routine tests on 0.5 % of the total no. of working piles as per provisions of IS: 2911 - Part 4.

1.8. Concrete Works:

All RCC works shall be with design mix as per IS 456 and the materials used viz. Cement, coarse & fine aggregate, Reinforcement steel etc. shall conform to relevant BIS standards. The contractor shall carry out concrete mix design well in advance prior to construction through NABL accredited laboratory/ Reputed Engineering Institute. The minimum grade of RCC shall be M25 except for underground UG water tank where the grade of concrete shall be min. M30. PCC shall be of min. grade M10 (equivalent nominal Mix - 1:3:6) unless otherwise specified. Reinforcement steel shall be of high strength TMT bars of grade Fe500 D conforming to IS: 1786. Ductile detailing in accordance with IS: 13920 shall be adopted for superstructure and sub-structure of all RCC buildings and structures. For grouting works anti shrink ready mix grout of approved make or cement mortar (CM) grout with non-shrink additive shall be used. The grout shall be high strength grout having min. characteristic strength of 30 N/ mm² at 28 days.

1.9. Misc. Steel Works:

Unless otherwise specified all structural steel work shall be designed as per provisions of IS: 800 with working stress method of design (WSD). Structural steel hot rolled sections, flats and plates shall conform IS: 2062, structural Pipes shall be medium (M)/high (H) grade conforming to IS: 1161, chequered plate shall conform to IS: 3502 and Hollow steel sections for structural purposes shall conform to IS: 4923.

1.10. Masonry Work:

The masonry work shall be of bricks or concrete blocks. All external walls of buildings shall be 230mm and internal walls shall be 230/ 115mm as per requirements. All concrete block masonry walls shall be min. 200mm thick. Brick work shall be in cement mortar (CM) 1:6 & 1:4 for 230 mm and 115 mm thick brick wall respectively. Bricks shall be of class designation 7.5 conforming to IS: 1077, IS: 2212 & IS: 3495. All concrete blocks shall be of min. compressive strength of 7.5 N/mm² and shall be of Grade-A conforming to IS: 2185. Suitable damp proof course (DPC) shall be provided. The DPC shall be with PCC (1:2:4) using 6 down coarse aggregate and water proofing admixture. The min. thickness of DPC shall be 40mm.

1.11. Plastering, Pointing & Coping Works:

All brick masonry work shall be provided with plaster. Wall and ceiling plaster shall be in cement mortar (CM) - 1:6 and 1:3 respectively. Thickness of plaster shall be 18mm and 12mm for rough and smooth surface of the brick wall respectively. The ceiling plaster shall be 6 mm thick.

All joints in stone masonry shall be raked and pointed in cement mortar (CM) - 1:3 except specified otherwise. Exposed top surface of brick or stone masonry shall be provided with 50 thick plain cement concrete (PCC) coping (1:2:4) with trawl finish.

All exposed coping shall be provided with suitable slope and projection for easy drainage of water.

1.12. Quality Assurance and Inspection for Civil Works:

1.12.1. Introduction

This part of the specification covers the sampling, testing and quality assurance requirement (including construction tolerances and acceptance criteria) for all civil and structural works covered in this specification. This part of the technical specification shall be read in conjunction with other parts of the technical specifications, general technical requirements & erection conditions of the contract which covers common QA requirements. Wherever IS code or standards have been referred they shall be the latest revisions. The rate for respective items of work or price shall include the cost for all works, activities, equipment, instrument, personnel, material etc. what so ever associated to comply with sampling, testing and quality assurance requirement including construction tolerances and acceptance criteria and as specified in subsequent clauses of this part of the technical specifications. The QA and QC activities in all respects as specified in the technical specifications/ drawings / data sheets / quality plans / contract documents shall be carried out at no extra cost to the owner. The contractor shall prepare detailed construction and erection methodology scheme which shall be compatible to the requirements of the desired progress of work execution, quality measures, prior approvals from statutory authorities etc. if any and the same shall be got approved from the Employer. If required, work methodology may be revised/ reviewed at every stage of execution of work at site, to suit the site conditions, work progress commensurate with project schedule by the contractor at no extra cost to the Employer

1.12.2. QA and QC Manpower

The contractor shall nominate one overall QA coordinator for the contract detailing the name, designation, contact details and address at the time of post bid discussions. All

correspondence related to Quality Assurance shall be addressed by the contractor's QA coordinator to Employer/ Consultant. Employer/ Consultant shall address all correspondence related to Quality issues to the contractor's QA coordinator. The contractor's QA coordinator shall be responsible for co-ordination of Quality activities between various divisions of the contractor and their sub-vendors on one hand & with Employer/ Consultant on the other hand. The contractor shall appoint a dedicated, experienced and competent QA&QC in-charge at site, preferably directly reporting to the Project Manager, supported as necessary by experienced personnel, to ensure the effective implementation of the approved QAP. The contractor shall finalize and submit a deployment schedule of QA&QC personnel along with their details to Employer/ Consultant for approval/ acceptance and further shall ensure their availability well before the start of the concern activity.

1.12.3. Laboratory and Field Testing

The contractor shall make necessary provisions to provide all facilities required for QA & QC activities by setting up a field laboratory for QA and QC activities in line with the indicative field QA & QC laboratory set-up enclosed at Annexure-I. The Laboratory building shall be constructed and installed with adequate facilities to meet the requirement of envisaged test setup. Temperature and humidity controls shall be available wherever necessary during testing of samples. The quality plan shall identify the testing equipment's/ instrument, which the contractor shall deploy and equip the field quality laboratory for meeting the field quality plan requirements. The contractor shall furnish a comprehensive list of testing equipment's/ instrument required to meet the planned/scheduled tests for the execution of works for Employer acceptance/ approval. The contractor shall mobilize the requisite laboratory equipment and QA & QC manpower at least 15 days prior to the planned test activity as per the schedule of tests. In case contractor desires to higher the services of any established laboratory nearby then he shall ensure that the subject laboratory is well equipped with all requisite testing facilities and qualified QA & QC staff and this shall not affect in anyway the work progress. All equipment's and instruments in the laboratory/ field shall be calibrated before the commencement of tests and then at regular intervals, as per the manufacturer's recommendation and as directed by the Employer. The calibration certificates shall specify the fitness of the equipment's and instruments within the limit of tolerance for use. Contractor shall arrange for calibration of equipment's and instruments by an NABL / NPL accredited agency and the calibration report shall be submitted to Employer. The tests which cannot be carried out in the field laboratory shall be done at a laboratory of repute. This includes selected IITs, NCB, CSMRS, reputed government / autonomous laboratories / organizations, NITs and other reputed testing laboratories. The test samples for such test shall be jointly selected and sealed by the engineer and thereafter these shall be sent to the concerned laboratory through the covering letter signed by Engineer-in-charge. Test report along with the recommendations shall be obtained from the laboratories without delay and submitted to Employer. Based on the schedule of work agreed with the Engineer-in-charge and the approved FQP, the contractor shall prepare a schedule of tests and submit them to the Engineer-in-charge and organize to carry out the tests as scheduled / agreed.

1.12.4. Sampling and Testing of Construction Materials

The method of sampling for testing of construction materials and work / job samples shall be as per the relevant IS / standards / codes and in line with the requirements of the technical specifications / quality plans. All samples shall be jointly drawn, signed and sealed wherever required, by the contractor and the engineer or his authorized representative.

The contractor shall carry out testing in accordance with the relevant IS standards/ codes and in line with the requirements of the technical specifications / quality plans. Where no specific testing procedure is mentioned, the tests shall be carried out as per the best prevalent engineering practices and to the directions of the Engineer-in-charge. All testing shall be done in the presence of Engineer-in-charge or his authorized representative in a NABL accredited / Govt. Laboratory acceptable to Employer. This includes all IITs, NCB, CSMRS, reputed government /autonomous laboratories /organizations, NITs and other reputed testing laboratories. The test samples shall be jointly selected and sealed and signed by the Engineer-in-charge and thereafter these shall be sent to the concerned laboratory. The test report along with the recommendations shall be obtained from the laboratory without delay and submitted to Employer.

1.12.5. Purchase and Service

All structural steel shall be procured from main steel producers like SAIL, TISCO, RINL, Essar Steel, Ispat Industries, JSW Steel, Lloyds Steel Industries, Jindal Steel & Power {for rounds (15-105 mm), flats (45-120 mm width & 4.75-28 mm thick), hex rods (15.5- 42 mm) and wire rods (5.5-38 mm)}. In case of non-availability of some of the sections with main steel producers listed above, the contractor may propose to procure the sections from the re-rollers of the main steel producers, the name of such re-rollers will have to be cleared by the Employer for which details such as BIS approval, main steel producer's approval, past experience for production of sections of specified material, details of machines, plant, testing facilities etc. Confirmation that the process control and manufacturing of steel sections by re-rollers shall be same as that of main steel producers, that billets for re-rolling will only be sourced from main steel producers shall be furnished with regard to re-roller. For Pole/Mounting Structures (MS), sources of steel other than those specified under this clause may also be used subject to the condition that they otherwise meet the requirements of the Technical Specifications / Bid documents. Even after clearance of re-rollers, induction of billets with identified and correlated Mill test certificates (MTC) in the process of re-rolling, sampling of steel, quality checks thereof and stamping of final product for further identification and correlation with MTC prior to dispatch shall be the responsibility of the contractor and these shall be performed in presence of the authorized representative of the main Contractor.

Reinforcement steel shall be procured from main steel producers like SAIL, TISCO, RINL, Essar Steel, Ispat Industries, JSW Steel, Lloyds Steel Industries, Jindal Steel & Power and Jai Balaji Industries Ltd, Durgapur (for 8-40mm reinforcement steel) and Mill test certificates (MTC) is to be obtained and submitted to the Employer for correlation.

1.12.6. Field Quality Plan

Well before the start of the work, the contractor shall prepare and submit the Field Quality Plans to Employer for approval, which shall detail out for all the works, equipment, services, quality practices and procedures etc. in line with the requirement of the technical

specifications to be followed by the contractor at site. This FQP shall cover all the items / activities covered in the contract / schedule of items required, right from material procurement to completion of the work at site. An Indicative Field Quality Plan for civil works is enclosed with this specification for reference.

1.12.7. General QA Requirements

The contractor shall ensure that the works, BOIs and services under the scope of Contract, whether manufactured or performed within contractor's works or at his subcontractor's premises or at the project site or at any other place of work, are in accordance with Technical specification, applicable standards / codes, approved drawings / data sheets / quality plans and BOQ. All the works, BOIs and services shall be carried out as per the best prevalent engineering practices and to the directions of the Engineer.

S.No.	Equipment	Approx. No.
1	Cube moulds for cement testing	3
2	Sieve shaker	1
3	Sieve for fine aggregate	1 set
4	Sieve for coarse aggregate	1 set
5	Slump testing equipment	1
6	Oven	1
7	Physical balance (electronic)	1
8	Thermometer	2
9	Burret	1
10	Measuring cylinder	2
11	Measuring flask	2
12	Compression testing machine	1 set
13	Cube mould for concrete	7
14	Mechanical weighing machine	2 (100 kg capacity)
15	Drum type concrete mixer (for trial mixes)	1
16	Proctor testing equipment	1 set

Notes:

1. The equipment's listed above are indicative and minimum required. Additional equipment, if any, required for successful completion of work shall be provided /arranged by the contractor.
2. All test reports/ inspection reports shall be submitted in soft copy also and shall be available at site for easy access to the Engineer-in-charge/ Employer.
3. Based on the schedule (L2/L3 Network), Quality control & Quality Assurance Work plan shall be finalized by the contractor and the same shall be submitted to Employer for acceptance/approval.

G. Inspection & Testing

9. Inspection:

- 9.1. Employer shall have free access to Bidder's manufacturer's works to inspect, expedite and witness shop floor tests. Any materials or work found to be defective or which does not meet the requirements of the specification will be rejected and shall be replaced at Bidder's cost. Employer reserves the right to carry out stage wise inspection of fabrication and components. The Bidder shall furnish a detailed quality assurance plan (QAP) for review by the Employer.
- 9.2. The test & inspection shall be carried out at manufacturer's work and at the site with the Bidders obligation. The test and Inspection shall be done in accordance with the relevant standards and the Manufacturer's standard before the delivery to site as well as after the erection and commission at site. The bidders shall give the list of tests that they will carry out at site to show the performance of the facilities.
- 9.3. A detailed 'QAP' for Manufacturing and Inspection shall be submitted by the Bidder for Employer's approval. The data of each test and inspection shall be recorded and submitted as soon as the test/ trials are conducted and will also be a part of final documentation.
- 9.4. The shop test shall be carried out to prove the performance parameters of the offered model. The testing shall be done in the presence of the representatives of the department.
- 9.5. The Employer will nominate its representatives (max. of 2 nos.) for inspection of stage manufacturing and testing at works & 7 days training at premises of equipment manufacturer. The notice of such inspection shall be given 30 days in advance in case of countries outside India and 15 days in India.
- 9.6. Manufacturer has to submit procedure for Test carried out at their Factory:
 - Start Up Trials
 - Load Test
 - Records & Measurements
 - Safety Device List
 - Setting values for all sensors for Pressure and Temperature
 - Dimensional Check-up, Overall Inspection, Completeness of Scope of Supply

10. Load Trials & Reliability test at Site

- 10.1. Performance Test at Site: These tests will be conducted at site as per site conditions and after performing all pre-commissioning check and trials and after readiness of the each system which are required to carry out the trials.
- 10.2. All the tests which are mentioned will be carried out in presence of Employers' Representative at Site under site conditions and the parameters checked in accordance with the data sheet and guaranteed parameters given by the Contractor.
- 10.3. All the equipment supplied by the vendor will be tested as per relevant standard/ Quality assurance plan at site conditions and the performance monitored.

11. Quality Considerations

- 11.1. Contractor will submit and get finalized detailed comprehensive Standard Field Quality Plan (SFQP) within 30 days from date of issue of the order for bought out items and items manufactured by them. The Standard Field Quality Plan shall relate to the specific and objective erection practices right from storage of equipment till final inspection and testing

to be followed for bought out items and items manufactured by Contractor. Accordingly, the Manufacturing Quality Plan shall be submitted broadly under following sub-heads:-

- Raw material/Bought Out items and Components.
 - In process inspection and test/checks to establish successful completion/accomplishment of the process.
 - Final tests/checks in accordance with relevant national/international standards/specification.
- 11.2. The quantum of check for each and every inspection/test items shall be based on an established sampling method and the quantum of check indicated in the SFQP should be designed adequate quality protection.
- 11.3. In case reference documents/acceptance norms are indicated as per standards then the same shall be duly substantiated/properly explained by well-established and proven engineering practices. All submissions will be in English language only.
- 11.4. Bidder will to allow Employer to carry out Quality/Audit/Quality surveillance on bidders and our sub-vendor's work with reference to contractual obligations to ensure that the quality management practices/norms as detailed out in the Quality Manual are adhered to. To facilitate this activity, you shall keep Employer informed all progress of work in this contract on monthly basis.
- 11.5. Contractor will associate/fully witness in each inspection being carried out at their/their sub-vendor's works by our authorized inspection engineer(s).
- 11.6. Employer shall also carry out quality audit and quality surveillance of your systems, procedures and quality control activities. However, this shall not relive you of any of your contractual responsibilities under the contract.

12. Performance and Functional Warranty / Guarantees

- 12.1. The complete street lighting system shall be warranted for 05 years for failures due to material defects and workmanship, including but not limited to luminary, SPV Module, battery, pole/mounting structure, foundations etc.
- 12.2. The Contractor must ensure that the goods supplied under the Contract are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- 12.3. During the period of Warranty / Guarantee the Contractor shall remain liable to replace any defective parts, that becomes defective in the facilities, of its own manufacture or that of its sub-Contractors, under the conditions provided for by the Contract under and arising solely from faulty design, materials or workmanship, provided such defective parts are not repairable at Site. After replacement, the defective parts shall be returned to the Contractors works at the expense of the Contractor unless otherwise arranged.
- 12.4. At the end of guarantee period, the Contractor's liability shall cease. In respect of goods not covered by the first paragraph of this clause, the Employer shall be entitled to the benefit of such guarantee given to the Contractor by the original Contractor or manufacturer of such goods.
- 12.5. The performance of the facilities will be determined by the performance test. The same shall be measured and recorded for a period of one month for operational acceptance of the facilities as mentioned under TS Clause 7.
- 12.6. During the first year of assured performance demonstration and Operation & Maintenance thereafter, the Contractor shall be responsible for any defects in the work due to faulty

workmanship or due to use of sub-standard materials in the work. Any defects in the work during the guarantee period shall therefore, be rectified by the Contractor without any extra cost to the Employer within a reasonable time as may be considered from the date of receipt of such intimation from the Employer failing which the Employer shall take up rectification work at the risk and cost of the Contractor.

- 12.7. During the O&M period, the bidder, in concurrence with the Employer, is encouraged to carry out the performance tests in similar fashion for a period of 7 days, at regular intervals, in order to check the continued performance of the facilities and to determine the necessary steps to meet the commitment.

SHEET-1

GUARANTEED TECHNICAL PARTICULAR DATA SHEET FOR SOLAR PV MODULE

(To be furnished by the bidder)

S.No.	Particulars	Unit	Type/value
1	PV Module Manufacture (Name & Country)		
2	PV Module type (Crystalline- Mono/ Multi)		
3	Product Code (commercial)		
4	No. of PV cells per Module	cells	
5	Mounting arrangement for Solar Module		
6	Solar Module frame material (if framed)		
7	Module dimensions		
8	Output Cables (viz., Polarized Weather Proof DC rated multi-contact connector)		
9	Availability of Reverse Blocking Diode and Bypass Diode		
10	Construction: Front glass description and thickness Back sheet details Encapsulating details		
11	Cell efficiency	%	
12	Module efficiency	%	
13	Nominal Wattage (P_{nom})	W	
14	Power Tolerance ($\pm 5W$)	W	
15	Peak power voltage (V_{mp})	V	
16	Peak power current (I_{mp})	A	
17	Open circuit voltage (V_{oc})	V	
18	Short circuit current (I_{sc})	A	
19	Weight of each module	kg	
20	Fill Factor	%	
21	Standards/Approvals from International Agencies	IEC 61215 IEC 61730 IEC 61646 IEC 61701 IEC 62716 Others	
22	Module is suitable to operate up to 50° ambient temp	Yes/No	

Note:

- Based on the design calculations the bidder shall clearly specify the wattage of the lights being proposed for replacement of Existing 20 W & 40 W LED Street Lights.
- The proposed equipment shall comply with the technical requirements of this RFP.
- Guaranteed Technical Particulars should be submitted for each wattage separately.

SHEET-2

TECHNICAL PARTICULAR DATA SHEET FOR BATTERY

(To be furnished by the bidder)

Particulars	Unit	Value
Make		
Type		
Capacity		
Origin		
Rating		
Maximum Input DC power	kW	
Maximum DC voltage	V	
Maximum DC current	A	
DC over voltage protection		
Ampere hour Efficiency	%	
Watt hour Efficiency	%	
Ambient temperature range	°C	
Degree of protection	IP	
Dimensions approx. (H x W x D)	mm	
Weight	kg	
Compliances (Reference Standards)		

Note:

- i. Based on the design calculations the bidder shall clearly specify the wattage of the lights being proposed for replacement of Existing 20 W & 40 W LED Street Lights.
- ii. The proposed equipment shall comply with the technical requirements of this RFP.
- iii. Guaranteed Technical Particulars should be submitted for each wattage separately.

SHEET -3

TECHNICAL PARTICULARS OF POLE

(To be furnished by the bidder)

S. No.	Description	Guaranteed particulars to be filled in by the manufacturer
1	Make	
2	Type	
3	Origin	
4	Height (m)	
5	Base Outer Diameter (mm)	
6	Top Outer Diameter (mm)	
7	Thickness (mm)	
8	Weight (Kg)	
9	Colour Availability	
10	Compliance and in line with ANSI C 136.20 – 1990 (Yes/No)	
11	Compliance and in line with AASHTOLTS-4 (Yes/No)	
12	Compliance and in line with IS 875 (part 3) 1987 (Yes/No)	
13	Compliance and in line with BS EN 40 - 7:200 (Yes/No)	
14	Reference Standards (others)	

Note:

- i. Based on the design calculations the bidder shall clearly specify the wattage of the lights being proposed for replacement of Existing 20 W & 40 W LED Street Lights.
- ii. The proposed equipment shall comply with the technical requirements of this RFP.
- iii. Guaranteed Technical Particulars should be submitted for each wattage separately.

SHEET- 4

Guaranteed Technical Particulars of LED lights
(To Be Submitted By the Bidder)

S. No.	Parameter	Guaranteed Value
1	LED Operating Current	
2	Output Luminous Flux	
3	Beam Angle	
4	Illuminance	
5	Photometric Curve	
6	Material of Luminaire	
7	Dimension	
8	Weight	
9	Impact Resistance	
10	LED Life	

Note:

- i. Based on the design calculations the bidder shall clearly specify the wattage of the lights being proposed for replacement of Existing 20 W & 40 W LED Street Lights.
- ii. The proposed equipment shall comply with the technical requirements of this RFP.
- iii. Guaranteed Technical Particulars should be submitted for each wattage separately.

Section - VI

Forms and Formats

(RFP No: GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)

Contents

Appendix 1: (on Bidders' letter head).....	111
Appendix 2: Details of Bidder (on Bidders' Letter head)	114
Appendix 3: Bid Evaluation Criteria (BEC).....	115
Appendix 4: Performance Test.....	117
Appendix 5: Performa for Financial Proposal (on Bidders' Letter head)	118
Appendix 6: Details of qualified technical staff (On bidders' Letter head).....	121
Appendix 7: Declaration of Compliance (On bidders' Letter head).....	122
Appendix 8: No Deviation Certificate (On bidders' Letter head).....	123
Appendix 9: Declaration on Bidder's relation to Directors (On bidders' Letter head)	124
Appendix 10: Execution Timeline (on Bidders' letter head)	125
Appendix 11: Performa of acknowledgement letter for receipt of RFP Documents.....	126
Appendix 12(a): Format of Bank Guarantee for Bid Security	127
Appendix 12(b): Format for Performance Bank Guarantee for Performance Security during EPC	130
Appendix 12(c): Format of Bank Guarantee for Performance of O&M.....	133
Appendix 12(d): Format of Bank Guarantee for Mobilization Advance	135
Appendix 12 (e): Bank Guarantee Verification	137
Appendix 13: Terms of Payment.....	138
Appendix 14: Contract Agreement	139
Appendix 15: Power of Attorney for signing of Bid	141
Appendix 16: Model Format for certification of satisfactory operation (on Owners' letter head):	143
Appendix 17: Indemnity Bond to be executed by The Contractor for The Removal / Disposal of Scrap/Disposal of Surplus Material.....	144
Appendix 18: Indemnity Bond to be executed by the contractor for the facilities handed over by GVSCCL for Performance of its O&M Contract.....	146
Appendix 19(a): Indemnity bond to be executed by the contractor for the equipment handed over by the employer for performance of its contract (entire equipment consignment in one lot)	149
Appendix 19 (b): Form of indemnity bond to be executed by the contractor for the equipment handed over in instalments by the employer for performance of its contract	152
Annexure 1: Details of Site.....	155

To,

The MD & CEO,

Greater Visakhapatnam Smart City Corporation Limited (GVSCCL),

Visakhapatnam, Andhra Pradesh, INDIA, Pin: 530003

Subject: Submission of the bid (GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018) for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission.

Dear Sir,

We, the undersigned, have considered and complied with the "Instructions to Bidders" and have accepted the terms stipulated in the RFP documents. The scope of work shall include but not be limited to **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission. All the above shall be as per **RFP Document No. GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018**).

Also we have familiarized ourselves with the proposed area and metrological, climatological and environmental conditions which may exist in the installations area. In full cognizance and compliance with these aforesaid conditions and the regulations of local government authorities, we the undersigned do hereby offer for the subject project using PV technology on a turnkey basis in Visakhapatnam for which we have Bid. The work covered under the Bid shall be completed to the entire satisfaction of yourselves or your representative in conformity with the RFP documents at the prices accompanying this Bid.

It is a term of our Bid that the Project shall be handed over installed, tested, commissioned and modified and shall achieve Commissioning of all the facilities not later than (180) One Hundred and Eighty Days from the date of issue of NTP/ LOI as per the completion schedule mentioned under SCC Clause 8. This shall be the essence of the Contract between us.

We further agree and stipulate as follows:

1. Until the final Contract Documents are prepared and executed, the RFP documents, with any modifications, additions, deletions agreed with the Employer and your written acceptance thereof, shall constitute a binding Contract between us, upon terms contained in aforesaid documents and the Financial Proposal accompanying the Bid.
2. That the Employer will not supply any material. In all respects we shall be fully self- sufficient in the Performance of the work.

3. I/ We understand that you are not bound to accept the lowest of the Bid you may receive.
4. I/ We shall make available to the Employer any additional information it may find necessary or require to supplement or authenticate the qualification statement.
5. I/ We acknowledge the right of the Employer to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
6. I/ We understand that you may cancel the bidding process at any time and that you are neither bound to accept any Application that you may receive nor to invite the Applicants to Bid for the Project, without incurring any liability to the Applicants.
7. I/ We further certify that in regard to matters relating to security and integrity of the country, we or any of our Associates have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.
8. I/ We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our directors/ managers/ employees.
9. I/ We undertake that in case due to any change in facts or circumstances during the bidding process, we are attracted by the provisions of disqualification in terms of the provisions of this RFP; we shall intimate the Employer of the same immediately.
10. We understand that the selected Bidder shall be an existing Company incorporated under the Indian Companies Act, 1956 or 2013.
11. I/ We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Employer in connection with the selection of Applicants, selection of the Bidder, or in connection with the selection/ bidding process itself, in respect of the above mentioned Project and the terms and implementation thereof.
12. I/ We agree and undertake to abide by all the terms and conditions of the RFP document.
13. We agree to keep the bidding valid for acceptance for a period of 180 days from the date of floating the Bid (hereinafter referred to as validity period) and the Bid shall not be withdrawn on or after the opening of bidding till the expiration of the validity period or any extension thereof.
14. We also undertake not to vary/ modify the Bid during the validity period or any extension thereof.
15. We represent that we have fully satisfied ourselves as to the nature and location of the Project having in mind the general and local conditions and other factors incidental to the Performance of the works and the costs thereof.
16. We further represent that from our own investigation of the Site of the Project we have fully satisfied ourselves as to the character, quality other soil conditions to be encountered in the Performance of the works and we understand and represent that any failure to acquaint ourselves in respect of these matters and the other factors and conditions as set forth shall not relieve us from any responsibility for estimating properly the difficulty and cost of successfully performing the works.
17. We also acknowledge and accept that you shall not pay for any discontinuance or low Performance rate resulting from malfunction of / or inadequacy of our equipment, instruments or personnel.
18. We agree to return to you all reports and technical data provided for our use in preparing this Bid and in the subsequent conduct of the works. We undertake that we will not use the same for any other work/purpose.
19. We further represent that we have familiarized ourselves with all the terms and provisions of the various parts of the bidding documents and that in making our Bid, we do not rely upon

any representation made by any agent or employee of yourselves in respect of the terms of the bidding documents or the nature of the Performance of the works.

20. We submit this Bid with the full understanding that our Bid fully complies with all the terms and conditions of the RFP documents including Bid evaluation criteria and that no deviation/exception to the RFP documents have been taken by us. We also agree that in case we have taken any exceptions/ deviations to the RFP documents, the Employer will be free to reject our offer on account of such exceptions/deviations.
21. We agree to guarantee minimum average illumination Level (LUX Level) as prescribed in the RFP Document.

Dated this _____ day of _____ 2018

Signature: _____

In the capacity of: _

Duly authorized to sign Tenders for and on behalf of (Name & Address)

—

—

—

Witness

Appendix 2: Details of Bidder (on Bidders' Letter head)

1. General
 - a. Name of Company:
 - b. Country of incorporation:
 - c. Address of the corporate headquarters and its branch office(s), if any, in India:
 - d. Date of incorporation and/ or commencement of business:
2. Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Project:
3. Details of individual(s) who will serve as the point of contact/ communication for the Company:
 - a. Name:
 - b. Designation
 - c. Company:
 - d. Address:
 - e. Telephone Number:
 - f. E-Mail Address:
 - g. Fax Number:
4. Particulars of the Authorised Signatory of the Bidder:
 - a. Name:
 - b. Designation:
 - c. Address:
 - d. Phone Number:
 - e. Fax Number:
5. Details of the bank from where the bid bond is issued and submitted along with bid
 - a. Name of Contact person:
 - b. Name of Bank:
 - c. Address:
 - d. Phone Number:

Appendix 3: Bid Evaluation Criteria (BEC)

The following steps will be undertaken in the selection of Bidder:

1. Financial bids of the agencies scoring more than 70 points (out of 100 points of technical weightage) of the total technical assessment point only will be opened.
2. Tendering Authority shall award the contract to the agency/bidder who obtain the highest combined score of the technical and financial price evaluation.
3. Evaluation Criteria for selecting the agency will include

S.No.	Criteria	Maximum Marks	Scoring System	Supporting Document
1	Product Test Certificates	5	The intending bidder must have internal and third party test reports/ certificates from a government accredited NABL/MNRE test laboratories for the products to be supplied.	Internal and third party test reports/certificates from a government accredited NABL/MNRE test laboratories for the products to be submitted.
2	Test Compliance for LED is LM 80 (IS-16105) and Test Compliance for Fixture is LM 79 (IS-16106, IEC 60598/ IS:10322).	5	The bidder should upload Photometry Test (LM 79 Report) and LM80 compliance certificate to be adhered by the LED manufacturer.	Compliance Report.
3	Lighting Design Report	20	Bidder should upload Lighting design report indicating the Average illuminance (lux), uniformity, maximum and minimum values. Polar curve of the light fitting indicating the light distribution capability of luminaire as per the conditions.	Lighting design report indicating the Average illuminance (lux), uniformity, maximum and minimum values. Polar curve of the light fitting indicating the light distribution capability of luminaire as per the conditions.
4	Integrated Wireless Remote Monitoring & Control System	10	Bidder should provide detailed architecture of Wireless Remote Monitoring & Control System.	Compliance report with brief description of the proposed system to be uploaded.
5	Similar Nature of works done for Private/Government / Semi-Government Authority/PSUs/ Local Bodies till October 2018.	30	The bidder should have designed, procured, supplied, erected, commissioned <ol style="list-style-type: none"> 3 (Three) different Projects of Standalone Solar Street Lights/Street Lights - Minimum quantity of lights not less than 1000 No's. – 10 Marks 2 (Two) different Projects of Standalone Solar Street Lights/Street Lights - Minimum quantity of lights not less than 1300 No's. – 20 Marks 1(One) Project of Standalone Solar Street 	Purchase Order and Delivery Challans & Commissioning Certificates certified by concerned authority or any other proof of order and proof of supply by the authority.

			Lights/Street Lights Minimum quantity of lights not less than 2000 No's. – 30 Marks	
6	Demonstration and Presentation	30	i. Understanding of the project and requirement – 5 Marks ii. Demonstration of Integrated, Wireless Remote Monitoring & Control System – 20 Marks iii. Visual appearance of All in One Street Light Fixture - 5 Marks	Bidder shall give a presentation of the proposed solution.
	Total	100		

4. Evaluation of Bid:

- The evaluation will be based on Quality Cost Based System (QCBS).
- The Tendering Authority will select the bidder by giving 80% weightage on the Technical Marks scored and 20% weightage to the Price Bid.
- The marks obtained by bidder in technical evaluation shall be taken as Technical score (T) of technically eligible bidder.
- Comparison of Price Bid shall be done by the formula as under:

$$Sf = 100 \times Fm/F$$
Where
Sf : is the standard financial score of the Price Proposal being evaluated
(Financial Bid Marks of the Proposed Bidder)
Fm : is the lowest price bid
F : is the Price Proposal under consideration
- Based on combined marks of Technical and Financial Bid, bidder securing highest score/ranking will be selected.

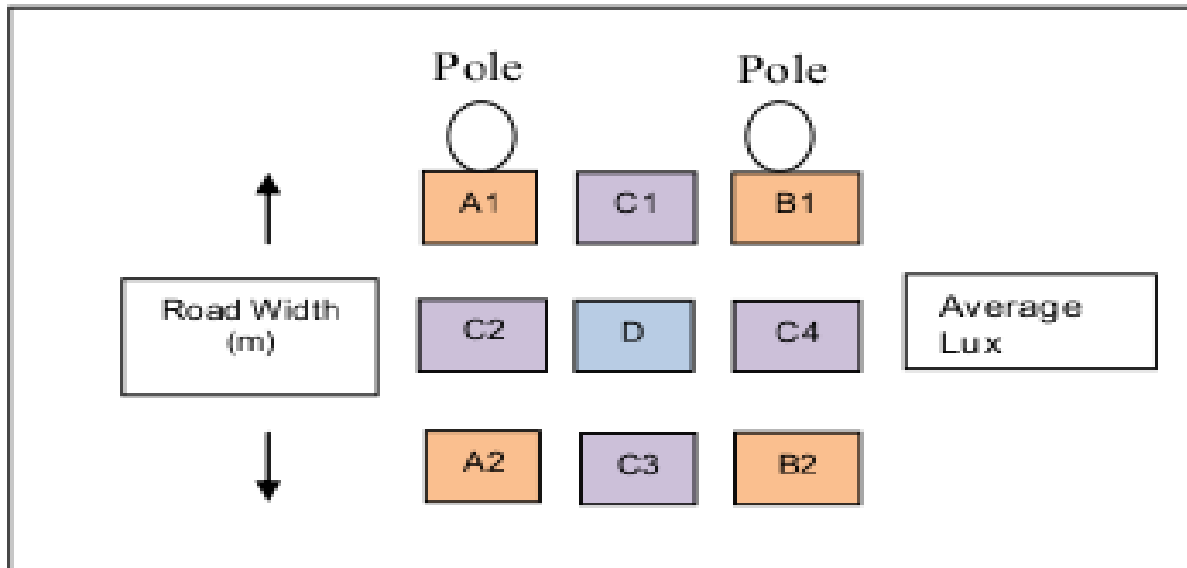
$$\text{Final Score} = T \times 0.8 + Sf \times 0.2$$

Note:

- Bidder with Highest Combined Score shall be awarded the Tender.
- The price shall be inclusive of all taxes and duties as price quoted by the bidder.
- In case, any of the item/ component from the entire supplies is imported by the bidder than the price break up of those items shall be mentioned separately along with the applicable taxes and duties. Further in case, any concession/ exemption is desired to be availed by the bidder in accordance with provisions of GCC Clause 8.5, and as applicable by the permissible law/ rule/ regulations then the same shall be mentioned by the bidder.

Appendix 4: Performance Test

- Illumination level (lux levels) shall be measured using a calibrated lux meter by the following “Nine Point Method”. The layout of a 9 point measuring grid (for one span) should be as below. The same methodology would be followed for all types of roads.



Average illuminance, $E_{av} = (A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$

- Average level of illumination (LUX Level) on the road surface should be minimum of 8 Lux as per IS-1944(1&2)-1970 – Classification of Lighting Installation and Levels of Illumination.
- Minimum lux should be at least 3 lux in between two poles, with Uniformity minimum lux/average lux should be > 0.4 & minimum lux/maximum lux should be > 0.33 , the longitudinal uniformity to be minimum 0.7 & all these uniformities parameters need to be sane at the dimmed stage.

Note:

- The lux meter being used to measure the Average level of illumination (LUX Level) should be calibrated and the latest calibration report has to be submitted.
- Subsequent to the Commissioning of the facilities, the Contractor shall notify the Employer a date for Commencement of Performance Test Procedure.

Signature:

Designation:

Name:

Organization:

Address:

Phone:

Email:

Seal Of the Company

Appendix 5: Performa for Financial Proposal (on Bidders' Letter head)

Date:

To,

The MD & CEO,

Greater Visakhapatnam Smart City Corporation Limited (GVSCCL),

Visakhapatnam, Andhra Pradesh, INDIA, Pin: 530003

Sub: Submission of the Financial Proposal (GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018) for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission.

Sir,

I, _____, present the financial proposal for the Bid for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission in response to **RFP document No. GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018**, confirming that:

- I agree to all the terms and conditions set forth in this RFP document. If awarded the Project, the implementation of the Project shall also conform to the terms and conditions, as well as specifications indicated in the RFP documents and as finally indicated by the Evaluation Committee.
- Rates quoted in this Bid is FOR destination prices inclusive of all taxes (unless stated otherwise), levies, duties, packing, forwarding, freight, insurance, loading, unloading, supply, installation, commissioning, and any/all charges for successful Engineering, Construction, Operation and Maintenance of Supply & Installation of “Project” Site. The break-up of taxes considered should be clearly mentioned in price bid.
- Under any circumstances, escalation in the prices quoted against various items of this RFP Document shall not be entertained. The details quoted herein stands valid for at least six months from the date of opening of Bid.

TABLE 5A: Total EPC Contract Price (including Taxes/Duties and other Levies)					
S. No.	Item	Unit Price (INR) (A)	Total Tax and Others (INR) (B)	Quantity (Nos) (C)	Final Price (INR) [{{(A)+(B)}} X (C)]
Part - A: Supply Works package(Delivery at site basis, as per specification mentioned in RFP)					
For Replacement of existing 20 W LED Street Light					
1	All in One Solar Street Light			2135	
2	Pole/ Mounting Structure including required hardware.			2135	
For Replacement of existing 40 W LED Street Light					
3	All in One Solar Street Light			193	
4	Pole/ Mounting Structure including required hardware.			193	
5	RMS (Remote Monitoring & Control System)				
Part - B: Erection Works Package (as per specification in RFP)					
For Replacement of existing 20 W LED Street Light					
6	General works including erection, commissioning, testing etc. of entire facilities including installation, excluding Civil Works.			2135	
For Replacement of existing 40 W LED Street Light					
7	General works including erection, commissioning, testing etc. of entire facilities including installation, excluding Civil Works.			193	
Part - C: Civil Works Package (as per specification in RFP)					
For Replacement of existing 20 W LED Street Light					
8	Civil works including excavation, casting of foundations and removal of debris etc.			2135	
For Replacement of existing 40 W LED Street Light					
9	Civil works including excavation, casting of foundations and removal of debris etc.			193	
10	Total (1+2+3+4+5+6+7+8+9) (In Figures)				
Total EPC Contract Price (in Words)					

***Note: Payment shall be done as per the installed quantity, pursuant to sub clause 14. Terms of Payment.**

TABLE 5B: Total Price for O&M Contract (including taxes)				
Sr. No.	Item	Basic Price (INR) (A)	Total Tax and Others (INR) (B)	Final Price (INR) {(A)+(B)}
1	Operation and Maintenance of the facilities for First YEAR			
2	Operation and Maintenance of the facilities for SECOND YEAR			
3	Operation and Maintenance of the facilities for THIRD YEAR			
4	Operation and Maintenance of the facilities for FOURTH YEAR			
5	Operation and Maintenance of the facilities for FIFTH YEAR			
Total O&M Contract Price (in figures)				
Total O&M Contract Price (in Words)				

Table 5B: Price Quote for O&M Contract including all Taxes

Table 5C: Total Project Cost

S. No.	Item	Price (in INR)
1	Total EPC Contract Price (from Table 5A)	
2	Total Price for O&M Contract (from Table 5B)	
3	Total Project Cost (1+2) (In Figures)	
Total Project Cost (in Words):		

***Note: Payment shall be done as per the installed quantity, pursuant to sub clause 14. Terms of Payment.**

Signature:

Designation:

Name:

Organization:

Address:

Phone:

Email:

Seal Of the Company

Appendix 6: Details of qualified technical staff (On bidders' Letter head)

S. No.	Name	Relevant Qualification	Additional Certifications	Total Years of relevant Experience	Remarks
1					
2					
3					
4					
5					
6					
7					

Note: Kindly submit copies of resumes and appropriate certifications with this sheet.
Additional sheets may be used to provide accurate information.

Signature:

Designation:

Name:

Organization:

Address:

Phone:

Email:

Seal Of the Company

Appendix 7: Declaration of Compliance (On bidders' Letter head)

Date:

To,

The MD & CEO,

Greater Visakhapatnam Smart City Corporation Limited (GVSCCL),

Visakhapatnam, Andhra Pradesh, INDIA, Pin: 530003

Sub: Declaration of Compliance (**GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018**) for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission.

Dear Sir,

This is to certify that I, _____, am the duly authorized signatory appointed on behalf of my organization to submit this Bid. The Power of Attorney along with Board Resolution is attached herewith.

I agree to all the terms and conditions set forth in this RFP Document.

If awarded the job, the job work shall also conform to the terms and conditions, as well as specifications indicated in the RFP documents and as finally indicated by the Evaluation Committee.

I further certify that all the information provided in this document is accurate to the best of my knowledge.

Signature:

Designation:

Name:

Organization:

Address:

Phone:

Email:

Seal Of the Company

Appendix 8: No Deviation Certificate (On bidders' Letter head)

Date:

To

The MD & CEO,

Greater Visakhapatnam Smart City Corporation Limited (GVSCCL),

Visakhapatnam, Andhra Pradesh, INDIA, Pin: 530003

Sub: No Deviation Certificate (GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018) for
“**Procurement of Implementing Agency for Providing All in One Solar LED Street
Lights with Poles including Design, Procurement, Erection, Testing &
Commissioning and Comprehensive Operation & Maintenance for 05Years on
Turnkey Basis along with associated Electrical & Civil Works in ABD Area**” under
implementation of Smart City Mission.

Dear Sir,

We, _____(Bidder's name), confirm our acceptance
to all terms and conditions mentioned in the RFP Document, and all subsequent clarifications, in
totality and withdraw all deviations raised by us, if any.

SEAL AND SIGNATURE OF BIDDER

Date: _____

Appendix 9: Declaration on Bidder's relation to Directors (On bidders' Letter head)

This has reference to our proposed bid/ Contract **(GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018)** for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission, to be entered into Agreement with Employer (GVSCCL).

We certify that to the best of my/our knowledge;

- I am not a relative of any Director of GVSCCL ;
- We are not a firm in which a Director of GVSCCL or its relative is a partner;
- I am not a partner in a firm in which a Director of GVSCCL, or its relative is a partner;
- We are not a private company in which a Director of GVSCCL is a member or director;
- We are not a company in which Directors of GVSCCL hold more than 2% of the paid-up share capital of our company or vice-versa.

Authorised Signatory of the Contracting Party

Place:

Date:

Appendix 10: Execution Timeline (on Bidders' letter head)

DETAILED PROJECT SCHEDULE

* Bidder shall enclose Gantt chart / PERT chart for the schedule of activities

1. Complete installation plan (in detail)

NOTE: The Bidder shall ensure that the entire work is completed within 730 days of issue of LOI.

SIGNATURE OF BIDDER

NAME

DESIGNATION

COMPANY SEAL

DATE

Appendix 11: Performa of acknowledgement letter for receipt of RFP Documents

Not Required as RFP document can be downloaded online.

Appendix 12(a): Format of Bank Guarantee for Bid Security

(BANK GUARANTEE ON NON-JUDICIAL STAMP PAPER OF Rs.100)

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Ref. _____ Bank Guarantee No. _____ Date: _____

BID BOND BANK GUARANTEE FORMAT FOR TENDER /RFP No. GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018.

In consideration of the ----- [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RFP inter alia for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ADB Area”** under implementation of Smart City Mission. , in response to the **RFP No. GVSCCL/Projects/105 (SSL – ABD) / 2018-19, dt: 14-11-2018** issued by Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) considering such response to the RFP of [insert the name of the Bidder] as per the terms of the RFP, the _____ [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to GVSCCL at [Insert Name of the Place from the address of GVSCCL] forthwith on demand in writing from GVSCCL or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees -----[Insert amount as per Clause 1.2.3 of Section II: ITB] only, on behalf of M/s. _____[Insert name of the Bidder]

This guarantee shall be valid and binding on this Bank up to and including _____[insert date of validity in accordance with Clause 1.2.3 of Section II: ITB of this RFP] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only). Our Guarantee shall remain in force until _____ [insert date of validity in accordance with Clause 1.2.3 of Section II: ITB of this RFP].

GVSCCL shall be entitled to invoke this Guarantee till _____ [Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the GVSCCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by GVSCCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to GVSCCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ----- [Insert name of the selected Contractor] and/or any other person. The Guarantor Bank shall not require GVSCCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against GVSCCL in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Hyderabad shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly GVSCCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Contractor, to make any claim against or any demand on the selected Contractor or to give any notice to the selected Contractor or to enforce any security held by GVSCCL or to exercise, levy or enforce any distress, diligence or other process against the selected Contractor.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to GVSCCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by GVSCCL to any entity to whom GVSCCL is entitled to assign its rights and obligations.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if GVSCCL serves upon us a written claim or demand.

Signature _____

Name _____

Power of Attorney No. _____

For

_____ [Insert Name of the Bank] ____

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

1.

Signature

Name and Address

2.

Signature

Name and Address

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per stamp duty applicable at the place where the tender has emanated. The non-judicial stamp paper should be in name of the issuing bank.
- The Bank Guarantee by Bidder will be given from any nationalized bank or from bank as per Schedule 1: List of Banks.
- This bank guarantee/ all further communication relating to the bank guarantee should be forwarded to MD & CEO, "Greater Visakhapatnam Smart City Corporation Limited, Visakhapatnam", only.
- The full address along with the Telex/Fax No. and email address of the issuing bank to be mentioned.
- The Bank Guarantee Checklist provided in Appendix 12(e): Bank Guarantee Verification, duly filled in, should be enclosed with The Bank Guarantee.

Appendix 12(b): Format for Performance Bank Guarantee for Performance Security during EPC

(Note: Performance Guarantee is to be submitted in Bank Guarantee as per the ITB Clause 1.2.3 at respective times)

Reference No. Bank Guarantee No. Dated: (On stamp paper of Rs.100/-)

In consideration of the ----- [Insert name of the Bidder] (hereinafter referred to as 'Contractor') submitting the response to RFP inter alia for **“Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area”** under implementation of Smart City Mission., in response to the RFP dated..... issued by Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) considering such response to the RFP of[insert the name of the Contractor] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Contractor and issuing Letter of Intent No ----- to (Insert Name of Contractor) as per terms of RFP and the same having been accepted by the Contractor. As per the terms of the RFP, the _____ [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to GVSCCL at [Insert Name of the Place from the address of GVSCCL] forthwith on demand in writing from GVSCCL or any Officer authorised by it in this behalf, any amount upto and not exceeding Rupees-----[Insert amount as per Clause 1.2.3 of Section II: ITB] only, on behalf of M/s _____ [Insert name of the Contractor] This guarantee shall be valid and binding on this Bank up to and including _____[insert date of validity in accordance with Clause 1.2.3 of Section II: ITB of this RFP] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only).

Our Guarantee shall remain in force until [Insert date of validity in accordance with Clause 1.2.3 of Section II: ITB]. GVSCCL shall be entitled to invoke this Guarantee till until [Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that GVSCCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by GVSCCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to GVSCCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ----- [Insert name of the Contractor] and/or any other person. The Guarantor Bank shall not require GVSCCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against GVSCCL in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Hyderabad shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly GVSCCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Contractor, to make any claim against or any demand on the selected Contractor or to give any notice to the selected Contractor or to enforce any security held by GVSCCL or to exercise, levy or enforce any distress, diligence or other process against the selected Contractor.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to GVSCCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by GVSCCL to any entity to whom GVSCCL is entitled to assign its rights and obligations.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if GVSCCL serves upon us a written claim or demand.

Signature _____ Name _____

Power of Attorney No. _____

For

_____ [Insert Name of the Bank] _____

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

1.

Signature

Name and Address

2.

Signature

Name and Address

INSTRUCTIONS FOR FURNISHING PERFORMANCE BANK GUARANTEE

- The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per stamp duty applicable at the place where the Guarantee has been issued. The non-judicial stamp paper should be in name of the issuing bank.
- The Bank Guarantee by Bidder will be given from any nationalized bank or from bank as per Schedule 1: List of Banks only.
- This bank guarantee/ all further communication relating to the bank guarantee should be forwarded to MD & CEO, GVSCCL, Visakhapatnam only.
- The full address along with the Telex/Fax No. and email address of the issuing bank to be mentioned.
- The Bank Guarantee Checklist provided in Appendix 12(e): Bank Guarantee Verification, duly filled in, should be enclosed with The Bank Guarantee.

Appendix12(c): Format of Bank Guarantee for Performance of O&M

(On stamp paper of Rs.100/-)

Reference No. Bank Guarantee No. Dated:

WHEREAS [Insert name of the Contractor] with address [Insert address of the Contractor] having its registered office at [Insert address of the Contractor] (Hereinafter, the "Bidder") wishes to participate in RFP document No. _____ issued by Greater Visakhapatnam Smart City Corporation Limited ("GVSCCL") (hereinafter, the "Beneficiary") for Operation and Management of Performance of the facilities.

And WHEREAS a Bank Guarantee for Rupees [.....] valid till [Insert date 10 years from the date of Operational Acceptance] is required to be submitted by the Contractor as per the terms and conditions of the RFP.

We,[Insert name of the Bank and address of the Branch giving the Bank Guarantee] having our registered office at [Insert address of the registered office of the Bank] hereby give this Bank Guarantee No. [Insert Bank Guarantee number] dated [Insert the date of the Bank Guarantee], and hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the Beneficiary any officer authorized by it in this behalf any amount not exceeding Rupees [.....] to the said Beneficiary on behalf of the Bidder.

We [Insert name of the Bank] also agree that withdrawal of the Bid or part thereof by the Bidder within its validity or non-submission of further O&M Performance Bank Guarantee by the Bidder within the stipulated time of the Letter of Intent to the Bidder or any violation to the relevant terms stipulated in the RFP would constitute a default on the part of the Bidder and that this Bank Guarantee is liable to be invoked and encashed within its validity by the Beneficiary in case of any occurrence of a default on the part of the Bidder and that the encashed amount is liable to be forfeited by the Beneficiary.

This agreement shall be valid and binding on this Bank up to and inclusive of [Insert the date of validity of the Bank] and shall not be terminable by notice or by Guarantor change in the constitution of the Bank or the firm of the Bidder or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the Bidder and the Beneficiary.

NOTWITHSTANDING anything contained hereinbefore, our liability under this guarantee is restricted to Rupees (Insert the Amount). Our Guarantee shall remain in force till [Insert date]. Unless demands or claims under this Bank Guarantee are made to us in writing on or before [Insert date], all rights of the Beneficiary under this Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under.

[Insert the address of the Bank with complete postal branch code, telephone and fax numbers, and official round seal of the Bank]

[Insert signature of the Bank's Authorized Signatory]

Attested:

..... [Signature] (Notary Public)

Place:

Date:

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per stamp duty applicable at the place where the Guarantee has been issued. The non-judicial stamp paper should be in name of the issuing bank.
- The Bank Guarantee by Bidder will be given from any nationalized bank or from bank as per Schedule 1: List of Banks only.
- This bank guarantee/ all further communication relating to the bank guarantee should be forwarded to MD & CEO, GVSCCL, Visakhapatnam only.
- The full address along with the Telex/Fax No. and email address of the issuing bank to be mentioned.
- The Bank Guarantee Checklist provided in Appendix 12(e): Bank Guarantee Verification, duly filled in, should be enclosed with The Bank Guarantee.

Appendix 12(d): Format of Bank Guarantee for Mobilization Advance

(On stamp paper of Rs.100/-)

Reference No. Bank Guarantee No. Dated:

WHEREAS GVSCCL has issued LOI No..... for “.....” (Hereinafter called “the Contractor”), having its registered office at AND WHEREAS vide Clause 12.2 of Section III: General Conditions of Contract, Mobilization Advance up to 10% (10 percent) of the original contract value of Rs..... is payable to the Contractor against Bank Guarantees, the Contractor hereby applies for Mobilization Advance of --% (--- percent) amounting to Rs...../- (Rupees.....) of the Contract Price, Now, we the undersigned, Bank of, being fully authorized to sign and to incur obligations for and on behalf of and in the name of Bank ofhereby declare that the said Bank will guarantee the Employer the full amount of 110% of Rs(AA) as per the requirements of the contract. i.e. Rs...../- (Rupees.....) as stated above We,[Insert Name of Bank], do hereby unconditionally, irrevocably and without demur guarantee and undertake to pay the Employer immediately on demand any or all money payable by the Contractor to the extent of Rs.-(Rupees.....) without any demur, reservation, context, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor on any dispute pending before any court, Tribunal, Arbitrator or any other authority. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Employer discharges this guarantee. This guarantee is valid till[insert date of validity in accordance with Clause 1.2.3 of Section II: ITB] At any time during the period in which this guarantee still valid of the Contractor fails to fulfil its obligation under the Contract, it is understood that the Bank will extend this guarantee under the same condition for the required time on demand by the Employer at the cost of the Contractor. The Guarantee hereinbefore contained shall not be affected by any change in the constitution of the Bank or of the Contractor. The neglect or forbearance of the Employer in enforcement of payment of any money, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the Bank of their liability under this Deed. The expressions “the Employer”, “the Bank” and “the Contractor” hereinbefore used shall include their respective successors and assigns. Notwithstanding anything contained herein: Our liability under this Bank Guarantee shall not exceed Rs...../- (AA) (Rupees.....) this bank Guarantee shall be valid up to.....[insert date of validity in accordance with Clause 1.2.3 of Section II: ITB] We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before(date of expiry of Guarantee). In witness whereof we of the Bank have signed and sealed this Guarantee on theday of being herewith duly authorized.

For

_____[Insert Name of the Bank]__

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

1.

Signature

Name and Address

2.

Signature

Name and Address

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per stamp duty applicable at the place where the Guarantee has been issued. The non-judicial stamp paper should be in name of the issuing bank.
- The Bank Guarantee by Bidder will be given from any nationalized bank or from bank as per Schedule 1: List of Banks only.
- This bank guarantee/ all further communication relating to the bank guarantee should be forwarded to MD & CEO, GVSCCL, Visakhapatnam only.
- The full address along with the Telex/Fax No. and email address of the issuing bank to be mentioned.
- The Bank Guarantee Checklist provided in Appendix 12(e): Bank Guarantee Verification, duly filled in, should be enclosed with The Bank Guarantee.

Appendix12 (e): Bank Guarantee Verification

CHECKLIST			YES	NO
I.		Does the bank guarantee Compare verbatim with Standard GVSCCL Performa for BG?		
II.	a.	Has the executing Officer Of BG indicated his name Designation & power of Attorney No. /signing power Number etc. on BG?		
	b.	Is each page of BG duly signed/initialled by the executant, and last page is signed with full particulars and under the seal of the Bank?		
	c.	Does the last page of the BG carry the signatures of two witnesses alongside the signatures of the executing Bank Manager?		
III.	a.	Is the BG on non-judicial stamp paper of appropriate value?		
	b.	Is the date of sale of non- judicial stamp paper shown on the BG and the stamp paper is issued not more than six months prior to the date of execution of BG?		
IV.	a.	Are the factual details such as Bid Specification Number, LOI Number, contract price, etc. correct?		
	b.	Whether overwriting/cutting of any on the BG authenticated under signature & seal of Executant.		
V.		Is the amount and validity of BG in line with terms of the RFP?		
VI.	a.	Is the Bank Guarantee Issued from a Bank's Branch located outside India?		
	b.	If the response to VI. a) Above is yes, has the Bank Guarantee been routed through the correspondent branch in India for due verification of the signature(s) of the executant(s)?		
VII.		Whether the BG has been issued by a Bank as per relevant provisions of the bidding documents.		

Note: Bidder / Contractor / Associate / Collaborator is required to fill up this form and enclose along with the Bank Guarantee.

Appendix 13: Terms of Payment

In accordance with the provisions of Clause 14 of SCC: Terms of Payment.

Appendix 14: Contract Agreement

This agreement is made at Visakhapatnam, the -----day of -----in the year Two thousand ----- between ----- (herein after referred to as “The Contractor” which expression shall unless excluded by or repugnant to the contract include its successors or permitted assigns) of the one part and the GVSCCL having their Head Office at “ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin:530003” only. (Hereinafter called “GVSCCL” which expression shall unless excluded by or repugnant to the context include its successors or assigns) of the other part.

WHEREAS the aforesaid GVSCCL has accepted the tender of the aforesaid Contractor for ----- as per GVSCCL’s LOI No.----- hereinafter called “the Works” and more particularly described enumerated or referred to in the specification, terms and conditions prescribed in the LOI which for the purpose of identification have been signed by ----- on behalf of the Contractor and by ----- on behalf of GVSCCL a list whereof is made out in the Schedule hereunder written and all of which said documents are deemed to form part of this contract and included in the expression “the Works” wherever herein used, upon the terms and subject to the conditions hereinafter mentioned.

AND WHEREAS GVSCCL has accepted the tender of the Contractor for the said works for the sum of Rs. ----- (Rupees :-----) upon the terms and subject to the conditions herein mentioned.

NOW THIS AGREEMENT WITNESSES AND IT IS HEREBY AGREED AND DECLARED THAT:-

- a) The Contractor shall do and perform all works and things in this contract mentioned and described or which are implied therein or therefrom respectively or are reasonably necessary for the completion of the works as mentioned and at the times, in the manner and subject to the terms, conditions and stipulations contained in this contract, and in consideration of the due provision, executions, construction and completion of the works agreed to by the contractor as aforesaid, GVSCCL doth hereby covenant with the Contractor to pay all the sums of money as and when they become due and payable to the Contractor under the provisions of the contract. Such payments to be made at such times and in such manner as is provided by the contract.
- b) The conditions and covenants stipulated herein before in this contract are subject to and without prejudice to the rights of the GVSCCL to enforce penalty for delays and / or any other rights whatsoever including the right to reject and cancel on default or breach by the Contractor of the conditions and the covenants as stipulated in the general conditions, specifications, forms, or tender schedule, drawing, etc., attached with GVSCCL’s LOI No. -----.

The contract value, extent of supply delivery dates, specifications, and other relevant matters may be altered by mutual agreement and if so altered shall not be deemed or construed to mean or apply to affect or alter other terms and conditions of the contract and the general conditions and the contract so altered or revised shall be and shall always be deemed to have been subject to and without prejudice to said stipulation.

SCHEDULE

List of documents forming part of the contract:

- 1.
- 2.
- 3.

In witness whereof the parties hereto have set their hands and seals this day and month year first above written.

1. Signed, Sealed and delivered by:

(Signature with Name, Designation & official seal)

for and on behalf of M/s. [Inset Name of Contractor]

In the presence of name, Full Address & Signatures. :

i) -----

ii) -----

2. Signed, Sealed and Delivered by:

(Signature with Name, Designation & official seal)

For and on behalf of GVSCCL.

In the presence of Name, Full Address & Signature:

i) -----

ii) -----

Appendix 15: Power of Attorney for signing of Bid

POWER OF ATTORNEY

(To be executed on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Know all men by these presents, We, (Name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr. / Ms (Name), son/daughter/wife of and presently residing at, who is presently employed with us and holding the position of, as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for the **"Procurement of Implementing Agency for Providing All in One Solar LED Street Lights with Poles including Design, Procurement, Erection, Testing & Commissioning and Comprehensive Operation & Maintenance for 05Years on Turnkey Basis along with associated Electrical & Civil Works in ABD Area"** under implementation of Smart City Mission at, pursuant to the RFP document no. issued by GVSCCL, including but not limited to signing and submission of all applications, Bids and other documents and writings, participate in Bidders and other conferences and providing information / responses to the Company, representing us in all matters before the Company, signing and execution of all contracts including the Contract Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with the Company in all matters in connection with or relating to or arising out of our Bid for the said Project and/or upon award thereof to us and/or till the entering into of the Contract Agreement with GVSCCL.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 20.....

For.....

(Signature, name, designation and address) Witnesses:

1.

2.

Accepted Notarised

(Signature, name, designation and address of the Attorney)

Notes:

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
2. Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
3. For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.

Appendix 16: Model Format for certification of satisfactory operation (on Owners' letter head):

Date:

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the (quantity, type, details and location) was commissioned on (Date of commissioning) by (Bidder Details) against the LOI/ WO No. (Details of LOI/ WO with complete scope).

The project is under operation since the date of commissioning and has been working satisfactorily, with Average Illumination Level (LUX Level) of (Measured LUX Levels) Lm on the road surface at the time of final acceptance/commissioning.

Regards,

Appendix 17: Indemnity Bond to be executed by The Contractor for The Removal / Disposal of Scrap/Disposal of Surplus Material

(TO BE EXECUTED ON STAMP PAPER OF APPROPRIATE VALUE)

INDEMNITY BOND

This INDEMNITY BOND executed this day of 20..... by(Name of Company), a Company registered under the Companies Act, 1956/ Partnership Firm/ Proprietary Concern and having its registered office(s) at(Office Address)....., hereinafter called the Indemnifier(s)/ Contractor(s) (which expression shall, unless excluded by or repugnant to the context, be deemed to mean and include its successors, administrators, executors and permitted assigns).

IN FAVOUR OF

“Greater Visakhapatnam Smart City Corporation limited”, having its registered office at, ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin: 530003.

1. GVSCCL has awarded the Contractor(s), contract for execution of work (“Scope of Work”) as mentioned in the contract agreement/LOI no..... dated, entered into between GVSCCL and Contractor(s), relating to(Name & Address of Project/Station) (hereinafter called ‘the Project’).
2. The Indemnifier(s) for the purpose of execution of its Scope of Work had from time to time procured and stored(Details of Material)..... at the Project Site.
3. After completion of the Scope of Work by Indemnifier(s), it has been identified that scrap (Details of Scrap Material & its Quantity).....and/or surplus (Details of Surplus Material & its Quantity)..... belonging to Indemnifier(s) is lying at the said Project Site.
4. Now, the scrap (Details of Scrap Material & its Quantity).....and/or surplus (Details of Surplus Material & its Quantity)..... belonging to the Indemnifier(s), requires to be removed by Indemnifier(s) from the Project Site.

NOW THEREFORE THIS INDEMNITY BOND WITNESSETH AS UNDER:

1. That Indemnifier(s) by way of this indemnity requests GVSCCL to issue approval in favour of Indemnifier(s) for removal of scrap (Details of Scrap Material & its Quantity).....and/or surplus(Details of Surplus Material & its Quantity)..... belonging to Indemnifier(s), from the project.
2. That the Indemnifier(s) shall ensure clearing of its scrap (Details of Scrap Material & its Quantity).....and/or surplus (Details of Surplus Material & its Quantity)..... by itself, as aforesaid.
3. That Indemnifier(s) in consideration of the premises above, for itself and its respective, executors, administrators and assigns, jointly and severally agree and undertake from time to time and at all times hereafter to indemnify GVSCCL and keep GVSCCL indemnified from and against all claims, demands, actions, liabilities and expenses which may be made or taken against or incurred by GVSCCL by reason of the issue of necessary approval by GVSCCL and permitting Indemnifier(s) to remove scrap(Details of Scrap Material & its

Quantity).....and/or surplus(Details of Surplus Material & its Quantity).....
belonging to Indemnifier(s), from the project.

4. That Indemnifier(s) undertakes to indemnify and keep GVSCCL harmless from any act of omission or negligence on the part of the Contractor in following the statutory requirements with regard to removal/disposal of scrap and surplus belonging to Indemnifier(s), from the Project Site aforesaid, by the Indemnifier(s). Further, in case the laws require GVSCCL to take prior permission of the relevant Authorities before handing over the scrap and/or surplus to the Indemnifier, the same shall be obtained by the Indemnifier on behalf of GVSCCL.

IN WITNESS WHEREOF, the Indemnifier(s), through its authorized representative, has executed these presents on the Day, Month and Year first mentioned above at

.....(Name of the Place).....

Witness:

Indemnifier

1.

2.

(Authorised Signatory)

Appendix 18: Indemnity Bond to be executed by the contractor for the facilities handed over by GVSCCL for Performance of its O&M Contract

(On non-judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND IS made this day of 20 By a Company registered under the Companies Act, 1956/2013 having its Registered Office at (hereinafter called as "Contractor" or "Obligor" which expression shall include its successors and permitted assigns) in favour of GVSCCL, a Company incorporated under the Companies Act, 1956 having its Registered Office at ROOM NO 306, TENNETI BHAVAN, ASILMETTA, VISAKHAPATNAM, ANDHRA PRADESH, INDIA, Pin:530003, its Project at (Hereinafter called "GVSCCL" which expression shall include its successors and assigns) :

WHEREAS GVSCCL has awarded to the Contractor a Contract for vide its Letter of Intent/Award Letter/Contract No Dated and its Amendment No (Applicable when amendments have been issued) (hereinafter called the "Contract") in terms of which GVSCCL is required to hand over various Equipment and facilities provided under Supply Contract, Erection Contract, herein after called "Facilities" to the Contractor for execution of the Contract.

AND WHEREAS by virtue of Clause No. 27.3 of Section III:GCC of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of GVSCCL for the Facilities handed over to it by GVSCCL for the purpose of Performance of the Contract/O&M portion of the Contract.

NOW, THEREFORE, this Indemnify Bond witnesseth as follows:

1. That in consideration of Facilities as mentioned in the Contract, Valued at Rs#..... (Rupees) handed over to the Contractor for the purpose of Performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep GVSCCL indemnified, for the full value of the facilities. The Contractor hereby acknowledges actual receipt of the Facilities as detailed in the Schedule appended hereto. The Contractor shall hold such Facilities in trust as a "Trustee" for and on behalf of GVSCCL.
2. That the Contractor is obliged and shall remain absolutely responsible for the safe O&M/protection and custody of the Project against all risks whatsoever till completion of O&M Contract in accordance with the terms of the Contract and is taken over by GVSCCL. The Contractor undertakes to keep GVSCCL harmless against any loss or damage that may be caused to the Facilities.
3. The Contractor undertakes that the Facilities shall be used exclusively for the Performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the Facilities shall be utilised for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnify Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes including legal/penal consequences.
4. That GVSCCL is and shall remain the exclusive owner of the Facilities free from all encumbrances, charges or liens of any kind, whatsoever. The Facilities shall at all times be

open to inspection and checking by Engineer-in-Charge/Engineer or other employees /agents authorised by him in this regard. Further, GVSCCL shall always be free at all times to take possession of the Facilities in whatever form the Facilities may be, if in its opinion, the Facilities are likely to be endangered, miss-utilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds itself and undertakes to comply with the directions of demand of GVSCCL to return the Facilities without any demur or reservation.

5. That this Indemnify Bond is irrevocable. If at any time any loss or damage occurs to the Facilities or the same or any part thereof is miss- utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Engineer-in-Charge/Engineer of GVSCCL as to assessment of loss or damage to the Facilities shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Facilities at its own cost and / or shall pay the amount of loss to GVSCCL without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to GVSCCL against the Contractor under the Contract and under this Indemnify Bond.
6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms of and conditions of this Bond to the satisfaction of GVSCCL, THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned

SCHEDULE

Particulars of the Equipment / Facilities handed-over	Quantity	Value	Other details (if any)	Signature of Attorney in token of receipt

WITNESS

For and on behalf of

M/s

I. 1. Signature ----- Name -----

3. Address ----- Designation of -----

 Authorised representative*

2. Name ----- Common Seal
(In case of Company)

3. Address -----

The value shall be sum of Supply and Erection Contract value.

Appendix 19(a): Indemnity bond to be executed by the contractor for the equipment handed over by the employer for performance of its contract (entire equipment consignment in one lot)

(On non-Judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND is made thisday of..... 20..... by..... (*Contractor's Name*) a Company registered under the Companies Act, 1956/2013 having its Registered Office at..... (Hereinafter called as 'Contractor' or "Obligor" which expression shall include its successors and permitted assigns) in favour of (*Name of Employer*), a Company incorporated under the Companies Act, 1956 having its Registered Office at..... and its project at (Hereinafter called ".....".{*Abbreviated name of the Employer*}) which expression shall include its successors and assigns):

WHEREAS@..... has awarded to the Contractor a Contract for.....vide its Notification of Award/ Contract No.....dated and its Amendment No. and Amendment No....., (*applicable when amendments have been issued*) (hereinafter called the Contract") in terms of which@..... is required to hand over various Equipment to the Contractor for execution of the Contract.

And WHEREAS by virtue of Clause No..... of the said Contract, the Contractor is required to execute an Indemnity Bond in favour of.....@..... for the Equipment's handed over to it by@..... for the purpose of performance of the Contract/Erection portion of the contract (hereinafter called the "Equipment's")

AND THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipment's as mentioned in the Contract, valued at (*Currency and amount in Figures*)..... (*Currency and amount in words*)..... Handed over to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep@..... indemnified, for the full value of the Equipment's. The Contractor hereby acknowledges actual receipt of the Equipment etc. as per despatch title documents handed over to the Contractor as detailed in the Schedule appended hereto. The Contractor shall hold such Equipment etc. in trust as a "Trustee" for and on behalf of@.....

@ Fill in abbreviated name of Employer

2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at@..... project site against all risks whatsoever till the Equipment's are duly used/erected in accordance with the terms of the Contract and the facilities/package duly erected and commissioned in accordance with the terms of the Contract is taken over by@..... . The Contractor undertakes to keep@..... harmless against any loss or damage that may be caused to the Equipment's.
3. The Contractor undertakes that the Equipment's shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this

Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.

4. That@..... is and shall remain the exclusive owner of the Equipment's free from all encumbrances, charges or liens of any kind, whatsoever. The Equipment's shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by him in this regard. Further ...@..... Shall always be free at all times to take possession of the Equipment's in whatever form the Equipment's may be, if in its opinion, the Equipment's are likely to be endangered, miss-utilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of@..... to return the Equipment's without any demur or reservation.
5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment's or the same or any part thereof is miss-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Project Manager of@..... as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment's at its own cost and/or shall pay the amount of loss to@..... without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to@..... against the Contractor under the Contract and under this Indemnity Bond.
6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of@....., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE

Particulars of the Equipment's handed over	Quantity	Particulars of Despatch title		Value of the Equipment's	Signature of Attorney in token of receipt
		RR/GR/ Bill of lading No & Date	Carrier		

WITNESS

For and on behalf of

M/s

I. 1. Signature ----- Name -----

2. Signature ----- Name -----

3. Address ----- Designation of -----
Authorised representative*

II. 1. Signature -----

2. Name ----- Common Seal
(In case of Company)

3. Address -----

* Indemnity Bonds are to be executed by the authorised persons and (i) In case of contracting Company under common seal of the Company of (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case (ii) the original Power of Attorney if it is specifically for our contract or a Photostat copy of the Power of Attorney if it is a General Power of Attorney and such documents should be attached to Indemnity Bond.

The value shall be sum of Supply and Erection Contract value.

Appendix 19 (b): Form of indemnity bond to be executed by the contractor for the equipment handed over in instalments by the employer for performance of its contract

(On non-Judicial stamp paper of appropriate value)

INDEMNITY BOND

THIS INDEMNITY BOND is made this.....day of..... 20..... by.....
(Contractor's Name) a Company registered under the Companies Act, 1956/2013 having its Registered Office at..... (Hereinafter called as 'Contractor' or "Obligor" which expression shall include its successors and permitted assigns) in favour of (Name of Employer), a Company incorporated under the Companies Act, 1956 having its Registered Office at and its project at (Hereinafter called "....." {Abbreviated name of the Employer}) Which expression shall include its successors and assigns):

WHEREAS@..... has awarded to the Contractor a Contract forvide its Notification of Award/Contract No.....dated..... And it's Amendment No. and Amendment No....., (applicable when amendments have been issued) (hereinafter called the Contract") in terms of which@..... is required to hand over various Equipment's to the Contractor for execution of the Contract.

And WHEREAS by virtue of Clause No..... of the said Contract, the Contractor is required to execute an Indemnity Bond in favour in@..... For the Equipment's handed over to it by@..... for the purpose of performance of the Contract/Erection portion of the contract (hereinafter called the "Equipment's")

NOW THEREFORE, This Indemnity Bond witnesseth as follows:

1. That in consideration of various Equipment's as mentioned in the Contract, valued at (Currency and amount in figures)..... (Currency and amount in words) to be handed over to the Contractor in installments from time to time for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep@..... indemnified, for the full value of the Equipment's. The Contractor hereby acknowledges actual receipt of the initial installment of the Equipment etc. as per details in the Schedule appended hereto. Further, the Contractor agrees to acknowledge actual receipt of the subsequent installments of the Equipment's etc. as required by@..... in the form of Schedules consecutively numbered which shall be attached to this Indemnity Bond so as to form integral parts of this Bond. The Contractor shall hold such Equipment's etc. in trust as a "Trustee" for and on behalf of@.....

@ Fill in abbreviated name of Employer.

2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at@..... project site against all risks whatsoever till the Equipment's are duly used/erected in accordance with the terms of the Contract and the facilities/package duly erected and commissioned in accordance with the terms of the Contract, is taken over by@..... . The Contractor undertakes to keep@..... harmless against any loss or damage that may be caused to the Equipment's.
3. The Contractor undertakes that the Equipment's shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. It is

clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.

4. That@..... is and shall remain the exclusive owner of the Equipment's free from all encumbrances, charges or liens of any kind, whatsoever. The Equipment's shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by him in this regard. Further,@..... shall always be free at all times to take possession of the Equipment's in whatever form the Equipment's may be, if in its opinion, the Equipment's are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of@..... to return the Equipment's without any demur or reservation.
5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment's or the same or any part thereof is mis-utilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Project Manager of@..... as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment's at its own cost and/or shall pay the amount of loss to@..... without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to@..... against the Contractor under the Contract and under this Indemnity Bond.
6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of@....., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

SCHEDULE No.1

Particulars of the Equipment's handed over	Quantity	Particulars of Despatch title		Value of the Equipment's	Signature of Attorney in token of receipt
		RR/GR/ Bill of lading No & Date	Carrier		

(Please number subsequent schedules)

WITNESS

For and on behalf of

M/s

I. 1. Signature ----- Name -----

2. Signature _____ Name _____

3. Address ----- Designation of -----

 Authorised representative*

II. 1. Signature -----

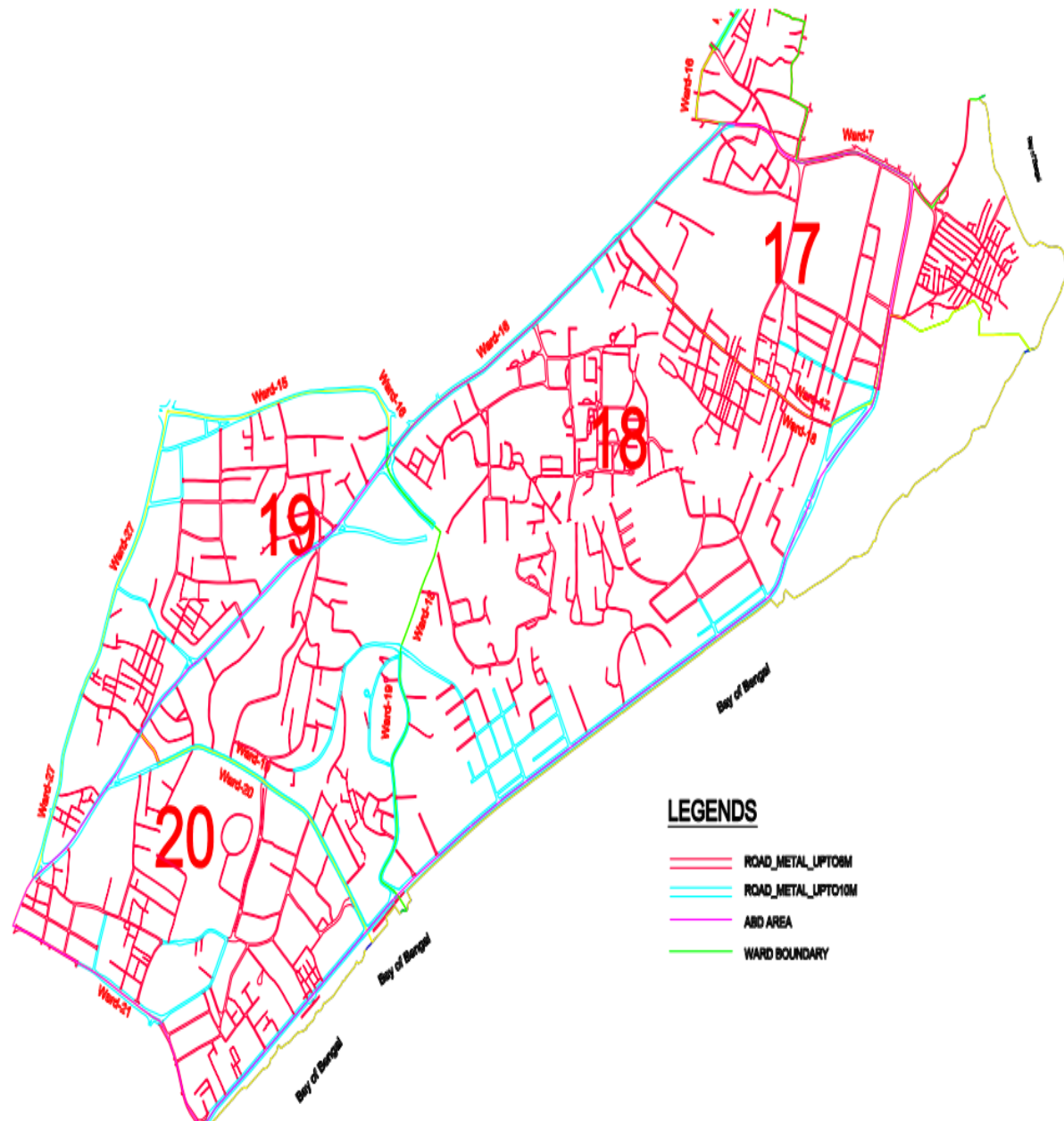
2. Name ----- Common Seal
(In case of Company)

3. Address -----

* Indemnity Bonds are to be executed by the authorised persons and (i) In case of contracting Company under common seal of the Company of (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case (ii) the original Power of Attorney if it is specifically for our contract or a Photostat copy of the Power of Attorney if it is a General Power of Attorney and such documents should be attached to Indemnity Bond.

Annexure 1: Details of Site

Site Location: ABD, Visakhapatnam District.



Note:

- (i) GVSCCL to provide access rights to the Contractor for the purpose of execution of the Contract.
- (ii) The topographical & geotechnical investigation and soil survey has to be carried out by the agency i.e., the Contractor.
- (iii) The developer has to carry out soil sample analysis through Govt. Approved laboratory for facilitating designing of civil foundations.