GANGTOK SMART CITY DEVELOPMENT LIMITED





REQUEST FOR BIDS



NAME OF THE WORK: SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR

(in case of any typographical/printing errors or any doubts and clarification on this Bidding Document, the Master Document available with GSCDL shall be referred and take precedence)

RFB No: 013/GSCDL/2022

Project identification No: SIK-GAN-0028

Standard Procurement Document

Summary

Specific Procurement Notice

RFB No: 013/GSCDL/2022, Project identification No: SIK-GAN-0028.

Bidding Document: Request for Bids – SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR (Two-Envelope Bidding Process)

PART I – BIDDING PROCEDURES

Section I - Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their Bids. It is based on two (2)-envelope Bidding process. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II - Bid Data Sheet (BDS)

This Section includes provisions that are specific to each procurement and that supplement Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the criteria to determine the Most Advantageous Bid.

Section IV - Bidding Forms

This Section includes the forms for the Bid submission, Bill of Quantities or Activity Schedules to be completed by the Bidder and submitted as part of its Bid.

Section V - Bill of Quantities

This Section contains Bill of Quantities.

PART II - WORKS REQUIREMENTS

Section VI -Works' Requirements

This Section contains the Specifications, the Drawings, and supplementary information that describe the Works to be procured. The Works' Requirements also include the environmental and social (ES) requirements (including requirements relating to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH)) which are to be satisfied by the Contractor in executing the Works.

PART III - CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII - General Conditions of Contract

This Section contains the general clauses to be applied in all contracts. The text of the clauses in this Section shall not be modified.

Section VIII- Particular Conditions of Contract

This Section consists the Particular Conditions of Contract which contains provisions specific to each contract. The contents of this Section modify or supplement the General Conditions and shall be prepared by the Employer.

Section IX - Contract Forms

This Section contains the Letter of Acceptance, Contract Agreement and other relevant forms.



Request for Bids

(Two-Envelope Bidding Process)

Employer: Gangtok Smart City Development Limited (GSCDL)

Project: SIK-GAN-0028 Solar Panel/ Street Light in and around Gangtok, Sikkim including Defect Liability

Period of One Year

Bid Value: Rs 5,87,91,500/- only

RFB No: 013/GSCDL/2022, Project identification No: SIK-GAN-0028.

Issued on: 25th February 2022

- The GSCDL is to receive financing under the Smart City Mission, and intends to apply part of the proceeds
 toward payments under the contract "For this contract, the GSCDL shall process the payments as per the
 Company policy, terms and conditions laid in this Standard Procurement Document, subject to availability
 of funds.
- 2. The GSCDL now invites sealed Bids from eligible Bidders for the work "Installation of Solar Panel /Street Light in and around Gangtok, Sikkim" to be completed within a period of Six months.
- 3. Bidding will be conducted through competitive procurement using Request for Bids (RFB) as specified herein and is open to all eligible Bidders as defined in the given criteria.
- 4. The bidding document in English may be purchased by interested eligible Bidders during working days between 1100 hrs to 1500hrs from 09/03/2022 to 11/03/2022 at the address indicated below, upon the submission of a written application to the address below and upon payment of a nonrefundable fee of Rs. 50,000/-. The method of payment will be through demand draft payable to Gangtok Smart City Development Limited. The DD should be issued by a Nationalized Bank and payable at Gangtok.
- 5. Interested eligible Bidders may obtain further information from the office of the Chief Executive Officer, GSCDL; email id ceosmartcity.gangtok@gmail.com and inspect the bidding document during office hours between 1100 hrs to 1500 hrs from 21/03/2022 to 22/03/2022 at the address indicated below.
- 6. Bids must be delivered to the address indicated below, on or before 1500 hours on or before 24/03/2022. Electronic bidding will not be permitted. Late Bids will be rejected. The outer Bid envelopes marked "ORIGINAL BID", and the inner envelopes marked "TECHNICAL PART" will be publicly opened in the presence of the Bidders' designated representatives and anyone who chooses to attend, at the address below at 1100 hrs on 25/03/2022. All envelopes marked "FINANCIAL PART" shall remain unopened and will be held in safe custody of the Employer until the second public Bid opening.
- 7. Bids must be accompanied by a Bid Security of Rs 14,69,788/-(Rupees Fourteen Lakh Sixty Nine Thousand Seven Hundred and Eighty Eight Only)
- 8. The address(es) referred to above is (are):

Chief Executive Officer

Gangtok Smart City Development Limited, Level V Kissan Bazar, - 737101 Gangtok, Sikkim, India

Email address: ceosmartcity.gangtok@gmail.com

Website: https://smartnet.niua.org/

Chief Executive Officer Gangtok Smart City Development Limited

Request for Bids

Solar Panel/Street Light in and around Gangtok, Sikkim including Defect Liability Period of One Year

(Two-Envelope Bidding Process)

Procurement of:

SIK-GAN-0028

RFB No: 013/GSCDL/2022, Project identification No: SIK-GAN-0028.

Project: Solar Panel/ Street Light in and around Gangtok, Sikkim including Defect Liability Period of

One Year

Employer: Gangtok Smart City Development Limited

Country: The Republic of India

Issued on: 25th Feb 2022

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Section 1 - INSTRUCTIONS TO BIDDERS

General

1. SCOPE OF BIDS:

- 1.1. In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), the Employer/GSCDL, as indicated in the BDS, issues this Bidding Document for the procurement of Works as specified in Section 6 (Employer's Requirements). The name and identification, number of the contract of the Request for Proposal (RFP) are provided in the BDS.
- 1.2. Throughout this Bidding Document:
 - (a) the term "in writing" means communicated in written form (example by mail, email, fax) and delivered against receipt;
 - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
 - (c) "day" means calendar day.

2. SOURCE OF FUND:

- 2.1. The Borrower or Recipient (hereinafter called "GSCDL") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the Smart City Mission (SCM) towards the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
- 2.2. Deleted

3. Fraud and Corruption

- 3.1. The Anticorruption Policy applicable in state of Sikkim requires bidders, suppliers, subcontractors and contractors under GSCDL-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, GSCDL.
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - iii. "Coercive practice" means impairing or harming or threatening to harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - iv. "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including, influencing improperly the actions of another party;

- (b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract;
- (c) will sanction a firm or an individual, at any time ,in accordance with the Anti-Corruption Policy and integrality Principles and guidelines (both as amended from time to time), including declaring in-eligible, either indefinitely or a stated period of time, to participate in GSCDL financed or GSCDL administered activities or to benefit from an GSCDL-finance or GSCDL-administered contract ,financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt fraudulent, collusive or coercive or other prohibited practices.
- (d) Will have the right to require that a provision be included in Bidding Documents and in contracts financed by GSCDL, requiring bidders, suppliers and contractors and consultants to permit the GSCDL to inspect their accounts and records and other documents relating to the Bid Submission and Contract Performance and to have them audited by auditors appointed by GSCDL.
- (e) Will cancel the portion of the financing allotted to contract if it determines at any time that representatives of the contractor or of a beneficiary or GSCDL financing engaged in corrupt, fraudulent, collusive or coercive or other prohibited practice during the procurement or the execution of the contract, without the borrower having taken timely and appropriate actions satisfactory to GSCDL to remedy the situation
- 3.2. Furthermore, Bidders shall be aware of the provisions of GCC 22.2 and 56.2 (h).

4. Eligible Bidders

- 4.1. A Bidder may be a natural person, private entity, government-owned entity—subject to ITB 4.5 under an existing agreement or with the intent to constitute a legally-enforceable joint venture, coming together to implement the Project
- 4.2. A Bidder, and all parties constituting the Bidder, shall have the Indian nationality. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
- 4.3. GSCDL considers a conflict of interest to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited practice under GSCDL's Anticorruption Policy. In pursuance of GSCDL's Anticorruption Policy's requirement that bidders, suppliers, subcontractors and contractors under GSCDL-financed contracts, observe the highest standard of ethics, GSCDL will take appropriate actions, which include not financing of the contract, if it determines that a conflict of interest has flawed the integrity of any procurement process. Consequently, all Bidders found to have a conflict of interest shall be

disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:

- (a) they have controlling shareholders in common; or
- (b) they receive or have received any direct or indirect subsidy from any of them; or
- (c) they have the same legal representative for purposes of this bid; or
- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) A Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; not otherwise participating as a Bidder.
- (f) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
- (g) A Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the contract.
- 4.4. A firm that is under a declaration of ineligibility by the GSCDL in accordance with ITB 3, at the date of the deadline for bid submission or thereafter, shall be disqualified. A bid from a sanctioned or cross debarred firm by any government agencies of Employers country will be rejected. It is the duty of the Contractor/Bidder to notify Employer if the Contractor/Bidder is being debarred by any agencies as mentioned above. The contractor bid will be summarily terminated even after contract has been awarded if it is found to in case of any such information comes to the notice of Employer in such an event the contractor will be liable for all losses and liabilities of Employers as well as of contractors firm.
- 4.5. Government-owned enterprises in the Employer's country shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the Employer.
- 4.6. Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.7. In case a prequalification process has been conducted prior to the bidding process, this bidding is open only for prequalified bidders.

5. Eligible Materials, Equipment and Services

- 5.1. The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.
- 5.2. For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing,

processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

Contents of Bidding Documents

6. Sections of Bidding Document

6.1. The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART I Bidding Procedures

Section 1 - Instructions to Bidders (ITB)

Section 2 - Bid Data Sheet (BDS)

Section 3 - Evaluation and Qualification Criteria (EQC)

Section 4 - Bidding Forms (BDF)

Section 5 – Bill of Quantities (BOQ)

PART II Employer's Requirements

Section 6 – Work Requirements (WRQ)

PART III Conditions of Contract and Contract Forms

Section 7 - General Conditions (GCC)

Section 8 - Particular Conditions (PCC)

Section 9 - Contract Forms (COF)

- 6.2. The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 6.3. The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.
- 6.4. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.

7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting:

- 7.1. A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS or raise his inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids, within a period given in the BDS. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.
- 7.2. The Bidder is encouraged to visit and examine the Site of Works and its surroundings and obtain for itself on its own risk and responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

- 7.3. The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4. The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5. The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than three days before the meeting.
- 7.6. Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.
- 7.7. Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.
- **7 A Sufficiency of the Bid:** The bidder shall be deemed to have satisfied himself before bidding as to the correctness and sufficiency of his tender for the Scope of Work.

8. Amendment of Bidding Document

- 8.1. At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
- 8.2. Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document.
- 8.3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2.

Preparation of Bids

9. Cost of Bidding

9.1. The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

10. Language of Bid

10.1. The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Bid may be in another language provided

they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- 11.1. The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in ITB 11.2 and the other the Price Bid containing the documents listed in ITB 11.3, both envelopes enclosed together in an outer single envelope.
- 11.2. The Technical Bid shall comprise the following:
 - I. Letter of Technical Bid;
 - II. Bid Security, in accordance with ITB 19;
 - III. written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
 - IV. documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract;
 - V. Technical Proposal in accordance with ITB 16;
 - VI. Any other document required in the BDS.
- 11.3 The Price Bid shall comprise the following.
 - (a) Letter of Price Bid;
 - (b) completed Price Schedules, in accordance with ITB 12 and 14, or as stipulated in the BDS;
 - (c) Any other document required in the BDS.

12. Letters of Bid, and Schedules

- 12.1. The Letters of Technical bid and Price bid, and all documents listed under Clause 11, i.e. Schedules, including the Bill of Quantities etc., shall be prepared using the relevant forms furnished in Section 4 (Bidding Forms) if so provided. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
- **13. Alternative Bids:** No Alternative bids shall be considered. Bidders submitting unsolicited alternative proposals shall be summarily rejected

14. Bid Prices and Discounts

- 14.1. The prices and discounts quoted by the Bidder in the Letter of Price Bid and in the Bill of Quantities shall conform to the requirements specified below.
- 14.2. The Bidder shall submit a bid for whole of the works described in ITB 1.1 by filling in prices for all items of Works, as identified in Section 4 (Bidding forms). In case of admeasurements contracts, the bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
- 14.3. The price to be quoted in the Letter of Price Bid, in accordance with ITB 12.1 shall be the total price of the Bid, excluding any discounts offered.
- 14.4. The Bidder shall quote Unconditional discounts, if any, and the methodology for their application in the Letter of Price Bid, in accordance with ITB 14.1.
- 14.5. If so indicated in ITB 1.1, bids are invited for individual contracts or for any combination of contracts (packages), Bidders wishing to offer any price reduction

- for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all contracts are submitted and opened at the same time.
- 14.6. Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section 4 (Bidding Forms) and the Employer may require the Bidder to justify its proposed indices and weightings.
- 14.7. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
- 14.8. Taxes, charges, Cess etc. including (but not limited to) Work Contract Tax (WCT), Seignorage/Royalty / Labour Cess and any other charges as may be applicable from time to time at the prevailing rates shall be deducted from all payments made to the Contractor. Contractor shall provide E-Way Bills, Form "38", or any other forms and comply with all the formalities that may be required by the Central/State Government for procurement of Owner supplied material.

15. Currencies of Bid and Payment

15.1. The currency (is) of the bid and payment shall be as specified in the BDS.

16. Documents Comprising the Technical Proposal

16.1. The Bidder shall furnish, as a part of the Technical bid, a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section 4 (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.

17. Documents Establishing the Qualifications of the Bidder

- 17.1. To establish its qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms).
- 17.2. Domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 35.

18. Period of Validity of Bids

- 18.1. Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 18.2. In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a bid security is requested in

accordance with ITB 19, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its Bid.

19. Bid Security

- 19.1. Unless otherwise specified in the BDS, the Bidder shall furnish as part of its bid, in original form, either Bid Securing Declaration or a Bid Security as specified in the BDS. In case of Bid Security the amount shall be as specified in the BDS.
- 19.2. A Bid Securing Declaration shall use the form included in Section 4 (Bidding Forms).
- 19.3. If a bid security is specified pursuant to ITB 19.1, the bid security shall be, at the Bidder's option, in any of the following forms:
 - (a) an unconditional Bank Guarantee;
 - (b) TDR/FDR
 - (c) Demand Draft

In the case of a Bank Guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section 4 (Bidding Forms). The form must include the complete name of the Bidder. The Bid Security shall be valid for twenty-eight days (28) beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

- 19.4. Any Bid not accompanied by to substantially compliant Bid Security, if required in accordance with ITB 19.3, or Bid Securing declaration in accordance with ITB 19.2, if required in accordance with ITB 19.1 shall be rejected by the Employer as non-responsive.
- 19.5. If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the Performance Security pursuant to ITB 43.1.
- 19.6. If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.
- 19.7. The Bid Security may be forfeited or the Bid Securing Declaration executed:
 - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, except as provided in ITB 18.2 or
 - (b) if the successful Bidder fails to:
 - i. sign the Contract in accordance with ITB 42;
 - ii. furnish a Performance Security in accordance with ITB 43.1.
 - iii. accept the correction of its Bid price pursuant to ITB 33.2

20. Format and Signing of Bid

20.1. The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL-TECHNICAL BID AND ORIGINAL-PRICE BID". In addition, the Bidder shall submit copies of the bid, in the number specified in the BDS, and clearly mark each of them "COPY". In the event of any discrepancy between the original and the copies, the original shall prevail.

- 20.2. The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature.
- 20.3. Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.
- 20.4. In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

Submission and Opening of Bids

21. Sealing and Marking of Bids

- 21.1. Bidders may always submit their bids by mail or by hand. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Procedures for submission, sealing and marking are as follows.
 - (a) Bidder shall enclose the original of the Technical Bid, the original of the Price Bid, and each copy of the Technical Bid and each copy of the Price Bid, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL TECHNICAL BID", "ORIGINAL PRICE BID" and "COPY NO... TECHNICAL BID" and "COPY NO... PRICE BID." These envelopes, the first containing the originals and the others containing copies, shall then be enclosed in one single envelope per set.
 - (b) Bidders submitting bids electronically shall follow the electronic bid submission procedures specified in the BDS.
- 21.2. The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;
 - (b) be addressed to the Employer as provided in BDS 22.1;
 - (c) bear the specific identification of this bidding process indicated in the BDS 1.1; and
- 21.3. The outer envelopes and the inner envelopes containing the Technical Bid shall bear a warning not to open before the time and date for the opening of Technical Bid, in accordance with ITB Sub-Clause 25.1.
- 21.4. The inner envelopes containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB Sub-Clause 25.1.
- 21.5. Alternative Bids, if permissible in accordance with ITB Clause 13, shall be prepared, sealed, marked, and delivered in accordance with the provisions of ITB Clauses 20 and 21, with the inner envelopes marked in addition "ALTERNATIVE NO...." as appropriate.
- 21.6. If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

22. Deadline for Submission of Bids

- 22.1. Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.
- 22.2. The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

23.1. The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.

24. Withdrawal of Bids

- 24.1. A Bidder may withdraw, substitute, or modify its Bid Technical or Price after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL", "SUBSTITUTION", "MODIFICATION", and
 - (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.
- 24.2. Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3. No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. Bid Opening

- 25.1. The Employer shall open the Technical bids in public at the address, date and time specified in the BDS in the presence of Bidder's designated representative and anyone who chose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1 shall be as specified in the BDS. The Price bids will remain unopened and will be held in the custody of the Employer until the specified time of their opening.
- 25.2. First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening.
- 25.3. Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Price Bids shall be exchanged for the corresponding envelopes being substituted, which are to

be returned to the Bidder unopened. Only the substitution Technical Bid, if any, shall be opened, read out and recorded. Substitution Price Bid will remain unopened in accordance with ITB Sub-Clause 25.1. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.

- 25.4. Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification is to be opened, read out, and recorded at the opening. Price Bids, both Original and Modification, will remain unopened in accordance with ITB Sub-Clause 25.1.
- 25.5. All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded:
 - (a) the name of the Bidder;
 - (b) Whether there is a modification or substitution
 - (c) the presence of a Bid Security, if required; and
 - (d) any other details as the Employer may consider appropriate.

Only Technical Bids and alternative Technical bids read out and recorded at bid opening shall be considered for evaluation. No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with ITB Sub-Clause 23.1.

- 25.6. The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is withdrawal, substitution or modification, alternative proposals and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.
- 25.7. At the end of the evaluation of the Technical Bids, the Employer will inform the bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice of the opening of Price Bids.
- 25.8. The Employer will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially non-responsive to the requirements of the Bidding Document and return their Price Bids unopened.
- 25.9. The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, date and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 25.10. All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded:

- (a) the name of the Bidder;
- (b) Whether there is a modification or substitution,
- (c) the Bid Prices, including any discounts; and
- (d) any other details as the Employer may consider appropriate.

Only Price Bids, discounts, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Price Bids.

25.11. The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price (per lot if applicable), any discounts, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

Evaluation and Comparison of Bids

26. Confidentiality

- 26.1. Information relating to the examination, evaluation, comparison, and post qualification of bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
- 26.2. Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its Bid.
- 26.3. Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.

27. Clarification of Bids

- 27.1. To assist in the examination, evaluation, and comparison of the Technical and Price bids, and qualification of the Bidders, the Employer may at its discretion ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in substance of the Technical bid or prices in the price bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 33.
- 27.2. If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.

28. Deviations, Reservations, and Omissions

- 28.1. During the evaluation of bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

29. Preliminary Examination of Technical Bids

- 29.1. The Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB Sub-Clause 11.2 have been provided, and to determine the completeness of each document submitted.
- 29.2. The Employer shall confirm that the following documents and information have been provided in the Technical Bid.
 - (a) Letter of Technical Bid
 - (b) Written confirmation of authorization to commit the Bidder
 - (c) Bid Security, if applicable and
 - (d) Technical Proposal in accordance with ITB 16

30. Responsiveness of Technical Bid

- 30.1. The Employer's determination of a bid's responsiveness will be based on the contents of the bid itself, as defined in ITB11.
- 30.2. A substantially responsive Technical bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
 - (a) if accepted, would:
 - i. Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
 - ii. Limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
- 30.3. The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section 6 (Works Requirements) have been met without any material deviation, reservation or omission.
- 30.4. If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

31. Nonconformities, Errors, and Omissions

- 31.1. Provided that a bid is substantially responsive, the Employer may waive any nonconformity in the bid that does not constitute a material deviation, reservation or omission.
- 31.2. Provided that a Technical bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Technical bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.

31.3. Provided that a Technical bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods indicated in Section 3 (Evaluation and Qualification Criteria).

32. Qualification of the Bidder

- 32.1. The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders meet the qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
- 32.2. The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.
- 32.3. An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.

32- A Subcontractors

- 32-A.1 Unless otherwise stated in the BDS, the Employer does not intend to execute any specific elements of the Works Design and Build by sub-contractors selected in advance by the Employer (so-called "Nominated Subcontractors").
- 32-A.2 The Bidder shall not propose to subcontract the whole of the contract. The Bidder may propose subcontractors for certain specialized parts of the contract. Bidders planning to use such specialized subcontractors shall specify, in the Letter of Bid, the parts of the contract proposed to be subcontracted along with details of the proposed subcontractors including their qualification and experience.
- 32-A.3 Subcontractors proposed by the Bidder shall be fully qualified for their parts of the contract. The subcontractor's qualifications shall not be used by the Bidder to qualify for the contract unless the Bidder designates them as Specialized Subcontractors, in which case, the qualifications of the Specialized Subcontractor proposed by the Bidder may be added to the qualifications of the Bidder for the purpose of the evaluation, if specified in BDS.
- 32-A.4 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the BDS. Sub-contractors proposed by the Bidder shall be fully qualified for their parts of the Works.

33. Correction of Arithmetical Errors

- 33.1. During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:
 - (a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall

- prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- (d) If there is a discrepancy in the ORIGINAL and COPY, the figures given in ORIGINAL shall prevail.
- 33.2. If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its Bid shall be disqualified and its bid security may be forfeited.

34. Conversion to Single Currency

34.1. For evaluation and comparison purposes, the currency(ies) of the bid shall be converted into a single currency as specified in the BDS.

35. Margin of Preference

35.1. Unless otherwise specified in the BDS, a margin of preference shall not apply.

36. Preliminary Examination of Price Bids

Deleted

37. Evaluation of Bids

- 37.1. The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 37.2. To evaluate bid price, the Employer shall consider the following:
 - (a) The evaluation committee shall evaluate the Stage-I Qualification Criteria such as preliminary qualifications, financial eligibility and Technical eligibility. The bidder who satisfies these requirements will be made eligible for further evaluation of full technical proposals (Stage-II) on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in **BDS**. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP.
 - (b) The bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurements contracts, or Schedule of Prices for lump sum contracts, but including Day work items, where priced competitively;
 - (c) price adjustment for correction of arithmetic errors in accordance with ITB 33.1;
 - (d) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (e) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 34;
 - (f) adjustment for nonconformities in accordance with ITB 31.3;
 - (g) The price bid will then be given a financial score as specified in detail in Section 3 (Evaluation and Qualification Criteria);

- (h) application of all the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria);
- (i) Any other additional evaluation factors specified in the BDS and Section 3, Evaluation and Qualification Criteria.
- 37.3. The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
- 37.4. If this Bidding Document allows Bidders to quote separate prices for different contracts, and to award multiple contracts to a single Bidder, the methodology to determine the lowest evaluated price of the contract combinations, including any discounts offered in the Letter of Bid, is specified in Section 3 (Evaluation and Qualification Criteria).
- 37.5. If the Bid for an admeasurements contract, which results in the lowest Evaluated Bid Price is seriously unbalanced, front loaded or substantially below updated estimates in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items in the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the Performance Security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

38. Comparison of Bids

38.1. The Employer shall compare all substantially responsive bids to determine the lowest evaluated bid in accordance with ITB 37.2.

39. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

39.1. The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

Award of Contract

40. Award Criteria

40.1. The Employer shall award the Contract to the Bidder whose bid is declared the Most Advantageous Bid by the Tender Evaluation Committee which is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

41. Notification of Award

41.1. Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted. The Notification letter (hereinafter and in the conditions of contract and contract forms called "The Letter of Acceptance"), shall specify the sum that the Employer will pay the contractor in

- consideration of the execution and completion of the works. (Hereinafter and in the conditions of contract and contract forms called "The Contract Price").
- 41.2. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 41.3. At the same time, the Employer shall put up in the public domain information about the results of the bidding process which will include the following information (i) name of the winning Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful bidders may request in writing to the Employer a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall respond in writing to any unsuccessful Bidder who, after publication of contract award, requests a debriefing after the evaluation process is complete.

42. Signing of Contract

- 42.1. Promptly after notification, the Employer shall send the successful Bidder the Contract Agreement.
- 42.2. Within fifteen (15) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

43. Performance Security

- 43.1. Within fifteen (15) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the Conditions of Contract, subject to ITB 37.5, using for that purpose the Performance Security Form included in Section 9 (Contract Forms), or another form acceptable to the Employer. If the institution issuing the Performance Security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.
- 43.2. Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.
- 43.3. The above provision shall apply for furnishing of a domestic preference security if so required.

Section 2 - BID DATA SHEET

The Section Consists of Provisions that are Specific to each procurement and Supplement the information and requirements included in Section 1 – Instructions to Bidders.

A. Introduction

ITB 1.1	The number and identification of this RFB is: SIK-GAN-0028			
112 1.1	The number of the Invitation for Bids is-1			
	The Employer is: Gangtok Smart City Development Limited			
ITB 1.1	The name of the bidding process is: Request for Proposal (RFP)			
	The name of the RFB is: SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR			
	The reference number of the Request for Bids (RFB) is: 013/GSCDL/2022			
ITB 2.1	The Borrower is: GSCDL			
ITB 2.1	The name of the Project: SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR			
ITB 3.1 (a)	The individuals or firms in a JV is allowed and shall be jointly and severally liable.			
	Maximum number of members in the JV shall be - 3			
ITB 3.1(b)	In support of the requirements for the Joint Venture, a Joint Venture Agreement and a Power of Attorney in favor of JV nominated representative should be submitted.			

B. Bidding Documents

ITB 7.1	For <u>Clarification of Bid purposes</u> only, the Employer's address is:		
	Attention: Mr. Bhupendra Kothari, Chief Executive Officer		
	Postal Address: Gangtok Smart City Development Limited, Level V, Kissan Bazar, Gangtok, East Sikkim.		

	City: Gangtok, Pin Code:737101, India			
	Phone Number: 8116679989			
	Electronic mail address: ctosmartcity.gangtok@gmail.com			
	Requests for clarification should be received by the Employer no later than seven days.			
ITB 7.4	Interested bidder may obtain information from 09/03/2022 till 12/03/2022 during Office hours.			
	Place: Gangtok Smart City Development Limited, Level V, Kissan Bazar, Gangtok, East Sikkim			
	A site visit conducted by the Employer "shall not be" organized			

C. Preparation of Bids

ITB 11.2(g) ITB 11.3(d)	Bidder shall submit with its Technical Bid the following additional documents: NIL Bidder shall submit with its Price Bid the following additional documents: Rate Analysis of major items			
ITB 14	The Bidder shall be deemed to have been satisfied himself as to the correctness and sufficiency of the Bid and the rates and prices stated in the Bill of Quantities, all of which shall, except in so far as it is otherwise provided in the contract, cover all his obligations under the contract and all matters and things necessary for the proper execution and completion of the works and the remedying of any defects there in.			
ITB 15.1	The prices shall be quoted by the bidder and shall be paid in: Indian Rupees			
ITB 18.1	The Bid shall be valid until: days.			
ITB 19.1	Bid Security shall be required, a Bid-Securing Declaration shall not be required. A Bid Security "shall be" required. A Bid-Securing Declaration "shall not be" required.			

	The Bid Security shall be required, the amount and currency of the Bid Security shall be: Rs. 14,69,788/- (Rupees Fourteen Lakh Sixty Nine Thousand Seven Hundred and Eighty Eight only)		
ITB 19.3	The Bid Security shall be in the form of an unconditional and irrevocable Bank Guarantee/ TDR/ FDR only from a Nationalized /Scheduled bank in India. The validity of Bid Security shall be 28 days beyond the original validity period of 120 days or beyond any of extension if requested.		
ITB 20.1	In addition to the original of the bid, the number of copies is: 2 (Two)		
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of:		
	(a) Power of Attorney from the authorized person to issue from the company.		
	(b) In the case of Bids submitted by an existing or intended JV, an Joint Venture Agreement signed by all parties:		
	(i) stating that all parties shall be jointly and severally liable, and		
	(ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.		
	(c) All the pages of the bid shall be signed or initialed by a person significant the bid along with the seal.		

D. Submission and Opening of Bids

ITB 21.1	Bidder shall not have the option of submitting their bids electronically.	
ITB 21.1(a)	The Bidder should use the bid documents in original and duplicate issued to	
	him by the Employer for filling and submitting the price bid along with supporting information, if any. He should prepare and submit the technical	
	bid in the formats given in the bid document and submit it separately.	
ITB 21.1(b)	Electronic Bid Submission shall be not applicable.	

ITB 22.1	For Bid submission purposes only, the Employer's address is: Gangtok Smart City Development Limited, Level V, Kissan Bazar		
	Attention: Chief Executive Officer, GSCDL, Gangtok.		
	The deadline for Bid submission is:		
	Date: 24/03/2022		
	Time: 1500 Hrs		
	Bidders shall not have the option of submitting their Bids electronically.		
ITB 25.1	The Bid opening shall take place at:		
	City: Gangtok, Sikkim, India		
	Date: 25/03/2022		
	Time: 1100 Hrs		

E. Evaluation and Comparison of Bids

ITB 32-A- 4	(a) Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: 25% of the total contract amount. (b) Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity(ies) or parts of the works to be subcontracted along with complete details of the sub-contractors and their qualification and experience. The qualification and experience of the sub-contractors must meet the minimum criteria for the relevant work to be sub-contracted failing which such subcontractors will not be permitted to participate.	
ITB 34.1	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: INR	
ITB 35	A margin of preference shall not apply	
ITB 37.2 (h)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.	

ITB 43.1	Performance Security shall be from a nationalized bank/scheduled bank situated in India and shall be valid for a period of 28 days beyond the DLP (defects liability period)
ITB 43.3	Not applicable

Section 3 - EVALUATION AND QUALIFICATION CRITERIA

1. Evaluation

In addition to the criteria listed in ITB 37.2 (a) - (i) the following criteria shall apply:

Additional Evaluation Criteria

The technically shortlisted bidders are required to give a presentation on the proposed design which will include 3-D elevation, prospective etc. of the building to be constructed under the contract to the evaluation committee. The presentation on the conceptual elevation and renovation will also form part of the evaluation criteria

1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Works Requirements).

The evaluated cost of quantifiable nonconformities, errors and/or omissions is determined as follows:

"Pursuant to Sub-Clause 31.3 of Section 1: Instructions to Bidders, the cost of all quantifiable non-conformities, errors, or omissions in a Bidder's Bid Proposal shall be evaluated. The Employer shall make its assessment of the cost of any quantifiable nonmaterial non conformities, errors, or omissions for the purpose of ensuring fair comparison of Bids, and for this purpose, the Employer shall base its assessment on the highest price quoted for the same item(s) or component(s) by the other responsive Bidders."

2. Qualification Criteria

Eligibility and Qualification Criteria		ibility and Qualification Criteria	Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
1. Eli	gibility			
1.1	Nationality	Nationality in accordance with ITB 4.2	Must meet requirement	Forms ELI – 1 and ELI- 2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.3	Must meet requirement	Letter of Technical Bid
1.3	GSCDL Eligibility	Not having been declared ineligible by the GSCDL & any other agencies in India in accordance with ITB 4.4.	Must meet requirement	Letter of Technical Bid
1.3	Technical Eligibility	a. The Bidder should have installed & commissioned at least one Grid connected Solar PV Power Project having a capacity of not less than 100 kW which should have been commissioned at least five years prior to Techno-Commercial Bid Opening date. The list of projects a) commissioned at least five year prior to	Must meet requirement	Certificate issued by Client/Owner

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity			Submission Requirements	
		Techno-Commercial Bid Opening date, indicating whether the project is grid connected, along with a copy of the Commissioning certificate and Work order / Contract / Agreement/ from the Client/Owner shall be submitted in support. b). A bidder should be a holder of valid enlistment certificate issued by Power Department, Government of Sikkim. C) A bidder should have a support of original Equipment manufacturer(OEM).					Class – II A Enlistment Certificate issued by Power Department, Government of Sikkim. OEM Certificate
1.4	Government- owned enterprise or institution	Meets conditions of ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1 and ELI- 2, with attachments
2. His	2. Historical Contract Non-Performance						
2.1	History of Non-	Non-performance of a contract or not legally	Must meet requirement1	Must meet	Must meet	N/A	Form LIT- 1

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity				Submission Requirements
	Performing Contracts	entitled.	& 2	requirements	requirement1		
2.2	Pending Litigation	Bidder's financial position and prospective long- term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement by itself	N/A	Must meet requirement by itself	N/A	Form LIT- 1
3. Fin	3. Financial Situation and Performance						
3.1	Financial Capabilities	The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements upto 30% of the Bid Value.	Must meet requirement	Must meet Requirement	N/A	N/A	Must meet requirement

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¹ This requirement also applies to contracts executed by the Bidder as JV member.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity			Submission Requirements	
		Solvency Certificate for 40 % of the Bid Value issued by a Nationalized Bank	Must meet requirements	Must meet requirements	Must meet requirement		Certificate issued by Bank
4. Exp	perience						
4.1	General Experience	Experience under construction contracts in the role of prime contractor, having undertaken a. Three similar works costing not less than 40% of the Bid Value b. Two similar works costing not less than 50% of the Bud value and or c. One similar work costing not less than 80% of the bid value.	Must meet requirement	N/A	Must meet requirement	N/A	Submit copies of completion certificate issued by the authority/employer
4.2	Financial turnover on construction works	Should be at least 30% of Bid value during the last three years ending 31st March 2021.	Must meet requirements	Must meet requirement	N/A		Submit copies of payment certificates issued by the

Eligibility and Qualification Criteria			Compliance Requirements	Documentation		
No.	Subject	Requirement	Single Entity	Submission Requirements		
				authority/employer		
4.2A	Specific Experience	A minimum number of any 2(two) projects that have been satisfactorily and substantially completed as a prime contractor, in the last 5 years. The selected projects should be applicable to project that have completed or substantially completed: Installation of Solar Panel/ Street Light with atleast one grid connected similar specifications of minimum of 10 KW each have a minimum value of INR 5 Cr (Indian Rupees Five Crores	Should meet the criteria in full, at least for one of key activities listed in column 3.	Form EXP – 4.2A		
4.5 (a)	Bid Capacity: Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity for work is equal to or more than the total bid value of the work. The available bid capacity will be calculated as under: Assessed Available bid capacity = $(A*N*1.5-B)$					

Eligibility and Qualification Criteria			Compliance Requirements	Documentation				
No.	Subject	Requirement	Single Entity	Submission Requirements				
Where,								
A = Maximum value of Solar Energy works executed in any one year during the last 5(five) years (updated to the price level of the 2017-18 at the rate of 5% per year), considering the completed as well as works in progress).								
	which bids are invited (period upto 6 months to be taken as half	alf-year and more than						
	B = Value, at the current price level, of existing commitments on on-going works to be completed during the period of construction of the works for which bids are invited.							
	Note: the statements in Section IV showing the value of existing commitments of on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.							
4.5	Even though the bidders may meet the above qualifying criteria, they are subject to be disqualified if they have: -							
(b)	a. made misleading or false representations in the forms, statements, affidavits, and attachments submitted in proof of the qualification requirement;							
	b. record of poor performance such as abandoning the works, not properly completion or financial failures etc.							
	c. consistent history of litigation or arbitration awards against the bidder or any member or the joint venture.							
	d. Participated in the previous bidding (if this is a re-bidding) for the same work and had quoted unreasonably high bid price and could not furnish any rational justification for the same to the employer.							

General notes for the Bidder:

- 1. Substantial completion shall be based on 80% or more of the contract completed.
- 2. For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's role and responsibilities shall be considered as qualifying experience.

.Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience [years]	Experience In Similar Works [years]
1	Engineer-1 no.	B.E./ Diploma in Electrical Engineering with 3 years' experience in relevant field	B.E./Diploma in Engineering with 2 years' experience in relevant field
2	Site supervisors-1no.	Diploma in Electrical Engineering with 3 years' experience in relevant field; or B.E. Engineering with 2 years' experience in relevant field	Diploma in Electrical Engineer with 2 years 'experience in relevant field; or B.E. in Electrical Engineering with 1 years' experience in relevant field

Note: The bidder shall furnish separate list of key personnel

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Information Forms PER- 1 and PER- 2 included in Section 4 (Bidding Forms).

3. Bid Evaluation Process

The method of evaluation of the Most Advantageous Bid will be based on the following steps as given below.

The Employer shall constitute a Tender Evaluation Committee to evaluate the responses of the bidders. The Tender Evaluation Committee shall evaluate the responses to the RFP and all supporting documents/documentary evidence. Inability to submit requisite supporting documents/documentary evidence by bidders may lead to rejection of their bids.

The decision of the Tender Evaluation Committee in the evaluation of bids shall be final. No correspondence will be entertained outside the process of evaluation with the Committee. The Tender Evaluation Committee may ask for meetings or presentation with the Bidders to seek clarifications or conformations on their bids.

The tender Evaluation Committee reserves the right to reject any or all bids. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP. The steps for evaluation are as follows-

3.1 Stage 1:Pre-Qualification (document sufficiency)

The Technical Evaluation Committee shall validate the following documents as per RFP. Each of the Pre-Qualification condition mentioned in this RFP is MANDATORY. In case, the Bidder does not meet any one of the conditions, the bidder shall be disqualified.

- 3.1.1. Demand Draft towards the cost of bid from a Nationalized/ Scheduled / commercial Bank drawn in favor of Gangtok Smart City Development Limited
- 3.1.2. Unconditional BG/ FDR/ TDR/ Demand Draft in respect of Bid Security from any nationalized/Scheduled /commercial Bank drawn in favor of Gangtok Smart City Development Limited
- 3.1.3. Permanent Account No (PAN) of the Bidder/Firm/Company/ Society.
- 3.1.4. Self-attested copy of Sales/ Service Tax/ GST registration and Sales/ Service Tax/ GST returns filed in last three years.
- 3.1.5. Self-attested copy of certificate that the up-to date Income Tax Returns filed.
- 3.1.6. Self-attested documentary evidence of (a) the Proof of Residence of the Bidder (in case of Proprietor/Partnership Firm (b) Proof of Registered Office of the Company and Residential Address of the Director/Authorized Representative (in case of Bidder being a Company) (c) Proof of Registered office of the Society and Residence of President/Secretary (in case Bidder being a Society) as well as, Proof of the Address of the Office of the Bidder Firm/Company/Society.
- 3.1.7. Self-attested copy of bank statement indicating name of the Bank and Account No. of the Bidder Firm/Company/Society.
- 3.1.8. The bidders should submit copy of valid Certificate of Registration attested by Company Secretary/ Authorized Signatory
- 3.1.9. Bidding forms ELI- 1, 2 and LIT-1 establishing the eligibility of the bidder to bid the contract along with relevant certificates.
- 3.1.10. Bidding forms EXP 4.1, 4.2A establishing the experience of similar works done by the bidder along with completion certificate from the client agency certifying the successful completion of the similar work done by the bidder.
- 3.1.11. Bidding forms FIN- 3.1, 3.2 establishing the financial capacity of the bidder. The turnover/network/financial status of the bidder shall be ascertained from the following documents which the bidder is required to submit along with the tender document for the preceding five financial years FY 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21 duly certified by a Charted Accountant
 - Audited Financial Statement of the Firm/Company/ Society
 - Audited Balance sheet of the Firm / Company /Society
 - Audited copies of profit and loss statements
 - Audited copies of Cash flow statements

- 3.1.12. The scanned copy of latest license from Labour Commissioner to employ contract labour under Contract Labour Act may be submitted.
- 3.1.13. The bidder has to submit a Letter of Bid as per format given.
- 3.1.14. Technical bids along with the compliance sheet of technical specifications and with necessary documents should be filled in all respects and each paper should be signed by the authorized representative and submitted.
- 3.1.15. The bidder has to submit financial bid in separate sealed marked as "Financial Bide" on the envelope and should contain Letter of Price Bid, Price Schedules.

3.2 Stage II Technical Evaluation

The Technical Evaluation Committee will review the technical bids of the bidders who have cleared the document sufficiency stage, to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.

3.3 Stage III Financial Evaluation

All bidders who have been technically qualified will be notified to participate in Financial Bid opening process. The Financial bids of all the bidders shall then be opened on the notified date and time and reviewed to determine whether the commercial bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.

Financial bids that are not as per the format provided shall be liable for rejection.

Section 4 - BIDDING FORMS

LETTER OF TECHNICAL BID

The Bidder must accomplish the Letter of Bid in its letterhead clearly showing the Bidder's complete name and address.

	Date:
	Bid No.:
	Invitation for Bid No.:
To: 7	The CEO, GSCDL, Level 5, Kissan Bazaar, Gangtok.
We,	the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda No;
(b)	We offer to execute in conformity with the Bidding Documents the following Works: SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR
(c)	Our bid shall be valid for a period as specified in the BDS ITB 18.1 (or as amended if applicable) (fill the number of days as per ITB 18.1) from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
(d)	If our Bid is accepted, we commit to obtain a Performance Security in the amount of 5 percent of the contract Price for the due performance of Contract.
(e)	Our firm, including any subcontractors or suppliers for any part of the Contract, have Indian nationalities;
(f)	We, hereby certify that we including any subcontractors or suppliers for any part of the contract meet the eligibility criteria and do not have any conflict of interest in accordance with ITB 4^2 ;

²Include if price adjustment provisions apply in the Contract in accordance with PCC Sub-Clause 44.1.

- (g) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 7,
- (h) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by the Employer & other agencies, under the Employer's country laws;
- (i) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
- (j) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared & executed.
- (k) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (l) We agree to permit GSCDL or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the GSCDL.

Name
In the capacity of
Signed
Duly authorized to sign the Bid for and on behalf of
Date

APPENDIX TO BID- TECHNICAL PART

(Technical Bid Forms)

BID SECURITY

Bank Guarantee

	Bank's Name, and Address of Issuing Branch or Office
	Beneficiary:
	Date:
	Bid Security No.:
	We have been informed that name of the Bidder (hereinafter called "the Bidder") has submitted to you its bid dated (Hereinafter called "the Bid") for the execution of name of Contract under Invitation for Bids No ("the IFB").
	Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.
	At the request of the Bidder, wename of Bank hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of amount in figures (amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:
(a)	has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
(b)	does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
(c)	having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
	This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.
	Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.
	Bank's seal and authorized signature(s)

TECHNICAL PROPOSAL

Form PER - 1: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section 3 (Evaluation and Qualification Criteria). The data on their experience should be supplied using the Form below for each candidate.

1	Title of position
	Name
2	Title of position*
	Name
3	Title of position*
	Name
4	Title of position*
	Name
5	Title of position*
	Name

^{*}As listed in section 3(Evaluation and Qualification criteria)

Form PER - 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Fields with asterisk (*) shall be used for evaluation.

Position*		
Personnel informatio n	Name	Date of birth
	Professional qualifications	
Present employme nt	Name of employer	
	Address of employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present employer

PART I: BIDDING PROCEDURES

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Fro m*	To*	Company, Project, Position and Relevant Technical and Management Experience*

BIDDER'S QUALIFICATION

To establish its qualifications to perform the contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder

Form ELI – 1: Bidder's Information Sheet

Bidder's Information	on
Bidder's legal name	
In case of JV, legal name of each partner	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Bidder's authorized representative (name, address, telephone numbers, fax numbers, e- mail address)	

Attached are copies of the following original documents.

- 1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.
- 2. Authorization to represent the firm or JV named in above, in accordance with ITB 20.2.
- 3. In case of JV, JV agreement, in accordance with ITB 4.1.
- 4. In case of a government-owned entity, any additional documents not covered under 1 above required to comply with ITB 4.5.
- 5. Organization chart, and list of Board of Directors

Form ELI - 2: JV Information Sheet

Each member of a JV must fill in this form

JV / Specialist Su	abcontractor Information
Bidder's legal name	
JV Partner's legal name	
JV Partner's country of constitution	
JV Partner's year of constitution	
JV Partner's legal address in country of constitution	
JV Partner's authorized representativ e information (name, address, telephone numbers, fax numbers, e- mail address)	

Attached are copies of the following original documents.

- 1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.
- 2. Authorization to represent the firm named above, in accordance with ITB 20.2.
- 3. In the case of government-owned entity, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.
- 4. Organization Chart and list of Board of Director

DETAILS OF PARTICIPATION IN THE JOINT VENTURE

PARTICIPATION DETAILS	FIRM 'A' (Lead Member)	FIRM 'B'	FIRM 'C'
Financial			
Name of the Banker(s)			
Planning			
Construction Equipment			
Key Personnel			
Execution of Works and Operational Services (Give details on proposed contribution of each)			

The Joint Venture should indicate the details of participation as above.

Form LIT-1: Historical Contract Non-Performance, and Pending Litigation

(to be completed for the Bidder and each member of Joint Venture)

Non-Performe	d Contracts in	accord	lance with Section 3	3, Evaluation and Qua	alificat	ion Criteria
Evalu □ Contr	ation and Qual act(s) not perf	lificatio ormed	on Criteria, sub claus	• - •		ecified in Section III,
Year	Non- performance portion contract	ormed of	Contract I	dentification	Tota	l Contract Amount (INR)
□ Nop	ending litigation	nce wit	Any other identification Name of Employer Address of Employer street/city/country] Reason(s) for nonpular findicate main reasons the Section III, Evaluation and Section III, Evaluation III, Evaluation III, Evaluation III, Eva	name/ number, and ution] r: [insert full name] yer: [insert performance: son(s)] ation and Qualification	d Qualification Criteria,	
	se 2.2 indicated			n, Evaluation and Qu	amica	ion Cricia, Sub-
Year of Di		Amou (INR)	nt in dispute	Contract Identification		Total Contract Amount (INR)
				Contract Identification Name of Employer Address of Employ Matter in dispute:	:	

PART I: BIDDING PROCEDURES

Year of Dispute	Amount in dispute (INR)	Contract Identification	Total Contract Amount (INR)
		Party who initiated the dispute:[indicate "Employer" or "Contractor"]	
		Status of dispute:[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]	
		Contract Identification:	
		Name of Employer: Address of Employer:	
		Matter in dispute:	
		[indicate "Employer" or "Contractor"]	
		Party who initiated the dispute:	
		Status of dispute:	
		[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]	

Form FIN – 3.1: Financial Situation and Performance

(to be completed for the Bidder and each member of Joint Venture)

1. Financial data

Type of Financial information in (INR)	Historic i	nformatio	n for previ	ous	years,
		(ar	nount in IN	NR)	
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position (Information	from Balan	ce Sheet)			
Total Assets (TA)					
Total Turnover					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Assets + Loans & Advances					
Current Liabilities (CL)					
Current Liabilities& provision					
Working Capital (WC)					
Information from Income Statement					

PART I: BIDDING PROCEDURES

Total Revenue (TR)			
Profits Before Taxes (PBT)			
Profits after Tax			
Cash Flow Information			
Cash Flow from Operating Activities			
Net cash accruals= Profit after Tax + depreciation			

This information should be extracted from the Annual Financial Statements/ Balance sheets, which should be enclosed. Year 1 will be the latest year for which audited financial statements are available. Year 2 shall be the year immediately preceding year 1 and year 3 shall be the year immediately preceding Year 2.

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (INR)
1		
2		
3		

3. Financial documents

The Bidder and its parties shall provide copies of financial statements for last 5 years pursuant Section III, Evaluation and Qualifications Criteria, Sub-clause 3.2. The financial statements shall:

(a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).p

PART I: BIDDING PROCEDURES

(b) be independently audited or certified by a Chartered Accountant.
(c) be complete, including all notes to the financial statements.
(d) correspond to accounting periods already completed and audited.
Attached are copies of financial statements ³ for the

³ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Form FIN - 3.2: Average Annual Construction Turnover

	Annual turnover data (construction only)
Year	Amount in INR
[indicate year]	[insert amount]
Average	
Annual Construction Turnover *	

^{*} See Section III, Evaluation and Qualification Criteria, Sub-clause 3.2. Annual construction turnover calculated as total certified payments received for work in progress or completed, for 5 years. This should be certified by a Chartered Accountant.

JOINT VENTURE

Names of all partners of a joint venture
1. Member in charge
2. Member
3. Member

Total value of annual construction turnover, in terms of work billed to clients, in Rupees

	A	Annual Turn	over Data (c	onstruction (only; in INR	*)	
Member	Form 2 page no.	Year 1	Year 2	Year 3	Year 4	Year 5	Average
1. Member in charge							
2. Member							
3. Member							
TOTALS							

^{*} To be certified by a chartered accountant

Name and address of Bankers to the Joint Venture

GENERAL EXPERIENCE

Form EXP - 4.1

Startin g Year	Endin g Year	Contract Identification		Role of Bidde r	Status of Project ⁴
		Contract name: Brief Description of the Works performed by Bidder:	the		
		Amount of contract: Name of Employer: Address:	_		
		Contract name: Brief Description of the Works performed by Bidder:			
		Amount of contract: Name of Employer: Address:	_		
		(add more rows if required)			

⁴ Mention whether the project is Complete or under progress.

If it is under progress mention % of work complete.

All above statements should be backed by corresponding experience certificate from respective Employers.

SPECIFIC EXPERIENCE IN SIMILAR WORKS

Form EXP - 4.1

SN	Contract Details	Elements Executed	Unit	Value in Rs.
1	Contract name:		Sqm	
1	Year of completion:		Sqm	
	Amount of contract:		_	
	Name of Employer:			
	Address:			
	If the contract was in JV mention bidder responsibilities and achievement.			
2	Contract name:		Sqm	
	Year of completion:		Sqm	
	Amount of contract:			
	Name of Employer:			
	Address:			
	If the contract was in JV mention bidder responsibilities and achievement.			

PART I: BIDDING PROCEDURES

Bidder's Declaration on Affidavit

		Date:
		Bid No.:
	Invitat	ion for Bid No.:
To: CEO, GSCDL, Level 5, Kis	san Bazaar, Gar	igtok, Gangtok.
We, the undersigned, declare the	at:	
understood all the Clauses	of this Section.	pecifications and we have studied and We accordingly offer to execute and by defects therein, fit for purpose in Section.
2. We further undertake to acceet these at the time when the co	•	m a part of our bid and we agree to sign nt is executed.
Dated this	day of	20
Signed and Sealed by	:	
In the Capacity of	:	
Name and Address of Bidder	:	
(Affix company seal)		

LETTER OF FINANCIAL PRICE BID

			Date:	
			Bid No.:	
		Invitation	for Bid No.:	
	To: CEO, GSCDL, Level	5, Kissan Bazaar, Gangtol	Χ.	
	We, the undersigned, decla	are that:		
(a)	We have examined and a Addenda issued in accord		C	nts, including
(b)	We offer to execute in con	nformity with the Bidding	Documents the follow	ving Works:
	SOLAR PANEL/ STRE INCLUDING DEFECT			K, SIKKIM
(c)	The total price of our B	id, excluding any discou	ints offered in item ((d) below is:
(d)	The detailed breakup of th	ne Bid is given in the Price	e Schedule From of the	e Bid
(e)	e) The discounts offered and the methodology for their application are: INR			
(f)	Our Bid shall be valid for if applicable) (fi for the bid submission dearemain binding upon us a period;	Il the number of days as judline in accordance with t	per ITB 18.1) from the Bidding Document	he date fixed ss, and it shall
(g)	If our Bid is accepted, we the Bidding Documents;	commit to obtain a perform	rmance security in acc	ordance with
(h)	We have paid, or will pay the bidding process or exe	•		vith respect to
	Name of Recipient	Address	Reason	Amount

PART I: BIDDING PROCEDURES

- (i) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (j) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (k) We agree to permit GSCDL or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the GSCDL.
- (l) If awarded the contract, the person named below shall act as Contractor's Representative.

Name
In the capacity of
Signed
Signed
Duly authorized to sign the Bid for and on behalf of
Date
Date

^{**}If none has been paid or is to be paid, indicate "none"

Section 5- BILL OF QUANTITY

SL. NO.	PARTICULARS WITH CAPACITY RANGE	PROPOSED CAPACITY (Wp)	COST (^/Wp)(In Rs)	ESTIMATED COST (In Rs)
1	1 kW Roof Tops	42000		
2	2 kW Roof Tops	40000		
3	3 kW Roof Tops	120000		
4	3-10 kW	440000		
5	Solar Street Light ALL-IN-ONE	7500		
	SUB-TOTAL	649500		
6	Truss and Miscellaneous Works (To be paid as per actual measurement)	LS		
A	TOTAL			

Name
Signed
In the capacity of
Duly authorized to sign the Bid for and on behalf of
Data

EMPLOYER'S REQUIREMENT PART II

Section 6 - WORKS REQUIREMENTS

1. BRIEF BACKGROUND OF THE PROJECT

- a. Gangtok, the capital of Sikkim is the 3rd city to be selected under the INDIA SMART CITY MISSION. Gangtok Smart City Development Limited (GSCDL) is the nodal agency with a mandate to development of the smart city. Gangtok is one of the most beautiful hill cities and a preferred tourist destination of the country. The city apart from tourist hub is also a base for adventure seekers trekking to the Himalayan Mountain range. Nearly 14.25 lakhs tourist have visited the city in 2017 and is expected to grow in coming years.
- b. Smart Cities Mission was launched with the mission to promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of 'smart solutions'. The mission aims to drive economic growth and improve quality of life through comprehensive work on social, economic, physical and institutional pillars of the city. The focus is on sustainable and inclusive development by creation of replicable models which act as lighthouses to other aspiring cities. 100 cities have been selected to be developed as Smart Cities through a two-stage competition.
- c. Gangtok is a capital and the largest town of the Indian state of Sikkim. Gangtok is in the eastern Himalayan range, at an elevation of 1,650 m (5,410 ft). Gangtok enjoys a temperate climate and is pleasant most of the year round. With a booming tourism sector and establishment of numerous pharmaceutical and other companies around the town, there has been a rapid increase in the economic growth of the area. Hotels, resorts, public / private sectors etc are mushrooming up in every nook and corner which is leading to rapid urbanization of the peripheral areas. What was once a desolate place in the outskirts of the town, is today bustling with tourism activities. The power sector is therefore bearing the brunt of this economic boom. The construction activities are continuing unabated and at this rate the power demand is also going to rise proportionately. With the sudden rise in power demand, the existing power sub-stations and the distribution systems which were initially designed as per the scenario which was prevalent few years ago are unable to cater to the existing demand.
- d. Renewable energy sources are fast growing. The diminishing fossil-fuel reserves and increasing energy demand makes it mandatory to look forward towards the new ways of energy generation. Global warming and climate shift has become a major concern now-a-day. There are growing trends in setting up grid interactive power plants worldwide.
- e. Gangtok smart city proposal envisages 10% of its energy requirement to be fulfilled with solar/ non-fossil fuel energy sources. Thus, to bring in impetus for initiating the project, Gangtok Smart City Development Limited (GSMDL) in coordination with Sikkim Renewable Energy Development Agency (SREDA) is ensuring and facilitating the Rooftop solar (RTS) installation across the city. The Rooftop solar projects are planned under various Government Buildings and premises

2. OBJECTIVE OF THE PROJECT:

- a. Implementation of Grid connected rooftop solar programs for achieving cumulative capacity of 40,000 MW from Rooftop solar (RTS) Projects by the year 2022.
- b. Best practice in diminishing fossil fuels and increasing demand of energy.
- c. Reduction in carbon footprint in accordance with Nationally Determined Contributions.
- d. Solar photovoltaic arrays are durable, produce no emission and demand minimal maintenance to operate.
- e. Higher energy accountability will be achieved.
- f. Create awareness and sustainability thinking within the institutions and society.
- g. Follow the international trend in Green Energy.
- h. Reduction in demand of conventional energy.
- i. Manpower deployment plan, including the designation of Key Personnel for the management and supervision of all Project Activities. This would include the designation of suitably qualified and experienced personnel for areas such as Contract Administration and Supervision, Construction Management, Traffic & Safety, Environmental Management, Plant & Equipment Maintenance, Procurement, Materials Management, Quality Control & Assurance, etc.
- j. A broad method statement for key items setting out methodology of construction, materials and construction equipment mobilization, utilization plans, broad output calculations and details of the quality assurance and quality control procedures.
- k. Advise to GSCDL on the details of the utilities that are necessary to be shifted, including suggestions on the alternate routing, and the estimates of the costs associated with such shifting.
- 1. All detailed designs must be submitted to the Project Manager for approvals and works are to be taken up after the receipt of respective approvals and "Good for Execution/Implementation" stamps from the Project Manager.
- m. This project shall make use of the building that has been rendered useless and convert the same into a structure that is the need of the hour of the region which will also help in generate revenue for the Government.
- n. The Contractor will be responsible for all Clearance from Town Planning / Municipal Corporation & any other competent authority needs to be obtained for constructing the SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM including all necessary Environmental clearances from concerned authority.
- o. The Contractor shall also obtain No objection Certificate from Fire Department shall be obtained after taking care of disaster management measures as per NBC-2016 pre/ post construction as the case may be.
 - All clearances from relevant competent Authorities for start of work, during work, final commissioning of work done or any item or any part of work or any other necessary item clearances are contractor's responsibility with no extra costs/payments on this account from employer.
- p. The structure has to be designed in accordance with standard of specification of Sikkim Renewal Energy Development Agency (SREDA) duly conforming to

relevant IS Codes. Each item shall be according to relevant available codes and if any item or part of the item is not covered in these specifications best quality item available in market shall be installed with relevant pre-approvals for rates and standards from authority (Project Manager/appropriate government authority appointed by GSCDL for approval). All designs have to be submitted to the Project Manager/appropriate government authority appointed by GSCDL for approval. Any item or part of the item not covered in Sikkim Renewal Energy Development Agency (SREDA) Specifications shall be executed as per relevant IS Codes as per the directions of Authority. The following codes and standards will be applicable

• Bureau of Indian Standards (BIS)

3. PROJECT SUMMARY

1	Name of the Implementing Agency	SREDA, Power Department
2	Proposed Project Location	Gangtok, Sikkim
3	District Name	East
4	State	Sikkim
5	Location	27.335229°, 088.615723°
6	Proposed Plant capacity	0.6495 MWp
	1kW Roof Tops	42kWp
	2kW Roof Tops	40kWp
	3kW Roof Tops	120kWp
	3-10kW	440kWp
	Solar Street Lights	7.5kWp
7	Technology	On-Grid Solar Photovoltaic
8	Nearest airport	Pakyong (PYG)
9	Nearest Railway station	New Jalpaiguri (NJP)

4. SITE SELECTION

The site selection for a Renewal Power Plant is pre-dominantly determined by solar insolation availability & internal grid connectivity for exporting power. Equally important are other essential factors/considerations such as:

- Availability of adequate space for Solar Rooftop Plant and green belt development.
- Accessibility of the site.

The proposed site where Solar Rooftop Plant to be located are found favoring all the above factors to a reasonable extent.

5. SOLAR RESOURCES DATA OF THE IDENTIFIED SITE:

Solar radiation GHI = 1665.40 kWh/sq.mt/year.

The above data are referred from:

The MNRE/NIWE/ solar radiation resource assessment atlas at an altitude of 20m/50m/100m website http://mnre.gov.in/centers/cwet India, http://globalsolaratlas.info

6. SCOPE OF WORK

ELECTRIC POWER:

The power generated from the Power Plant will be on-grid and connected to the existing power line within the premises.

IMPLEMENTING AGENCY:

The project will be executed by the State Renewal Energy Development Agency (SREDA), Power Department, Govt. of Sikkim in coordination with GSCDL.

GOVERNMENT BUILDINGS / PROPERTIES:

Under this category, multiple buildings and locations have been identified for installation of Roof top solar power plants. Initially, approximately 3.05 MW of cumulative capacity is proposed to be installed across the rooftop / surrounding areas of the following locations:

- Rongyek State Jail
- Chongay School
- Enchey Monastry
- VIP Colony Complex
- Modern School
- Bulbullay Zoological Park
- SREDA Bhawan
- White Hall
- Burtuk College
- PNG School
- State Data Centre for Hydrology, Sokeythang
- DESME, Sokeythang
- ICAR Complex

PART II: EMPLOYER'S REQUIREMENTS

- Amusement Park, Ranka
- Deorali Monastery
- Manan Kendra
- Various Government Departments and other public sectors
- Tadong College
- SSERC, Deorali
- GMC Office
- Super Market, lal Bazar
- Kissan Bazar

6A Standard Specifications

List of Materials and Proposed schedule of finishes for the works has to take prior approvals of all materials, fixtures and finishes to be used from the Project Manager/appropriate authority appointed by GSCDL before procurement.

Materials	Specifications			
Cement	OPC 43,53 Grade			
Sand	Tar Khola or its equivalent			
Stone chips	Government approved quarry			
Bricks	Cement Concrete (20x10x10)			
Cement Plaster	1:4			
Reinforcement Fe415,500	TATA / SAIL or equivalent			
Concrete RCC	M25			
Fixtures				
G.I. Pipe	Medium with high quality fibre with ISI Mark			
Luminaries and Electrical Fitting (All concealed wiring)				
Wire	Fire Proof			
Switches/Sockets	MK / Crabtree / Legrand or equivalent			
Luminaires	Philips or equivalent			
Transformer	100kVA with armoured cable of appropriate design			

(The bidder is required to sign the declaration as given in section 4 (Bidding forms) and submit along with the bid.)

In addition to above declaration relevant national and international standard specifications are to be referred and taken into consideration for the bid.

6B Technical Specifications:

The proposed projects shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of subsidy in full or part as decided by [NAME OF THE ORGANISATION] & Competent Authority's decision will be final and binding on the bidder.

1. **DEFINITION**

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipments/components.

- Solar PV modules consisting of required number of Crystalline PV modules.
- Grid interactive Power Conditioning Unit with Remote Monitoring System
- Mounting structures
- Junction Boxes.
- Earthing and lightening protections.
- IR/UV protected PVC Cables, pipes and accessories

1.1. SOLAR PHOTOVOLTAIC MODULES:

- The PV modules used should be made in India.
- The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.
 - a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701.
 - b) The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 250 Wp

- and above wattage. Module capacity less than minimum 250 watts should not be accepted
- c) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- d) PV modules must be tested and approved by one of the IEC authorized test centers.
- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminum.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. [NAME OF THE ORGANISATION]/owners shall allow only minor changes at the time of execution.
- g) Other general requirement for the PV modules and subsystems shall be the Following:
 - I. The rated output power of any supplied module shall have tolerance of +/-3%.
 - II. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
 - III. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
 - IV. IV curves at STC should be provided by bidder.
- Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each modules (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
- a) Name of the manufacturer of the PV module
- b) Name of the manufacturer of Solar Cells.
- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)

- e) I-V curve for the module Wattage, Im, Vm and FF for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001
- Warranties:
- a) Material Warranty:
- I. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Customer")
- II. Defects and/or failures due to manufacturing
- III. Defects and/or failures due to quality of materials
- IV. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option
 - b) Performance Warranty:
 - I. The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.
 - 1.2. Solar Street Light ALL-IN-ONE

Solar Street Light with fitting of not more than 15 watt and Lumen Efficacy not less than 2000 lumens all in one solar LED street light Luminaires having 12V - Mono- crystalline cell solar panel.

Details technical specification given below:

- A. System Wattage: Should not be more than 15 Watt (+/-5%)
- B. System Lumen output: should not be less than 2000 lumen with BMS technology with Progressive Intelligent Dimming which automatically control the dimming and brightness of light which increase the backup time.
- C. System Efficacy: should not be less than 140 lumens/watt.

PART II: EMPLOYER'S REQUIREMENTS

D. Battery chemistry: lithium Ferro phosphate (LiFepo4) Battery should be used.

E. Battery Capacity: 12.8V14Ah.

F.Charging Electronics: Itegrated MPPT chargerwith driver.

G. Charger Efficiency:>90%

H. Driver Efficiency:>90%

I.Led Burning Hours: Should be > 50000 Hrs. @ L70/.

J.IP Rating:IP66 for Dust and Water protection.

K. Housing to be with Aluminum Extruded body.

L.CCT(Color Temperature):5700k(+/-5%)

M. CRI:>70(+/-5%)

N. luminaire should have in - Intelligent Progressive dimming technology for better battery Backup.

O. Charging & discharge LED indicator: Should be provided in luminaire.

P. Input Voltage:12V DC/.

Q. Solar cell Efficiency: Min. 14%, Monocrystalline

R. Operating Temp Range: -10 to +55 Deg. C.

S. operating Humidity: Up to 95%/ Manufacturer should provide LM79 / LM80 reports corresponding to the luminaire / LED chip along with Type Test Certificate.

T. Warranty 3-years warranty against manufacturer defects from date of supply. luminaire Make: Havells, SSSSLX0143 equivalent model of Philips /bajaj etc

U. A corrosion resistant metallic frame structure should be fixed on the pole to hold the module. The frame structure should have provision so that the module can be oriented at the suitable tilt angle. Pole should be Hot dip galvanized pipe as per IS1161 & IS4736 i.e. Class B.Pole height 5 m above the ground level and 1 m below the ground. Luminaire shall be at least 4.5 m above the ground level.

2. ARRAY STRUCTURE

a. Hot dip galvanized MS mounting structures may be used for mounting the modules/panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However to accommodate more capacity the angle

inclination may be reduced until the plant meets the specified performance ratio requirements.

- b. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (like Delhi-wind speed of 150 kM/hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to [NAME OF THE ORGANISATION]. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- c. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- d. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.
- e. The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- f. Regarding civil structures the bidder need to take care of the load baring capacity of the roof and need arrange suitable structures based on the quality of roof.
- g. The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m2.
- h. The minimum clearance of the structure from the roof level should be 300 mm.

3. JUNCTION BOXES (JBs)

- a. The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JBs shall be such that input & output termination can be made through suitable cable glands.
- b. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings. It should be placed at 5 feet height or above for ease of accessibility.

- c. Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- d. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

4. DC DISTRIBUTION BOARD:

- a. DC Distribution panel to receive the DC output from the array field.
- b. DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

5. AC DISTRIBUTION PANEL BOARD:

- i. AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- ii. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- iii. The changeover switches, cabling work should be undertaken by the bidder as part of the project.
- iv. All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz
- v. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- vi. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- vii. Should conform to Indian Electricity Act and rules (till last amendment).
- viii. All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions Variation in supply voltage +/- 10 % Variation in supply frequency +/- 3 Hz

6. PCU/ARRAY SIZE RATIO:

- a. The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b. Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

7. PCU/ Inverter:

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

- · Switching devices : IGBT/MOSFET
- · Control: Microprocessor /DSP
- Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz

(In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)

- · Output frequency: 50 Hz
- · Grid Frequency Synchronization range: + 3 Hz or more
- · Ambient temperature considered : -200 C to 500 C
- · Humidity: 95 % Non-condensing
- · Protection of Enclosure : IP-20(Minimum) for indoor.
- : IP-65(Minimum) for outdoor.\
- · Grid Frequency Tolerance range: + 3 or more
- · Grid Voltage tolerance : 20% & + 15 %
- · No-load losses: Less than 1% of rated power
- · Inverter efficiency(minimum): >93% (In case of 10kW or above)

- · Inverter efficiency (minimum) : > 90% (In case of less than 10 kW)
- · · · THD : < 3%
- $\cdot PF:>0.9$
- i. Three phase PCU/ inverter shall be used with each power plant system (10kW and/or above) but In case of less than 10kW single phase inverter can be used.
- ii. PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- iii. The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- iv. Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- v. The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- vi. The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- vii. The PCU/ inverters should be tested from the MNRE approved test centres / NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

8. INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.

9. DATA ACQUISITION SYSTEM / PLANT MONITORING

- i. Data Acquisition System shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and

- Instrumentation for display of systems parameters and status indication to be provided.
- iii. Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Readout integrated with data logging system.
- iv. Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
- v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
 - a. AC Voltage.
 - b. AC Output current.
 - c. Output Power
 - d. Power factor.
 - e. DC Input Voltage.
 - f. DC Input Current.
 - g. Time Active.
 - h. Time disabled.
 - i. Time Idle.
 - j. Power produced
 - k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
- vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- vii. PV array energy production: Digital Energy Meters to log the actual value of AC/DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.

- viii. Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
 - ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
 - x. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
 - xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- xii. All instantaneous data shall be shown on the computer screen.
- xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
- xiv. Provision for Internet monitoring and download of data shall be also incorporated.
- xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
- xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
- xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
- xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner /[NAME OF THE ORGANISATION] location with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on [NAME OF THE ORGANISATION] server and portal in future shall be kept.

10. TRANSFORMER "IF REQUIRED" & METERING:

- a) Dry/oil type relevant kVA, 11kV/415V, 50 Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- b) The bidirectional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.

- c) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to [NAME OF THE ORGANISATION] before commissioning of SPV plant.
- d) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement.

11. POWER CONSUMPTION:

a) Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of [NAME OF THE ORGANISATION] or MNRE. Decisions of appropriate authority like DISCOM, state regulator may be followed.

12. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

a) LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning &overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

b) SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement)

c) EARTHING PROTECTION

- i. Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition the lighting arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department/[NAME OF THE ORGANISATION] as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.
- ii. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

d) GRID ISLANDING:

- i. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- ii. A manual disconnect 4pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel

13. CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

- i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- ii. Temp. Range: -10oC to +80oC.
- iii. Voltage rating 660/1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- v. Flexible
- vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- vii. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- viii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25years.
- ix. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing appropriate reasons. All cable schedules/layout drawings approved prior to installation.

- x. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- xi. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- xii. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

14. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
Up to 10 kW	240V-single phase or 415V-three phase at the option of the consumer
Above 10kW and up to 100 kW	415V – three phase
Above 100kW	At HT/EHT level (11kV/33kV/66kV) as per DISCOM rules

- i. The maximum permissible capacity for rooftop shall be 1 MW for a single net metering point.
- ii. Utilities may have voltage levels other than above, DISCOMS may be consulted before finalization of the voltage level and specification be made accordingly.
- iii. For large PV system (Above 100 kW) for commercial installation having large load, the solar power can be generated at low voltage levels and stepped up to 11 kV level through the step up transformer. The transformers and associated switchgear would require to be provided by the SPV bidders.

15. TOOLS & TACKLES AND SPARES:

i. After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools

- and tackles to be supplied by the bidder for approval of specifications and make from [NAME OF THE ORGANISATION]/ owner.
- ii. A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished

16. DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery —cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with [NAME OF THE ORGANISATION]/ owner.

17. FIRE EXTINGUISHERS:

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits
- b) Sand buckets in the control room
- c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

18. DRAWINGS & MANUALS:

- a. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- b) Approved ISI and reputed makes for equipment be used.
- c) For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to [NAME OF THE ORGANISATION]/owners before progressing with the installation work

19. PLANNING AND DESIGNING:

a. The bidder should carry out Shadow Analysis at the site and accordingly design strings
 & arrays layout considering optimal usage of space, material and labor. The bidder

should submit the array layout drawings along with Shadow Analysis Report to [NAME OF THE ORGANISATION]/Owner for approval.

- b. [NAME OF THE ORGANISATION] reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
- c. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

20. DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

- a. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- b. General arrangement and dimensioned layout
- c. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- d. Structural drawing along with foundation details for the structure.
- e. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- f. Layout of solar Power Array
- g. Shadow analysis of the roof

21. SOLAR PV SYSTEM ON THE ROOFTOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT

The Solar PV system on the rooftop of the selected buildings will be installed for meeting upto 90% of the annual energy requirements depending upon the area of rooftop available and the remaining energy requirement of the office buildings will be met by drawing power from grid at commercial tariff of DISCOMs.

22. SAFETY MEASURES:

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

23. TECHNICAL SPECIFICATION - SOLAR:

PART II: EMPLOYER'S REQUIREMENTS

Capacity of PV	325Wp Poly/Mono, 24 V
Modules	
Output power – Pmax	325 Wp
(Watts)	
Voltage at Pmax	36.85 V
Current at Pmax	8.82 A
Open-circuit voltage	45.35 V
Short circuit current	8.75
Module Efficiency	16.75%
Maximum system	IEC: DC 1000V / UL: DC 600V
voltage (Volts)	
Type of solar PV cell	Poly / Multi - Crystalline silicon
Operating temperature	-40 to 85 degree C
Certification	MC 4 terminations
Power warranty	 10-year limited warranty on power output & 16-months product warranty 25-year performance warranty - 10 years: 90% minimum performance - 25 years: 80% minimum performance

6C Drawings

- 1. Employer's Drawings: -The drawings listed in the Tender document are Employer's drawings and are provided by the Employer as a guideline of the specifications and work only. All data and information furnished in the drawings by the Employer is given in good faith but the Employer does not accept the responsibility for the completeness and accuracy thereof. The same shall be verified by the contractor promptly pointing out errors or discrepancies thereof to the Engineer.
- 2. **Contractor's Drawings:** -All drawings provided by the Contractor shall be on standard size sheets, prepared on computer with Auto CAD Latest revision and shall show particulars in a title block located in the lower right hand corner, in addition to the name of Contractor and equipment manufacturer, date, scale, drawing, revision number (R0 for drawings submitted initially, R1, R2 etc. for drawings submitted subsequently). A blank space shall be provided for the Engineer's approval stamp and provision shall be made for detail of revisions to be recorded. All drawings submitted by the supplier shall use the English language. All drawings shall be clearly and fully cross-referenced to the other drawings as relevant.

6E Terms & Procedure of Payment

- 1. In accordance with the provisions of GCC Clauses 39 and 40, the Employer shall pay the Contractor in the manner and at the times set out in this Terms and Procedures of Payment Schedule. As per the schedule given below the Employer shall subject to provisions of Clause 5 of this section, no later than 28 days after the receipt of Engineers in Charge statement by the Employer.
- 2. Item wise breakup of the payment schedule

Sr. No	Particulars	Performance Level of work	% of payment allowed (on prorata basis)

- **3.** The amounts to be paid to the Operator in accordance with Clause 2 of this Terms and Procedures of Payment Section shall include all costs and expenses of the contractor in building the structures.
- **4.** The amounts paid to the Operator in accordance with Clause 2 of this Terms and Procedures of Payment Section shall be repaid to the Contractor as part of the payments set out in Clause 2 of this section by reducing those payments by an amount equal to the advance payment times the same percentage of the Contract Amount that the Engineer in Charge determines in accordance with Clause 2 of this Terms and Procedures of Payment Section.
- 5. The Employer shall deduct from each payment to the Contractor pursuant to Clause 2 this Term and Procedures of Payment Section, a Retention for 10 per cent of each payment to the Contractor. The Retention amount may be released to the Contractor subject to the Operator furnishing an irrevocable Bank Guarantee from the nationalized Bank equivalent to the Retention amount. The Employer shall pay the 100 per cent of the Retention amount back to the Contractor after the expiry of Defects Liability Period

6D Supplementary Information

- 1. Co-operation: The Contractor shall establish full co-ordination with the officials of Employer/GSCDL, extend co-operation to complete work.
- 2. Records procedures and reports: A work order book shall be maintained by the contractor at site/workshop for taking instructions from employer or his representative. The Contractor shall maintain records pertaining to the quality of installation / erection work and inspection, testing, compliance with all technical requirements in respect of all this works as described before. The Contractor shall submit such records to the Employer after the completion of any particular work before submitting the bill.
- 3. Personnel:-The contractor shall depute sufficient staff to carry out installation, the maintenance and repair work efficiently and satisfactorily. The Contractor shall undertake to comply with applicable legislation and the code of labour law on matters of health, hygiene and safety, and shall assume responsibility for works required in the event of any change in applicable regulations. The contractor shall provide all necessary superintendence during the execution of works and during maintenance. The Contractor's staff shall include adequate and competent persons with proven suitable, previous experience on similar contracts to supervise the works and sufficient skilled, semi-skilled and unskilled labour to ensure completion of works in time. The Contractor shall not remove any representative or skilled labour from the site without prior approval of the Employer's Representative for the proper fulfilling of the contractors obligations under the contract. The contractor or a competent and authorized agent or representative approved in writing by Employer on the basis of qualification and experience to be furnished by the contractor, which approval may at any time be withdrawn, is to be constantly on the works and shall give his whole time to the superintendence of the work.
- 4. Public Authorities: The Contractor shall comply with all rules & regulations, bye laws and directives given from time to time by any local or public authority in connection with this work and shall himself pay fees or charges which shall be levied on him without any extra cost.
- 5. Safety:-The Contractor will be responsible for safety of the material supplied and kept in joint custody of the employer and the contractor till completion of contract. The Contractor shall at his own expense arrange for the safety of his labour / supervisor staff employed by him directly or indirectly for performing the work, as per statutory requirement. The Contractor shall report any accident or unusual occurrence with the

PART II: EMPLOYER'S REQUIREMENTS

- work at site that take place to employer immediately with the action, which he might have taken.
- 6. Acquaintance with Site and Work Conditions: The Bidder shall study the site and general conditions in respect of approaches, labourers, climate and the data included in the tender documents and get it verified with actual inspections of the site, before submitting the tender. In case of doubt about any item or data included in the tender, the same shall be got clarified in pre-bid meeting. Once the tender is accepted, it shall be concluded that the Contractor has verified and made himself conversant with all the details required for completing the work as stipulated conditions and specifications.

PART III

CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section 7 - GENERAL DIRECTIONS AND CONDITIONS OF CONTRACT

A. General

1. Definitions

- 1.1. Boldface type is used to identify defined terms.
- (a) The **Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- (b) The **Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
- (c) The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.1 hereunder.
- (d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- (e) **Compensation Events** are those defined in GCC 41.1 hereunder.
- (f) The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC 52.1.
- (g) The **Contract** is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC 2.3 below.
- (h) The **Contractor** is the party whose Bid to carry out the Works has been accepted by the Employer.
- (i) The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.
- (j) The **Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
- (k) **Days** are calendar days; months are calendar months.

- (l) **Day works** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- (m) A **Defect** is any part of the Works not completed in accordance with the Contract.
- (n) The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.
- (o) The **Defects Liability Period** is the period calculated from the Completion Date where the Contractor remains responsible for remedying defects.
- (p) **Drawings** include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (q) The **Employer** is the party who employs the Contractor to carry out the Works, as specified in the **PCC**.
- (r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (s) **Force Majeure** means an exceptional event or circumstance: which is beyond a Party's control; which such Party could not reasonably have provided against before entering into the Contract; which, having arisen, such Party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other Party.
- (t) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.
- (u) The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the **PCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (v) **Letter of Acceptance** means the formal acceptance by the Employer of the Bid and denotes the formation of the Contract at the date of acceptance.
- (w) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (x) "Party" means the Employer or the Contractor, as the context requires.
- (y) **PCC** means Particular Conditions of Contract
- (z) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

- (aa) The **Project Manager** is the person named in the **PCC** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- (bb) **Retention Money** means the aggregate of all monies retained by the Employer pursuant to GCC 45.1.
- (cc) The **Site** is the area defined as such in the **PCC**.
- (dd) **Site Investigation Reports** are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (ee) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (ff) The **Start Date** is given in the **PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (gg) A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (hh) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (ii) A **Variation** is an instruction given by the Project Manager which varies the Works.
- (jj) The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the **PCC**.
- (kk) The **Certificate of Completion** is the Certificate issued by the Project Manager to the Contractor, on successful completion of all the works specified in the Works Requirement (Section 6) and is "fit for purpose".

2. Interpretation

2.1. In interpreting these GCC, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.

- 2.2. If sectional completion is specified in the PCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3. The documents forming the Contract shall be interpreted in the following order of priority:
 - a) Agreement,
 - b) Letter of Acceptance,
 - c) Particular Conditions of Contract,
 - d) General Conditions of Contract,
 - e) Specifications,
 - f) Drawings,
 - g) Bill of Quantities (or Schedules of Prices for lump sum contracts), and
 - h) Contractor's Bid,
 - i) any other document listed in the PCC as forming part of the Contract.

3. Language and Law

3.1. The language of the Contract and the law governing the Contract are stated in the PCC.

4. Project Manager's Decisions

4.1. Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1. The Project Manager may delegate any of his duties and responsibilities to other people except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications

6.1. Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered

7. Subcontracting

7.1. The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

8. Other Contractors

8.1. The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the PCC. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of other Contractors, and shall notify the Contractor of any such modification.

9. Personnel and Equipment

- 9.1. The Contractor shall employ the key personnel and use the equipment identified in its Bid to carry out the Works, or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2. If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

10.1. The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1. From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
 - (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
 - (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

- 11.2. From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
 - (a) a Defect which existed on the Completion Date,
 - (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
 - (c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1. From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the PCC for the following events which are due to the Contractor's risks:
 - (a) loss of or damage to the Works, Plant, and Materials;
 - (b) loss of or damage to Equipment;
 - (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
 - (d) personal injury or death.
 - 13.1.1. Insurance of work and contractor's equipment: The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause GCC 11, insure:
 - (a) the Works, together with materials and Plant for incorporation therein to the full replacement cost
 - (b) additional sum as required by the employer, detailed out in the PCC.
 - (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.
 - 13.1.2. Scope of cover: The insurance in paragraphs (a) and (b) of Sub-Clause 13.1.1 shall be in the joint names of the Contractor and the Employer and shall cover:
 - (b) the Employer and the Contractor against all loss or damage from whatsoever cause arising, other than as provided Sub-Clause 13.1.4, from the first working day after the commencement date until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
 - (c) the Contractor for his liability;

- (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and
- (ii) for loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause GCC 33.
- 13.1.3. Responsibility for Amount not Recovered: Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities Clause GCC 11 & 12.
- 13.1.4. Exclusions: There shall be no obligation for the insurance in Sub-Clause 13.1.1 to include loss or damage caused by
 - (a) war, hostilities, invasion, and act of foreign enemies.
 - (b) Rebellion, revolution, insurrection or military or usurped power, or civil war.
- 13.1.5. Third Party Insurance: The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause GCC 63, insure, in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in sub-clause 13.1.6 and 13.1.7) or loss or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exception defined in paragraphs (a), (b) and(c) of clause GCC 63.3

Such insurance shall be for a certain minimum percentage of the contract amount as specified in the PCC.

The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insured.

- 13.1.6. Insurance for Employers Staff: The Contractor shall also, without limiting his or the employer's obligations insure in the Joint names of the contractor and the Employer, the Employer's staff to extent of 5 numbers and their staff engaged on the works at the site against liabilities for death or injury. The amount for the insurance cover for each of the employer's staff so engaged shall be limited to a minimum of Rs. 3,00,000/- per person or as per the laws governing in state whichever is more. The insurance shall continue until the taking over certificate for the whole of the works is issued. Notwithstanding the amount mentioned above, insurance obtained should satisfy the prevailing rules in this regard.
 - 13.1.7 Accident or Injury to Workmen: The Employer or its representatives shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any subcontractor, other than death or injury resulting from any act or default or the Employer, his agents or

servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

The Contractor shall insure against such liability and shall continue such insurance during the whole time that any person is employed by him on the Works. Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under the Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Employer, when required, such policy of insurance and the receipt for the payment of the current premium.

13.1.8 Personal Accident Insurance: In addition to any other insurance required to be taken out by statutory requirements (e.g. Workmen's Compensation Act 1923), the Contractor shall take out a Personal Accident Insurance in favour of each workman employed by him on the Works. Provided that, in respect of any persons employed by any Sub-Contractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Sub-Contractor shall have taken out Personal Accident Insurance in respect of his workmen employed on the works and the Contractor shall require such Sub-Contractor to produce to the Employer, when required, such policy of Personal Accident Insurance and the receipt for the payment of the current premium.

13.1.9 Evidence and Terms of Insurances: The Contractor shall provide evidence to the Employer as soon as practicable after the respective insurance have been taken out but in any case prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Project Manager of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the Employer.

13.1.10 Adequacy of Insurance: The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premium.

- 13.1.11 Remedy on Contractor's failure to Insure: If the Contractor fails to effect and to keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Clause 13.1.9, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time and deduct premium amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.
- Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
- 13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

14.1. The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the PCC, supplemented by any information available to the Bidder.

15. Contractor to Construct the Works

15.1. The Contractor shall construct and install the Works in accordance with the Specifications and Drawings as specified in Section 6.

16. The Works to Be Completed by the Intended Completion Date

16.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

17. Designs by Contractor and Approval by the Project Manager

17.1. The Contractor shall carry out design to the extent specified in the PCC. The Contractor shall promptly submit to the Employer all designs prepared by him. Within 14 days of receipt, the Employer shall notify any comments. The

Contractor shall not construct any element of the permanent work designed by him within 14 days after the design has been submitted to the Employer or where the design for that element has been rejected. Design that has been rejected shall be promptly amended and resubmitted. The Contractor shall resubmit all designs commented on taking these comments into account as necessary.

- 17.2. The Contractor shall be responsible for design of Temporary Works.
- 17.3. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them if they comply with the Specifications and Drawings.
- 17.4. The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.5. The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.6. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

18. Safety

18.1. The Contractor shall be responsible for the safety of all activities on the Site.

19. Discoveries

19.1. Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

All old curiosities, relic coins, minerals etc., found in the excavation or pulling down shall be the property of the Government. Should any ancient masonry or other old work of interest be opened up, or any religious edifice or relic be involved in removal or destruction, in the execution of a work, a clear report on the matter should be sent to Government through the Employer and orders obtained before the demolition or removal of such works or relics. Similarly, regarding old curiosities etc., obtained during excavation, the Project Manager should consult the District Collector through appropriate channel regarding disposal of the same.

20. Possession of the Site

20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the PCC, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event. The final authority on this matter shall lie with the

GSCDL and decision in this matter taken by GSCDL will be binding on all parties to this contract.

21. Access to the Site

21.1. The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

22. Instructions, Inspections and Audits

- 22.1. The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2. The Contractor shall permit the GSCDL to inspect the Contractor's accounts, records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the GSCDL. The Contractor shall maintain all documents and records related to the Contract for a period of three (3) years after completion of the Works. The Contractor shall provide any documents necessary for the investigation of allegations of fraud, collusion, coercion, or corruption and require its employees or agents with knowledge of the Contract to respond to questions from the GSCDL.

23. Appointment of the Adjudicator

- 23.1. The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the PCC, to appoint the Adjudicator within 14 days of receipt of such request.
- 23.2. Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract; a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority at the request of either party, within 14 days of receipt of such request.

24. Procedure for Disputes

- 24.1. Void.
- 24.2. Void.
- 24.3. Any disputes between the Employer and the Contractor arising out of or in connection with the Contract not settled amicably and in respect of Project Manager's decision, arbitration shall be conducted in accordance with the Arbitration and Conciliation Act 1996 with relevant amendments.

24.4. The seat and place of the arbitration shall be Gangtok, Sikkim. Arbitration shall be held by a three-member Arbitration team. For the Panel, the Employer and the Contractor will suggest an Arbitrator each within 14 days of receipt of Arbitration Notice. The two Arbitrators will then mutually decide upon the Third Arbitrator.

B. Time Control

25. Program

- 25.1. The Contractor shall submit for approval a Program for the Works within 14 days from the date of the Letter of Acceptance. Within this, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.
- 25.2. An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 25.3. The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period of 30 days. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the PCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 25.4. The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

- 26.1. The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 26.2. The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the

delay by this failure shall not be considered in assessing the new Intended Completion Date.

27. Acceleration

- 27.1. When the Employer wants the Contractor to complete works before the Intended Completion Date, the Project Manager appointed by employer shall obtain priced proposals for achieving the necessary acceleration of works from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 27.2. If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

28. Delays Ordered by the Project Manager

28.1. The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

29. Management Meetings

- 29.1. The Project Manager or on the request of the Contractor may convene a management meeting and the Project Manager may require the Contractor to attend the management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 29.2. The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

30. Early Warning

- 30.1. The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 30.2. The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

31. Identifying Defects

- 31.1. The Project Manager and PDMC appointed by GSCDL shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- 31.2. The contractor shall ensure that the raw materials, goods & related services procured/deployed under this contract/project should comply with the technical specifications and other provisions of Contract.

The contractor shall be supply and use and will be held responsible for raw materials, goods & related services under this contract/project shall conform to the standards mentioned in the Sikkim SOR and when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the superior quality in reference to as mentioned in description in BoQ.

32. Tests

32.1. If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

33. Correction of Defects

- 33.1. The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the PCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 33.2. Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

34. Uncorrected Defects

34.1. If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

35. Contract Price

- 35.1. In the case of an admeasurements contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
- 35.2. In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

36. Changes in the Contract Price

- 36.1. In the case of an admeasurements contract:
 - (a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.
 - (b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.
 - (c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.
- 36.2. In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

37. Variations

- 37.1. All Variations shall be included in updated Programs, produced by the Contractor.
- 37.2. The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

- 37.3. If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 37.4. If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 37.5. The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 37.6. In the case of an admeasurements contract, if the work in the variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Engineer, the quantity of work to be executed is an extra item and the rates in the bill of quantities shall be used for calculate the value of variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the variation does not correspond with item in the BoQ, the procedure explained in the above Para i.e., 36.1 (i), the data rate based on schedule of rate of the year of execution or market rate (when Schedule of Rate is not available) shall be followed for arriving the rate for the new item.

38. Cash Flow Forecasts

38.1. When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

39. Payment Certificates

- 39.1. The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 39.2. The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor, subject to statutory deductions and any other deductions coming from Clause 48. The Project Manager shall within 28 days after receiving a statement and supporting documents from the Contractor, issue to the employer, an Interim Payment Certificate.
- 39.3. The value of work executed shall be determined by the Project Manager.
- 39.4. The value of work executed shall comprise:
 - (a) In the case of an admeasurements contract, the value of the quantities of work in the Bill of Quantities that have been completed; or
 - (b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.

- 39.5. The value of work executed shall include the valuation of Variations and Compensation Events.
- 39.6. The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

40. Compensation Events

- 40.1. The following shall be Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC 20.1.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue Drawings, Specifications required for execution of the Works on time.
 - (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
 - (e) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
 - (f) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
 - (g) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
 - (h) The advance payment is delayed.
 - (i) The effects on the Contractor of any of the Employer's Risks.
 - (j) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 40.2. If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 40.3. As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own

- forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
- 40.4. The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

41. Payments

- 41.1. Payments shall be adjusted for deductions for advance payments & its interests and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager according to each certificate.
- 41.2. If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator same shall be paid to contractor.
- 41.3. Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 41.4. Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

42. Tax

- 42.1. The rates quoted by the Contractor shall be deemed to be inclusive of all the taxes, levies, etc. including GST including their variations as notified by the concerned authority from time to time, and also of all the new taxes and levies that may be imposed that the Contractor will have to pay for the performance of this Contract. The Employer on behalf of the Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.
- 42.2. The Contractor shall comply with the proper bye-laws and legal orders of the local body or public authority under the jurisdiction of which the work is executed and pay all fees and charges for which he may be liable. Nothing extra shall be payable on this account.
 - (j) The rates quoted by the Contractor shall be deemed to be inclusive of all the prevailing taxes/octroi that the Contractor has to pay for performance of this contract. The Employer shall perform such duties in regard to the deduction of such taxes as per statutory deduction requirements at the source of payment as per applicable rules.

42.3.

(i) Exemptions: The bidder shall refer such notifications/circulars/orders of the Government of India issued from time to time and shall quote his rates accordingly considering the exemptions available. The Employer will give the necessary certificates to the selected bidders to claim the exemption on specific requests made by the Contractor. Any conditional bids in this regard will not be accepted. The quoted rates should be based on the exemptions available and it will be responsibility of the Contractor to avail the exemptions, as per the contents of the

- notifications/circulars/orders, the Employers responsibility being limited to the issue of necessary certificates and will not take any responsibility of any kind in this regard.
- (ii) It may also be noted that if the Government of India announces any exemptions on any statutory levies in future also during the tenure of the Contract, all the benefits accruing in view of such further exemptions of any kind on the taxes, shall be passed on to the Employer.

43. Currencies

43.1. Where payments are made in currencies other than Indian Rupees (INR), the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

44. Price Adjustment

- 44.1. Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the PCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. The following conditions shall apply:
 - (a) No price increase will be allowed beyond the original completion date unless covered by an extension of time awarded by the Employer under the terms of the Contract. No price increase will be allowed for periods of delay for which the Contractor is responsible. The Employer will, however, be entitled to any price decrease occurring during such periods of delay.
 - (b) Deleted.
 - (c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

Base, Current and Provisional Indices: the base cost and indices or prices shall be those prevailing on the day 28 days prior to the latest date for submission of Bid. Current indices or prices shall be those prevailing on the quarter for which a particular interim Payment Certificate is related. If at any time the current indices are not available, no provisional escalation will be payable on the basis of indices of the previous quarter in absence of non-publication of indices for concerned quarter by the RBI. Escalation amount will be payable to the Contractor when the current indices become available.

Adjustable amount: The adjustable amount of each Interim Payment Certificate shall be the difference between (i) the amount which, in the opinion of the Employer's

Representative, shall be due to the contractor including the amount at base rates and prices of the schedule works carried out but excluding provisional sums and the value of materials on the site, and (ii) the amount as calculated in (i) above and included in the last preceding interim payment certificate issued by the Employer's Representative. The adjustable amount shall exclude payments to

nominated sub-contractors and any other amounts based upon actual cost or current prices.

Adjusted Amount: The adjusted amount of each payment certificate shall be determined by applying the price adjustment factor to the adjustable amount, and shall become payable to the contractor subject to any deductions there from for retention money, liquidated damages and any other monies due to the Employer from the Contractor including the recovery of advance mobilization, loan if any.

If the Contractor fails to complete the Works within the Time for Completion, adjustments of prices thereafter shall be made using either each index or price applicable on the date 49 days prior to the expiry of the Time for Completion, or the current index or price, whichever is more favorable to the Employer, provided that, if an extension of time is granted in accordance with the relevant Sub-Clause the above provision shall apply to the extended time for completion.

44.2. If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

45. Retention

- 45.1. The Employer shall retain from each payment due to the Contractor the proportion stated in the PCC until Completion of the whole of the Works.
- 45.2. Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 52.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an unconditional bank guarantee.

46. Liquidated Damages

- 46.1. The Contractor shall pay liquidated damages to the Employer as compensation for delay at the rate per day stated in the PCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the PCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
- 46.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC 40.1.

47. Bonus

47.1. The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the PCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

48. Advance Payment

- The Employer shall make advance payment of not more five percent of the 48.1. estimated cost put to tender or five percent of tender value whichever is more may be given with the approval of the competent authority, if requested by the contractor in writing within one month of the order to commence the work as stated in the PCC by the date stated in the PCC, against provision by the Contractor of an unconditional bank guarantee bond in a form and by a bank acceptable to the Employer in amounts and currencies equal to 110% to the advance payment amount. The bank guarantee shall remain effective until the advance payment has been repaid, but the amount of the bank guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest on mobilization advance shall be levied as per the Government Notification and as amended prior to conclusion of this contract. The amount of mobilization advance, if paid to the contractor, shall be recovered from each monthly bill / running account bill payable to the contractor for the work done so that the entire amount is recovered before completion of 60% of the Contract value. In case of any difficulty in recovering the advance, it shall be recovered from the bank guarantee given by the Contractor. The Contractor may, at his option, can repay the advance earlier by increasing the percentage rate of deductions from invoice raised.
- 48.2. The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 48.3. The advance payment shall be recovered at a rate of minimum of 10 % (ten percent) of the amount of advance payment from the first and every subsequent bills until the full advance paid has been recovered. However the Project Manager has the liberty to recover more than 10 % amount if he feels the pattern of submission of bills of the contractor warrants deduction of more amount for recovery of advance amount. If the advance amount is not recovered fully before the intended time of completion, penalty interest @ 8% will be recovered for the outstanding amount.

49. Securities

49.1. The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the PCC, by a bank acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a bank guarantee.

50. Day works

- 50.1. If applicable, the Day works rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 50.2. All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 50.3. The Contractor shall be paid for Day works subject to obtaining signed Day works forms.

51. Cost of Repairs

51.1. Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

52. Completion

52.1. The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed.

53. Taking Over

53.1. The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

54. Final Account

54.1. The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor

within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

55. Operating and Maintenance Manuals

- 55.1. If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them within 14 days after completion of the component/ milestone.
- 55.2. If the Contractor does not supply the Drawings and/or manuals by the dates stated in GCC 55.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold 5% of the next interim payment due to the Contractor.

56. Termination

- 56.1. The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 56.2. Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
 - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
 - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate; at least 15 days before the expiry of 84 days' time period, the contractor should address a letter informing the same and requesting for early release of payment.
 - (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
 - (f) the Contractor does not maintain a Security, which is required; and

- (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the PCC.
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC 57.1.
- 56.3. When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.
- 56.4. Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 56.5. If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

57. Fraud and Corruption

- 57.1. GSCDL requires Contractors, Subcontractors, manufacturers & Suppliers, observe the highest standard of ethics during the procurement and execution of contract(s). In pursuit of this policy, the GSCDL:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.
 - (b) will cancel the allocated contract if GSCDL determines at any time that representatives of the Contractor or sub-contractors if permitted under this contract are found to be engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Contractor having taken timely and appropriate action satisfactory to the GSCDL and or competent authority to remedy the situation the said contract would be terminated; and
 - (c) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a GSCDL financed contract if it at any time determines that they have, directly or

through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a GSCDL-financed contract.

58. Payment upon Termination

58.1. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the PCC. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

The Contractor shall comply with all applicable national and local environmental laws and regulations.

The Contractor shall (a) establish an operational system for managing environmental impacts, (b) carry out all the monitoring and mitigating measures as set forth in Project's Environmental Management Plan (EMP), attached here to as Appendix 1 (the actual costs for the implementation of such measures shall be reimbursed by the Employer from provision sums). The contractor shall submit to the Employer quarterly report on the carrying out of such measures.

The Contractor Shall:(a) comply with all applicable labor laws, and (b) provide equal pay for men and women for work of equal value or type.

The Contractor shall not employ child labor, as defined in national legislation for construction and maintenance activities.

The Contractor shall give priority to the employment of local people, who meet the job and efficiency requirements, for the Contract works.

The Contractor shall not employ for the contract works (a) any person that has relationship with any of the officials of the Contractor (i.e., spouses or first blood relations), and (b) any person who retired, within the last two years, as a gazette officer from any department of the government of Sikkim.

58.2. If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

59. Property

59.1. All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

60. Release from Performance

60.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

61. Suspension of Loan or Credit

61.1. deleted

62. Eligibility

The Contractor shall have the Indian nationality. The Contractor shall be deemed to have the nationality of a country if the Contractor is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.

- 62.1. The materials, equipment and services to be supplied under the Contract shall have their origin in India and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, the Contractor may be required to provide evidence of the origin of materials, equipment and services.
- 62.2. For purposes of GCC 62.2, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

63. Indemnities

- 63.1. Each party shall be liable for and indemnify the other Party against losses, expenses and claims for loss or damage to physical property, personal injury, and death caused by his own acts or omissions, subject to the exception defined in Clause 63.3.
- 63.2. Notwithstanding Clause 63.1 above, the Contractor shall be solely responsible for and shall indemnify and hold harmless the Employer from and against all claims, liabilities and costs of action in respect of injury to or both of any person in the employment of the Contractor or any of his Subcontractors subject to exceptions defined in clause 63.3.
- 63.3. The "exceptions" referred to in Clause 63.2 are:

- a. the permanent use or occupation of land by the Works, or any part thereof,
- b. the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land
- c. damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract, and
- d. death or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, or his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, whether the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the injury or damage.

64. Indemnities

Deleted

65. Royalties

65.1. Except otherwise stated, the Contractor shall pay all tonnage and other royalty charges and other payments or compensation, if any for getting stone, sand, gravel, clay or other materials required for the works.

66. Third Party Inspection and Testing

- 66.1. The representative of the concerned independent consultant appointed by the Employer will undertake independent third party inspections and testing for supply and installation pipes and valves used for water supply and sewerage, pumps and motors and all works and any civil structure or material or work as may be applicable and as desired by the Project Manager. The Contractor shall be wholly responsible to make his own arrangements with the approved third party inspection agencies for carrying out the required tests. The Contractor shall be responsible to obtain permission for and provide all facilities to such agency for carrying out such inspections or testing as may be required. The Third Party Inspection charges of the agency only will be paid by the employer and all the other costs for such independent inspection and testing shall be borne by the contractor.
- 66.2. A mutually agreed quality assurance plan with minimum requirements as per Indian Standards will be developed which provides for inspection and certification by the third party inspection agency at specified times.
- 66.3. No material shall be delivered to the site without formal inspection or testing unless otherwise waived in writing by the Project Manager with a certificate issued

- by the contractor, which is endorsed by the Engineer that the item confirms to the requirement of contract in all respects.
- 66.4. The Employer or his authorized representative may make inspections at any of the manufacturing or shipping points at any time in addition to the schedule provided in this specification at the cost of Employer. However, during such inspection, if it is found that any of the items are not being supplied, manufactured or transported in accordance with the specifications, the contractor shall bear all expenses including fees incurred by the employer in respect of such inspection.
- 66.5. The contractor shall perform or make arrangements for all tests when requested by the Employer.
- 66.6. The Contractor shall agree with the Project Manager on the time and place for the inspection of any materials or plant. The Project Manager shall give the contractor not less than 24 hours' notice of his intention to carry out inspection or to attend the tests. If the Project Manager or his duly authorized representative does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Project Manager, proceed with the test reports.
- 66.7. If at the time and place agreed in accordance with as mentioned in the clause 66.4 and 66.6, the materials or Plant if, as a result of the inspection or testing referred to in this Clause, the Project Manger determines that the materials or plant are defective or otherwise not in accordance with the contract, he may reject the materials or plant and shall notify the contractor there of immediately. The notice shall state the Project Manager's observations with reasons. The Contractor shall then promptly make good the defect or replace the same. It the Project Manager so requests, the tests of such material or plant shall be made or repeated under the same terms and conditions. All costs incurred by the Project Manager or the Third Party inspection agency for the inspection of the tests shall be determined by the Project Manager and shall be recoverable from the contractor and may be deducted from any money's due that the Contractor and the Project Manager shall notify the Contractor accordingly.
- 66.8. Any inspection carried out by the Project Manager shall not relieve the contractor of his obligations under the contract.

67. Licenses for Explosives

67.1. The Contractor should take necessary licenses under the current explosive rules to enable him to manufacture and process the quantity of gunpowder / explosive and perform the blasting as necessary according to prevailing rules.

68. Indemnities

Deleted

69. Incomplete or unattended defective works or delays

The Employer has the right to get the uncompleted works done by other competent contractors at the risk and cost of the contractor in the following circumstances:

- a) If the contract is terminated for the reasons attributable to the contractor
- b) If the Contractor has delayed the work as per the schedule with no justifiable reasons.
- c) If the Contractor fails to correct any defects in the work within the period stated in the defects notice sent by the Project Manager to the Contractor.
- d) If the Contractor does not meet any of its obligations within the time frame of the contract specified in section 7 GCC or section 8 PCC

70. Contractor's General Responsibilities

- 70.1. The Contractor shall, with due care and diligence, execute and complete the Works and remedy any defects therein accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.
- 70.2. The Contractor shall promptly notify the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.
- 70.3. The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Employer.
- 70.4. The Contractor shall provide all necessary superintendence during the execution of the Works and as long as thereafter as the Project Manager may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorized representative approved of by the Project Manager, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorized representative shall receive, on behalf of the Contractor, instructions from the Engineer. If the approval of the representative is withdrawn by the Project Manager, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Project Manager.
- 70.5. The Contractor shall be responsible for:

- (a) the accurate setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing,
- (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and
- (c) The provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.

If, any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Project Manager, shall, at his own cost, rectify such error to the satisfaction of the Project Manager, unless such error is based on incorrect data supplied in writing by the Project Manager, in which case the Project Manager shall determine an addition to the Contract Price as per the relevant provisions of the contract and shall notify the Contractor accordingly.

The checking of any setting-out or of any line by the Project Manager shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, sigh-rails, pegs and other things used in setting-out the Works.

71. Water for works and workforce

71.1. The contractor at his own expenses should provide water from municipal mains or other sources for the use of work and workmen.

72. Project Manager and Project Manager's representative

- 72.1. The Project Manager is the representative of the Employer and the contractor is bound to take all his instructions as that of the employer. The Project Manager shall represent the employer in all dealings with the Contractor concerning the work, including administering contract, certifying payments due to the contractor, issuing and valuing variations, awarding extension of times and valuing compensation events as per the powers delegated to him by the employer and after taking necessary approvals.
- 72.2. The Project Manager's representative who would be appointed to assist the Project Manager would be notified to the Contractor. The Employer / Project Manager may employ any other additional representative for managing this contract.
- 72.3. The Project Manager may from time to time delegate any of his duties and authorities, to his representative, and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until copy thereof has been delivered to the Employer and the Contractor.
- 72.4. The Project Manger's representative may appoint any number of persons to assist the Project Manager's representative in carrying out his duties. He shall notify to the Contractor the names, duties and scope of authority of such persons.

73. Alterations, Additions and Omissions

- 73.1. The Project Manager shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any reason it shall, in his opinion appropriate he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:
 - (a) increase or decrease the quantity of any work included in the Contract,
 - (b)omit any such work
 - (c) change the character or quality or kind of any such work,
 - (d)change the levels, lines, position and dimensions of any part of the Works,
 - (e) execute additional work of any kind necessary for the completion of the Works, or
 - (f) change any specified sequence or timing of construction of any part of the Works.

No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with relevant provisions of the Contract. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

74. Deleted

75. Site Order Book

75.1. A site order book is to be maintained at site by the contractor for issue of necessary instructions during the site visits. It is binding on the contractor to enforce such instructions and if the compliance of such instructions would have financial implications, the contractor need to inform the Project Manager on the financial implications on executing the instruction, obtain his permission, and sanction before executing such works. No additional payment would be made on the basis of the instructions of the site order alone. The site in charge of the Employer and the Contractor should sign both while issuing the order and after compliance. The site order book needs to be serially numbered. The site order should be maintained by the contractor throughout the work and submitted to the Project Manager before the payment of the final bill.

76. Measurement Book:

76.1. All measurements should be recorded directly in the Measurement Book as per the instructions printed in the Measurement Book.

77. Sikkim State Building & Other Construction Workers Welfare Fund:

77.1. The contractor for this work shall be bound to remit an amount equal to 1 % (one percent) of the value of the work to be done on account of this contract, excluding cost of departmental materials, towards the employer's (Contractor) contribution to Sikkim State Building & Other Construction Workers Welfare Fund as provided in Sikkim Construction Workers Fund. The amount shall be recovered proportionately from the part bills and the final bill for the work and the contractor shall abide by such recoveries.

78. Safety, Security and Protection of the Environment

78.1. Accidents – Hoarding – Lighting – Observations – Watchmen:

The contractor shall be responsible for the safety of the labour employed by him and he shall be liable for payment of necessary compensation in the case of accidents as per workers compensation act.

- a) When excavations have been made or obstacles have been put in public through-fares or in places where there is likelihood of accidents, the contractor shall comply with any requirement of law on the subject and shall provide suitable Hoarding- Lighting, watchmen when and where necessary or required by the Project Manager or by any duly constituted authority, for protection of works and safety and convenience of the public or others. In case of excavations on roads, a traffic diversion plan should be made and got approved by the concerned authorities.
- b) It shall be the contractor's sole responsibility to protect the public and its employees against the accident from any cause and he shall indemnify the Government against any claims for damages for injury to person or property, resulting from any such accidents and he shall, where the provisions of the Workmen's Compensation Act apply, take steps to properly insure against any claims thereafter.
- c) On the occurrence of an accident which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such accidents, intimate the employer in writing, the fact of such accident. The contractor shall indemnify Government against all loss or damage sustained by the Government resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or fines if any payable by the Government as a consequence of Government's failure to give notice under the Workmen's Compensation Act or otherwise confirm to said Act in regard to such accident.
- d) In the event of an accident in respect of which compensation may become payable under the workmen's Compensation Act VIII of 1923 whether by the Contractor or by the Government as principal it shall be lawful for the Project Manger to retain out of moneys due and payable to the contractor such sum or sums of money as may, the opinion of the Project Manager shall be final in regard or all matters arising under this clause.

78.2. Noise, Disturbance and Pollution:

Works shall be carried out without unreasonable noise and disturbance. The Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbances created while executing the Works and from against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in regard or in relation to such liability. Necessary permissions as may be required from Pollution Control Board or any other regulatory authority shall have to be obtained by the Contractor for erecting and operating any plant or machinery and for other operations required for the execution of the Works in the Contract.

78.3 Site Sanitation:

The contractor should provide and erect prior to commencement of the work sufficient latrines for the use of workmen, both males and females and should keep the same disinfected and clean all times during the progress of the work and remove the same and restore to original ground on completion of the works.

78.4 HIV/AIDS awareness and prevention program:

It is obligatory as a part of the Contractor to carryout HIV / AIDS awareness and prevention program, and dissemination of information on worksites on risks of sexually transmitted diseases and HIV/AIDS as a part of health and safety measures for those employed under the Contract.

- 78.5 The Contractor shall comply with all applicable environmental laws and regulations and the Contractor shall
- (a) establish an operational system for managing environmental impacts,
- (b) carry out all of the monitoring and mitigation measures set forth in the Initial Environmental Assessment (IEE) or Environmental Impact Assessment (EIA) and Environment Management Plan (EMP) attached hereto as Appendix 1 (c) allocate the budget required to ensure that such measures are carried out, and the actual costs for the implementation of such measures shall be reimbursed by the Employer to the Contractor from Provisional Sum. The Contractor shall submit to the Employer quarterly reports of the carrying out of such measures.

79. Labour

- 79.1. The contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 79.2 It is mandatory to the contractor to register all the labours he is engaging at site with the concerned authorities.
- 79.3 The Contractor shall, if required by the Project Manager, deliver to the Project Manager a return in detail, in such form and at such intervals as the Project Manager

may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Project Manager may require.

80. Compliance with Labour Regulations

- 80.1. During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour law that are applicable to construction industry are given below. The contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or Rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/ bye laws/ Acts/ Rules/ Regulations including amendments, if any, on the part of the Contractor, Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.
- 80.2. The employees of the Contractor and the Sub Contractor in no case shall be treated as the Employees of the Employer at any point of time.
- 80.3. Salient features of some major labor laws applicable to establishments engaged in building and other construction work:
- a) Workmen Compensation Act 1923: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death the rate of 15 days wages for every completed year of service The Act is applicable to all establishments employing 10 or more employees.
- c) Employees P.F and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:
 - Pension or family pension on retirement or death, as the case maybe
 - Deposit linked insurance on the death in harness of the worker.
 - Payment of P.F accumulation on retirement/death etc.
- d) Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

- contract labour (Regulation and Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. the Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.
- f) Minimum Wages Act 1948: The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment as per the act.
- g) Payment of Wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to male and Female workers and for not making discrimination against Female Employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/ per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/- per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50) The Act provided for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition and Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.

- n) Inter-State Migrant Workmen's (Regulation of Employment and Conditions of Service) Act 1979: The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home upto establishment and back, etc.
- Onditions of Service) Act 1996 and the Cess Act of 1996: All the Establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First Aid facilities, Ambulance, housing accommodations for workers near the work place etc. The employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aide of power or 20 or more persons without the aid of power engaged in manufacturing process.
- 80.4. Notwithstanding what is given in the above the acts as amended latest shall apply from time to time

81. Fair Wage Clause:

- 81.1. The following should be followed in respect of payment of wages to the labour.
- a) The contractor shall pay not less than fair wages to labourers engaged by him on the work.
 - "Fair Wages" means wage whether for time or piece work notified at the time of inviting Bids for the work and where such wages have not been so notified the wage prescribed by the Central PWD for the District in which the work is done".
- b) The contractors shall not withstanding the provisions of any contract to the contrary cause to be paid a fair wage to labourers indirectly engaged on the work including any labour engaged by his subcontractor in connection with the said work as if he labourers had been immediately employed by him.
- c) In respect of all labour directly or indirectly employed in the works for the performance of the Contractor's part of this agreement, the contractor shall comply with or cause to be complied with (the Central P W D Contractor's labour) regulations made by Government in regard to payment of wages, wage period deduction from wages, recovery of wages not paid and deductions unauthorized made, maintenance of wages

register, other terms of employment, inspection and submission of periodical returns and all wages cards, publication of scale of wages and returns and all other matters of a like nature.

- d) The Deputy Programme Director or Subdivision Officer concerned shall have the right to deduct from the moneys due to the contractor and any sum required or estimated to be required for making good the loss suffered by a worker or workers by reasons of non-fulfilment of the conditions of the contract for the benefit of works, non-payment of wages or deductions made from his or their wages which are not justified by their terms of contract or non-observance of the regulations.
- e) Vis a Vis the Central Government the Contractor shall be primary liable for all payment to be made under the observance of the regulations aforesaid without prejudice to his right to claim from this subcontractors.
- f) The regulation aforesaid shall be deemed to be a part of this contract and breach there shall, be a breach of this contract.

82. Recovery of compensation paid to workmen

In every case in which by virtue of the provisions sub section(1) of section 12, of the workmen's compensation act 1923, Employer is obliged to pay compensation to a workman employed by the contractor, in execution of the works Employer will recover from the contractor, the amount of compensation so paid; and without prejudice to the right of the Employer under sub section2 of section 12, of the said act Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or any sum due to the Employer to the contract whether under this contract or otherwise. Employer shall not be bound to contest any claim made against it under sub section (1) Section 12 of the said act except on the written request of the contractor and upon his giving to Employer full security for all costs for which Employer become liable in consequence of contesting such claim.

83. Ensuring Sikkim Labour Protection Act 2005:

In every case in which by virtue of the provisions of Sikkim Labour Protection Act Employer shall be at liberty or to recover such amount or any part thereof by deducting it from the Security Deposit or any sum due by Employer to the contractor under this contract or otherwise.

- 1. The contractor must employ local people whose nationality is not in doubt for execution of works in Sikkim.
- 2. The labourers employed by the contractor should be of Indian origin only.
- 3. The Contractor shall obtain a valid certificate of Registration under Sikkim Labour Protection Act 2005 (20 to 2005) and the rules made there under and contractor should abide by all provisions of the act and Rules aforesaid as may be required from time to time regarding wages and other working conditions.
- 4. No labour below the age of 14 years shall be employed on the work and the contractor shall pay not less than fair wages to labourer engaged by him on the work.
- 5. The contractor shall comply with the provisions of the payment of wages act 1936 Minimum Wages Act 1948 Employees Labour (Regulation and Abolition) Act 1970 or

the modifications thereof or any other laws relating thereto and the rules made there under from time to time by the state Government.

Section 8 - PARTICULAR CONDITIONS OF CONTRACT

The following Particular Conditions of Contract shall supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

A. General	
GCC 1.1 (q)	The Employer is CEO, GSCDL Level 5, Kissan Bazaar, Gangtok - 737101, Sikkim
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be 6 months.
GCCs 1.1 (aa) & 4.1	The Project Manager is the Chief Technical Officer, GSCDL, Level 5, Kissan Bazaar.
GCC 1.1 (cc)	The Sites are located within Gangtok Municipal Limits in Sikkim, India
GCC 1.1 (ff)	The Start Date shall be 7 days from the date of signing the Agreement.
GCC 1.1 (jj)	The Works consist of SOLAR PANEL/STREET LIGHT IN AND AROUND GANGTOK
GCC 2.2	Sectional Completions are: Not allowed
GCC 2.3(i)	Any other written agreement reached between the Employer and contractor further to the award of contract shall be in line with the original bidding document only, there will be no contradiction with respect to the clauses, terms and conditions of the original conditions of the contract. The Environment Plan attached hereto as Appendix I shall also form part of the agreement The following documents also form part of the Contract: Environmental Management Plan, attached hereto as Appendix 1.
GCC 3.1	The language of the contract is English.

	The law that applies to the Contract is the law of Union of India and State of Sikkim. Where there is a conflict between the two, the laws of The Union of India shall prevail.		
GCC 8.1	Schedule of other contractors: Nil.		
GCC 13.1.1 (b)	Insurance for an additional sum of 15 per cent of replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature "it being understood that such insurance shall provide for compensation to be payable to rectify the loss or damage incurred"		
GCC 13.1.5	Third Party Insurance: Insurance shall be for at least 1 % (one percent of the contract amount) subject to a minimum of Rs.20,00,000/-(Rs. 2 million) per occurrence with number of occurrences unlimited		
GCC 17.1	The following shall be designed by the Contractor: Detailed working drawings of the following: Structural drawings, Elevations, Layout plan, Electrical, Plumbing, Landscaping, boundary fencing, Sound & security system arrangement, Rain water harvesting & Renewable energy system plan, etc.		
GCC 20.1	The Site Possession Date(s) shall be: the site shall be handed over to the contractor within 15 days from the date of issue of instruction of work commencement.		
GCC 23.1	Not applicable		
GCC 24.4	Institution whose arbitration procedures shall be used: Indian Arbitration Act.		
B. Time Control			
GCC 25.3	The amount to be withheld for late submission of an updated Program is an amount equal to 5 % of the next interim payments		
C. Quality Control			

GCC 33.1	The Defects Liability Period is: 1 year from the date of issue of Certificate of Completion.
GCC 45.1 &	The proportion of payments retained from each payment shall be 10% (ten percent) of the payment amount, as Retention Money. No interest will be paid for the retention money.
GCC 45.2	50% of retention money will be paid upon issue of Certificate of Completion and remaining 50% upon completion of defect liability period. The Contractor may substitute retention money with an "unconditional" bank guarantee.
GCC 46.1	In the event that the contractor fails to comply with the Intended Time of completion for the whole of the Works, or, if applicable, any section within the relevant time, then the Contractor shall pay liquidated damage to the Employer at the rate of 0.1% (one percent) per day. The maximum amount of liquidated damages for the whole of the works is 10% (ten percent) of the final contract price. Whether the asset is put to use or not the Liquidated Damages will be levied for any delay in completion of works as a part of commitment on the part of the contractor.
GCC 47	Bonus : Not Applicable
GCC 48.1	The Advance Payments shall be: 5 % of the Contract Amount and shall be paid to the Contractor no later than 21 days after the submission of the required Bank Guarantee issued by a Nationalized Bank/Scheduled Bank. The mobilization advance cannot be claimed after the expiry of 4 months from the date of agreement of this contract.
GCC 48.3	The advance payment shall be recovered at a rate of minimum of 10 % (ten percent) of the amount of advance payment from the first and every subsequent bills until the full advance paid has been recovered. However the Project Manager has the liberty to recover more than 10 % amount if he feels the pattern of submission of bills of the contractor warrants deduction of more amount for recovery of advance amount. If the advance amount is not recovered fully before the intended time of completion, penalty interest @ 8% will be recovered for the outstanding amount.

GCC 49.1	The Performance Security in the form unconditional and irrevocable bank guarantee issued by a Nationalized Bank/Scheduled Bank located in India for an amount of 10 % of the Contract price. The performance security shall be valid up to 28 days beyond completic of defect liability period.	
E. Finishing the Cor	atract	
GCC 56.2(b)	The contractor has to approach the Project Manager at least 5 days before the expiry of time period of 28 days to get the revised instructions.	
GCC 56.2 (g)	The maximum number of days is: 100 days.	
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 20%.	

Appendix-1 Environmental Monitoring Plan

(Deleted)

Appendix-2 Environmental Management Plan

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
Sources of Materials	Extraction of rocks and material may cause ground instability	(i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of GSCDL (iii) Submit to GSCDL on a monthly basis documentation of sources of materials.	Construction Contractor	Construction Contractor documentation
Air Quality	Emissions from construction vehicles, equipment, and machinery used for excavation and construction resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides, and hydrocarbons)	(i) Consult with GSCDL on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Bring materials (aggregates) as and when required; (iv) Use tarpaulins to cover sand and other loose material when transported by vehicles; (v) Fit all heavy equipment and machinery with air pollution control devices	Construction Contractor	(i) Location of stockpiles; (ii) Complaints from sensitive receptors; (iii) Heavy equipment and machinery with air pollution control devices; (iv) Ambient air for Respirable particulate matter (RPM) and suspended particulate matter (SPM); (v) Vehicular emissions such as sulphur dioxide (SO2),

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		which are operating correctly; and (vi) Clean wheels and undercarriage of vehicles prior to leaving construction site.		nitrous oxides (NOx), carbon monoxide (CO), and hydrocarbons
Surface water quality	Mobilization of settled silt materials, run-off from stockpiled materials, and chemical contamination from fuels and lubricants during construction works can contaminate nearby surface water quality.	(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with GSCDL on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and	Construction Contractor	(i) Areas for stockpiles, storage of fuels and lubricants and waste materials; (ii) Number of silt traps installed along drainages leading to water bodies; (iii) Records of surface water quality inspection; (iv) Effectiveness of water management measures; (v) For inland water: suspended solids, oil and grease, biological oxygen demand (BOD), and coliforms.

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		Environmental Management Plan (EMP).		
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	(i) Plan activities in consultation with GSCDL so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Provide prior information to the local public about the work schedule; (iii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iv) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (vi) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Use of silencers in noise-producing equipment and sound barriers; (iii) Equivalent day and night time noise levels

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
Socio- Economic – Employment and income	Generation of contractual employment and increase in local revenue	(i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Construction Contractor	(i) Employment records; (ii) records of sources of materials
Occupational Health and Safety	Occupational hazards which can arise during work	(i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers;	Construction Contractor	(i) Site-specific Health and Safety (H and S) Plan; (ii) Equipped first-aid stations; (iii) Medical insurance coverage for workers; (iv) Number of accidents; (v) Supplies of potable drinking water; (vi) Clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) record of H and S

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted		orientation trainings (viii) personal protective equipments; (ix) % of moving equipment outfitted with audible back-up alarms; (xi) sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		with audible back-up alarms; (xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.		
Quarry Sites and Borrow Pits	Extraction of approximately 8575 m3 of clay, 476.4 m3 of sand, 22282 m3 of stones, 952.8 m3 of coarse aggregates, and loose materials other than stones can cause disruption of natural land contours and vegetation resulting in accelerated erosion, landslides, disturbance	(i) Verify suitability of all material sources and obtain approval of GSCDL; (ii) Prioritize government-approved quarries and borrow pits; (iii) Obtain approval of GSCDL if new quarries	Construction contractor	(i) List of approved quarry sites and borrow pits; (ii) GSCDL/PDMC report in writing that all necessary environmental restoration work has been

PART III: CONDITIONS OF CONTRACT AND CONTRACT FORMS

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
	in natural drainage patterns, sedimentation/siltation of surface waters, and water pollution.	and borrow sites are necessary; (iv) Obtain approval of GSCDL if extracting rocks, gravel, and sand from small rivers or streams is necessary. The extraction points shall be spread out along the length of the river to minimize disruption in river flow and to prevent instability to embankments. Local residents and water users shall be consulted to ensure that irrigation intakes, bunds, and local fishing are not adversely impacted; and (v) Request GSCDL to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.		adequately performed before acceptance of work.
Work Camps	Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants	(i) Consult with GSCDL before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees;	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Water and sanitation facilities for employees; and (iii) GSCDL/PDMC report in writing that the camp

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;(v) Train employees in the storage and handling of materials which can		has been vacated and restored to preproject conditions
		potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site;		
		(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;		
		(viii) Remove all wreckage, rubbish, or temporary structures which are no longer required; and		
		(ix) Request GSCDL to report in writing that the camp has been vacated and restored to pre- project conditions before acceptance of work.		
Social and Cultural Resources – Chance Finds	Risk of archaeological chance finds	(i) Strictly follow the protocol for chance finds in any excavation work; (ii) Request GSCDL or any authorized person with archaeological/historical	Construction Contractor	Records of chance finds

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Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation
		field training to observe excavation; (iii) Stop work immediately to allow further investigation if any finds are suspected; and (iv) Inform GSCDL if a find is suspected, and take any action they require ensuring its removal or protection in situ.		

Section 9 - CONTRACT FORMS

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Letter of Acceptance

---- on letterhead paper of the Employer ----

date
Γο: name and address of the Contractor
Subject: Notification of Award Contract No
Dear Sirs
This is to notify you that your Bid dated date for
We accept/ do not accept that
We note that as per bid, you do not intend to subcontract any component of work.
OR
We note that as per bid, you propose to employ M/s as subcontractor for executing

You are hereby requested to furnish the Performance Security, plus additional security for unbalance bids in terms of ITB clause 43.1, in the form detailed in Para 37.5 of ITB for an amount of INR
We have reviewed the construction methodology submitted by you along with the bid in response to section IV and our comments are given in the attachment. You are requested to submit a revised Program including environmental management plan as per Clause 25 of General Conditions of Contract within 14 days of receipt of this letter.
Yours Faithfully
Authorized Signature:
Name and Title of Signatory:
Name of Agency:

^{*} - delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.

^{** -} to be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer".

Contract Agreement

THIS AGREEMENT made the day of , between Chief Executing Officer, GSCDL, Level 5, Kissan Bazaar, Gangtok-737101, Sikkim (India) (here in after "the Employer"), of the one part, and name of the Contractor. (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as **SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR**, should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein.

The Employer and the Contractor agree as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - a) the Letter of Acceptance
 - b) Letters of Technical Bid and Price Bid
 - c) The Addenda Nos insert addenda numbers if any. . . .
 - d) the Particular Conditions
 - e) the General Conditions;
 - f) the Specification
 - g) the Drawings; and
 - h) the completed Schedules,
- 3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Sikkim on the day, month and year indicated above.

Signed by	Signed by
for and on behalf of the Employer	for and on behalf the Contractor
in the presence of:	in the presence of:
Witness, Name, Signature, Address, Date	Witness, Name, Signature, Address, Date

Unconditional Performance Security

Bank's Name, and Address of Issuing Branch or Office

Beneficiary:

Name of the Employer: Gangtok Smart City Development Limited represented by the Chief Executing Officer, Level 5, Kissan Bazaar, Gangtok-737101, Sikkim (India)

Date:

Performance Guarantee No.:

We have been informed that name of the Contractor. . . . (here in after called "the Contractor") has entered into Contract No. reference number of the Contract. . . . dated with you, for the SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR, (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an irrevocable and unconditional performance guarantee is required.

This guarantee shall expire, no later than the Day of *Insert the date twenty-eight days after the defect liability period*. , and any demand for payment under it must be received by us at this office on or before that date.

The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee

Seal of Bank and Signature(s)

Advance Payment Security (Unconditional)

Bank's Name, and Address of Issuing Branch or Office

Beneficiary:

Name of the Employer: Gangtok Smart City Development Limited represented by the Chief Executing Officer, Level 5, Kissan Bazaar, Gangtok-737101, Sikkim (India)

Date:

Advance Payment Guarantee No.:

We have been informed that name of the Contractor. (hereinafter called "the Contractor") has entered into Contract No. reference number of the Contract. dated with you, for the SOLAR PANEL/ STREET LIGHT IN AND AROUND GANGTOK, SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR, (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum name of the currency and amount in figures..... (..... amount in words.....) is to be made against an advance payment guarantee.

At the request of the Contractor, we name of the Bank. . . . hereby unconditionally and irrevocably undertake to pay you any sum or sums not exceeding in total an amount of name of the currency and amount in figures*. (. . . . amount in words. . . .) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number.... at.... name and address of the Bank.....

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire upon our receipt of a copy of the payment certificate indicating that hundred (100) percent mobilization advance has been recovered. This guarantee will not be subjected to any cavil or arguments.

The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee

Seal of Bank and Signature(s)	
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UNCONDITIONAL BANK GUARANTEE IN LIEU OF RETENTION MONEY

To: Gangtok Smart City Development Limited represented by the Chief Executing Officer, Level 5, Kissan Bazaar, Gangtok-737101, Sikkim (India)

called the "Contractor") has undertaken, in	[name and address of contractor] (hereinafter pursuance of Contract Nodated CT LIGHT IN AND AROUND GANGTOK,					
SIKKIM INCLUDING DEFECT LIABILITY PERIOD OF ONE YEAR,						
(herein after called the "Contract".);						
Contractor has option to replace the Retention Bank Guarantee, in instalments of	REED BY YOU IN THE SAID contract that the a Money with an irrevocable and unconditional (indicate the value) from a Bank acceptable to or's obligations in accordance with the contract contract).					
AND WHEREAS the Contractor has opted to and un conditional Bank Guarantee;	replace the retention money with an irrevocable					
behalf of the Contractor, up to a total of	e are the Guarantor and responsible to you, on [amount of Guarantee [amount in words], *such sum being payable in the he Contract Price is payable, and we undertake and without cavil or argument, any sum or sums [amount of Guarantee] as aforesaid without reasons for your demand for the sum specified					
We hereby waive the necessity of your dema	nding the said debt from the Contractor before					

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

Tł	nis guarantee	shall b	e valid till th	e 'Project	Manager' c	ertifies repay	me	nt of reten	tion m	oney
in	accordance	with	Sub-clause	45.2 of	Particular	Conditions	of	Contract	i.e.,	upto
		•								
SI	GNATURE A	AND S	SEAL OF TH	E GUAR	ANTOR					
Na	ame of the Ba	ank:								
۸,	ddress:									
А	iuress.									
Da	ate:									

[#] An amount is to be inserted by the Guarantor, representing the amount specified in the Contract, and denominated either in the currency(ies) of the Contract or in a freely convertible currency acceptable to the Employer.