SOLAR ENERGY CORPORATION OF INDIA

(A GOVERNMENT OF INDIA ENTERPRISE)

INVITES BIDS FROM INTERESTED COMPANIES

FOR

DESIGN, MANUFACTURING, SUPPLY, ERECTION, INSTALLATION, TESTING & COMMISSIONING INCLUDING ONE YEAR SYSTEM WARRANTY AND ANNUAL MAINTENANCE CONTRACT (AMC) FOR 4 YEARS OF LED BASED SOLAR STREET LIGHTING SYSTEM IN JHARKHAND

BID No: SECI/Cont./Ind./56/2013

Dated: 27.08.2013



SOLAR ENERGY CORPORATION OF INDIA (SECI) NBCC PLAZA, TOWER-I, IVTH-FLOOR, SECTOR-V, SAKET NEW DELHI-110 017, INDIA.

Telephone No & Fax No: 91-11- 29564033/36 & 29563834

MNRE Website : www.mnre.gov.in Employer Website : www.seci.gov.in

Email: secicontracts@yahoo.com

August-2013



SOLAR ENERGY CORPORATION OF INDIA

(A Government of India Enterprise)

Bid No: SECI/Cont./Ind./56/2013

Date: 27.08.2013

On behalf of Power Finance Corporation (PFC), Solar Energy Corporation of India (hereinafter called "SECI" or "Employer"), invites companies to participate in the Bid for "Design, Manufacture, Supply, Erection, Testing and Commissioning including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system (SSLS) in Jharkhand State".

For the implementation of above mentioned work, Bidders should submit their bid proposal along with all supporting documents complete in all aspect on or before 19th September,2013 up to 2.30 p.m. in the office of "Employer" in prescribed format.

Bidder shall submit Bid along with non-refundable processing fee of Rs. 1000/-(Rupees ten thousand only) in the form of DD issued in favour of **"Solar Energy Corporation of India"**, payable at New Delhi. Techno-Commercial Bids will be opened on 19th September,2013 at 3:30 p.m in presence of authorised representatives of Bidders who wish to be present. Bids received without the prescribed processing fee and Bid Bond will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Bid documents which include Eligibility criteria, "Technical Specifications", various conditions of contract, formats, etc, can be be downloaded from MNRE website **www.mnre.gov.in** and / or Employer website **www.seci.gov.in**. Any amendment (s)/corrigendum/Clarifications with respect to this Bid shall be uploaded on MNRE website and / or SECI website only. The Bidder should regularly follow up for any Amendment/Corrigendum/Clarification on the above website(s).

Dy. Manager (Contracts)

BID INFORMATION SHEET

Bid Description	Design, Manufacture, Supply, Erection, Testing and Commissioning including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system in Jharkhand State.	
Pre-Bid Conference/Clarification meeting	A pre-bid conference shall be held on 5 th September, 2013 at 11:00 A.M in SECI office, 4 th floor, Tower-1, NBCC Plaza, Pushp Vihar, Sector-V, Saket, New Delhi-110 017. Only one person from the bidder company is allowed to participate in the meeting. Bidders are requested to send their queries at least 3 days before the schedule date of meeting.	
Bid Deadline	19 th September,2013 up to 2.30 PM	
Date of Techno- Commercial bids opening	19 th September,2013 at 3:30 PM	
Bid processing fee	Rs. 10,000/- (Rs. Ten Thousand only) to be furnished through Demand Draft (DD) along with Bid.	
Validity of Bid	135 days from the date of Techno-Commercial Bid Opening.	
Bid Bond	Bidder has to furnish the Bid Bond for the amount of Rs. 2.5 Lakhs and shall remain valid for 180 days from the Bid Dead Line. Please refer ITB Clause 10 of Section -II	
Performance Security(PBG)	10 % of Contract Price shall be furnished within 21 days of the receipt of Notification for Award of Work from the Employer. Please refer ITB Clause 28 of Section –II.	
Bid Process	Single stage, Two Part (Techno-Commercial Bid & Price Bid)	

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SECTION-I: DEFINITIONS & INTERPRETATION

SECTION-I: DEFINITIONS & ABBREVIATIONS

1.0. **Definitions**

- 1.1. In the "Bid / Tender / Contract Document" as herein defined where the context so admits, the following words and expression will have the following meaning:
 - a. "Affiliate" shall mean a company that either directly or indirectly
 - i. controls or
 - ii. is controlled by or
 - iii. is under common control with

a Bidding Company (in the case of a single company) and "**control**" means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.

- 1.2. **"B.I.S"** shall mean specifications of Bureau of Indian Standards (BIS);
- 1.3. **"Bid / Tender"** shall mean the Techno Commercial and the Price Bid submitted by the Bidder along with all documents/credentials/attachments, formats, etc., in response to this Bid Document, in accordance with the terms and conditions hereof.
- 1.4. **"Bidder / Tenderer"** shall mean Bidding Company submitting the Bid. Any reference to the Bidder includes Bidding Company including its successors, executors and permitted assigns jointly and severally, as the context may require";
- 1.5. **"Bid Bond"** shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under ITB Clause 10 of this Bid, as per the prescribed Format-3 provided under Section-VIII;
- 1.6. **"Bidding Company"** shall refer to such single company that has submitted the Bid in accordance with the provisions of this Bid;
- 1.7. **"Bid Deadline"** shall mean the last date and time for submission of Bid in response to this Bid as specified in Bid information Sheet and as specified in ITB Clause 14 of this Bid document including all amendments thereto ;

- 1.8. **"Bid Document"** shall mean all Definitions, Sections, Layouts ,Drawings, Photographs, Formats & Annexures etc as provided in the Bid No SECI/Cont./Ind./56/2013 dated 27.08.2013 including all the terms and conditions hereof.
- 1.9. "Chartered Accountant" shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
- 1.10. **"Competent Authority"** shall mean Managing Director (MD) of Solar Energy Corporation of India himself and/or a person or group of persons nominated by MD for the mentioned purpose herein;
- 1.11. **"Company"** shall mean a body incorporated in India under the Companies Act, 1956;
- 1.12. **"Contract"** means the agreement entered into between the Employer and the Contractor, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
- 1.13. **"Contract Price / Contract Value"** shall mean the sum accepted or the sum calculated in accordance with the prices accepted in Bid and/or the Contract rates as payable to the Contractor for the entire execution and full completion of the Work (Price for Supply, Transportation(including loading, unloading and transfer to Site), Insurance, Installation & Commissioning including one year system warranty and Annual Maintenance Contract for 4 years), including change order;
- 1.14. "Completion of Work" means that the Project/Works have been completed operationally and structurally and Commissioning has been attained as per Technical Specifications.
- 1.15. **"Commissioning"** means successful operation of the Project/Works by the Contractor, for the purpose of carrying out Guarantee Test(s).
- 1.16. "Contract Document" shall mean collectively the Bid Document, Design, Drawings, and Specifications, Annexures, agreed variations, if any, and such other documents consisting the bid and acceptance thereof;
- 1.17. **"Contractor's Equipment"** means all plant, Works, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Works that are to be provided by the Contractor, but does not include plant and equipment, or other things intended to form or forming part of the Works.
- 1.18. "Day" means calendar day;

- 1.19. **"Defect Liability Period"** means the period of validity of the warranties given by the Contractor (commencing at Completion of the Project/Works, during which the Contractor is responsible for defects with respect to the Project/Works.
- 1.20. **"Employer" or "SECI"** shall mean Solar Energy Corporation of India , New Delhi (A Govt of India Enterprise) under MNRE;
- 1.21. **"Eligibility Criteria"** shall mean the Eligibility Criteria as set forth in ITB Clause 2.0 of this BID;
- 1.22. **"Engineer-in-Charge"** shall mean the person designated from time to time by the Employer and shall include those who are expressly authorized by him to act for and on his behalf for operation of this Contract;
- 1.23. **"Effective Date"** means the date from which the Time for Completion shall be determined;
- 1.24. "GCC" means the General Conditions of Contract contained in this section;
- 1.25. "GHI" shall mean Global Horizontal Irradiation
- 1.26. **"Goods"** means permanent plant, equipment, machinery, apparatus, articles and things of all kinds to be provided and incorporated in the Works by the Contractor under the Contract but does not include Contractor's Equipment;
- 1.27. "Guarantee Test(s)" means the test(s) specified in the Technical Specification to be carried out to ascertain whether the Project/Works is able to attain the functional requirements specified in the Technical Specifications.
- 1.28. "The Government" means the Government of India.
- 1.29. "IEC" shall mean specifications of International Electro-technical Commission;
- 1.30. **"MNRE"** shall mean Ministry of New and Renewable Energy, Government of India;
- 1.31. **"Mobilization**" shall mean establishment of adequate infrastructure by the Contractor at Site comprising of construction equipment's, aids, tools tackles, offices with facilities such as power, water, communication etc. including manpower comprising of Engineers, Supervising personnel and an adequate strength of skilled, semi-skilled and un-skilled workers, who with the so established infrastructure shall be in a position to commence execution of Work at site(s), in accordance with the agreed Time Schedule of Completion of Work.
- 1.32. **"O&M / AMC"** shall mean Operation & Maintenance(O & M) / Annual Maintenance Contract (AMC) of Solar Street Lighting System;

- 1.33. **"Parent Company"** shall mean a company that holds at least twenty six percent (26%) of the paid-up equity capital directly or indirectly in the Bidding Company, as the case may be;
- 1.34. "PFC" means the Power Finance Corporation;
- 1.35. **"Price Bid"** shall mean Envelope II of the Bid, containing the Bidder's Quoted Price Bid as per the Section- VII of this BID;
- 1.36. "Qualified Bidder" shall mean the Bidder(s) who, after evaluation of their Techno Commercial Bid as per ITB Clause 2.1(e) of Section-II stand qualified for opening and evaluation of their Price Bid;
- 1.37. **"Representative"** shall mean any employee or agent of Power Finance Corporation nominated by Employer for the purpose mentioned therein.
- 1.38. "SNA" shall mean State Nodal Agency.
- 1.39. "SCC" means the Special Conditions of Contract.
- 1.40. **"Statutory Auditor"** shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956 or under the provisions of any other applicable governing law;
- 1.41. "Services" means all those services ancillary to the supply of the Works, to be provided by the Contractor under the Contract; e.g. transportation(including loading, unloading and transfer to Site) and provision of marine or other similar insurance, inspection, expediting, Site preparation works (including the provision and use of Contractor's Equipment and the supply of all civil, structural and construction materials required), installation, /Pre-commissioning, commissioning, carrying out guarantee tests, operations, maintenance, the provision of operations and maintenance manuals, training of Employer's personnel and one or two persons from the beneficiaries groups are imparted trainings etc.
- 1.42. "Successful Bidder(s) / Contractor(s)" shall mean the Bidder(s) selected by Employer pursuant to this Bid for "Design, Manufacture, Supply, Erection, Testing and Commissioning including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system in Jharkhand State".
- 1.43. "Site" means the Land and other places upon which the Works are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site. The details of the Site are as per Annexure-1 of Section-VIII
- 1.44. "**Sub-Contractor**" means any person or firm or Company (other than the Contractor) to whom any part of the Work has been entrusted by the Contractor,

with the written consent of the Engineer-in-Charge-In-Charge, and the legal representatives, successors and permitted assigns of such person, firm or company.

- 1.45. **"Standards"** shall mean the standards mentioned in the technical specification of the goods and equipment utilized for the Work or such other standard which ensure equal or higher quality and such standards shall be latest issued by the concerned institution like Bureau of Indian standards(BIS), MNRE, etc,.
- 1.46. **"Time for Completion"** means the time within which Completion of the Project/Works is to be attained in accordance with the stipulations in the SCC and the relevant provisions of the Contract;
- 1.47. **"Ultimate Parent Company"** shall mean a company which directly or indirectly owns at least twenty six percent (26%) paid up equity capital in the Bidding Company, (as the case may be) and/or in the Financially Evaluated Entity and such Bidding Company (as the case may be) and /or the Financially Evaluated Entity shall be under the direct control or indirectly under the common control of such company;
- 1.48. **"Work"** means the "Goods" to be supplied and installed, as well as all the "Services" to be carried out by the Contractor under the Contract;
- 1.49. "Wp" shall mean Watt Peak

INTERPRETATIONS

- 1. Words comprising the singular shall include the plural & vice versa
- **2.** An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
- **3.** A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
- 4. Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.
- 5. The table of contents and any headings or sub headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

SECTION-II: INFORMATION & INSTRUCTIONS TO BIDDERS (ITB)

SECTION-II: INFORMATION & INSTRUCTIONS TO BIDDERS (ITB)

1.0 **General Information:**

- 1.1 As a part of Jawaharlal Nehru National Solar Mission, MNRE launched off-grid schemes for the promotion of solar applications. Under these schemes, Solar Energy Corporation of India (hereinafter called "SECI or the Employer") has been mandated to implement Solar Street Lighting system in Jharkhand State. The PFC and SECI has formalized an MoU for the purpose of assigning SECI the turn-key task of Design, Manufacture, Supply, Erection, Testing and Commissioning" including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system in district Bokaro of State Jharkhand. On behalf of PFC, SECI or Employer hereby invites Bidders to participate in the Bidding process for the selection of Successful Bidder(s) for Design, Manufacture, Supply, Erection, Testing and Commissioning" including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting Step invites Bidders to participate in the Bidding process for the selection of Successful Bidder(s) for Design, Manufacture, Supply, Erection, Testing and Commissioning" including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system in district Bokaro of State Jharkhand.
- 1.2 The Bidder is advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the Bid document must be furnished by the Bidders. Failure to provide the information and / or documents as required may render the submitted Bid as Techno-Commercially unacceptable.
- 1.3 The Bidder shall be deemed to have examined the Bid document, to have obtained his own information in all matters whatsoever that might affect carrying out the Works in line with the Scope of Work specified in the document at the offered rates and to have satisfied himself to the sufficiency of his Bid. The bidder shall be deemed to know the scope, nature and magnitude of the work and requirement of materials, equipment, tools and labour involved, wage structures and as to what all works he has to complete in accordance with the Bid documents irrespective of any defects, omissions or errors that may be found in the Bid documents.
- 1.4 The quantity of solar street lights are approximately 500 No's. The Bidder shall quote for full quantity only. The quantity indicated above may increase or decrease by 25%. The details of location is indicated in Annexure-1 of Section-VIII, which may vary at the time of execution of work.

2.0. Eligibility Criteria

2.1. General Criteria

- a) 500 Nos LED based Solar street Lighting Systems are to be installed and commissioned in district Bokaro of State Jharkhand as indicated in Section-VI (Technical Specifications) and details of location is given in Annexure-1 of Section- VIII. The Bidder shall quote for full quantity only. Also, Bidder including its Parent Company / Affiliate/Ultimate Parent Company shall submit only one Bid directly or indirectly in response to this Bid Document.
- b) The Bidder should be a Company duly incorporated in India under the relevant Law and engaged in the business of Solar.

(Copy of certificate of incorporation/Memorandum of Association/Article of Association or any other relevant document(s) may be furnished along with the bid in support of above. In the Memorandum and Articles of association, Article Number should be highlighted separately wherein above information has been stated.)

- c) The Bidder should have valid CST/State VAT/TIN registration certificate of any part of India at the time of submission of Bid (Copy to be furnished in support).
- d) Bidder must meet the Eligibility criteria individually. However, Bidder can use the technical strength of its Parent Company to fulfil the Technical Eligibility criteria mentioned below. In such case, Bidders shall submit an Undertaking from the Parent Company as per Format -8 and also furnish a certificate of relationship of Parent Company or Affiliate with the Bidding Company as per Format-7, Company Secretary certificate towards shareholding pattern of the Parent Company and the Bidding Company along with a Board resolution from the Parent Company
- e) Bidder will be declared as a "Qualified Bidder" based on meeting the Eligibility Criteria and as demonstrated based on documentary evidence submitted by the Bidder in the Bid.

2.2. Technical Eligibility Criteria

a) A bidder should be accredited channel partner by the Ministry for Off-Grid and Decentralized Solar PV Applications under JNNSM as per latest list available on the MNRE website (www.mnre.gov.in) (at the time of Bid submission) with a rating either of SP1A or SP1B or SP2A or SP2B.

b) The Bidder should have installed at least 100 No's solar street light which should have been successfully commissioned at least six months prior to Techno-Commercial Bid Opening date.

The list of project commissioned at least 6 month prior to Techno-Commercial Bid Opening date, along with a copy of the Contract/Agreement/ Work order and commissioning certificate from the Client/Owner shall be submitted in support of Clause 2.2 (b) above.

Documentary evidence in support of this shall be furnished in the form of copies of Contract/Agreement/ Work order and commissioning certificate from the Client/Owner.

3. Cost of Bidding:

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

4. Contents of the Bid Document

- 4.1 The goods and services required, Bidding procedures and contract terms are prescribed in the Bid documents. In addition to the Definition and Interpretation, the Bid document includes:
 - a. Information & Instruction to Bidders (ITB);
 - b. General Conditions of Contract (GCC);
 - c. Special Conditions of Contract (SCC);
 - d. Certificates and Payments
 - e. Technical Specifications;
 - f. Price Bid
 - g. Formats -1 to Formats -11;
 - h. Annexure -1
- 4.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bid document. Failure to furnish all information as required in the Bid document or submission of a Bid not substantially responsive to the Bid documents in every respect will be at the Bidder's risk and may result in rejection of its Bid.

5. Clarification of Bid Documents

5.1. A prospective Bidder requiring any clarification on the Bid documents may notify the Employer in writing/Fax/Email at the Employer's mailing address indicated in the ITB Clause 13, which it receives not later than 3 days after the Pre-Bid meeting. The Employer may choose not to respond or give any clarification. If the Employer chose to respond it will be given by uploading on MNRE's website (www.mnre.gov.in) and / or Employer website (www.seci.gov.in). The Bidder should have a regular follow-up of the website for any amendments/ corrigendum/ clarifications. The clarification / response shall be to all the prospective Bidders but without identification of the particular person asking for the clarification. The clarification given shall become a part of the Bid conditions. In addition, it is for the Employer to send a written communication of all clarification to the Bid/Tender, If the Employer chooses to do but without any obligation to do so and there shall not be any implication if such communication is not sent or otherwise not received by the one or more Bidders. Any clarification or response given except as mentioned above or by any person other than the person authorised by the Employer for the purpose shall not be valid.

6. Amendment of Bid Documents

- 6.1. At any time prior to the deadline for submission of Bids, the Employer may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid document by issuing clarification(s) and/or amendment(s).
- 6.2. The clarification(s) / amendment(s) (if any) will be notified on MNRE website www.mnre.gov.in. and / or Employer website www.seci.gov.in at least Two (2) days before the proposed date of submission of the Bid. If any amendment is required to be notified within Two (2) days of the proposed date of submission of the Bid, the Bid Deadline may be extended for a suitable period of time.
- 6.3. Employer will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the websites for any such amendment before submitting their Bid.
- 6.4. In case any amendment is notified after submission of the Bid (prior to the opening of Techno-Commercial Bid. Bids received by Employer shall be returned to the concerned Bidders through registered post or courier and it will be for the Bidders to submit fresh Bids as the date notified by the Employer for the purpose.
- 6.5. All the notices related to this Bid which are required to be publicized shall be uploaded on **www.mnre.gov.in** and / or **www.seci.gov.in**

7. Language of Bid

7.1. The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language duly certified by the bidder, in which case, for purposes of interpretation of the Bid, the translation shall govern.

8. Documents Constituting the Bid

- 8.1. The Techno-Commercial bid prepared by the Bidder shall comprise the following components :
 - 8.1.1. Covering Letter as per prescribed Format-1.
 - 8.1.2. General Particulars as per Format-2
 - 8.1.3. Bid Processing fee as per the Bid information sheet
 - 8.1.4. Documentary evidence in support of General eligibility criteria as per ITB Clause 2.1. and Technical eligibility criteria as per ITB Clause 2.2
 - 8.1.5. Bid Bond, as per the prescribed Format-3.
 - 8.1.6. Checklist for Bank Guarantee submission requirements as prescribed in Format-5
 - 8.1.7. Original power of attorney issued by the Bidding Company in favour of the authorized person signing the Bid, in the form attached hereto as Format-6 or standard power of attorney in favour of authorized person signing the Bid. (Power of Attorney must be supplemented by Board Resolution to above effect.). However, Employer may accept general Power of Attorney executed in favour of Authorised signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.
 - 8.1.8. Bidder's composition and ownership structure as per prescribed Format-7
 - 8.1.9. Undertakings from the Financially Evaluated Entity or its Parent Company /Ultimate Parent Company as per Format-8.
 - 8.1.10. Board Resolution of the Parent Company /Ultimate Parent Company of the Bidding Company duly certified by the Company Secretary or Authorized signatory to provide the Performance Bank Guarantee in the event of failure of the Bidding Company to do so.
 - 8.1.11. Blank copy of Bid documents signed and stamped by Authorised signatory on each page.

9. Price Bid

9.1. The Bidder shall indicate in the Price Bid, the unit prices in Rs. (INR) and total Bid prices of the Goods & Services in the prescribed format only, it proposes to supply & commission under the Contract. Bidders shall quote for the complete requirement of Goods and Services specified under the Contract on a single responsibility basis, failing which such Bids will not be taken into account for evaluation and will not be considered for award.

- 9.2. The Bidder's separation of the price components in accordance with ITB Clause 9.1 above will be solely for the purpose of facilitating the comparison of Bids by the Employer and will not in any way limit the Employer's right to contract on any of the terms offered.
- 9.3. Statutory variation in applicable taxes & duties (other than excise duty) shall only be on account of Employer and other prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to ITB Clause 19.
- 9.4. Prices shall be quoted in Indian Rupees.
- 9.5. All applicable taxes & duties (other than excise duty) shall be indicated in Sr No 5 of Price Bid. All identified taxes and duties shall be considered for evaluation of Bid Price. These Taxes & duties shall be reimbursed at actuals against documentary evidence.

10. Bid Bond

- 10.1.The Bidder shall furnish, as part of its Bid, a Bid Bond for the amount of Rupees 2.5 Lakhs as specified in Bid Information Sheet.
- 10.2. The Bid Bond is required to protect the Employer against the act of Commission or omission on part of the Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 10.7.
- 10.3. The Bid Bond shall be denominated in Indian Rupees and shall:
 - i. at the Bidder's option, be in the form of either a demand draft, or a bank guarantee from a Public sector bank/Scheduled Indian Bank in the prescribed format ;
 - ii. A scheduled Indian Bank should have paid up capital (net of any accumulated losses) of Rs. 1,000 Million or above (the latest annual report of the Bank should support compliance paid-up capital requirement);
 - iii. the bank guarantee be substantially in accordance with the form of Bid Bond included in Format-3 of Section-VIII or other form approved by the Employer prior to Bid submission;
 - iv. be payable promptly upon written demand by the Employer in case any of the conditions listed in ITB Clause 10.7 are invoked;
 - v. be confirmed for payment by the branch of the bank giving the bank guarantee at New Delhi.

- vi. be submitted in its original form; copies will not be accepted; and remain valid for a period of 180 from the Bid Dead line, or beyond any period of extension subsequently requested under ITB Clause 11.2.
- 10.4. Any Bid not secured in accordance with ITB Clauses 10.1 and 10.3 above will be rejected by the Employer as nonresponsive, pursuant to ITB Clause 19.
- 10.5. Unsuccessful Bidder's Bid Bond will be discharged/returned as promptly as possible, but not later than 30 days after the expiration of the period of Bid validity period prescribed by the Employer, pursuant to ITB Clause 11.
- 10.6. The successful Bidder's Bid Bond will be discharged upon the Bidder signing the Contract, pursuant to ITB Clause 27, and furnishing the performance security, pursuant to ITB Clause 28.
- 10.7. The Bid security or Bid Bond may be forfeited in any of the following circumstances by the Employer:
 - 10.7.1. if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder ;
 - 10.7.2. in case of a successful Bidder, if the Bidder fails:
 - i. to accept and sign the Contract in accordance with ITB Clause 27; or
 - ii. to furnish performance security in accordance with ITB Clause 28.
 - 10.7.3. If the Bidder withdraws or varies its bid during the period of bid validity specified by the bidder.
 - 10.7.4. If the bidder/his representatives commits any fraud while competing for this Contract.

11. Period of Validity of Bid

- 11.1. Bid shall remain valid for 135 days from the Bid Deadline of Bids prescribed by the Employer, pursuant to ITB Clause 14. A Bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 11.2. In exceptional circumstances, the Employer may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid Bond provided under ITB Clause 10 shall also be suitably extended. A Bidder may refuse the request to extend the validity without forfeiting its Bid Bond. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner.

12. Format and Signing of Bid

- 12.1. The Bidder shall prepare two copies of the Bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate. In the event of any discrepancy between them, the original shall govern.
- 12.2. The "Copy Bid" shall not include the Price Bid.
- 12.3. The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed and stamped by the authorized person The latter authorization shall be indicated by written power-of attorney accompanying the Bid. All pages of the Bid, except for unamended printed literature, shall be signed by the authorized person signing the Bid.
- 12.4. Any interlineations, erasures or overwriting shall be valid only if they are duly signed by the person signing the Bid.

13. Sealing and Marking of Bids

- 13.1. Bid shall be prepared and sealed in the following manner:
 - a. There shall be Cover Envelope, which shall contain two smaller envelopes superscribed as "Techno-Commercial Bid" & "Price Bid".
 - b. The "Techno-Commercial Bid" shall further contain two envelopes containing the documents as indicated below:
 - i. One envelope shall contain Processing fee and Bid Bond of requisite amount and in a format as prescribed in the Bid document. This envelope shall be super scribed with Bid No ____ and date along with "Bid Processing fee & Bid Bond".
 - ii. Other envelope shall contain all the documents listed in ITB Clause 8.1 along with all Literature/Brochure/Technical documents or any other document the Bidder will like to submit in support of his Bid. This envelope shall be superscribed with Bid No __and Date along with "Techno-Commercial Bid".
 - c. The "Price Bid" shall contain only the Price schedule. This envelope shall be superscribed with Bid No ___and date along with Price Bid.
 - d. The Cover envelope shall be superscribed
 - i. Original or Copy as the case may be.
 - ii. Bid No and Date
 - iii. Date of Bid Opening: **19th September,2013 at 3:30p.m**
 - iv. Not to be opened before 1530hrs on **19th September, 2013.**
 - v. Addressed to the Employer at the following address:

Dy. Manager (Contracts)

Solar Energy Corporation of India NBCC Plaza, Tower-1, 4th Floor Pushp Vihar, Sector-V, Saket New Delhi-110 017

- e. All the envelopes shall be sealed properly & shall indicate the Name & address of the Bidder.
- f. If the outer envelope is not sealed and marked as required by ITB Clause 13, the Employer will assume no responsibility for the Bid's misplacement or premature opening.
- g. Telex, cable or facsimile Bids will be rejected.
- h. The Bid must be complete in all technical and commercial respect and should contain requisite certificates, drawings, informative literature etc. as required in the Bid document.
- i. Each page of the Bid document should be signed & stamped. Bids with any type of change or modification in any of the terms/ conditions of this document shall be rejected. If necessary, additional papers may be attached by the Bidder to furnish/ submit the required information.
- j. Any term/condition proposed by the Bidder in his bid which is not in accordance with the terms and conditions of the Bid document or any financial conditions, payment terms, rebates etc. mentioned in Price bid shall be considered as a conditional Bid and will make the Bid invalid.

14. Deadline for Submission of Bids

- a. Bids must be received by the Employer at the address specified under ITB Clause 13.1 (d) no later than the time and date specified in the Bid information sheet. In the event of the specified date for the submission of Bids being declared a holiday for the Employer, the Bids will be received up-to the appointed time on the next working day.
- b. The Employer may, at its discretion, extend this deadline for submission of Bids by amending the Bid documents in accordance with ITB Clause 5, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

15. Late Bids

Any Bid received by the Employer after the deadline for submission of Bids prescribed by the Employer, pursuant to ITB Clause 15, will be rejected and/or returned unopened to the Bidder.

16. Modification and Withdrawal of Bids

- a) The Bidder may modify or withdraw its Bid after the Bid's submission, provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline prescribed for submission of Bids.
- b) The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of ITB Clause 13. A withdrawal notice may also be sent by fax/Email but followed by a signed confirmation copy by post not later than the Bid dead line for submission of Bids.
- c) No Bid shall be modified at the time of Bid opening or subsequent to opening of Techno-Commercial bid.
- d) No Bid shall be withdrawn in the interval between date of opening of Techno-Commercial bid and the expiration of the period of Bid validity specified by the Bidder. Withdrawal of a Bid during this interval may result in the Bidder's forfeiture of its Bid Bond, pursuant to ITB Clause 10.7.

17. Opening of Bids by the Employer

17.1. The Employer will start opening the Cover envelope of the bids received in the presence of Bidders' representatives who choose to attend, at the following location:

Solar Energy Corporation of India Tower-1,4th Floor, NBCC Plaza Pushp Vihar, Sector-V, Saket, New Delhi-110017

The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Technical bid opening being declared a holiday for the Employer, the Bids shall be opened at the appointed time and location on the next working day.

17.2. The Employer shall first open the envelope super scribed as Processing fee and Bid Bond on the date of opening of Techno-Commercial bid. If Bid Bond and processing fee are not found in order then bid of such Bidders shall be summarily rejected. Techno-Commercial Bid of the Bidders whose "Processing fee & Bid Bond" is found to be in order shall then only be processed for evaluation.

- 17.3. The Bidders' names, Bid modifications or withdrawals, Bid prices, and the presence or absence of requisite Bid security and such other details as the Employer, at its discretion, may consider appropriate, will be announced at the opening.
- 17.4. In case it is not possible to open the Bid on the schedule date then a suitable date for this purpose shall be announced or shall be communicated to Bidders by letter/ fax/ email (Either Mode). It is in the interest of the Bidders to send their authorized representatives who are well conversant with the Bid. Only one person from the bidder company is allowed to participate in the opening of the Bids.

18. Clarification of Bids for Evaluation

- 18.1. During evaluation of Bids, the Employer may, at its discretion, ask the Bidder for a clarification of its Bid. The request for clarification and the response shall be in writing and no change in prices or substance of the Bid shall be sought, offered or permitted.
- 18.2. Any query in the form of Email/Fax regarding any clarification required by Employer should be replied by Email/ fax within three (3) days or on or before the date & time prescribed by the Employer in it is clarification letter, failing which Employer shall do its own interpretation and take its own decision on rejection and selection of Bid.

19. Preliminary Examination

- 19.1. The Employer will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and stamped and whether the Bids are otherwise in order.
- 19.2. Arithmetical errors will be rectified on the following basis. 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. If there is a discrepancy between words and figures, the amount written in words will prevail.

20. Zero Deviation Bids

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

21. Evaluation and Comparison of Bids

- 21.1. The Employer will evaluate and compare the Bids which have been determined to be responsive, pursuant to ITB Clause 19. No Bid will be considered if the complete requirements is not included in the Bid.
- 21.2. Price Bids shall be evaluated for Award of Contract.

22. Contacting the Employer

- 22.1. Subject to ITB Clause 18, no Bidder shall contact the Employer on any matter relating to its Bid, from the time of the Bid opening to the time the Contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 22.2. Any effort by a Bidder to influence the Employer in its decisions on Bid evaluation, Bid comparison or contract award may result in rejection of the Bidder's Bid.

23. Award Criteria

- 23.1.Subject to ITB Clause 25 & 26, the Employer will award the Contract to the successful Bidder whose Bid has been determined to be substantially responsive and has been determined as the lowest evaluated Bid including taxes and duties.
- 23.2. The mode of contracting with the Successful Bidder will be as per stipulation outlined in Clause No. 4.0 of the GCC and briefly indicated below:
 - (i) First Contract: For supply of plant and equipment.
 - (ii) Second Contract: For providing all services i.e. inland transportation for delivery at site, inland transit insurance, unloading, storage, handling at site, installation (including civil. Structural steel work & allied work, if applicable) insurance covers other than inland transit insurance, erection, testing & commissioning, conducting Guarantee tests and Annual Maintenance for Four years in respect of all the Goods supplied under the 'First Contract' and all other
 - (iii) Services as specified in the Contract Documents. Both the above Contracts will contain a cross-fall breach clause specifying that breach of one Contract will constitute breach of the other Contract which will confer a right on the Employer to terminate the other Contract also at the risk and the cost of the Contractor.
- 23.3.Employer, however reserves the right to award a composite contract at its sole discretion.

24. Not in Use

25. Employer's Right to Accept Any Bid and to Reject Any or All Bid

25.1. 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 at its sole discretion for whatsoever reasons and without incurring any liability whatsoever to any of the Bidder for any cost expense loss etc.

26. Notification of Award

- 26.1.Prior to the expiration of the period of Bid validity, the Employer will issue Notification of award of Contract to the Successful Bidder in writing by registered letter or by fax/Email, to be confirmed in writing by registered letter, that its Bid has been accepted.
- 26.2. The Notification of award will constitute the formation of the Contract, without the need of any further acceptance by the Bidder.

27. Signing of Contract

- 27.1. At the same time as the Employer informs the successful Bidder that its Bid has been accepted through Notification, the Employer will send the Bidder the Contract Form, incorporating all agreements between the parties.
- 27.2. Within 21 days of receipt of the Notification of Award / Contract Form, the successful Bidder shall sign and date the Contract and return it to the Employer.

28. Performance Security

- 28.1.Within 21 days of the receipt of notification from the Employer for award of work, the successful Bidder shall furnish the Performance Security in accordance with the General Conditions of Contract, in the Performance Security Form provided by the Employer or in other form acceptable to the Employer.
- 28.2.Failure of the successful Bidder to comply with the requirement of ITB Clause 27.2 and ITB Clause 28.1 or shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Bond.
- 28.3.No interest shall be payable by the Employer for sum deposited as Performance Security.

29. Expenses of the Agreement

29.1. The selected Bidder shall pay all the expenses of stamp duties and other requirements for signing the Agreement with Employer.

30. Corrupt or Fraudulent Practices

- 30.1. The Employer requires that Bidders/ Contractors should follow the highest standard of ethics during the procurement and execution of Employer financed contracts. In pursuance of this policy, the Employer:
- 30.2. defines, for the purposes of this provision, the terms set forth as follows :
- 30.3. "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- 30.4. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition;
- 30.5. will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a Employer financed contract if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government/ Employer financed contract.

SECTION III: GENERAL CONDITIONS OF CONTRACT (GCC)

SECTION III – GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

1.1. These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2. Standards

2.1. The Goods &Services supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

3. Use of Contract Documents and Information; Inspection and Audit by the Government

- 3.1. The Contractor shall not, without the Employer's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Employer in connection therewith, to any person other than a person employed by the Contractor in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- 3.2. The Contractor shall not, without the Employer's prior written consent, make use of any document or information enumerated in GCC Clause 3.5 except for purposes of performing the Contract.
- 3.3. Any document, other than the Contract itself, enumerated in GCC Clause 3.5 shall remain the property of the Employer and shall be returned (in all copies) to the Employer on completion of the Contractor's performance under the Contract if so required by the Employer.
- 3.4. The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

3.5. Patent Rights

The Contractor shall indemnify the Employer against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods and services or any part thereof in India.

4. Construction of the Contract

The Contracts to be entered into between the Employer and the Successful Bidder shall be as under:

'First Contract' for supply of all the Goods.

'Second Contract' for providing all services i.e. loading, inland transportation for delivery at site, inland transit insurance, unloading, storage, handling at site, installation, insurance covers other than inland transit insurance, Erection, testing and commissioning including carrying out guarantee tests and Annual Maintenance for Five years in respect of all the Goods supplied under the 'First Contract' and all other services specified in the Contract Documents.

The award of separate Contracts shall not in any way dilute the responsibility of the Contractor for the successful completion of the Project/Works as per Contract Documents and a breach in one contract shall automatically be construed as a breach of the other contract(s) which will confer a right on the Employer to terminate the other Contract(s) also at the risk and the cost of the Contractor.

5. Performance Security

- 5.1. Within 21days of receipt of the Notification of Award from the Employer, the Contractor shall furnish Performance Security to the Employer for an amount of 10% of the Contract Price valid for 60 days after the Warrant/ Guarantee period.
- 5.2. The proceeds of the performance security shall be payable to the Employer as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Contract.
- 5.3. The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:
 - 5.3.1. a demand draft, or a bank guarantee from a Public sector bank/Scheduled Indian Bank ;
- 5.4. The Bank guarantee should from a scheduled Indian Bank which should have paid up capital (net of any accumulated losses) of Rs. 1,000 Million or above (the latest annual report of the Bank should support compliance of paid up capital requirement).
- 5.5. The Performance Security will be discharged by the Employer and returned to the Contractor not later than 60 days following the date of completion of the

Contractor's performance obligations, including any Warranty obligations, under the Contract.

5.6. In the event of any contract amendment, the Contractor shall, within 20 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract as amended for 60 days after the completion of performance obligations including Warranty obligations.

6. Inspections and Tests

6.1. Inspection of Goods

- 6.1.1. The Employer or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Employer. (SCC and the Technical Specifications shall specify what inspections and tests the Employer requires and where they are to be conducted). The Employer shall notify the Contractor in writing in a timely manner of the identity of any representatives retained for these purposes.
- 6.1.2. The inspections and tests may be conducted on the premises of the Contractor or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Contractor or its subcontractor(s), all reasonable Works and assistance, including access to drawings and production data shall be furnished to the inspectors at no cost to the Employer.
- 6.1.3. Should any inspected or tested Goods fail to conform to the specifications, the Employer may reject and the Contractor shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Employer.
- 6.1.4. The Employer's right to inspect, test and, where necessary, reject the Goods after the arrival at Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Employer or its Representative prior to the Goods shipment.
- 6.1.5. Nothing in GCC Clause 6 shall in any way release the Contractor from any warranty or other obligations under this Contract.

6.1.6. Manuals and Drawings

6.1.6.1. Before the Goods and Services are taken over by the Employer, the Contractor shall supply operation and maintenance manuals together with drawings of the goods and equipment. These shall be in such detail as will

enable the Employer to operate, maintain, adjust and repair all parts of the equipment as stated in the specifications.

- 6.1.6.2. The manuals and drawings shall be in the English ruling language and in such form and numbers as stated in the contract.
- 6.1.6.3. Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purpose of taking over until such manuals and drawings have been supplied to the Employer.
- 6.1.6.4. It shall be the obligation of the Contractor to train and familiarise the designated person by the Employer in regard to the operation manual and drawings.

6.2. Inspection of Works

- 6.2.1. The Engineer-in-Charge and / or its Representatives will have full power and authority to inspect the Work at any time wherever in progress either on the Site or at the Contractor's premises/workshops wherever situated, premises/ workshops of any person, firm or corporation where Work in connection with the Contract may be in hand or where materials are being or are to be supplied, and the Contractor shall afford or procure for the Engineer-in-Charge every facility and assistance to carry out such inspection. The Contractor shall, at all time during the usual working hours and at all other time at which reasonable notice of the intention of the Engineer-in-Charge or his representative to visit the Work shall have been given to the Contractor, either himself be present or receive orders and instructions, or have a responsible agent duly accredited in writing, present for the purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself. The Contractor shall give not less than seven days' notice in writing to the Engineer-in-Charge before covering up or otherwise placing beyond reach of inspection and measurement of any work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at Contractor's expense for carrying out such measurement or inspection.
- 6.2.2. No material shall be dispatched from the Contractor's stores before obtaining the approval in writing of the Engineer-in-Charge. The Contractor is to provide at all time during the progress of the Work and the operation & maintenance period, proper means of access with ladders, gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurements of the Work by the Engineer-in-Charge.

6.2.3. The Contractor shall make available to the Engineer-in-Charge free of cost all necessary instruments and assistance in checking or setting out of Work and in the checking of any Work made by the Contractor for the purpose of setting out and taking measurements of Work.

7. Packing

- 7.1. The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling Works at all points in transit.
- 7.2. The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Employer.

8. Delivery and Documents

8.1. Delivery of the Goods shall be made by the Contractor in accordance with the terms specified by the Employer at the project site to the Representative as nominated by Employer for each Site. The details of shipping and/or other documents to be furnished by the Contractor are specified in SCC.

9. Insurance

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

10. Transportation, Demurrage Wharfage, Etc.

- 10.1. Contractor is required under the Contract to transport the Goods to place of destination defined as Site. Transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Contractor, and the related cost shall be included in the Contract Price.
- 10.2. All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be on the account of Contractor.

11. Materials to be supplied by Contractor:

- 11.1. The Contractor shall procure and provide within the Contract price the whole of the materials required for the construction including steels, cement and other building materials, tools, tackles, construction plant and equipment for the completion and maintenance of the Work and shall make his own arrangement for procuring such materials and for the transport thereof. The Employer may give necessary recommendation to the respective authority if so desired by the Contractor but assumes no further responsibility of any nature. The Employer will insist on the procurement of materials which bear ISI stamp and/or which are supplied by reputed suppliers.
- 11.2. The Contractor shall properly store all materials either issued to him or brought by him to the Site to prevent damages due to rain, wind, direct exposure to sun, etc. as also from theft, pilferage, etc. for proper and speedy execution of his works. The Contractor shall maintain sufficient stocks of all materials required by him. Any loss of material on the above part shall be accrue to the Contractor.

12. Incidental Services

- 12.1. The Contractor may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- 12.1.1. furnishing of tools spares required for assembly and/or maintenance of the supplied Goods;
- 12.1.2. furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- 12.1.3. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Contractor of any warranty obligations and scope of services under this Contract; and
- 12.1.4. Training of the Employer's personnel and one or two persons from the beneficiaries groups are imparted training, at the Contractor's plant and/or on-site, in assembly, Operation & maintenance and/or repair of the supplied Goods.
- 12.1.5. Installation of 50 Nos Permanent Display Boards of approximate size 1.25m X 0.75m at various places as directed by Employer and providing sufficient No. of Hand bills & banners etc,.
- 12.1.6. Each solar street light system (SSLS) shall be identifiable with unique identification No. in a manner to be decided by Engineer-In-Charge.

13. Warranty

- 13.1. The Contractor warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Contractor further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Employer's Specifications) or from any act or omission of the Contractor, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 13.2. This warranty of all the Works shall remain valid for 1 year after the Commissioning. The Contractor shall, in addition, comply with the performance and/or guarantees specified under the Contract. If for reasons attributable to the Contractor, these guarantees are not attained in whole or in part, the Contractor shall:
 - 13.2.1. make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC Clause 2; OR
 - 13.2.2. pay liquidated damages to the Employer with respect to the failure to meet the contractual guarantees.
- 13.3. The Employer shall notify the Contractor in writing of any claims arising under this warranty.
- 13.4. Upon receipt of such notice, the Contractor shall, within the period of 15 days and with all reasonable speed, repair or replace the defective Goods or parts thereof, free of cost at the ultimate destination. The Contractor shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Employer for the replaced parts/goods thereafter. In the event of any correction of defects or replacement of defective material during the Warranty period, the Warranty for the corrected or replaced material shall be extended to a further period.
- 13.5. If the Contractor, having been notified, fails to remedy the defect(s) within 15 days, the Employer may proceed to take such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which the Employer may have against the Contractor under the Contract. The performance guarantee and liquidated damaged be entitled to be recovered without prejudice to other rights of the Employer.

14. Payment

- 14.1. The method and conditions of payment to be made to the Contractor under this Contract shall be as specified in the SCC and Section-V.
- 14.2. The Contractor's request(s) for payment shall be made to the Employer in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 8, and upon fulfilment of other obligations stipulated in the contract.
- 14.3. Payments shall be made promptly by the Employer but in no case later than Thirty (30) days after submission of the invoice or claim by the Contractor.
- 14.4. Payment shall be made in Indian Rupees.
- 14.5. In the event of excess release of funds to Contractor, Employer shall demand and recover from Contractor such excess disbursements and Contractor would be liable to refund the excess disbursements within a period of 10 days of ascertainment of Final amount.
- 14.6. Income Tax & any other taxes as applicable shall be deducted at source for all items.

15. Prices

15.1. Prices payable to the Contractor as stated in the contract shall be firm during the performance of the contract and no escalation for whatsoever reason shall be admissible under the Contract.

16. Abnormal Rates:

16.1. The Bidder is expected to quote rate for each item after careful analysis of cost involved for the performance of the completed item considering all specifications and Conditions of Contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. In case it is noticed that the rates quoted by the Bidder for any item are unusually high or unusually low, it will be sufficient cause for the rejection of the Bid unless the Employer is convinced about the reasonableness after scrutiny of the analysis for such rate(s) to be furnished by the Bidder (on demand).

17. Contract Amendments

17.1. Subject to GCC Clause 17, no variation in or modification of the terms of the Contract shall be made except by amendment issued by Employer through MNRE or Employer website.

18. Assignment

18.1. The Contractor shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Employer's prior written consent.

19. Time of Performance

- 19.1. The Work covered by this Contract shall be completed in stages on or before the dates as mentioned in the Time Schedule of Completion of Work as defined in SCC Clause 14. The Contractor should bear in mind that time is the essence of this agreement.
- 19.2. The Contractor shall submit a detailed PERT network /Bar chart consisting of adequate number of activities covering various key phases of the Work such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days from the date of signing of the Contract form. This network shall also indicate the interface Works to be provided by the Employer and the dates by which such Works are needed.
- 19.3. Contractor shall discuss the PERT network/Bar chart so submitted with the Engineer-in-Charge and the agreed network which may be in the form as submitted with the Engineer-in-Charge or in revised form in line with the outcome of discussions shall form part of the Contract. During the performance of the Contract, if in the opinion of the Engineer-in-Charge proper progress is not maintained, suitable changes shall be made in the Contractor's operation to ensure proper progress. The above PERT network/Bar chart shall be reviewed periodically and reports shall be submitted by the Contractor as directed by Engineer-in-Charge.

20. Delays in the Contractor's Performance

- 20.1. Delivery of the Goods and performance of the Services shall be made by the Contractor in accordance with the time schedule specified by the Employer in the Bid Document.
- 20.2. If at any time during performance of the Contract, the Contractor or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Contractor shall promptly notify the Employer in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Contractor's notice, the Employer shall evaluate the situation and may, at its discretion, extend the Contractor's
time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

20.3. Delay by the Contractor in the performance of its delivery obligations shall render the Contractor liable to the imposition of liquidated damages pursuant to GCC Clause 21, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.

21. Liquidated Damages

21.1. If the Contractor fails to deliver any or all of the Goods and to complete the Work within the period(s) specified in the Contract, the Employer shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.5% of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10% of the Contract Price. Once the maximum is reached, the Employer may consider termination of the Contract pursuant to GCC Clause 22.

22. Termination for Default

- 22.1. The Employer may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Contractor, terminate the Contract in whole or part:
- 22.1.1. if the Contractor fails to deliver any or all of the Goods and complete the Work within the period(s) specified in the Contract, or within any extension thereof granted by the Employer pursuant to GCC Clause 20; or
- 22.1.2. if the Contractor fails to perform any other obligation(s)/duties under the Contract.
- 22.1.3. If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- 22.2. In the event the Employer terminates the Contract in whole or in part, pursuant to GCC Clause 22.1, the Employer may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Contractor shall be liable to the Employer for any excess costs for such similar Goods or Services. However, the Contractor shall continue the performance of the Contract to the extent not terminated.

23. Contractor remains liable to pay compensation if action not taken

23.1. In any case in which any of the powers conferred upon the Engineer-in-Charge by any of the Clause of Contract thereof shall have become

exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any further case of default by the Contractor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his Contract Performance Security, and the liability of the Contractor for past and future compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force the power under above Sub-Clauses vested in him under the preceding clause he may, if he so desired, take possession of all or any tools, and plants, materials and stores in or upon the works or the site thereof belonging to the Contractor or procured by him and intended to be used for the execution of the Work or any part thereof paying or allowing for the same in account at the Contract rates or in case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final, otherwise the Engineer-in-Charge may give notice in writing to the Contractor or his clerk of the works, foreman or other Authorized agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the Contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

24. Discrepancies between instructions:

24.1. Should any discrepancy occur between the various instructions furnished to the Contractor, his agent or staff or any doubt arises as to the meaning of any such instructions or should there be any misunderstanding between the Contractor's staff and the Engineer-in-Charge's staff, the Contractor shall refer the matter immediately in writing to the Engineer-in-Charge whose decision thereon shall be final and conclusive and no claim for losses alleged to have been caused by such discrepancies between instructions, doubts, or misunderstanding shall in any event be admissible.

25. Action where no specification is issued:

25.1. In case of any class of Work for which there is no Specification supplied by the Employer as mentioned in the Bid Documents, such Work shall be carried out in accordance with Indian Standard Specifications and if the Indian Standard Specifications do not cover the same, the Work should be carried out as per standard Engineering Practice subject to the approval of the Engineer-in-Charge.

26. Force Majeure

26.1. Notwithstanding the provisions of GCC Clauses 20, 21, 22, the Contractor shall not be liable for forfeiture of its performance security, liquidated damages

or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- 26.2. For purpose of this clause, "Force majeure" means an event beyond the control of the Contractor or its sub-contractors and not involving the Contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by Employer and its decision shall be final and binding on the Contractor and all other concerned.
- 26.3. In the event that the Contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during

the force majeure period. In the event that such force majeure extends beyond six months, Employer has the right to terminate the contract in which case, the contractual guarantees and warrantees shall be refunded to him.

26.4. If a force majeure situation arises, the Contractor shall notify Employer in writing promptly, not later than 14 days from the date such situation arises. The Contractor shall notify Employer not later than 3 days of cessation of force majeure conditions. After examining the cases, Employer shall decide and grant suitable additional time for the completion of the Work, if required.

27. Work in monsoon and dewatering:

- 27.1. Unless otherwise specified elsewhere in the Bid, the execution of the Work may entail working in the monsoon also. The Contractor must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such Work in monsoon.
- 27.2. During monsoon and other period, it shall be the responsibility of the Contractor to keep the construction work site free from water at his own cost.

28. Termination for Insolvency

28.1. The Employer may at any time terminate the Contract by giving written notice to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Employer.

29. Termination for Convenience

- 29.1. The Employer, by written notice sent to the Contractor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Employer's convenience, the extent to which performance of the Contractor under the Contract is terminated, and the date upon which such termination becomes effective.
- 29.2. The Goods that are complete and ready for shipment within 15 days after the Contractor's receipt of notice of termination shall be accepted by the Employer at the Contract terms and prices. For the remaining Works, the Employer may elect:
 - 29.2.1. to have any portion completed and delivered at the Contract terms and prices; and/or
 - 29.2.2. to cancel the remainder and pay to the Contractor an agreed amount for partially completed Goods and for materials and parts previously procured and Services rendered by the Contractor.

30. Payment if the contract is terminated

- 30.1. Notwithstanding anything herein above the Contract shall be terminated as per Bid pursuant to Clause no. 20, 22 & 29 of GCC, the Contractor shall be paid by the Employer in so far as such amounts or items shall not have already been covered by payments of amounts made to the Contractor for the Work executed and accepted by Engineer-in-Charge prior to the date of termination at the rates and prices provided for in the Contract.
- 30.2. The Contractor will be further required to transfer the title and provide the following in the manner and as directed by the Employer.
 - a) Any and all completed Works.
 - b) Such partially completed Work including drawings, information and Contract rights as the Contractor has specially performed, produced or acquired for the performance of the Contractor.

31. Suspension of Works:

31.1. The Contractor shall, if ordered in writing by the Engineer-in-Charge, or his representative, temporarily suspend the Works or any part thereof for such written order, proceed with the Work therein ordered to be suspended until, he shall have received a written order to proceed therewith. The Contractor shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the Works aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of

the Works as aforesaid will be granted to the Contractor should he apply for the same provided that the suspension was not consequent to any default or failure on the part of the Contractor.

32. No waiver of rights:

32.1. Neither the inspection by the Employer or any of their officials, employees, or agents nor any order by the Employer for payment of money or any payment for or acceptance of the whole or any part of the Work by the Employer nor any extension of time, nor any possession taken by Employer shall operate as a waiver of any provision of the Contract, or of any power herein reserved to the Employer, or any right to damages herein provided, nor shall any waiver of any breach in the Contract be held to be a waiver of any other subsequent breach.

33. Certificate not to affect right of employer and liability of contractor :

33.1. No interim payment certificate(s) issued by the Engineer-in-Charge of the Employer, nor any sum paid on account by the Employer, nor any extension of time for execution of the Work granted by Employer shall affect or prejudice the rights of the Employer against the Contractor or relieve the Contractor of his obligations for the due performance of the Contract, or be interpreted as approval of the Work done or of the equipment supplied and no certificate shall create liability for the Employer to pay for alterations, amendments, variations or additional Works not ordered, in writing, by Employer or discharge the liability of the Contractor for the payment of damages whether due, ascertained, or certified or not or any sum against the payment of which he is bound to indemnify the Employer.

34. Settlement of Disputes

- 34.1. If any dispute of any kind whatsoever shall arise between the Employer and Contractor / Contractor in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, whether the parties shall seek to resolve any such dispute or difference by mutual consultation.
- 34.2. If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party of its intention to commence arbitration as hereafter provided, as to the matter in dispute, & no arbitration may be commenced unless such notice is given. Any dispute in respect of which a notice of intention to commence arbitration has been given in accordance to with GCC Sub Clause 34.2, shall be finally settled by arbitration.

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

34.3.1. In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India incharge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional 10 Secretary, when so authorized by the Law Secretary, The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

34.4. In case the Contractor is not a Public Sector Enterprise or a Government Department.

- 34.4.1. In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.
- 34.4.2. The Employer and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within twenty (20) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineer-in-Charges.
- 34.4.3. If one party fails to appoint its arbitrator within thirty-two (32) days after the other party has named its arbitrator, the party 11 which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
- 34.4.4. If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in GCC Clause 37 (Applicable Law) and a substitute shall be appointed in the same manner as the original arbitrator.
- 34.4.5. Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be New Delhi.

- 34.4.6. The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- 34.4.7. The arbitrator(s) shall give reasoned award.
 - 34.5. Notwithstanding any reference 12 to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.

35. Limitation of Liability

- 35.1. Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to GCC Clause 3.5,
- 35.1.1. the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer; and
- 35.1.2. the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

36. Governing Language

36.1. The contract shall be written in English language. Subject to GCC Clause 37, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

37. Applicable Law

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

38. Notices

38.1. Any notice given by one party to the other pursuant to this Contract shall be sent to other party in writing or by email and confirmed in writing to the other Party's address specified in SCC.

38.2. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

39. Taxes and Duties

- 39.1. Except as otherwise specifically provided in the Contract, the Contractor shall bear & pay all taxes, duties, levies and charges including entry tax, service tax if applicable in connection with the Work to be completed under this contract.
- 39.2. Notwithstanding the provisions stated in GCC Clause 39.1 above, the Employer shall reimburse to Contractor all applicable taxes & duties (other than Excise Duty) indicated in Price Bid (concessional sales tax in case Form C is issued by the Employer or its Representative(s)) as applicable at the time of delivery in respect of direct transaction between Employer and Contractor (excluding taxes, duties & levies on bought out items & raw materials) imposed on the contracted goods against the documentary evidence. Any surcharge in lieu of Sales tax shall however not be reimbursed by the Employer. Any taxes & duties on inland transportation, insurance & other Incidental Services shall be to the Contractor's account and no separate claim in this regard will be entertained by the Employer.

40. Design and Engineering

40.1. Specifications and Drawings

The Contractor shall execute the basic and detailed design and the Engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good Engineering practice.

The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Engineer-in-Charge or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the contractor by or on behalf of the Employer.

40.2. Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied after approval by the Employer.

41. Defect Liability

- 41.1. The Contractor warrants that the Works / Projects or any part thereof shall be free from defects in the design, Engineering, materials and workmanship of the Plant and Equipment supplied and of the Work executed.
- 41.2. The Defect Liability Period shall be twelve (12) months from the date of completion of Operational Acceptance of the Project/Plant unless otherwise specified in the SCC.
- 41.3. If during the Defect Liability Period any defect should be found in the design, Engineering, materials and workmanship of the Plant and Equipment supplied or of the Work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good (as the Contractor shall, at its discretion, determine) such defect as well as any damage to the Works /Projects / Plant caused by such defect.

42. Insurance

Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below for an amount not less than the Contract Price. The identity of the insurers and the form of the polices shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.

a. Cargo Insurance During Transport

Covering loss or damage occurring while in transit from the Contractor's or Subcontractor's works or stores until arrival at the Site, to the Plant and Equipment (including spare parts if any thereof) and to the Contractor's Equipment if any.

b. Installation All Risks Insurance

Covering physical loss or damage to the Plant & Equipment at the Site, occurring during execution of work and prior to Completion of the Project/Plant, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the Defect Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defect Liability Period.

c. Third Party Liability Insurance

Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property occurring in connection with the supply and installation of the Works.

d. Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.

e. Workers' Compensation & Employer's Liability

In accordance with the statutory requirements applicable in India.

f. Employer in no case shall be responsible for providing any security/storage for the material /equipment's lying at Site during execution of Work. Under the Contract, Contractor shall be responsible for any loss or damage until the system is taken over.

43. Other Conditions

- 43.1. The Contractor shall not transfer, assign or sublet the Work under this contract or any substantial part thereof to any other party without the prior consent of Employer in writing.
- 43.2. The Contractor or its subcontractors shall not display the photographs of the Work and not take advantage through publicity of the Work without written permission of Employer.
- 43.3. The Contractor or its subcontractors shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.
- 43.4. Employer will not be bound by any Power of Attorney granted/ issued by the Contractor or its subcontractors or by any change in the composition of the firm made during or subsequent to the execution of the contract. However recognition to such Power of Attorney and change (if any) may be given by Employer after obtaining proper legal advice, the cost of which will be chargeable to the Contractor concerned.

43.5. Successors and Assigns:

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

43.6. The majority and controlling shareholding in the Contractor selected shall be maintained with the promoter shareholders of the Contractor without the approval of the Employer.

43.7. Severability:

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

43.8. Counterparts:

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

43.9. Rights & remedies under the contract only for the parties:

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

43.10. Road permits:

Arranging for any road permit, wherever required to deliver the good to Employer or its nominee anywhere in India shall be the sole responsibility of Contractor. Employer may however facilitate the Contractor without any obligation on his part in getting such Road permit.

44. Statutory Acts

- 44.1. All legal formalities/clearances are to be obtained by the Contractor regarding the execution of the said Work.
- 44.2. The Contractor shall comply with the all the Acts & rules and regulations, laws and by-laws framed by State/ Central Government/ organization. SECI shall have no liabilities in this regard.

45. Local Conditions

45.1. The intending Bidders shall be deemed to have visited the Site and familiarized submitting the Bid. Non-familiarity with the Site conditions will not be considered a reason either for extra claims or for not carrying out the Works in strict conformity with the Technical Specifications or for any delay in performance.

SECTION IV:

SPECIAL CONDITIONS OF CONTRACT

SECTION IV: SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1. Definitions (Section I)

2. Inspection and Tests (GCC Clause 6)

3. Delivery and Documents (GCC Clause 8)

Upon delivery of the Goods, the Contractor shall notify the Employer and the insurance company by fax or by writing the full details of the shipment including contact number, railway receipt number and date, description of goods, quantity, name of the consignee etc.

The Contractor shall mail the following documents to the Employer with a copy to the insurance company:

- a. Four Copies of the Contractor invoice showing contract number, goods' description, quantity, unit price, total amount;
- Railway receipt/Transporter receipt/acknowledgment of receipt of goods from the consignee(s);
- c. Four Copies of packing list identifying the contents of each package;
- d. Insurance Certificate;
- e. Manufacturer's/Supplier's warranty certificate;
- f. Inspection Certificate issued by the nominated inspection agency, and the Contractor's factory inspection report; and

The above documents shall be received by the Employer before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Contractor will be responsible for any consequent expenses.

4. Incidental Services (GCC Clause 12)

5. Payment (GCC Clause 14)

For Supply of Plant and Equipment

- 5.1 Thirty Percent (30%) of the total Supply component as Initial Advance Payment on:
 - (i) Acceptance of Notification of Award and Signing of the Contract Agreement.
 - (ii) Submission of an unconditional Advance Bank Guarantee covering the advance amount which shall be initially kept valid upto (Sixty) 60 days beyond the schedule date for successful Completion of the Project. However, in case of delay in completion of Project, the validity of this Bank Guarantee shall be extended by the period of such delay. Proforma of Bank Guarantee is enclosed in Section-VIII-Format-10
 - (iii) Submission of an unconditional Bank Guarantee(s) towards Contract Performance Security(s) in respect of all Contracts and valid upto (Sixty) 60 days after the end of Defects Liability Period of all the equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section-VIII Format-4
- 5.2 Twenty Percent (60%) of Supply component of the Contract Price on Completion of Work & issuance of completion certificates.
- 5.3 Ten Percent (10%) of supply component of the Contract Price shall be paid on successful completion of guarantee Test/Inspection/Quality checks by the Engineer in charge/Representative & handing over of the system & after submission of a Performance Bank Guarantee equivalent to 10% of the Contract Price valid till 60 days after completion of Annual Maintenance Contract of 4 years.

5.4 For Local Transportation

Hundred Percent (100%) of Local Transportation (including inland insurance charges) for the equipment covered under the contract shall be paid to the Contractor on receipt of all major equipment at site and on production of invoices by the Contractor and verification and certification by the Engineer in charge of having the equipment received and stored at site. The aggregate of all such prorate payments shall, however, not exceed the total amount identified in the Contract for Local Transportation.

5.5 For Installation Services

The Installation Services component of the Contract Price shall be paid as under:

- (I) Eighty percent (80%) of total Installation price of the contract shall be paid on successful Completion of Work and issuance of completion certificate by Engineer in charge.
- (II) Twenty Percent (20%) of the total installation price of the contract shall be paid on successful completion of Guarantee Tests/Inspection/ Quality checks by the Engineer in charge and taking over of the system by the Representative.

5.6 For Annual Maintenance Contract

- 25 % of the yearly Annual Maintenance contacts charges after end of each quarter on furnishing of a Certificate from Employer Representative and clearance by Engineer-in-Charge.
 Note:
 - a. No price escalation due to any reason except the statutory variation in all applicable taxes & duties (other than excise duty) as indicated in Sr No 5 of Price Bid shall be considered by Employer during the validity/ extended validity of the contract agreement.
 - b. <u>The bank guarantees should be made from nationalized bank/scheduled</u> <u>Indian bank like in the case of other bank guarantees viz Bid Bond or</u> <u>PBG.(Refer ITB Clause 10.3(i) &10.3(ii) for details)</u>
 - c. <u>No interest shall be payable by the Employer for sum deposited as Advance</u> <u>Bank guarantee or any other amount due to the Contractor.</u>

6. Settlement of Disputes (GCC Clause 34)

7. Legal Jurisdiction

Any dispute arising between the Contractor and the Employer under the contract or in connection with the contract shall be subjected to the jurisdiction of courts at New Delhi only.

8. Notices (GCC Clause 38)

For the purpose of all notices, the following shall be the address of the Employer and Contractor.

Employer:

Sr. Manager (PV) Solar Energy Corporation of India NBCC Plaza Tower-1,4th floor, Pushp Vihar, Sector-V, Saket, New Delhi-110 017

Contractor: (To be filled in at the time of Contract signature)

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9. Right to use defective Solar Street Lighting System:

If after delivery, acceptance, Installation & Commissioning and within the guarantee and warranty period, the operation or use of the solar Street Lighting system proves to be unsatisfactory, the Employer shall have the right to continue to operate or use such solar street lighting system until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Employer's operation.

10. Contractor Integrity:

The Contractor is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state-of-the-art methods and economic principles and exercising all means available to achieve the performance specified in the Contract.

11. Contractor's Obligations:

The Contractor is obliged to work closely with the Employer's staff, act within its own authority and abide by directives issued by the Employer /Representative and implementation activities. The Contractor will abide by the job safety measures prevalent in India and will free the Employer from all demands or responsibilities arising from accidents or loss of life the cause of which is the Contractor's negligence. The Contractor will pay all indemnities arising from such incidents and will not hold the Employer responsible or obligated.

The Contractor is responsible for managing the activities of its personnel or subcontracted personnel and will hold itself responsible for any misdemeanours. The Contractor will treat as confidential all data and information about the Employer, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Employer.

12. Patent Rights:

In the event of any claim asserted by a third party of infringement of copyright, patent, trademark or industrial design rights arising from the use of the Goods or any part

thereof in the Employer's country, the Contractor shall act expeditiously to extinguish such claim. If the Contractor fails to comply and the Employer is required to pay compensation to a third party resulting from such infringement, the Contractor shall be responsible for the compensation including all expenses, court costs and lawyer fees. The Employer will give notice to the Contractor of such claim, if it is made, without delay.

13. Spare Parts

The Contractor shall make arrangement to maintain a sufficient stock of essential spares and consumables that may be required during maintenance /breakdown of the system to ensure proper maintenance of the system promptly.

14. Time of completion

- 14.1. The entire Scope of Work shall be executed strictly as per the Time Schedule specified herein below.
 - 14.1.1. The entire Design, Manufacturing, Supply, Installation, Testing & Commissioning shall be completed in **3 months** from the date of Notification of Award.
- 14.2. The period of construction given in Time Schedule includes the time required for mobilisation as well as testing, rectifications if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.
- 14.3. A joint programme of execution of the Work will be prepared by the Engineerin-Charge and Contractor based on priority requirement of this project. This programme will take into account the time of completion mentioned in Sub clause 14.1.1 above and the time allowed for the priority Works by the Engineer-in-Charge.
- 14.4. Monthly/Weekly construction programme will; be drawn up by the Engineer-in-Charge jointly with the Contractor, based on availability of Work fronts and the joint construction programme as per Sub Clause 14.2 above. The Contractor shall scrupulously adhere to these targets /programmes by deploying adequate personnel, construction tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievements the decision of the Engineer-in-Charge will be final and binding on the Contractor.

15. Risk, Property and Transfer of Title

15.1. Without affecting its rights to reject the Goods, the property (legal and beneficial) and risk in the Goods passes to the Employer or its Representative on Delivery (unless payment, whether in whole or in part, for the Goods is

made prior to Delivery, in which case title to the Goods shall pass to the Company once payment has been made) .The decision of Engineer –in-charge in this case shall be final and binding.

15.2. After the award of contract, Contractor shall ensure that the goods supplied to the different beneficiaries of SECI should be in title of Power Finance Corporation (PFC) or Solar energy Corporation of India (Employer) as approved by Engineer –in-charge.

16. Four Years Annual Maintenance Contract (AMC)

16.1. Annual Maintenance Contract (AMC)

- 16.1.1. The Contact details (Name, Mobile number, Email, Address) to be declared to all the users for repair and maintenance of the system during AMC.
- 16.1.2. The Annual Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including Single fixture along with the mounting arrangement, etc.) of Solar Street Lighting Systems for 4 years from the date of completion of one year warranty period of complete system.
- 16.1.3. The maintenance service provided shall ensure proper functioning of the LED based Solar Street Lighting system as a whole. All preventive/routine maintenance and breakdown/corrective maintenance required for ensuring maximum uptime shall have to be provided by the Contractor. Accordingly, the Annual Maintenance Contract (AMC) shall have two distinct components as described below:

16.1.3.1. Preventive/Routine Maintenance

Preventive & Routine Maintenance of all the components of the system shall be carried out by the Contractor as recommended by the manufacture/Supplier of the component/sub system but at least once in every two months. This shall include cleaning of module surface, maintenance of other equipment's or any other adjustment required by the system, checking of all electrical connections, wherever required or any other activity that may be required for proper functioning of the system.

16.1.3.2. Breakdown/Corrective Maintenance:

Whenever a complaint is lodged by the user, the bidder shall attend to the same within a reasonable period of time (2 days). In case if the material or major component needs to be rectified/ replaced shall be corrected or replaced within a period not exceeding 7 (seven) days from the date of complaint.

- 16.1.3.3. The bidder shall maintain the following Works at the local Service Centre for ensuring highest level of Services to the end user
- 16.1.3.3.1. Adequately trained manpower, specifically trained by the bidder for carrying out the service activities.
- 16.1.3.3.2. Adequate provisions for record keeping, which shall inter-alia, include the following

(a) Details of system supplied within the command area of the service station including full name and address of end user, system and sub-system serial numbers and records of routine maintenance carried out (duly signed by the end user).

- (b) History record sheets of maintenance done.
- 16.1.4. Adequate spares for ensuring least down time of an individual system.
- 16.1.5. The Service Centre shall send summary service reports to Employer on half yearly basis. These reports shall include the following information:
 - (a) Number of systems covered by the Service Centre
 - (b) Number of systems working satisfactorily on the reporting date
 - (c) Number of complaints received during the period of reporting
 - (d) Number of complaints attend during the period of reporting
 - (e) Major cause of failure, as observed

(f) Major replacement made during the reporting period Separate report shall be submitted for each type of systems manufacture wise in case the service centre caters to the requirement of more than one manufacture

- 16.1.6. The records maintained during the AMC period shall be available time to time to Employer.
- 16.1.7. The date of AMC maintenance period shall begin on the date of actual completion of warranty period.
- 16.1.8. Bidder shall furnish details of infrastructure that are presently available for establishing of Service Centres.

SECTION V:

CERTIFICATES AND PAYMENTS

1. CERTIFICATES AND PAYMENTS

1.1. Schedule of rates and payments:

i) Contractor's Remuneration

The price to be paid by the Employer to Contractor for the whole of the Work to be done and for the performance of all the obligations undertaken by the Contractor under the Contract documents shall be ascertained by the application of the respective rates or Price Bid and payment to be made accordingly for the Work actually executed and approved by the Engineer-in-Charge.

ii) Schedule of rates or Price Bid to be inclusive:

The prices/rates quoted by the Contractor shall remain firm till the issue of Final Certificate and shall not be subject to escalation. Schedule of Rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completing and handing over the Work to the Employer or the Agency nominated for the purpose by the Employer. The Contractor shall be deemed to have known the nature, scope, magnitude and the extent of the Work and materials required though the Contract document may not fully and precisely furnish them. Bidder's shall make such provision in the Schedule of Rates as he may consider necessary to cover the cost of such items of Work and materials as may be reasonable and necessary to complete the Work. The opinion of the Engineer-in-Charge as to the items of Work which are necessary and reasonable for completion of Work shall be final and binding on the Contractor, although the same may not be shown on or described specifically in Contract documents. Generality of this present provision shall not be deemed to cut down or limit in any way because in certain cases it may and in other cases it may not be expressly stated that the Contractor shall do or perform Work at his own cost or without addition of payment or without extra charge or words to the same effect or that it may be stated or not stated that the same are included in and covered by the Price Bid.

iii) Price Bid To cover construction equipment's, materials, Labour etc.:

Without in any way limiting the provisions of the preceding sub-clause the Schedule of Rates or Price Bid shall be deemed to include and cover the cost of all construction equipment, temporary work (except as provided for herein), materials, labour, insurance, consumables, stores and appliances to be supplied by the Contractor and all other matters in connection with each item in the Schedule of Rates or Price Bid and the execution of the Work or any portion thereof finished, complete in every respect and maintained as shown or described in the Contract documents or as may be ordered in writing during the continuance of the Contract.

iv) Price Bid to cover royalties, rents and claims:

The Price Bid (i.e., Value of Contract) shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, patent or otherwise incorporated in or used in connection with the Work, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the Work and shall include an indemnity to the Employer which the Contractor hereby gives against all actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use on the Work of any such articles, processes or materials, octroi or other municipal or local Board Charges, if levied on materials, equipment or machineries to be brought to site for use on Work shall be borne by the Contractor.

v) Price Bid to cover Taxes and Duties:

No exemption or reduction of Customs Duties, Excise Duties, Sales Tax, Service Tax on Works or any dues, transport charges, stamp duties or Central or State Government or local Body or Municipal Taxes or duties, taxes or charges (from or of any other body), whatsoever, will be granted or obtained, all of which expenses shall be deemed to be included in and covered by the Price Bid. The Contractor shall also obtain and pay for all permits or other privileges necessary to complete the Work.

vi) Price Bid to cover risks of delay:

The Price Bid shall be deemed to include and cover the risk of all possibilities of delay and interference with the Contractor's conduct of Work which occur from any causes including orders of the Employer in the exercise of his power and on account of extension of time granted due to various reasons and for all other possible or probable causes of delay.

2. Procedure for measurement and billing of Work in progress:

- 2.1.1. Billing procedure: Following procedures shall be adopted for billing of works executed by the Contractor.
- 2.1.1.1. Engineer-in-Charge shall pass the bills after carrying out the comprehensive checks in accordance with the terms and conditions of the Contracts, within 30 (Thirty) days of submission of the bills, complete in all respects and send the same to the Employer to effect payment to the Contractor.
- 2.1.1.2. Employer shall make all endeavor to make payments of undisputed amount of the bills submitted based on the joint measurements within 15 (Fifteen) days from the date of certification by the Engineer-in-Charge.
- 2.1.1.3. Measurements shall be recorded as per the methods of measurement spelt out in Employer Technical Specifications / Contract document. Engineer-in-Charge shall be fully responsible for checking the measurements quantitatively and qualitatively as recorded in the Measurement Books/ Bills.

- 2.1.1.4. Secured advance on material:
- 2.1.1.5. Unless otherwise provided elsewhere in the Bid, no `Secured Advance' on security of materials brought to site for execution of contracted items(s) shall be paid to the Contractor whatsoever.
- 2.1.1.6. Dispute in mode of measurement:
- 2.1.1.7. In case of any dispute as to the mode of measurement not covered by the Contract to be adopted for any item of Work, mode of measurement as per latest Indian Standard Specifications shall be followed.
- 2.1.1.8. Rounding-off of amounts:
- 2.1.1.9. In calculating the amount of each item due to the Contractor in every certificate prepared for payment, sum of less than 50 paisa shall be omitted and the total amount on each certificate shall be rounded off to the nearest rupees, i.e., sum of less than 50 paisa shall be omitted and sums of 50 paisa and more upto one rupee shall be reckoned as one rupee.

3. Running account payments to be regarded as advance:

3.1. All running account payments shall be regarded as payment by way of advance against the final payment only and not as payments for Work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the Contract, or any part thereof, in this respect, or of the accruing of any claim by the Contractor, nor shall it conclude, determine or affect in any way the powers of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the Contract. The final bill shall be submitted by the Contractor within one month of the date of physical completion of the Work, otherwise, the Engineer-in-Charge certificate of the measurement and of total amount payable for the Work accordingly shall be final and binding on all parties.

4. Clause not in use

5. Payment of contractor's bill:

- 5.1. Payment due to the Contractor shall be made by the Employer by Account Payee cheque forwarding the same to registered office or the notified office of the Contractor. In no case will Employer be responsible if the cheque is mislaid or misappropriated by unauthorized person/persons. In all cases, the Contractor shall present his bill duly pre-receipted on proper revenue stamp payment shall be made in Indian Currency.
- 5.2. In general payment of final bill shall be made to Contractor within 60 days of the submission of bill on joint measurements, after completion of all the obligations under the Contract.

6. Receipt for payment:

6.1. Receipt for payment made on account of Work when executed by a firm, must be signed by a person holding due power of attorney in this respect on behalf of the Contractor, except when the Contractor(s) are described in their Bid as a limited company in which case the receipts must be signed in the name of the company by one of its principal officers or by some other person having authority to give effectual receipt for the company.

7. Completion certificate:

7.1. Application for completion certificate:

When the Contractor fulfils his obligation under the Contract, he shall be eligible to apply for Completion Certificate. The Engineer-in-Charge shall normally issue to the Contractor the Completion Certificate within one month after receiving any application therefore from the Contractor after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in drawings, and the Contract documents. The Contractor, after obtaining the Completion Certificate, is eligible to present the final bill for the Work executed by him under the terms of Contract.

7.1.1. Contractor shall offer solar street light system (SSLS) for issue of completion certificate in maximum 4 lots.

7.2. Completion certificate documents:

For the purpose of Clause 7 above the following documents will be deemed to form the completion documents:

- a) The technical documents complying with Technical Specifications given in Section VI.
- b) Contractor to comply and submit the minimum technical requirements and supporting documents to Engineer-in-charge to issue the Completion certificate as per **Format-11.**
- c) Photographs /Detailed circuit diagram of Electrical/Electronic components of the system.

8. Final decision and final certificate:

8.1. Upon expiry of the Defect liability and subject to the Engineer-in-Charge being satisfied that the Works have been duly maintained by the Contractor during such period as hereinbefore provided in Contract and that the Contractor has performed all his obligations under the Contract, the Engineer-in-Charge shall (without prejudice to the rights of the Employer to retain the provisions of relevant Clause hereof) otherwise give a certificate herein referred to as the Final Certificate to that effect and the Contractor shall not be considered to have fulfilled the whole of his obligations under Contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry

upon the Work and taking possession, working or using of the same or any part thereof by the Employer.

9. Certificate and payments on evidence of completion:

9.1. Except the Final Certificate, no other certificates or payments against a certificate or on general account shall be taken to be an admission by the Employer of the due performance of the Contract or any part thereof or of occupancy or validity of any claim by the Contractor.

10. Deductions from the contract price:

10.1. All costs, damages or expenses which Employer may have paid or incurred, which under the provisions of the Contract, the Contractor is liable/will be liable, will be claimed by the Employer. All such claims shall be informed by the Employer to the Contractor. Such claims shall be paid by the Contractor within 15 (fifteen) days of the receipt of the Information Notice bills and if not paid by the Contractor within the said period, the employer may, then, deduct the amount from any moneys due i.e., Contract Performance Security or becoming due to the contractor under the contract or may be recovered by actions of law or otherwise, if the contractor fails to satisfy the Employer of such claims.

SECTION VI TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATIONS FOR SOLAR STREET LIGHTING SYSTEM (LED BASED)

1.1. Scope of Work

- 1.1.1. The Scope of Work of a Contractor shall include Design, Manufacture, Supply, Erection, Testing and Commissioning" including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street Lighting system in district Bokaro of State Jharkhand. Details of identified locations may be referred in Annexure-1. Contractor to comply and submit the minimum technical requirements and supporting documents to Engineer-in-Charge to issue the Completion certificate as per Format-11.
- 1.1.2. To do survey at the actual site location and carry out detailed design configuration of the solar street lighting systems at the identified sites, develop layout drawings for actual execution of the Work. Approval from Engineer-in-Charge / Representative for each site shall be obtained individually prior to commencement of installation work at the site. Detailed layout along with drawings etc. shall be submitted by the contractor to the employer.
- 1.1.3. A standalone solar photovoltaic street lighting system is an outdoor lighting unit used for illuminating a street or an open area. The Solar Street Lighting System(SSLS) consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including Single fixture along with the mounting arrangement and the solar panel the integrated solar street light can be installed directly out of the box.
- 1.1.4. The luminaire is based on LED which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole at an angle facing south so that it receives solar radiation throughout the day, without any shadow falling on it.
- 1.1.5. Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

1.2. TECHNICAL DETAILS:

SI. No.	Parameters	Specification				
1						
	Light source	LED (6 Watt) Minimum 140 lumens / watt @ 350mA				
2	LED Efficacy (lumens /Watt)					
3	Lumens output of luminaire	700 – 800 lumens				
4	Duty cycle	Dusk to dawn ~ 12 hours/Day				
5	Autonomy	2 days				
6	Beam angle	120°				
7	Boom angle	10 °				
		Min 15 lux on ground from 4 meters				
8	Light Output	height & 10 lux @ dimming				
9	Dimming	Inbuilt Initially programmed Dimming				
10	Battery	Li-ion (11.2 V, 20 AH)				
11	DOD	75%				
12	PV module capacity	37 W				
13	Luminaire IP rating	IP 65				
14	Operating Temp.	(-20 to 50 °C)				
15	Humidity	10 to 90 %RH				
		Battery overcharge, deep discharge, SPV Module Reverse Polarity, Open				
16	Protection	Circuit				
		Green—Battery Charging Indication				
17	Indications	Red—Battery deep charge condition				

1.3. PV MODULE

- I. Indian manufactured PV module should be used.
- II. The PV module should have crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory.
- III. The power output of the module(s) under STC should be a minimum of 37 Wp at a load voltage* of 16.4 ± 0.2 V.
- IV. The open circuit voltage* of the PV modules under STC should be at least 21.0 Volts.
- V. The module efficiency should not be less than 14 %.
- VI. (vi)The terminal box on the module should have a provision for opening it for replacing the cable, if required.

- VII. A distinctive serial number starting with JNNSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.
- VIII. PV Junction box: IP 65
- IX. The PV module must use a RF Identification tag (RFID), which must contain the following information:
 - i. Name of the manufacturer of PV Module
 - ii. Model or Type Number
 - iii. Serial Number
 - iv. Month and year of the manufacture
 - v. I-V curve for the module
 - vi. Peak Wattage of the module at 16.4 volts
 - vii. Im, Vm and FF for the module
 - viii. Unique Serial No and Model No of the module

Until March 2013, the RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions. However, from 1st April 2013 onwards RFID shall be mandatorily placed inside the module laminate

*The load voltage and Voc conditions of the PV modules are not applicable for the system having MPPT based charge controller

1.4. BATTERY

- I. Li-Ion battery.
- II. The battery will have a minimum rating of 11.1 V, 20 Ah at C/10 discharge rate.
- III. 75 % of the rated capacity of the battery should be between fully charged and load cut off conditions.
- IV. Battery should conform to the latest BIS/ International standards.
- V. Battery need to be housed in the luminaire fixture only along with proper ventilation. No separate battery box is allowed.
- VI. Protection: Temperature compensated charging for battery

1.5. LIGHT SOURCE

- I. 6 W LED light source with fixture along with proper heat sink to dissipate heat generated by LEDs.
- II. The light source will be of white LED type
- III. The colour temperature of W-LEDs used in the system should be in the range of 5500 K–6500 K
- IV. LEDs should not emit ultraviolet light.

- V. The lamp should be housed in an assembly suitable for outdoor use, with a reflector on its back.
- VI. Bat wing type light output with even spread over the road by using proper diffusing lenses.
- VII. To be certified in complying with LM 80 standards.

1.6. ELECTRONICS

- I. The total electronic efficiency should be at least 85%.
- II. Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year.
- III. No load current should be less than 20 mA.
- IV. The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.
- V. The PCB containing the electronics should be capable of solder free installation and replacement.
- VI. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

1.7. ELECTRONIC PROTECTIONS

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

1.8. MECHANICAL COMPONENTS

- I. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- II. The frame structure should have provision to adjust its angle of inclination to the horizontal between 0 and 45, so that the module can be oriented at the specified tilt angle.
- III. The pole should be made of Galvanised Iron (GI) pipe / as per IS standards.
- IV. The height of the pole should be 4 metres above the ground level, after grouting and final installation.

- V. Module mounting pole including Single fixture along with the mounting arrangement and the solar panel the integrated solar street light can be installed directly out of the box.
- VI. The lamp housing should be IP 65 and should be painted with a corrosion resistant paint.

1.9. INDICATORS

- I. The system should have two indicators, green and red.
- II. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.
- III. Red indicator should indicate the battery "Load Cut Off" condition.

1.10. CIVIL

- I. Pole should be properly concreted with M16 or M20 grade.
- II. Pole foundation to be laid with minimum 0.5 meter inside the ground.

1.11. QUALITY AND WARRANTY

- I. All the components and parts used in the solar street lighting systems should conform to the latest BIS or IEC specifications, wherever such specifications are available and applicable.
- II. The street lighting system including the battery will be warranted for a period of 3 years from the date of commissioning.
- III. The PV module(s) will be warranted for a minimum period of 25 years from the date of supply. The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- IV. The Warranty Card to be supplied with the system must contain the details of the system.
- V. Standards to be complied: IEC 61215 : Solar panel, EN 50530 : MPPT performance, IEC 62124 : Solar standalone system performance, IEC 61347-213: LED driver safety, IEC 62384 : LED driver performance, IEC 61547 : EMC immunity requirements
- VI. Tests : Type test certificates to be enclosed for all the above standards (Enclose compliance certificate along with invoices for processing of payments)

1.12. OPERATION and MAINTENANCE MANUAL

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

I. Basic principles of Photovoltaic.

- II. A small write-up (with a block diagram) on Solar Street Lighting System its components, PV module, battery, electronics and luminaire and expected performance.
- III. Type, Model number, Voltage & capacity of the battery, used in the system.
- IV. The make and wattage of the LED used in the lighting system.
- V. About Charging and Significance of indicators.
- VI. Clear instructions about erection of pole and mounting of PV module (s) and lamp housing assembly on the pole.
- VII. Clear instructions on regular maintenance and trouble shooting of the Solar Street Lighting System.
- VIII. DO's and DONT's.
- IX. Name and address of the contact person for repair and maintenance, in case of non-functionality of the solar street lighting system.
- X. O&M Manual should contain the make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system.

SECTION VII PRICE BID

BID No: SECI/Cont./Ind./56/2013 Date:

SI. No	Description of Work	Proposed	Price per Unit quantity of SSLS Ex. Works	Ex-Works Price for Proposed	Applicable Taxes & duties {such as CST,VAT &	Total
		quantity of SSLS	Price (Rs.)	quantity (Rs.)	Service Tax etc. }	Price (Rs.)
Α	1	2	3	4 = (2X3)	5	6= (4+5)
1	 Design, Manufacture, Supply of LED based Solar Street Lighting system (SSLS) in Jharkhand State as per Annexure-1 including packing of. Solar photovoltaic module (SPV), a luminaire, Storage Battery, Control electronics, Inter-connecting wires/cables, module mounting pole including Single fixture along with the mounting arrangement and the solar panel the integrated solar street light can be installed directly out of the box, Civil & Structure Works, etc. (As defined in the Tender document inclusive of Excise Duty for all Sites as Per Annexure-1) 	500				
	Sub Total - A					
В						
2	Inland transportation including loading, unloading and transfer to Site, insurance and other costs incidental to delivery (Rs.) including all Taxes & Duties.	do				
3	Cost of Testing, Installation and Commissioning of SSLS Systems inclusive of all Taxes & Duties.	do				
	Sub Total - B					

	Description of Work	Period	Price Per Year	Price for 4Years	Applicable Taxes & duties {such as CST, VAT & Service Tax etc. }	Total Price AMC for 4 years
С	Annual Maintenance Contract (AMC) for SI. No.1	4Years				
	Sub Total - C					
	GRAND TOTAL (A+B+C)					

Note:

- 1 Price indicated for SI.No. 1 (System Price) includes price for the quantities indicated in the Price Bid includes solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including Single fixture along with the mounting arrangement and the solar panel the integrated solar street light can be installed directly out of the box, Civil & Structure Works, etc. as required as per the Tender Documents.
- 2 In case of discrepancy between unit price and total price, the unit price will prevail.
- 3 If there is a discrepancy between words and figures, the amount written in words will prevail.
- 4 Any other item as required for commissioning the system for reliable and efficient operation to be provided within the quoted price.

- 5. AMC is for a period of four years after one year warranty period to ensure a smooth and efficient operation of the system.
 - 6. All applicable taxes & duties (other than excise duty) shall be indicated in No 5.All identified taxes and duties shall be considered for evaluation of Bid Price. These Taxes & duties shall be reimbursed at actuals against documentary evidence.

(Signature of Authorised Signatory) (Name) (Designation)

(Common Seal)

FORMATS FOR SUBMISSION
SECTION VIII

FORMATS FOR SUBMITTING BID

Format-1

Covering Letter

(The covering letter should be on the Letter Head of the Bidding Company)

Ref. No._____Date:_____

From: _____(Insert name and address of Bidding Company)

Tel.#: Fax#: E-mail address#

То

Solar Energy Corporation of India (A Government of India Enterprise) NBCC Plaza, Tower-1,4th Floor, Pushp Vihar, Sector-V, Saket, New Delhi-110017

Sub: <u>Bid for "Design, Manufacturing, Supply, Erection, Testing and</u> <u>Commissioning including one year system warranty and Annual</u> <u>Maintenance Contract (AMC) for 4 years of LED based Solar Street lights</u> <u>in the district Bokaro of State Jharkhand (India)."</u>

Dear Sir,

We, the undersigned....[insert name of the 'Bidder'] having read, examined and understood in detail the Bid Document for Bid for "Design, Manufacturing, Supply, Erection, Testing and Commissioning including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED based Solar Street lights in the Jharkhand (India)." hereby submit our Bid comprising of Price Bid and Techno Commercial Bid. We confirm that neither we nor any of our Parent Company / Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid BID.

 We give our unconditional acceptance to the Bid, dated 27.08.2013 and Bid Documents attached thereto, issued by Solar Energy Corporation of India, as amended. As a token of our acceptance to the Bid Documents, the same have been initialled by us and enclosed to the Bid. We shall ensure that we execute such Bid Documents as per the provisions of the Bid and provisions of such Bid Documents shall be binding on us.

2. Bid Bond

We have enclosed a Bid Bond of Rs 2.5 Lakhs in the form of bank guarantee no.....(Insert number of the bank guarantee) dated......[Insert date of bank guarantee] as per Formatfrom(Insert name of bank providing Bid Bond) and valid up toin terms of ITB Clause 10 of this Bid.

3. We have submitted our Price Bid strictly as per Section VII of this Bid, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format.

4. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by Solar Energy Corporation of India in respect of any matter regarding or arising out of the BID shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfil our obligations with regard to execution of projects of capacity offered by us.

5. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the Bid Documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in Bid have been fully examined and considered while submitting the Bid.

6. Contact Person

Details of the contact person are furnished as under:

Name	:	
Designation	:	
Company	:	
Address	:	
Phone Nos.	:	
Fax Nos.	:	
E-mail address	:	

- We are enclosing herewith the Techno Commercial Bid (Envelope I) and Price Bid (Envelope II) containing duly signed formats, each one duly sealed separately, in one (1) original +(1) copy (duly attested) as desired by you in the Bid for your consideration.
- 8. It is confirmed that our Bid is consistent with all the requirements of submission as stated in the Bid and subsequent communications from Solar Energy Corporation of India.
- 9. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the Bid and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid.
- 10. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 135 days from the Bid Deadline.
- 11. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the _____day of _____,20....

Thanking you, We remain,

Yours faithfully,

Name, Designation and Signature of Authorized Person in whose name Power of Attorney/Board Resolution as per ITB Clause 8.1.7 is issued.

GENERAL PARTICULARS OF THE BIDDER

1.	Name of the Company	
2.	Registered Office Address	
3.	Telephone, Telex, Fax No	
4.	E-mail	
5.	Web site	
6.	Authorized Contact Person(s) with name, designation and Mobile Phone No. to whom all references shall be made	
7.	Year of Incorporation	
8.	Name of the Article in the Memorandum and Article of Association where Solar Business activity is mentioned.	
9.	Have the bidder/Company ever been debarred By any Govt. Dept. / Undertaking for undertaking any work.	
10.	Reference of any other information attached by the Bidder (please Mention no. of pages)	

PROFORMA FOR BANK GUARANTEE FOR BID BOND

(On Non-Judicial stamp paper of appropriate value)

Ref.:

Date: Bank Guarantee No.:

To,

Solar Energy Corporation of India NBCC Plaza, Tower – 1, 4th Floor, Pushp Vihar, Saket, New Delhi-110017.

Dear Sir,

accordance with Invitation Bids under Bid document In of No. M/S..... having its Registered/Head Office at(^).......................(hereinafter called the 'Bidder'') who wishes to participate in the said Bid for Design, Manufacturing, Supply, Installation, Testing & Commissioning Including one year system warranty and Annual Maintenance Contract (AMC) for 4 years of LED Based Solar Street Lighting System in Jharkhand as per Bid specification.

having our Head Office at.....(#).....(#)..... Guarantee and undertake to pay immediately on demand by [Solar Energy Corporation of India1 hereinafter called the 'Employer'..... the amount of (*)......without any reservation, protest, demand and recourse to the extent of the said sum of Rs. (Rupees.....only). Any such demand made by the 'Employer' shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

name] behalf this gu			 	 					01	n	w	hose
In witness wi stamp	on	this		 							and	and of
Witness:												
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	(Name)		 			(Des Bank	-	tion	with	1		
Seal)												
_	(Official Ad		 			Attorn No						
						Date	· · · · · · · ·					

Note:

- 1. (*) The amount shall be as specified in the Bid document.
 - (#) Complete mailing address of the Head Office of the Bank to be given.
 (@) This date shall be Six months from the date of Techno-Commercial bid opening.
- 2. The Bank Guarantee shall be from a Bank as per as define in ITB **Clause 10** of the Bid Document
- 3. The Stamp Paper of appropriate value shall be purchased in the name of guarantee issuing Bidder/bank issuing the guarantee.

PERFORMANCE SECURITY FORMAT

(To be stamped in accordance with Stamp Act if any, of the Country of the Issuing Bank)

Bank Guarantee No. :..... Date.....

То

Solar Energy Corporation of India NBCC Plaza, Tower -1, 4th Floor, Pushp Vihar, Sector V, Saket, New Delhi-110017.

Dear Sirs,

We......having its Head Office at.....having its Head Office at......(hereinafter referred to as the 'Bank', which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer, on demand any and all monies payable by the Contractor to the extent of(*)......as aforesaid at any time upto......(@)......[days/month/year] without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this Guarantee during its currency without previous consent of the Employer and further agrees that the Guarantee herein contained shall be enforceable as per the provisions of the Bid document including all amendments thereto.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Bank under this Guarantee, from time to time to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty, without affecting this Guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any convenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

Notwithstanding anything contained hereinabove our liability under this Guarantee is restricted to(*)......and it shall remain in force upto and including......(@).....and shall be extended from time to time for such period, as may be desired by M/s......[Contractor's Name]......on whose behalf this Guarantee has been given.

Dated	this	day
20.	atat	

of

Witness:

(Si	ignature)	
	ignature)	

1)	lame	e)	 	 	 	
	lame					

(Designation with Bank Stamp)...... (Official Address)

Attorney as per Power of Attorney

No.....

Dated.....

Notes:

. .

- i. The stamp papers of appropriate value shall be purchased in the name of guarantee issuing Bank or the party on whose behalf for BG is being issued. The Bank Guarantee shall be issued on a stamp paper of value as applicable in the State of India from where Bank Guarantee is issued or the State of India from where Bank Guarantee.
 - 2. (*) The amount shall be as specified in the Bid documents.

(#) Complete mailing address of the Head Office of the Bank to be given.

(@)The Bank Guarantee shall be from a Bank as per provisions of ITB Clause 28, and GCC Clause 5 of the Bid Documents including all Amendments thereto.

CHECK LIST FOR BANK GUARANTEES

SI.No.	Details of checks	YES/NO.
a)	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG).	
c)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
d)	Is each page of BG duly signed / initialled by executant and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
e)	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
f)	Are the factual details such as Bid Document No. / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
i)	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executant?	

POWER OF ATTORNEY

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

(a) Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the NIT.

Signed by the within named						
	(Insert	the	name	of	the	executant
company)						
through the hand of						
Mr						
duly authorized by the Board to issue su	uch Pow	er of	Attorne	ey		
Dated this d	ay of					
Accepted						

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

Attested

.....

(Signature of the executant) (Name, designation and address of the executant)

Signature and stamp of Notary of the place of execution

Common seal of has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1.(Signature)

Name.....

	Designation
2.	(Signature)
	Name
	Designation

Notes:

- (1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.
- (2) The person authorized under this Power of Attorney, in the case of the Bidding Company / Lead Member being a public company, or a private company which is a subsidiary of a public company, in terms of the Companies Act, 1956, with a paid up share capital of more than Rupees Five crores, should be the Managing Director / whole time director/manager appointed under section 269 of the Companies Act, 1956. In all other cases the person authorized should be a director duly authorized by a board resolution duly passed by the Company.
- (3) Also, wherever required, the executant(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

Format for certificate of relationship of Parent Company or Affiliate with the Bidding Company

Τo,

.....

Sub: Bid for "Design, Manufacturing, Supply, Installation, Testing & Commissioning Including one year system warranty and Annual Maintenance Contract (AMC) for 4 Years of LED Based Solar Street Lighting System in Jharkhand state".

Dear Sir,

We hereby certify that M/s.....,M/s....,M/s....,M/s....,M/s....,are the Affiliate(s) /Parent Company of the Bidding Company as per the definition of Affiliate/Parent Company as provided in this Bid and based on details of equity holding as on seven (7) days prior to the Bid Deadline.

The details of equity holding of the Affiliate/Parent Company * or vice versa as on seven (7) days prior to the Bid Deadline are given as below:

Name of Bidding Company	Name of the Affiliate of the Bidding Company/ Name of the Parent Company of the Bidding Company	Name of the Company having common control on the Affiliate and the Bidding Company	Percentage of Equity Holding of Parent Company in the Bidding Company/Biddin g Company.

*Strike out whichever is not applicable.

.....

(Insert Name and Signature of Statutory Auditor or practising Company Secretary of the Bidder)

Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company

(On the Letter Head of the Financially Evaluated Entity or its Parent Company/Ultimate Parent Company)

Name:
Full Address:
Telephone No.:
E-mail address:
Fax/No.:

To,

.....

Dear Sir,

We refer to the BID No......dated.....for Bid for "Design, Manufacturing, Supply, Installation, Testing & Commissioning Including one year system warranty and Annual Maintenance Contract (AMC) for 4 Years of LED Based Solar Street Lighting System in Jharkhand state".

We have carefully read and examined in detail the Bid, including in particular, **ITB Clause 2** of the Bid, regarding submission of an undertaking, as per the prescribed **Format 8** of the Bid.

We confirm that M/s.....(Insert name of Bidding Company) has been authorized by us to use our financial capability for meeting the Financial Eligibility as specified in Clause....of the Bid referred to above.

We have also noted the amount of the Performance Guarantee required to be submitted as per ITB Clause 28 of the Bid the(Insert the name of the Bidding Company) in the event of it being selected as the Successful Bidder".

In view of the above, we hereby undertake to you and confirm that in the event of failure of(Insert name of the Bidding Company) to submit the Performance Guarantee in full or in part at any stage, as specified in the BID, we shall submit the Performance Guarantee not submitted by(Insert name of the Bidding Company)".

We have attached hereto certified true copy of the Board Resolution Whereby the Board of Directors of our Company has approved issue of this Undertaking by the Company.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the BID.

Signature of Chief Executive Officer/Managing Director

Common seal ofhas been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1.	
	(Signature)
	Name
	Designation

2.	
	(Signature)
	Name
	Designation

CONTRACT AGREEMENT/CONTRACT FORM

(ABRIDGED VERSION)

This contract (hereinafter, together with all attachment annexed hereto and forming its integral part thereof, call the Contract) is made on the ------day of the month of ------- 2013, between, Solar Energy Corporation of India ("hereinafter called Employer which expression shall unless repugnant to the of meaning thereof includes its successors and assigns"), constituted in pursuance of Section-25 of Company Act, 1956 and now authorized by the Ministry of New and Renewable Energy (Govt. of India) to undertake this project and having its head quarter at NBCC Plaza,Tower-1,4th (Fourth) Floor, Sector-V, Pushp Vihar, Saket, New Delhi-17 of the one part and ------

------, a Company registered under the Laws of--------, a Company registered office at ------

------ (hereinafter called the Contractor which expression shall unless repugnant to the context of meaning thereof includes its successors and assigns) of the other part.

WHEREAS

- (A) Employer has placed Notification of Award for "Design, Manufacturing, Supply, Installation, Testing & Commissioning Including one year system warranty and Annual Maintenance Contract (AMC) for 4 Years of LED Based Solar Street Lighting System in Jharkhand state". and provide other services as covered in this contract vide Notification of Award No _____ dtd
- (B) The contractor has accepted the Notification of Award as set forth above vide reference No. ------ dtd. ------ dtd. ------ dtd. ------- and submitted the Performance Bank Guarantee for the amount of ______in the prescribed format of Employer.
- (C) The Employer, and the contractor shall jointly be termed as "Parties".
- (D) The contractor, having represented to Employer that they have the required professional skill, personnel and technical resource have agreed to provide the services on the terms and conditions set forth in this contract.

NOW THEREFORE THE PARTIES HERETO HEREBY AGREE AND COVENANT AS FOLLOWS:

- 1. The Parties hereto hereby covenant, bind and undertake to observe and perform this contract faithfully for the Work of Design, Manufacturing, Supply, Installation, Testing & Commissioning Including one year system warranty and Annual Maintenance Contract (AMC) for 4 Years of LED Based Solar Street Lighting System in Jharkhand state and execute, perform and do all Works and things mentioned and described in this Bid and in all other documents annexed hereto and in accordance with such conditions, specifications and terms and conditions forming part of this contract to the entire satisfaction of Employer and shall respect, perform, observe and fulfil all such terms, conditions and specifications which are expressed or intended to be performed, observed or fulfilled by the contractor.
- 2. The following documents, which are deemed to be integral part of this contract as in herein, set out verbatim and / or is hereto annexed, shall be binding on the parties.
 - (i) General Conditions of Contract.
 - (ii) Contractor's Compliance Certificate to the various sections of the NIT No_____dated____.
 - (iii) Offered Prices.
 - (iv) Copy of Notification of Award No. ----- and acceptance.
- Performance Security Deposit: The contractor has deposited a Performance security amount to the tune of ------ by ------ by ------ The Performance Security Deposit will be released after successful and satisfactory completion of installation and commissioning of the Work upto the satisfaction of Engineerin-Charge.
- 4. The Payment shall be made as per the Clause No__ of the Bid.

5. The parties hereto hereby agree and declare that in consideration of the payments to be made by Employer, the Contractor shall execute the Work as defined in the contract in the manner and as prescribed in this contract or which are implied or may be necessary for the completion of the said Work or incidental thereto on the terms and conditions mentioned in the Contract.

In witness whereof the parties hereto have signed this agreement hereunder on the date respectively against signature of each.

FOR AND ON BEHALF OF CONTRACTOR FOR AND ON BEHALF OF Employer

PLACE:

DATE:

FORMAT FOR BANK GUARANTEE FOR -ADVANCE

This deed of Guarantee made on......day of <u>Month & Year</u> on <u>Name & Address of the bank</u> (hereinafter called the 'GUARANTOR') on the one part, on behalf of M/s <u>Name & address of the Bidder</u> (hereinafter called the 'Contractor') in favour of Solar Energy Corporation of India, NBCC Plaza,Tower-1 Fourth Floor, Pushp Vihar ,Saket,New Delhi-17(hereinafter called 'Employer') on the other part, on the following terms and conditions.

Whereas the Contractor' has agreed for the <u>Name & quantity of the Work</u> against Work order issued by Employer bearing No.Dated......Dated......amounting to Rs...And whereas in pursuance of the term of agreement No......between Employer and the Contractor, Employer having agreed to pay advance of Rs...against bank guarantee, this guarantee is being made for the purpose release of mobilization advance.

Know all people by these presents that the GUARANTOR, hereby undertake to indemnifv and keep Employer indemnified to the extent qu of Rs.....during the validity of this bank guarantee and authorize Employer to recover the same directly from the GUARANTOR. This bank guarantee herein contained shall remain in full force and effect till the expiry of its validity or till any extended period (if extended by the bank on receiving instructions from FIRM). The liability under the guarantee shall be binding on the GUARANTOR or its successors.

Whereas the GUARANTOR further agrees that their liability under this guarantee shall not be affected by any reason of any change in the offer or its terms and conditions between the Contractor and Employer with or without the consent or knowledge of the GUARANTOR.

Whereas the GUARANTOR hereby agrees not to revoke this guarantee bond during its currency period except with the previous consent of Employer in writing.

Notwithstanding anything contained herein-

- 1 Our liability under this bank guarantee shall not exceed Rs.....
- 2 This Bank guarantee shall be valid up to
- 3 We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only against the written claim or demand on or before.....

Sealed with the common seal of the bank on this.....day of Month and Year

(Signature and seal of the bank)

<u>Witness</u>

1.....

2.....

Contractor to comply and submit the minimum technical requirements and supporting documents to Engineer-in-Charge to issue the Completion certificate

SI. No.	Parameters	Specification	Confirming (C) / Not Confirming (NC)	Details of supporting documents
	Lamp/ Luminaire			
1	Light source	LED (White, 6 Watt), should not emit ultraviolet light		
2	Heat Dissipation provision for LED	fixture along with proper heat sink		
3	LED Efficacy (lumens /Watt)	Minimum 140 lumens / watt @ 350mA		
4	Colour Temperature	5500 K -6500 K		
5	Lumens output of luminaire	700 – 800 lumens		
6	Lamp Assembly	Suitable for outdoor use, with a reflector on its back		
7	Exterior of lamp housing	Should be water proof and should be painted with a corrosion resistant paint.		
8	Light diffusion	Bat wing type light output , having spread over the road by using proper diffusing lenses.		
9	LM 80 standards	Compliance Certificate		
10	Duty cycle	Dusk to dawn ~ 12 hours/ day		
11	Beam angle	120°		
12	Boom angle	10 °		

13	Light Output	Min 15 lux on ground from 4 meters height	
		& 10 lux @ dimming	
14	Dimming	Inbuilt Initially programmed Dimming	
15	Luminaire IP rating	IP 65	
16	Lamp Body Material	Aluminium alloy	
17	switching ON and OFF the lamp	PV module should automatically sense the ambient light level for switching ON and OFF the lamp	
	Battery		
18	Battery type	Li-ion (11.2 V, 20 AH, at C/10 discharge rate)	
19	Battery Housing	to be housed in the luminaire fixture only along with proper ventilation	
20	DOD	75%	
21	Indications	Green—Battery Charging Indication (should be glowing while charging), Red—load cut-off condition	
22	Autonomy	2 days	
	PV Module/ panel		
23	Type of PV Module	Crystalline silicon solar cells	
24	Confirmity with IEC 61215 Edition II / BIS 14286 from an NABL or IECQ	Copy of relevant test certificates	
25	The power output of the module(s) under STC	should be a minimum of 37 Wp at a load voltage of 16.4 ± 0.2 V.	
26	Module efficiency	Not less than 14 %	

27	The open circuit voltage of the PV modules under STC	At least 21.0 Volts.	
28	Mechanical configuration of Street Light system	Module mounting pole including Single fixture along with the mounting arrangement and the solar panel.	
29	Operating Temp.	(-20 to 50 oC)	
30	Humidity	10 to 90 %RH	
	Electronics/ Protections		
31	Installation method of PCB containing the electronics	Capable of solder free installation and replacement.	
32	Electronic efficiency	≥ 85%	
33	No load current	Should be less than 20 mA.	
34	"No Load" on protection	Protection is to be incorporated under "No Load" conditions e.g. when the lamp is removed and the system is switched ON	
35	Protection for battery	Battery overcharge, deep discharge, Open Circuit, reverse polarity	
36	Protection against short circuit conditions	Adequate size of fuse protection to be provided	
37	Protection for PV module	Protection against reverse flow of current through the PV module to be provided	
38	Temperature compensation	Electronics should have temperature compensation for proper charging of the battery throughout the year	
39	Load reconnect	Should be provided at 80% of the battery capacity status	

	Mechanical / Civil			
40	Street Light pole & SPV frame	Should be corrosion resistant		
41	Provision for angular adjustment in SPV frame	Inclination to the horizontal between 0 and 45		
42	Material of Construction (MOC) for Street light pole	Galvanised Iron (GI)		
43	The height of the pole	4 metres above the ground level, after grouting and final installation.		
44	Mounting of pole	Pole should be properly concreted with M16 or M20 grade		
45	Pole foundation	laid with minimum 0.5 meter inside the ground		
Note: Details of supporting document should contain name of document, page number, annexure number & details in enclosing documents should be highlighted with marker/ highlighter in order to provide clear idea regarding conformity of technical specification.				

Location for Installation of Solar Street Lights in District Bokaro, State Jharkhand

(English Translation)

Block:- Petarwar:

- 1. Arjuva Panchayat, Village Harmita Tola (Panna) nearby mosque.
- 2. Chargi Panchayat, Village Chargi nearby mosque and madarsa.
- 3. Bundu nearby Urdu madarsa.
- 4. Nearby imambara of Bundu.
- 5. Saramkala nearby mosque.
- 6. Saramkala nearby imambara.
- 7. Zaruwatad nearby imambara.
- 8. Harmita Khas nearby mosque.
- 9. Harmita Khas nearby imambara.
- 10.Harmita Padna tad nearby mosque.
- 11. Patki punarwas nearby mosque.
- 12.Khetko nearby Urdu madarsa.
- 13.Khetko Upar Tola nearby imambara.
- 14.Khetko Partad nearby Mazar Sharif.
- 15. Nearby Khetko Dargah Tola.
- 16.Khetko Khandolia basti nearby mosque.
- 17.Khetko Purnadih nearby madarsa.
- 18. Chalkari Upar Tola nearby mosque.
- 19. Ulgadda Panchayat in Harmita nearby mosque.
- 20. Pichadi Basti nearby imambara.
- 21. Pichadi Puranatad nearby mosque.
- 22. Ulgadda Panchayat, Village Harmita nearby mosque.
- 23.Khetko Panchayat, Village Khetko nearby BJP Residential Office.
- 24.Khetko Panchayat, Village Khetko nearby dargah.
- 25.Bundu Panchayat, Village Petarwar, Shopping Centre nearby BJP Office
- 26.Sadma Panchayat, nearby Chatru Mahto Ex. MLA's Office
- 27. Patki Panchayat in Village Chiniyagada nearby mosque.
- 28. Pichadi Uttar Panchayat nearby panchmukhi hanuman temple.

- 29. Petarwar Panchayat, Gurjuwa nearby durga temple.
- 30. Pichadi North Panchayat Main Road nearby Bajrangbali temple.
- 31. Ulgadda Panchayat, Village Harmita nearby imambara.
- 32. Ulgadda Panchayat, Village Harmita nearby Tola pandanatad mosque.
- 33. Patki Panchayat, Patki Punarwas, nearby muslim tola mosque.
- 34. Lukaiya Ansari Locality nearby mosque.
- 35. Ulgadda Panchayat, Village Pannatad nearby mosque.
- 36.Petarwar, nearby BJP office.
- 37.Ordana Panchayat, nearby Bhandoyazar khunta baba temple.
- 38. Patki Panchayat within Village Chiniyagada near by mosque.
- 39.Angwali Southern Panchayat, Village Barakendua Dela Kocha in front of Babu Chand Manjhi's House.
- 40. Angwali Southern Panchayat, Village Barakendua Badakulhi nearby Sukhdev Soren's House.
- 41.Angwali Southern Panchayat, Village Barakendua Muchetkulhi nearby Shivram Soren's House.
- 42.Angwali Southern Panchayat, Village Barakendua Dobat nearby Lalachand Manjhi's House.
- 43.Angwali Southern Panchayat, Village Jhoprotad nearby Lalchand Mrandi's House.
- 44. Chalkari North Panchayat Chalkari Basti Giri Tola nearby Kali Temple.
- 45. Dharwatad Panchayat Chapargada nearby Hanuman temple.
- 46. Chalkari Panchayat Ravidas Tola nearby Bajranbali temple.
- 47.Ulgadda Panchayat, Village Chipudaag nearby Durga temple.
- 48.Nearby Achaiya's Durga temple.
- 49. Tenughat 'F' type nearby Durga Mandap.
- 50. Dharwatad Panchayat nearby Dharwatad's Durga Mandap.
- 51. Chando Panchayat nearby Chando Durga temple.
- 52. Pichadi North Nearby Radha Krishna temple.
- 53. Pichadi Southern Panchayat Chappardih nearby Shiv Temple.
- 54. Chando Panchayat Village Busria Upar Tola nearby Durga Temple.
- 55.Petarwar Khatri Locality nearby old Durga Temple.
- 56.Ordana Panchayat Village Ordana nearby Durga Temple.
- 57.Ordana Panchayat Village Ordana nearby Sarvjanik Durga Temple.

58. Tenughat Panchayat 'l' type near Shiv Temple.

59. Tenughat Panchayat 'F' type near Durga Temple.

60. Tenughat Panchayat New Market nearby Durga Temple.

61. Chando Panchayat Village Mandal Tola nearby Durga Temple.

62. Chando Panchayat Village Khurdchando nearby Shiv Temple.

63.Koh Panchayat Village Lepo nearby Gayatri Temple.

64.Bundu Panchayat within Village Temple Tola nearby Bajrangbali Temple.

65. Arjuva Panchayat, Village Irguva nearby Durga Temple.

66. Pichri Panchayat within Village Pichri nearby Durga Temple.

67. Pichri Panchayat within Village Pichri nearby Kali Temple.

- 68. Pichadi Northern Near road side nearby Hanuman Temple.
- 69.Bundu Panchayat, Tenu Chauk nearby Mast Light pole.
- 70.Sadma Panchayat, Sadma Khurd nearby Mansa Temple.
- 71.Sadma Panchayat, Sadma Kala nearby Durga Temple.
- 72.Koh Panchayat, Village Koh nearby Kali Temple.
- 73.Koh Panchayat Lepo nearby Sarvjanik Bajrangbali Temple.
- 74. Dharwatad Panchayat Dharwatad Upar nearby Durga Mandap.
- 75.Sadma Panchayat nearby Durga Temple.

Block:-Bermo

- 1. Bermo Eastern Panchayat within Sunday Market nearby Gurudwara.
- 2. Bermo Eastern Panchayat within Gandhinagar nearby Madarsa.
- 3. Kurpaniya Panchayat within Kurpaniya nearby Masjid Moth.
- 4. Fusro within Patel Nagar nearby Makka Mosque.
- 5. Fusro within Patel Nagar nearby Madni Mosque.
- 6. Nai Basti nearby Mosque.
- 7. Bokaro Thermal Raja Market nearby Mosque.
- 8. Bokaro Thermal Bajartad nearby Mosque.
- 9. Kathara nearby Gurudwara.
- 10.Kathara Staff Colony nearby Mosque.
- 11.Amlo Basti ward no. 08 nearby Mosque.
- 12. Amlo Basti ward no. 08 in Karbala Hirak on main road.
- 13. Gandhinagar Bermo Basti nearby Mosque.
- 14. Jarangdih, North Jarangdih Market nearby Gurudwara.
- 15. Jarangdih, North Jarangdih Babu Quarter nearby Mosque.
- 16. Jarangdih, North Jarangdih Beldar Tola nearby Karbala.

- 17. Central Colony near Mosque.
- 18. Jawahar Nagar near Gurudwara.
- 19. Sunday Market near Gurudwara.
- 20. Jaridih Market near Gurudwara.
- 21. Jarangdih nearby Gurudwara.
- 22.Bermo Barwabeda nearby Mosque.
- 23.Kargali Market nearby Gurudwara.
- 24. Dhori Panchayat, Singhnagar nearby Shiv Temple.
- 25.Amlo Panchayat, nearby Maa Tara Temple.
- 26.Dhori Panchayat, Raja Beda in Dhori Basti Ansari Locality nearby Madarsa.
- 27. Dhori Panchayat, Raja Beda nearby Madarsa.
- 28. Dhori Panchayat, Raja Beda nearby Mosque.
- 29.Amlo nearby Halt.
- 30. Kargali Market in front of SBI nearby Devi Temple.
- 31. Kurpaniya Panchayat Sunday Market nearby Islamia Madarsa.
- 32. Jaridih Eastern Panchayat nearby Jaridih Sabzi Mandi.
- 33.Jaridih Western Panchayat Main Entrance of Primary Heath Centre Bermo (Jaridih)
- 34. Jarangdih North Panchayat nearby Jarangdih Tata Block Church.
- 35. Khas Dhori nearby BMS office.
- 36.Baidkaro Bari Village nearby BMS office.
- 37. Ghutiyatad Basti in Murga Chothan nearby Shiv Temple.
- 38.Bermo Eastern Panchayat within Badri Fail nearby Kali Temple.
- 39.Bermo Eastern Panchayat near Ramashankar Singh's House nearby Bajrangbali Temple.
- 40.Bermo Eastern Panchayat within Paswan Patti nearby Bajrangbali Temple.
- 41.Bermo Eastern Panchayat within Sunday Market Ravidas Basti nearby Bajrangbali Temple.
- 42. Amlo Panchayat within Ranchi Dhaura nearby Radha Krishna Temple.
- 43.Amlo Panchayat within Mahadev Locality nearby Gol Pahadi Temple.
- 44.Kargali Senior Quarter nearby Shiv Temple.
- 45.Kargali Market nearby Shiv Narayan Temple.
- 46.Baidkaro Eastern Chalkari nearby Shiv Temple.

- 47.Kurpaniya Mahavir place nearby Bajrangbali Temple.
- 48.Kurpaniya Panchayat within Kurpaniya nearby Shiv Temple.
- 49.Kurpaniya Panchayat within Kurpaniya Ram Sahib Fardel nearby Hanuman Temple.
- 50. Armo Yadav nearby Tola's Temple.
- 51. Armo river Dhar Tola nearby Tola's Temple.
- 52. Armo Panchayat in New Basti nearby Mahavir Temple.
- 53. Amlo Basti Ward No. 8 nearby Kali Temple.
- 54. Nearby Ramnagar New Maharani Devi Maa Temple.
- 55. Fusro New Road in front of Brahma Kumari Sansthan.
- 56.Amlo Panchayat within Tarabeda nearby Budha Place.
- 57. Jaridih Eastern Panchayat nearby Dharamshala.
- 58. Jaridih Eastern Panchayat nearby Langar Bhawan.
- 59. Jaridih Eastern Panchayat nearby Damodar Nath Temple.
- 60. Jaridih Eastern Panchayat Jaridih Jhanda Chauk nearby Hanuman Temple.
- 61.Amlo Panchayat, Amlo Basti nearby Kali Temple.
- 62.Jarangdih nearby Northern Durga Temple.
- 63.Kargali Market Harijan Locality nearby Temple.
- 64.Karo Panchayat within Jawahar Nagar nearby Bajrangbali Temple.
- 65. Amlo Panchayat in Purana Subhash Nagar nearby Bajrangbali Temple.
- 66. In Central Colony's Durga Mandap.
- 67. Makoli Niche Dhaura nearby Durga Temple.
- 68.In between Bermaseem Mahavir Temple and Durga Temple.
- 69. Jaridih Western Panchayat nearby Durga Temple.

Block:- Jaridih

- 1. Tupkadih Ahsan Nagar nearby Muslim Locality's Mosque.
- 2. Jaridih Eastern Panchayat nearby Gurudwara.
- 3. Bandhdih Panchayat in Village Bandhdih nearby Mosque.
- 4. Araju Panchayat in Old Village nearby Mosque.
- 5. Gayechanda Panchayat Pathuria Tadghar nearby Mosque.
- 6. Khutri Panchayat Village Tupkadih nearby Budha Mahadev Shiv Temple.
- 7. Tantari Southern Panchayat nearby Tupkadih's Mosque.
- 8. Bhaski Panchayat nearby Jilingtad's Kali Temple.
- 9. Gayechanda Panchayat in Village Tiro nearby Hari Temple.
- 10.In front of Jainamod Rolling Mill nearby Temple.

- 11. Tantari Southern Panchayat nearby Nutandih's Lakhi Temple.
- 12. Tantari Southern Panchayat in Ambedkar Colony nearby Durga Temple.
- 13.Khutri Panchayat in Village Khutri nearby Shiv Temple.
- 14. Tantari Northern Panchayat in Village Tantari nearby Thakurvadi Temple.
- 15. Jaina Panchayat nearby Mishra Side Baba Numdeshwar Temple.
- 16. Jaina Panchayat in Rajput Tola nearby Chaiti Durga Temple.
- 17.Bandhdih Panchayat in after Police Station on Right Side nearby Bajrangbali Temple.
- 18.Gayechanda Panchayat within Village Tiro under Tola nearby Hari Temple.
- 19.Gayechanda Panchayat within Village Pathuria Thakur Kuli Raksha nearby Kali Temple.
- 20.Gayechanda Panchayat within Village Pathuria nearby Mahavir Temple.
- 21. Gangjori Panchayat within Village Barahmashiya nearby Kali Temple.
- 22.Beldih Panchayat within Village Saraivindha nearby Hanuman Temple.
- 23. Araju Panchayat within Village nearby Kali Temple.
- 24. Baradih Panchayat within Village Baradih in front of Shivalaya.
- 25.Baradih Panchayat within Village Baradih under Niche Tola nearby Hari Temple.
- 26.Baradih Panchayat within Village Baradih nearby Kali Temple.
- 27. Tantari Northern Panchayat in Village Kumhardih nearby Kali Temple.
- 28.Tantari Northern Panchayat within Village Tantari, nearby Norther Madyatad's Kali Temple.
- 29.Tantari Northern Panchayat within Village Tantari nearby Kumhardih's Hari Temple.
- 30. Tantari Northern Panchayat within Village Nutandih nearby Hari Temple.
- 31.Tantari Northern Panchayat within Village Punarwas field nearby Kali Temple.
- 32. Jaina Panchayat in Village Rajwar Tola nearby Hari Temple.
- 33. Jaina Panchayat in Village Mehto Tola nearby Hari Temple.
- 34. Gayechanda Panchayat within Tiro in front of Ram Mandir.
- 35. Araldih Panchayat in Village Banchas nearby Hanuman Temple.
- 36. Araldih Panchayat in Village Simaldih nearby Bajrangbali Temple.
- 37. Araldih Panchayat in Village Jagasur nearby Hari Temple.
- 38. Araldih Panchayat in Village Dumardih nearby Bajrangbali Temple.

- 39. Tad Mohanpur, Panchayat Bankapur in front of Markchandi Temple.
- 40.In Tad Mohandpur Panchayat nearby Shiv Temple.
- 41. Tad Mohanpur Panchayat in Village Tad Balidih nearby Shiv Temple.
- 42.Bhaski Panchayat within Village Lipuu nearby Hari Temple.
- 43. Bhaski Panchayat within Village Lipuu nearby Bajrangbali Temple.
- 44.Bahardurpur Kasmar Chauk nearby Mahavir Temple.
- 45.Gangjori Panchayat within Village Barahmashiya Nishichatpur nearby Bajrangbali Temple.
- 46.Gangjori Panchayat within Village in front of Budha Baba Mandir.
- 47.Gangjori Panchayat within Village Tillaya nearby Hari Temple.
- 48. Chilgadda Panchayat within Village Balrampur nearby Hari Temple.
- 49. Chilgadda Panchayat within Village Nandutad nearby Hari Temple.
- 50.Beldih Panchayat within Village Hardi Haridih nearby Hari Temple.
- 51.Beldih Panchayat within Village Sundro nearby Hanuman Temple.
- 52.Beldih Panchayat within Village Kenduwadih nearby Bajrangbali Temple.
- 53. Baru Panchayat within Village Baru Mehto Tola nearby Hari Temple.
- 54.Baru Panchayat within Village nearby Kali Temple.

Block:-Nawadih:

- 1. Sehriya Panchayat, Village Kochwatad nearby Mosque.
- 2. Sehriya Panchayat, Village Sehriya nearby Imambara.
- 3. Sehriya Panchayat, Village Path Lagdwa near by Mosque.
- 4. Sehriya Panchayat, Village Dhujudih nearby Imambara.
- 5. Aahardih Panchayat in Village Junodih nearby Mosque.
- 6. Aahardih Panchayat in Village Aahardih nearby Mosque.
- 7. Aahardih Panchayat, Village Kokaldih nearby Mosque.
- 8. Parasbunni Panchayat in Village Parasbunni nearby Mosque.
- 9. Dahiyari Panchayat in Village Dahiyari nearby Mosque.
- 10. Khatpeeto Panchayat in Village Khatpeeto Upar Tola nearby Mosque.
- 11. Khatpeeto Panchayat in Village Khatpeeto Niche Tola nearby Mosque.
- 12. Birni Panchayat in Village Birni nearby Mosque.
- 13. Birnin Panchayat in Village Titahitad nearby Mosque.
- 14. Surhi Panchayat in Village Surhi nearby Shiv Temple.
- 15. Surhi Panchayat in Village Surhi nearby Imambara.

- 16. Surhi Panchayat in Village Surhi nearby Hanuman Temple. 17. Palamu Panchayat Village in front of Imambara. 18.Penk Panchayat in Village Penk nearby Mosque. 19. Penk Panchayat in Village Penk in front of Jama Masjid. 20.Penk Panchayat in Gajobar in front of Mosque. 21. Penk Panchayat in Bakhyani nearby Mosque. 22. Goniyato Panchayat in Village Goniyato nearby Madarsa. 23.Narayanpur Panchayat in Village Harladih nearby Mosque. 24.Kacho Panchayat in Village Kacho nearby Madarsa. 25. Mungo Panchayat in Village Mungo Hera nearby Madarsa. 26.Narayanpur Panchayat, Lahiya Pathan Tola nearby Mosque. 27.Penk Panchayat Tola Rohaniyatad nearby New Mosque. 28.Penk Panchayat nearby Penk Dargah Chawk. 29.Nawadih Panchayat Nawadih in Centre Premises. 30.Penk Panchayat Village Penk nearby Budha-Budhi Palace. 31. Gunjardih Panchayat nearby Village Gunjardih's Shiv Temple. 32. Chirudih Panchayat in Village Mundratad nearby Shiv Temple. 33. Chirudih Panchayat in Chirudih nearby Mansa Temple. 34. Aahardih Panchayat in Village Aahardih nearby Hanuman Temple. 35. Aahardih Panchayat in Village Junodih nearby Durga Temple. 36. Aahardih Panchayat in Village Aahardih nearby Shiv Temple. 37. Aahardih Panchayat in Village Aahardih nearby Kesdhari Budha Palace. 38. Aahardih Panchayat in Village Junodih nearby Hari Temple. 39. Parasbani Panchayat in Village Kanchanpur, Bengali Tola nearby Durga
 - Temple. 40.Parasbani Panchayat in Village Parasbani, Harijan Tola nearby Shiv Temple.
 - 41.Parasbani Panchayat in Village Kimojoria nearby Hanuman Temple.
 - 42. Parasbani Panchayat in Village Kimojoria nearby Shiv Temple.
 - 43. Dahiyari Panchayat in Village Dahiyari nearby Old Dahiyari Shiv Temple.
 - 44. Dahiyari Panchayat in Village Dahiyari nearby New Hanuman Temple.
 - 45.Bhendra Panchayat in Village Bhendra nearby Durga Temple.
 - 46.Bhendra Panchayat in Village Rajatad nearby Shiv Temple.
 - 47.Baradih Panchayat in Village Baradih nearby Shiv Temple.
 - 48.Kharpito Panchayat in Village Kharpito Argamo nearby Durga Temple.

- 49. Kharpito Panchayat in Village Kudpaniya nearby Shiv Temple.
- 50.Kharpito Panchayat in Village Kharpito nearby Bajrangbali Temple.
- 51. Chapri Panchayat in Village Mungo nearby Shiv Temple.
- 52.Bhalmara Panchayat in Village Bhalmara nearby by Durga Temple.
- 53.Bhalmara Panchayat in Village Katghara nearby Shiv Temple.
- 54.Bhalmara Panchayat in Village Katghara Sarubeda nearby Shiv Temple.
- 55.Bhalmara Panchayat in Village Katghara nearby Hanuman Temple.
- 56.Birni Panchayat in Village Manpur nearby Shiv Temple.
- 57.Birni Panchayat in Village Munjhalitad nearby Shiv Temple.
- 58.Potso Panchayat in Village Khuta in front of Kali Temple.
- 59. Potso Panchayat in Village Khuta in front of Hanuman Temple.
- 60. Potso Panchayat in Village Potso nearby Shiv Temple.
- 61. Potso Panchayat in Village Potso Bhawani nearby Shiv Temple.
- 62. Potso Panchayat in Village Potso Bhawani Hanuman Temple.
- 63. Potso Panchayat in Village Sehria Dhujudih nearby Shiv Temple.
- 64.Nawadih Panchayat in Village Nawadih Tractor Stand in front of Binod Babu Smarak.
- 65.Nawadih Panchayat in Village Nawadih nearby Kali Temple.
- 66. Nawadih Panchayat in Village Nawadih in front of Mansa Temple.
- 67. Barai Panchayat in Village Barai Judamana nearby Bajrangbali Temple.
- 68. Barai Panchayat in Village Bankatwa nearby Shiv Temple.
- 69.Barai Panchayat Harladih nearby Bajranbali Temple.
- 70.Palamu Panchayat in Village Palamu Badki Kudi nearby Bajrangbali Temple.
- 71. Palamu Panchayat in Village Asnatad nearby Shiv Temple.
- 72. Palamu Panchayat in Village Asnatad nearby Bajrangbali Temple.
- 73. Penk Panchayat in Village Pen nearby Shiv Temple.
- 74. Goniyato Panchayat in Village Goniyato nearby Shiv Temple.
- 75. Deggadda Panchayat in Village nearby Shiv Temple.
- 76. Deggadda Panchayat in Village Deggadda nearby Bajrangbali Temple.
- 77. Narayanpur Panchayat in Village Narayanpur nearby Shiv Temple.
- 78. Narayanpur Panchayat in Village Lahiya nearby Hari Temple.
- 79.Kacho Panchayat in Village Kacho nearby Bajrangbali Temple.
- 80.Kanjkiro Panchayat in Village Kanjkiro nearby Shiv Temple.
- 81. Chirudih Panchayat, Chirudih Wat Tree nearby Hari Temple.

- 82. Chirudih Panchayat, Chirudih nearby Lugu Temple.
- 83. Chirudih Panchayat nearby Chirudih Kali Temple.
- 84. Chapri Panchayat Dokwatad nearby Bajrangbali Temple.
- 85. Chapri Panchayat Gothwar Tola nearby Bajranbali Temple.
- 86.Chapri Panchayat Bugdegwa nearby Bajrangbali Temple.

Block:-Gomiya

- 1. Swang Northern Panchayat, Mahavir Palace nearby Mosque.
- 2. Swang Northern Panchayat, Swang Feeter Quarter nearby Mosque.
- 3. Palihari Gurudih Panchayat Bank Mod nearby Gurudwara.
- 4. Teekahara Panchayat in Village Teekahara, Tola Pakiyadih nearby Mosque.
- 5. Kunda Panchayat, Village Jageshwar nearby Mosque.
- 6. Badkipunnu Panchayat nearby Punnu Mosque.
- 7. Chatrochatti Panchyat Village Ketwar nearby Mosque
- 8. Swang Northern Panchayat Maszid Tola nearby Mosque.
- 9. Gomiya Panchayat Village Latkuta nearby Mosque.
- 10.Sasbeda Panchayat Village Sasbeda nearby Mosque.
- 11. Palihari Gurudih Panchayat Bank Mod nearby Gurudwara.
- 12.Lalpaniya Panchayat in Village Iyer nearby Mosque.
- 13.Kathara Panchayat in Village Asnapani nearby under Imambara.
- 14.Bandh Panchayat in Village Palani nearby Mosque.
- 15.Gomiya nearby Gurudwara.
- 16.Kander Panchayat in Village Godhara in front of Mosque.
- 17. Teekahara Panchayat in Village Kasiyadih nearby Mosque.
- 18.Jhirke nearby Imambara.
- 19.Jhirke nearby Khankah.
- 20.Susbeda Eastern Panchayat Government Colony adjancent to Bablu Tiwari's House nearby Hanuman Temple.
- 21. Palihari-Gurudih Panchayat Gomiya Madhya nearby Durga Temple.
- 22.Badkipunnu Panchayat Badkipunnu across the pond, nearby Durga Temple.
- 23. Palihari-Gurudih Panchayat in Gomiya Mehto Tola nearby Hari Temple.
- 24. Gomiya nearby Durga Temple.
- 25.Gomiya nearby Mansa Temple.
- 26.3 No. Tenughat nearby Krishna Chetna Temple.
- 27.Badkipunnu Panchayat Badkipunnu other side nearby Durga Temple.
- 28. Gomiya Panchayat nearby Gomiya Government Hospital.
- 29.Sadam Eastern Chatniyabad upar locality in front of Madarsa.
- 30.Sadam Eastern Panchayat Village Nawabandh in front of Madarsa.
- 31.Gomiya Thakur nearby Badi.
- 32. Tulbul Panchayat nearby Hari Temple.
- 33. Tileya Panchayat near Village Daniya Station nearby Durga Mandap.
- 34.Baridari Panchayat Village Chagdi nearby Durga Temple.
- 35.Kunda Panchayat Village Lawalong nearby Durga Temple.
- 36. Hosir Western Rath Tad nearby Shiv Temple.
- 37. Mahuatad Panchayat adjacent to Mahuatad Police Station nearby Durga Temple.
- 38. Chuttey Panchayat nearby temple of Village Chuttey.
- 39. Chuttey Panchayat Village Khrana nearby Shiv Temple.
- 40.Kurirkhurd Panchayat Village Kurknalo nearby Bajrangbali Temple.
- 41.Badki Sidhawara Panchayat Village Chotki Sidhawara nearby Shiv Temple.
- 42.Badki Sidhawara Panchayat Village Tithi nearby Sarna Temple.
- 43.Badki Chidri Panchayat Village Badki Chidri nearby Shiv Temple.
- 44. Hazari Panchayat Village Hazari Patwa Tola nearby Durga Mandap.
- 45. Hazari Panchayat Village Hazari Nayak Tola nearby Temple.
- 46.Hazari Western Panchayat Village Swang nearby Kali Temple.
- 47.Lodhi Panchayat nearby Village Lodhi's Rajanagar Partiya Mosque.
- 48. Chatrochatti Panchayat Village Tiskopi nearby Hanuman Temple.
- 49. Hurlung Panchayat Village Hurlung nearby Karmatad's temple.
- 50. Hazari Panchayat Village Hazari Mod nearby Shiv Temple.
- 51.Swang Northern Panchayat Old Mines nearby Mahavir Temple.
- 52.Swang Northern Panchayat Mahavir Palace nearby Shiv Temple.
- 53.Gomiya Panchayat Gomiya Mod nearby Kali Temple.
- 54. Gomiya Panchayat Village Palihari Gurudih nearby Bajranbali Temple.
- 55.Sadam Panchayat Village Sadam Market nearby Bajrangbali Temple.
- 56.Sadam Panchayat Sadam Bengali Tola nearby Durga Temple.
- 57.Sadam Western Panchayat Sadam Market nearby Durga Temple.
- 58. Hosir Panchayat, Hosir nearby Durga Temple.
- 59. Palihari Gurudih Panchayat Bank Mod nearby Hanuman Temple.
- 60.Kunda Panchayat Village Lawalong nearby Mahavir Temple.

- 61. Hosir Panchayat Hosir Bagiyatola nearby Shiv Temple.
- 62. Hosir Eastern Panchayat nearby temple in Hosir Naraiyatad.
- 63. Chuttey Panchayat Peeparawar nearby Bajrangbali Temple.
- 64.Karikhurd Panchayat Karikhurd nearby Shiv Temple.
- 65.Karikhurd Panchayat Baratad nearby Bajrangbali Temple.
- 66.Sadam Panchayat Nenatad nearby Durga Temple.
- 67.Lodhi Panchayat Village Tisri nearby Haribol Temple.

Block:- Chandrapura

- 1. Turiyo Panchayat in Viilage Turiyo nearby Indra Chua Saruhul Puja Palace.
- 2. Turiyo Panchayat in Village Turiyo nearby Khanodih Manjhi Palace.
- 3. Dugda Western Panchayat in Village Bargaach Colony adjacent to Bhajpa Office.
- 4. Taranari Panchayat in Village Aaamtola nearby Mosque.
- 5. Taranari Panchayat in Village Taranari nearby Mosque.
- 6. Telo Madhya Panchayat in Village Telo nearby Urdu Maklab Telo Mosque Locality.
- 7. Telo Eastern Panchayat in Village Dandudih in front of Mosque.
- 8. Ghatiyari Panchayat in Village Peepradih nearby Mosque.
- 9. Sijua Panchayat in Village Pathrakulhi adjancent to Bhajpa Office.
- 10. Turiyo Panchayat nearby Indra Chua Saruhul Puja Palace.
- 11. Turiyo Panchayat, Manjhi Palace nearby Khanodih.
- 12. Dugda Panchayat Vidyasagar High School nearby Dugda Gate.
- 13. Dugda Northern Panchayat nearby Maharishi Mehi Ashram.
- 14. Alarago Panchayat in Village Alarago nearby Mosque.
- 15. Dugda Southern Panchayat in Pandit Bageshwari Pandey Saraswati Vidya Mandir.
- 16. Narra Panchayat Village Narra nearby Shiv Temple.
- 17. Ghatiyari Panchayat Village Ghatiyari nearby Madarsa School.
- 18. Rangamati Western Panchayat Sunday Market nearby Garib Nawaz.
- 19. Chandrapura Panchayat nearby Dhamashah Path Sahu Dharmshala.
- 20. Chandrapura Panchayat Chandrapur Church Road nearby Hospital.
- 21.Kurumba Panchayat Stari
- 22. Dugda Eastern Panchayat in Village Dugda basti nearby Durga Temple.
- 23.Dugda Northern Panchayat in Village Durgda Station, Sijua, on Patna Garage Mod.

- 24. Taranari Panchayat in Village Taranari Pandey Tola in Shiv Temple.
- 25. Dugda Southern Panchayat in Village Sarhul on Puja Palace.
- 26. Dugda Southern Panchayat in Village Dugda on Binod Bihari Mehto Pratibha Palace.
- 27. Chirudih Panchayat in Village Giri Tola in front of Durga Temple.
- 28. Turiyo Panchayat in Village Turiyo Dhaura nearby Shiv Temple.
- 29. Telo Madya Panchayat in Village Telo nearby Madal Tola's Hari Temple.
- 30.Telo Madya Panchayat in Village Telo Dewan Bandh in front of Bajrangbali Temple.
- 31.Telo Western Panchayat in Village Telo Telo Lalbandh in front of Hanuman Temple.
- 32.Telo Western Panchayat in Village Telo Shrinagar Tola in front of Hanuman Temple.
- 33. Telo Eastern Panchayat in Village Telo in front of Durga Temple Hatiya Tad.
- 34. Telo Eastern Panchayat in Village Telo in front of Durga Temple Hatiya Tad.
- 35. Telo Madhya Panchayat in Village Bhandar Tola adjacent to Shiv Temple.
- 36. Ghatiyari Panchayat in Village Ghatiyari nearby Shiv Temple.
- 37. Rangamati Panchayat in Village Jharnadih in front of Shiv Temple.
- 38.Rangamati Southern Panchayat in Village Nimtalla Market nearby Public Toilet.
- 39.Rangamati Eastern Panchayat "D" Type Khtal Chandrapura nearby Hanuman Temple.
- 40.Karmatad Panchayat in Village Budhidih nearby Damodar River's Safety Guard Camp.
- 41. Sijua Panchayat in Village Kari Dagdho nearby Shiv Temple.
- 42.Chandrapura Panchayat in Village Chandrapura Station Road nearby Mahavir Temple.
- 43.Kurumba Panchayat in Village Kurumba Jaruwa Basti nearby Shiv Temple.
- 44.Kurumba Panchayat in Village Kurumba nearby Kali temple on Chauk.
- 45.Kurumba Panchayat nearby Village Hed Dhowa's Durga Mandap.
- 46.Kurumba Panchayat in Village Beda Basti nearby Hari Temple.
- 47.Kurumba Panchayat in Village New Tola nearby Hari Temple.
- 48.Kurumba Panchayat in Village Bandhdih nearby Bajrangbali Temple.

- 49.Kurumba Panchayat in Village Stari nearby Kali Temple.
- 50.Kurumba Panchayat in Village Stari Basti nearby B.Ed. College.
- 51.Kurumba Panchayat in Stari Basti nearby Idgah.
- 52.Kurumba Panchayat in Village Kurumba in front of Hari Temple.
- 53. Bandiyo Panchayat in Village Bandiyo
- 54.Dugda Eastern Panchayat in Village Dugda Basti Bhat Tola nearby Hari Temple.
- 55. Dugda Eastern Panchayat in Village Basti at center of Mantaf Chauk.
- 56.Dugda Eastern Panchayat in Village Phuljhariya in front of Kali Temple's Marriage Mandap.
- 57. Dugda Eastern Panchayat in Village Badki tad nearby Shiv Temple.
- 58. Dugda Eastern Panchayat in Village in Bajranbali Temple.
- 59. Dugda Northern Panchayat in Village Parsatad in Bajrangbali Temple.
- 60. Dugda Northern Panchayat in Village Khelachandi in Shiv Temple.
- 61.Dugda Northern Panchayat in Village Chanduwadih Basti nearby Mansa Temple.
- 62. Alarago Panchayat in Village Alarago nearby Bajrangbali Temple.
- 63. Alarago Panchayat in Village Alarago nearby Shiv Temple in Simar Kulhi.
- 64.Taranari Panchayat in Village Taranari nearby Bodhitad Bada Shiv Temple.
- 65. Taranari Panchayat in Village Taranai nearby Hari Temple.
- 66. Bandiyo Panchayat in Village Laharbeda nearby Shiv Temple.
- 67.Bandiyo Panchayat in Village Bandiyo Market Tad nearby Hathiya Rock's Bajrangbali Temple.
- 68.Bandiyo Panchayat in Village Bandiyo Korkota nearby Hari Temple.
- 69.Bandiyo Panchayat in Village Fatehpur nearby Shiv Temple.
- 70.Dugda Southern Panchayat in Village Dugda nearby Prem Nagar Pahari's Bajrangbali Temple.
- 71.Narra Panchayat in Village Narra Tola Harladih nearby Kali Temple.
- 72.Narra Panchayat in Villge Tola Yadugadda nearby Hari Temple.
- 73. Paplo Panchayat in Village nearby Shiv and Durga Temple.
- 74. Paplo Panchayat in Village Khodnatad nearby Hari Temple.
- 75. Taranga Panchayat in Village Sureya Tad nearby Hari Temple.
- 76. Tranga Panchayat in Village Redwa nearby Bajrangbali Temple.
- 77. Taranga Panchayat in Village Jamunatad nearby Shiv Temple.

- 78. Tarmi Panchayat in Village Tarmi in front of Shiv Temple.
- 79. Tarmi Panchayat in Village Tarmi in front of Shiv Temple.
- 80. Tarmi Panchayat in Village Upar Bandh nearby Hari Temple.
- 81. Turiyo Panchayat in Village Turiyo nearby Ded Tola's Kali Temple.
- 82. Turiyo Panchayat in Village Bhandardih Sonadali nearby Shiv Temple.
- 83. Turiyo Panchayat in Village Rajabeda Basti nearby Bajrangbali Temple.
- 84. Turiyo Panchayat in Villge Chirudih Mehto Tola nearby Kali Temple.
- 85. Telo Panchayat in Villge Telo Khalcho nearby Hari Temple.
- 86. Telo Eastern Beltad nearby Shiv Temple.
- 87. Telo Eastern Panchayat in front of Village Bahiyahad Tad's Temple.
- 88. Telo Madhya Panchayat Village Mine Tola nearby Mansha Temple.
- 89. Ghatiyari Panchyat Village Ghatiyari Lalmatiya nearby Shiv Temple.
- 90.Rangamati Western Panchayat Block Office Road nearby Hanuman Temple.
- 91.Rangamati Western Panchayat Village Western Palli nearby Chandrashekhar Nath Shiv Temple.
- 92.Rangamati Panchayat nearby Rangamati Pahari.
- 93. Rangamati nearby Southern Bhursabad's Temple.
- 94.Karmatad Dhaura nearby Shiv Temple.
- 95.Sijua Panchayat Damoda Hatiya nearby Shiv Temple.
- 96. Chandrapura Panchayat nearby Chandrapura Mansa Temple.
- 97.Kurumba Panchayat Kurumba Yadav Tola nearby Bajrangbali Temple.
- 98.Kurumba Panchayat Savdih nearby Bajrangbali Temple.
- 99.Kurumba Panchayat Amaratad nearby Bajrangbali Temple.
- 100. Kurumba Panchayat Chandnabad nearby Bajrangbali Temple.
- 101. Kurumba Panchayat Village Hardova Manjhalipatra nearby Kali Temple.
- 102. Aagardih Panchayat Aagardih Thakur Tola nearby Kali Temple.

Block:- Kasmar

- 1. Kasmar nearby Bhajpa Office.
- 2. Garri Panchayat nearby Bhajpa Office.
- 3. Baraikala Panchayat nearby Novajar Mosque.
- 4. Kherachatar Panchayat nearby Kherachatar Mosque.
- 5. Dantu Panchayat Village Dantu nearby office of the Head.
- 6. Kherachatar Panchayat Kherachatar

- 7. Hisim Panchayat Kedla
- 8. Murhulsudi Panchayat nearby Krishna Murari High School.
- 9. Madhukarpur Panchayat nearby Madhukar Mosque.

10.Sonpur Panchayat Village Khunta nearby Kali Temple.

11.Kasmar Panchayat Chatti nearby Durga Temple.

12. Manjura Panchayat nearby Manjur Shivalaya.

13. Manjura Panchayat Jharmunga nearby Bajrangbali Temple.

14. Madhukarpur Panchayat Upar Tola nearby Durga Temple.

15. Madhukarpur Panchayat Niche Tola nearby Durga Temple.

16. Madhukarpur Panchayat Bhuchungdih nearby Hari Temple.

- 17. Madhukarpur Panchayat Mayapur nearby Hari Temple.
- 18. Madhukarpur Panchayat Jamhar nearby Kali Temple.
- 19. Durgapur Panchayat Dundadih nearby Bajrangbali Temple.

20. Durgapur Panchayat Lalmatiya nearby Bajrangbali Temple.

21.Baraikala Panchayat Barai nearby Hari Temple.

22. Baraikala Panchayat Chainpur nearby Bajrangbali Temple.

23.Bagda Panchayat Bagda nearby Public Durga Temple.

24. Tangtona Panchayat Teliyadih nearby Hari Temple.

25. Tangtona Panchayat Purni Bagiyari nearby Hari Temple.

26. Tangtona Panchayat Bagiyari nearby Shivalaya.

27. Tangtona Panchayat Nawadih nearby Hari Temple.

28.Kherachatar Panchayat nearby Public Durga Temple.

29. Kherachatar Panchayat Kherachatar nearby Hari Temple.

30. Murhulsudi Panchayat Kotogadda nearby Durga Temple.

(HINDI TRANSLATION)

<u>जिला-बोकारो</u> सोलर लाईट लगाने हेतू स्थानों की सूची

🥑 प्रखण्ड :- पेटरवार

अरजूवा पंo ग्राम हड्मिता टोला (पन्ना) में मस्जिद के पास । 1. वरगी पं० ग्राम चरगी मस्जिद एवं मदरसा के पास । 2 बुण्डू उर्दु मदरसा के पास । 3. 4. बण्डू के इमामबाड़ा के पास । 5 साडमकला मस्जिद के पास । 6. साडमकला इमामबाडा के पास । जरूवाटॉंड इमामबाडा के पास । 7. हडमिता खास मस्जिद के सामने । 8. हडमिला खास इमामबाडा के पास । 9. 10. हडमिला पदना टॉड मस्जिद के पास । 11. पलकी पूर्नवास मस्जिद के पास । खेतको उर्दु मदरसा के पास । 12. खेतको उपर टोला इमामबाडा के पास । 13. खेतको पारटॉड स्थित मजार शरीफ के पास । 14. 15. खेतको दरगाह टोला के पास । खेतको खण्डोलिया बस्ती मस्जिद के पास । 16. 17. खेतको पूरनाडीह मदरसा के पास । वलकरी उपर टोला मस्जिद के पास । 18. उलगङ्डा पंo अंतर्गत हड़मिता मस्जिद के पास । 19. पिछरी बस्ती के इमामबाड़ा के पास । 20. 21. पिछरी पुरनाटॉड मस्जिद के पास । उलगड्डा पं० ग्राम हडमिता मस्जिद के पास । 22. खेतको पं० ग्राम खेतको भाजपा आवासीय कार्यालय के पास । 23. खेतको पं0 ग्राम खेतको दरगाह के पास । 24. बुन्डू पं० ग्राम घेटरवार भाजपा कार्यालय के नजदीक सोपिंग सेन्टर के पास । 25. संदर्भा पं० छन्नुराम महतां पूर्व विधायक कार्यालय के पास । 26. पतकी पं0 अंतर्गत ग्राम चिनियागढ़ा मस्जिद के पास । 27 पिछरी उ० पं० पंचमुखी हनुमान मंदिर के पास । 28. पेटरवार पं० गुरजुवा दुर्गा मंदिर के पास । 29. पिछरी उ0 पं0 पिछरी मेन रोड बजरंगबली मंदिर के पास । 30. उलगड्डा पं० ग्राम हड़मिता के ईमामबाड़ा के पास । 31. उलगङ्डा पं0 ग्राम हड़मिता के टोला पन्दनाटॉड़ मस्जिद के पास । 32. पतकी पं० पतकी पुनर्वास मुस्लिम टोला मस्जिद के पास । 33. लुकइया अंसारी मुहल्ला मस्जिद के पास । 34. उलगड्डा पं० ग्राम पन्नाटॉड मस्जिद के पास । 35. पेटरवार भाजपा कार्यालय के पास । 36. ओरदाना पं० भन्डोयाजार खुंटा बाबा मंदिर के पास (2 अद्द) । 37. पतकी पंठ अंतर्गत ग्राम चिनियागढ़ा मस्जिद के पास । 38. अंगवाली दक्षिणी पंo ग्राम बाराकेन्दुआ डेला कोचा में बाबु चन्द मांझी के घर के सामने । 39. अंगवाली दक्षिणी पंo ग्राम बाराकेन्दुआ बाड़ाकुल्ही में सुखदेव सोरेन के घर के पास । 40. अंगवाली दक्षिणी पंo ग्राम बाराकेन्दुआ मुचेतकुल्ही शिवराम सोरेन के घर के पास । 41. अंगवाली दक्षिणी पंo ग्राम बाराकेन्दुआ दोबाट लालचन्द मांझी के घर के पास । 42

अंगवाली दक्षिणी पंo ग्राम झोपड़ोटॉड़ में लालचन्द मरांडी के घर के पास । 43. चलकरी उ0 पं0 चलकरी बस्ती गिरि टोला काली मंदिर के पास । 44. धरवाटॉंड पं० छपरगढा हनुमान मंदिर के पास । 45. 46. बलकरी पं0 रविवास टोला बजरंगबली मंदिर के पास । उलगड्डा पं० ग्राम चिपूदाग दुर्गा मंदिर के पास । 47. अछैया के दुर्गा मंदिर के पास । 48. तेनुघाट 'एफ' टाईप दुर्गा मण्डप के पास । 49. धरवाटॉंड पं0 के धरवाटांड़ में दुर्गा मंडप के पास । 50. चान्दो पं० चान्दो दुर्गा मंदिर के पास । 51. पिछरी उ० पं० राधा कृष्ण मंदिर के पास । 52. पिछरी दक्षिणी पंठ छप्परडीह शिव मंदिर के पास । 53. वान्दो पं० ग्राम बसरिया उपर टोला दुर्गा मंदिर के पास। 54. पेटरवार खत्री मुहल्ला पुराना दुर्गा मंदिर के पास। 55. ओरदाना पंo ग्राम ओरदाना दुर्गा मंदिर के सामने । 56. ओरदाना पंo ग्राम ओरदाना सार्वजनिक दुर्गा मंदिर के पास । 57. तेनुघाट पं० आई टाईप शिव मंदिर के पास । 58. तेनुघाट पं० एफ टाईप दुर्गा मंदिर के पास। 59. GU. तेनुधार पं० न्यू मार्केट दुर्गा मंदिर के पास। वाच्दो पं० ग्राम मंडल टोला दुर्गा मंदिर के पास । 61. 62. चान्दो पं० ग्राम खुर्दचान्दो शिव मंदिर के पास। कोह पंo ग्राम लेपों गायत्री मंदिर के पास । 63. बुन्डू पं0 अंतर्गत ग्राम मंदिर टोला में बजरंगबली मंदिर के पास । 64. अरजूवा पंo ग्राम इरगुवा दुर्गा मंदिर के पास । 65. पिछरी पं० अंतर्गत ग्राम पिछरी दुर्गा मंदिर के पास । 66. पिछरी पं० अंतर्गत ग्राम पिछरी काली मंदिर के पास । 67. पिछरी उ० पं० रोड किनारे अस्पताल के नजदीक हनुमान मंदिर के पास। 68. बुण्डू पचांयत तेनु चौक मास्ट लाईट के पोल के पास । 69, संदमा पं० सदमा खुर्द मनसा मंदिर के पास । 70. सदमा पं० सदमा कला दुर्गा मंदिर के पास । 71. 72. कोह पं0 ग्राम – कोह काली मंदिर के पास । कोइ पं0 लेपो सार्वजनिक बजरंगबली मंदिर के पास। 73. धरवाटांड पं० धरवाटांड उपर दुर्गा मंडप के पास। 74. 75. सदमा पं० दुर्गा मंदिर के पास ।

Э प्रखण्ड :- बेरमो

वेरमो पूर्वी पंo अंतर्गत सण्डे बाजार गुरुद्वारा के पास । 1. बेरमो पूर्वी पंo अंतर्गत गॉधीनगर मदरसा के पास । 2. कुरपनिया पं० अंतर्गत कुरपनिया मस्जिद मोड़ पर । 3. फुसरो अंतर्गत पटेल नगर में मक्का मस्जिद के पास । 4. फुरारो अंतर्गत पटेल नगर में मदनी मस्जिद के पास । 5. नई बस्ती में मस्जिद के पास । 6. बोकारो थर्मल राजा बाजार मस्जिद के पास । 7 बोकारो थर्मल बाजारटॉड मस्जिद के पास । 8. 9 कथारा गुरुद्वारा के पास । कथारा स्टाफ कॉलोनी मस्जिद के पास । 10.

अमलो बस्ती वार्ड नं० ०८ में मस्जिद के पास । 11. अमलो बस्ती वार्ड नं० ०८ में कर्बला हिरक मेन रोड पर । 12. गॉधीनगर बेरमो बस्ती में मस्जिद के पास । 13. जारंगडीह उत्तरी जारंगडीह बाजार गुरूद्वारा के पास । 14 जारंगडीह उत्तरी जारंगडीह बाबू क्वार्टर मस्जिद के पास । 15. जारंगडीह उत्तरी जारंगडीह बेलदार टोला कर्बला के पास । 16. सेन्ट्रल कॉलोनी मस्जिद के पास । 17. 18. जवाहर नगर गुरूद्वारा के पास । (2 अद्द) राण्डे बाजार गुरूद्वारा के पास । 19. जरीडीह बाजार गुरुद्वारा के पास । 20 जारंगडीह गुरुद्वारा के पास । 21. बेरमां बरवार्बड़ा मस्जिद के पास । 22. कारगली बाजार गुरुद्वारा के पास । 23. ढोरी पंचायत . सिंहनगर शिव मंदिर के पास । 24. अमलो पंचायत, मों तारा मंदिर के पास । 25. ढोरी पचायत, राजा बेडा ढोरी बस्ती अन्सारी मोहल्ला में मदरसा के पास । 26. ढोरी पंचायत, राजा बेड़ा मदरसा के पास । 27. ढोरी पंचायत, राजा बेड़ा मस्जिद के पास । 28. अमलो हॉल्ट के पास (2 अद्द) । 29. करगली बाजार एस0बी0आइ0 के सामने देवी मंदिर के पास । 30. कुरपनिया पं० सण्डे बाजार इस्लामिया मदरसा के पास । 31, जरीडीह पूर्वी पंo जरीडीह सब्जी मंडी के पास (2 अद्द) । 32. जरीडीह पश्चिमी पंठ प्राठस्वाठ केन्द्र बेरमो (जरीडीह) मुख्य प्रवेश द्वार पर (2 अद्द)। 33. जारंगडीह उ० पं० जारंगडीह टाटा ब्लॉक चर्च के पास । 34. खास ढोरी बी०एम०एस० कार्यालय के पास (2 अद्द) । 35. वैदकारो बारीग्राम बी०एम०एस० कार्यालय के पास (2 अद्द) । 36. घुटियाटॉड बस्ती में मुर्गा चोथान के शिव मंदिर के पास । 37. बेरमो पूर्वी पं0 अंतर्गत बद्री फैल काली मंदिर के पास । 38. बेरमो पूर्वी पं0 अंतर्गत रामाशंकर सिंह के घर के नजदीक बजरंगबली मंदिर के पास। 39. बेरमां पूर्वी पं0 अंतर्गत पासवान पट्टी बजरंगबली मंदिर के पास । 40. बेरमो पूर्वी पं0 अंतर्गत सण्डे बाजार रविदास बस्ती में बजरंगबली मंदिर के पास । 41. अमलो पंo अंतर्गत रांची धौड़ा राधा कृष्ण मंदिर के पास । 42. अमलो पं० अंतर्गत महादेव मुहल्ला गोल पहाड़ी मंदिर के पास । 43. कारगली सिनियर क्वार्टर शिव मंदिर के पास । 44. कारगली बाजार शिव नारायण मंदिर के पास । 45. बैदकारो पूर्वी चलकरी शिव मंदिर के पास । 46 कुरपनियां महावीर स्थान बजरंगबली मंदिर के पास । 47. कुरपनिया पं0 अंतर्गत कुरपनिया शिव मंदिर के पास । 48. कुरपनिया पं० अंतर्गत कुरपनिया राम साहब फार्डल हनुमान मंदिर के पास । 49. अरमां यादव टोला के मंदिर के मंदिर के पास । 50. अरमो नदी धार टोला में मंदिर के पास । 51. अरमो पं0 के नई बस्ती में महावीर मंदिर के पास । 52. 1 अमलो वस्ती वार्ड नं0 08 में काली मंदिर के पास । 53. रामनगर नया महारानी देवी मॉ मंदिर के पास । 54. फुरारो नया रोड ब्रम्हा कुमारी संस्थान के सामने । 55.

	56.	अमलो पं0 अंतर्गत ताराबेड़ा बुढ़ा स्थान के पास ।
	57.	जरीडीह पूर्वी पं० धर्मशाला के पास ।
	58	जरीडीह पूर्वी पं० लंगर भवन के पास ।
	59.	जरीडीह पूर्वी पं० दामोदर नाथ मंदिर के पास (2 अद्द) ।
2	60.	जरीडीह पूर्वी पं० जरीडीह झंडा चौक हनुमान मंदिर के पास ।
	61	अमलो पं० अमलो बस्ती काली मंदिर के पास ।
	62.	जारंगडीह उत्तरी दुर्गा मंदिर के पास ।
	63	करगली बाजार हरिजन मुहल्ला मंदिर के पास।
	64.	कारो पं0 अंतर्गत जवाहर नगर बजरंगबली मंदिर के पास ।
	65.	अमलो पं० अंतर्गत पुराना सुभाष नगर बजरंगबली मंदिर के पास ।
	66.	सेन्ट्रल कॉलोनी के दुर्गा मंडप में ।
	67.	मकोली नीचे धौडा दुर्गा मंदिर के पास ।
	68.	बेरमासीम महावीर मंदिर एवं दुर्गा मंदिर के बीच में ।
	69.	जरीडीह प0 पं0 दुर्गा मंडप के पास ।

3) प्रखण्ड :- जरीडीह

तुपकाडीह अहसान नगर, मुस्लिम मुहल्ला के मस्जिद के पास । 1. जरीडीह पूर्वी पं0 गुरूद्वारा के पास । 2 बांधडीह पें0 अंतर्गत ग्राम बांधडीह मस्जिद के पास । 3. अराजू पं0 अंतर्गत ग्राम पुराना मस्जिद के पास । 4. गायछन्दा पं० पथुरिया टॉंडघर मस्जिद के पास । 5. खुटरी पं0 ग्राम टुपकाडीह बुढ़ा महादेव शिव मंदिर के पास (2 अद्द) । 6 तांतरी दक्षिणी पंठ टुपकाडीहें मस्जिद के पास । 7. भस्की पं० जिलिंगटॉंड काली मंदिर के पास । 8. गायछन्दा पं0 ग्राम लिरो में हरि मंदिर के पास । 9, जैनामोड रोलिंग मिल के सामने मंदिर के पास । 10. तांतरी द0 पं0 नुतनडीह लख्खी मंदिर के पास । 11 तांतरी द0 पं0 अम्बेदकर कॉलोनी में दुर्गा मंदिर के पास । 12 खुटरी पं0 अंतर्गत ग्राम खुटरी शिव मंदिर के सामने। 13. तोंतरी उ० पं० अंतर्गत ग्राम तांतरी ठाकुरवाड़ी मंदिर के सामने । 14. जैना पंo अंतर्गत मिश्रा साईड बाबा नर्मदेश्वर मंदिर के पास । 15. जैना पं0 अंतर्गत राजपूत टोला में चैती दुर्गा मंदिर के पास । 16. बांधडीह पंo अंतर्गत थाना के आगे दाहिने साईड बजरंगबली मंदिर के पास। 17. गायछन्दा पं0 अंतर्गत ग्राम तीरो नीचे टोला हरि मंदिर के पास । 18. गाथछन्दा पं0 अंतर्गत ग्राम पाथुरिया ठाकुर कुली रक्षा काली मंदिर के पास । 19 गायछन्दा पं० अंतर्गत ग्राम पाथुरिया महावीर मंदिर के सामने । 20. गांगजोरी पं0 अंतर्गत ग्राम बारहेमशिया काली मंदिर के सामने । 21. वेलडीह पं० अंतर्गत ग्राम सरायविन्धा हनुमान मंदिर के पास । 22. 23. अराजु पं0 अंतर्गत ग्राम काली मंदिर के सामने । बाराडीह पं0 अंतर्गत ग्राम बाराडीह शिवालय के सामने । 24. बारडीह पं0 अंतर्गत ग्राम बाराडीह नीचे टोला हरि मंदिर के पास। 25. बाराडीह प0 अंतर्गत ग्राम बाराडीह काली मंदिर के पास । 26. तांतरी उठ पंठ अंतर्गत ग्राम कुम्हारडीह काली मंदिर के पास । 27. तांतरी उ० पं० अंतर्गत ग्राम तांतरी उतरी मडयटॉड में काली मंदिर के पास । 28. तांतरी उ० पं० अंतर्गत ग्राम तांतरी कुम्हारडीह हरि मंदिर के पास। 29 तांतरी उ० पं० अंतर्गत ग्राम नूतनडीह हरि मंदिर के पास। 30. तांतरी उठ पंठ अंतर्गत ग्राम पुर्नेवास क्षेत्र काली मंदिर के पास । 31 जैना पं0 अंतर्गत ग्राम रजवार टोला हरि मंदिर के पास । 32 जैना पंo अंतर्गत ग्राम महतो टोला हरि मंदिर के पास। 33. गाथछन्दा पं० अंलर्गत तीरो राम मंदिर के सामने । 34. अरालडीह पं0 अंतर्गत ग्राम बनचास हनुमान मंदिर के पास । 35. अरालडीह पं0 अंतर्गत ग्राम सिमलडीह बजरंगबली मंदिर के पास । 36. अरालडीह पंo अंतर्गत ग्राम जगासुर हरि मंदिर के पास । 37. अरालडीह पं0 अंतर्गत ग्राम डुमरडीह बजरंगवली मंदिर के पास। 38. टॉड मोहनपुर पं0 बांकापुर मारकचन्डी मंदिर के सामने (2 अद्द) । 39. टॉड मोहनपुर पं0 में शिव मंदिर के पास। 40. टॉड मोहनपुर पं0 अंतर्गत ग्राम टॉड बालीडीह शिव मंदिर के पाल। 41. भरकी पं0 अंतर्गत ग्राम लिपू हरि मंदिर के पास । 42 भएकी पंठ अंतर्गत ग्राम लिपू बजरंगबली मंदिर के पास । 43. बहादुरपुर कसमार चौक महावीर मंदिर के पास । 44 गांगजोरी पं० अंतर्गत ग्राम बारहमशिया निश्चितपुर बजरंगबली मंदिर के पास। 45. गांगजोरी पंo अंतर्गत ग्राम बुढ़ा बाबा मंदिर के सामने । 46. गांगजोरी पंo अंतर्गत ग्राम तिलैया हरि मंदिर के पास । 47.

48 चिलगञ्ज्डा पं० अंतर्गत ग्राम बलरामपुर हरि मंदिर के पास । 49. चिलगञ्ज्डा पं० अंतर्गत ग्राम नन्दुटॉड हरि मंदिर के सामने । 50. बैलर्डीह पं० अंतर्गत ग्राम हरदी हरिडीह हरि मंदिर के पास । 51. बेलर्डीह पं० अंतर्गत ग्राम सुन्दरो हनुमान मंदिर के पास । 52. बेलडीह पं० अंतर्गत ग्राम केन्दुवाडीह बजरंगबली मंदिर के पास । 53. बारू पं० अंतर्गत ग्राम बारू महतो टोला हरि मंदिर के पास । 54. बारू पं० अंतर्गत ग्राम काली मंदिर के पास ।

4) प्रखण्ड :- नावाडीह

सहरिया पं0 ग्राम कोचवाटॉड मस्जिद के पास । 1. सहरिया पं० ग्राम सहरिया इमामबाड़ा के पास । 2 सहरिया पं0 ग्राम पथ लगड़वा मस्जिद के पास । 3. 4 राहरिया ४० ग्राम धुजूडीह इमामबाडा के पास । आहरडीह पं0 अंतर्गत ग्राम जुनोडीह मस्जिद के पास । 5. आहरखीइ पंo अंतर्गत ग्राम आहरडीह मस्जिद के पास । 6. 7 आहरडीह पंo कोकलोडीह मस्जिद के पास । B परसबनी पं0 अंतर्गत ग्राम परसबनी मस्जिद के पास । दहियारी पंo अंतर्गत ग्राम दहियारी मस्जिद के पास । 9. खटगीटों पं0 अंलर्गत ग्राम खटपीटो उपर टोला मस्जिद के पास । 10 खटपीटो पं० अंतर्गत ग्राम खटपीटो नीचे टोला मरिजद के पास । 11. बिरनी पंo अंतर्गत ग्राम बिरनी मस्जिद के पास । 12. बिरनी पंo अंतर्गत ग्राम तिताहीटॉड मस्जिद के पास । 13. सुरही पंo अंतर्गत ग्राम सुरही शिव मंदिर के पास । 14. सुरही पं0 अंतर्गत ग्राम सुरही इमामबाड़ा के पास । 15. सुरही प0 अंतर्गत ग्राम सुरही हनुमान मंदिर के पास । 16 17 पलागू पं० ग्राम इमामबाड़ा के सामने । 18. पेंक पंo अंतर्गत ग्राम पेंक मस्जिद के पास । पेंक पंo अंतर्गत ग्राम पेंक जामा मस्जिद के सामने । 19. 20 पेंक पं0 अंतर्गत गाजोबार मस्जिद के सामने । 21 पेंक पं० अंतर्गत बखयानी मस्जिद के पास । गोनियाटो पं0 अंतर्गत ग्राम गोनियाटो मदरसा के पास । 22 23 नारायणपुर पं० अंतर्गत ग्राम हरलाडीह मस्जिद के पास । 24. काछो पंo अंतर्गत ग्राम काछो मदरसा के पास । 25. मुंगो पं० अंतर्गत ग्राम मुंगो हेरा मदरसा के पास । नारायणपुर पं०, लहिया पठान टोला मस्जिद के पास । 26. पेंक पं० टोला रोहनीयाटॉड नई मस्जिद के पास । 27. पेंक पंo पेंक दरगाह चौक के पास । 28. नागाडीह पं० नावाडीह प्रा० स्वा० केन्द्र परिसर में (2 अद्द) । 29 पेंक पं० ग्राम पेंक बुढ़ा–बुढ़ी स्थान के पास । 30. गुंजरडीह पं० ग्राम गुंजरडीह के शिव मंदिर के पास । 31. चिल्लडीह पंo अंतर्गत ग्राम मुण्डराटॉड़ शिव मंदिर के पास । 32 चिरूडीह पं0 अंतर्गत चिरूडीह सार्वजनिक मनसा मंदिर के पास । 33. आहरडीह पं० अंतर्गत ग्राम आहरडीह हनुमान मंदिर के पास । 34 आधरडीह पंo अंतर्गत ग्राम जूनोडीह दुर्गो मंदिर के पास । 35 आहरडीह पं0 अंतर्गत ग्राम आहरडीह शिव मंदिर के पास । 36. आहरडीह पंo अंतर्गत ग्राम आहरडीह केसंधरी बुढा स्थान के पास । 37. आहरडीह पं0 अंतर्गत ग्राम जूनोडीह हरि मंदिर के पास । 38. परसंबनी पंठ अंतर्गत ग्राम कंचनपुर बंगाली टोला दुर्गा मंदिर के पास । 39.

परसबनी पंo अंतर्गत ग्राम परसबनी हरिजन टोला शिव मंदिर के पास । 40. परसबनी पंo अंलर्गल ग्राम किमोजोरिया हनुमान मंदिर के पास । 41. परसबनी पंo अंतर्गत ग्राम किमोजोरिया शिव मंदिर के पास । 42. दहियारी पं0 अंतर्गत ग्राम दहियारी पुरानी दहियारी शिव मंदिर के पास । 43. दहियारी पं0 अंतर्गत ग्राम दहियारी न्यू हनुमान मंदिर के पास । 44. 45 भेण्डरा पंo अंतर्गत ग्राम भेण्डरा दुर्गा मंदिर के पास । भेण्डरा पं० अंतर्गत ग्राम राजाटॉड शिव मंदिर के पास । 46. बाराडीह पं0 अंतर्गत ग्राम बाराडीह शिव मंदिर के पास । 47. खरपीटों पं0 अंतर्गत ग्राम खरपीटों अरगामों दुर्गा मंदिर के पास । 48. खरपीटो पंo अंतर्गत ग्राम कुडपनिया शिव मंदिर के पास । 49. खरपीटो पं० अंतर्गत ग्राम खरपीटो बजरंगबली मंदिर के पास । 50. वपरी पंo अंतर्गत ग्राम मुंगो शिव मंदिर के सामने । 51. भलमारा पं0 अंतर्गत ग्राम भलमारा दुर्गा मंदिर के पास । 52 भलमारा पं० अंतर्गत ग्राम कटघरा शिव मंदिर के पास । 53. भलमारा पं0 अंतर्गत ग्राम कटघरा सारूबेड़ा शिव मंदिर के पास । 54. भलमारा पंo अंतर्गत ग्राम कटघरा हनुमान मंदिर के पास । 55 बिरनी पंo अंतर्गत ग्राम मानपुर शिव मंदिर के पास । 56 विरनी पंo अंतर्गत ग्राम मंझलीटॉड शिव मंदिर के पास । 57. 58. पोटसो पंठ अंतर्गत ग्राम खुटा काली मंदिर के सामने । पोटसो पं० अंतर्गत ग्राम खुटा हनुमान मंदिर के सामने । 59. 60. पोटसो पंo अंतर्गत ग्राम पोटसो शिव मंदिर के पास । पोटरों। पंठ अंतर्गत ग्राम पोटरों भवानी शिव मंदिर के पास । 61. पोटसो पं० अंतर्गत ग्राम पोटसो भवानी हनुमान मंदिर के पास । 62. 63. पोटसो पं० अंतर्गत ग्राम सहरिया धुजुडीह शिव मंदिर के पास । नावाडीह पंठ अंतर्गत ग्राम नावाडीह ट्रेक्टर स्टैण्ड स्व0 बिनोद बाबु स्मारक के सामने । 64 नावाडीह पंo अंतर्गत ग्राम नावाडीह काली मंदिर के पास । 65. नावाडीह पं० अंतर्गत ग्राम नावाडीह मनसा मंदिर के सामने । 66. बरई पं० अंतर्गत ग्राम बरई जुड़ामना बजरंगबली मंदिर के पास । 67. बरई पंo अंतर्गत ग्राम बनकटवा शिव मंदिर के पास । 68. वर्र्ड पं० हरलाडीह वजरंगबली मंदिर के पास । 69. 70 पलामू पंo अंतर्गत ग्राम पलामू बड़की कुड़ी बजरंगबली मंदिर के पास । 71. पलामू पंo अंतर्गत ग्राम असनाटॉड शिव मंदिर के पास । पलामू पंo अंतर्गत ग्राम असनाटॉंड बजरंगबली मंदिर के पास। 72. पेंक पं0 अंतर्गत ग्राम पेंक शिव मंदिर के पास । 73 गोनियाटो पंo अंतर्गत ग्राम गोनियाटो शिव मंदिर के पास । 74. 75 डेंगगढा पं0 अंतर्गत ग्राम शिव मंदिर के पास। डेगगढा पं0 अंतर्गत ग्राम डेगगढ़ा बजरंगबली मंदिर के पास । 76. नारायणपुर पंo अंतर्गत ग्राम नारायणपुर शिव मंदिर के पास । 77. नारायणपुर पं० अंतर्गत ग्राम लहिया हरि मंदिर के पास । 78. 79 काछो पं० अंतर्गत ग्राम काछो बजरंगबली मंदिर के पास । कंजकिरों पंo अंतर्गत ग्राम कंजकिरों शिव मंदिर के सामने । 80. विरूडीह पं० विरूडीह वट वृक्ष हरि मंदिर के सामने । 81. चिरूडीह पं० चिरूडीह लुगु मंदिर के पास । 82. 83. चिरूडीह पं0 चिरूडीह काली मंदिर के पास । चपरी पं0 डोकवाटॉड बजरंगबली मंदिर के पास । 84 चपरी पं0 गोठवार टोला बजरंगबली मंदिर के पास । 85 चपरी पं0 बगडेगवा बजरंगबली मंदिर के पास । 86.

(5) प्रखण्ड :- गोमिया

स्वांग उत्तरी पं० महावीर स्थान मस्जिद के पास । 1 रवांग उत्तरी पंo स्वांग फीटर क्वार्टर मस्जिद के पास । 2. पलिहारी गुरूडीह पं0 बैंक मोड़ गुरूद्वारा के पास । 3. टीकाहारा पं० ग्राम टीकाहारा टोला पकियाडीह मस्जिद के पास । 4 कुन्दा पं0 ग्राम जगेश्वर मस्जिद के पास । 5. 6. बडकीपुन्नू पं० पुन्नू मस्जिद के पास । चतरोचट्टी पं० ग्राम केतवार मस्जिद के पास । 7. स्वांग उतरी पं0 मस्जिद टोला मस्जिद के पास । 8 गोमिया पं0 ग्राम लटकुटा मस्जिद के पास । 9, संसंबेडा पं० ग्राम संसंबेड़ा मस्जिद के पास । 10. पलीहारी गुरूडीह पं0 बैंक मोड़ गुरूद्वारा के पास । 11. ललपनियाँ पं० अंतर्गत ग्राम अईयर मस्जिद के पास । 12. कथारा पं0 अंतर्गत ग्राम असनापानी इमामबाड़ा के पास नीचे । (2 अद्द) 13. बांध पं0 अंतर्गत ग्राम पलानी मस्जिद के पास । 14. गोमिया गुरूद्वारा के पास । (2 अद्द) 15. कण्डेर पं० अंतर्गत ग्राम गोधरा मस्जिद के सामने । 16. टिकाहारा पं० अंतर्गत ग्राम कसियाडीह मस्जिद के पास । 17. 18. डिरिके इमामबाडा के पास । झिरके खानकाह के पास । 19. सराबेड़ा पूर्वी पं0 गर्वमेंट कॉलोनी बबलू तिवारी के घर के बगल में हनुमान मंदिर के पास 20. पलिहारी – गुरूडीह पं0 गोमिया मध्य दुर्गा मंदिर के पास (2 अद्द) । 21. बडकीपुन्नू पं० बडकीपुन्नू तालाब के उस पार दुर्गा मंदिर के पास । 22. पलिहारी – गुरूडीह पं0 गोमिया महतो टोला में हरि मंदिर के पास । 23. गोमिया दुर्गा मंदिर के पास । 24. गोमिया मनसा मंदिर के पास । 25. 3 नं0 तेनुघाट कृष्ण चेतना मंदिर के पास (4 अदद) । 26. बडकीपुन्नू पं० बड़कीपुन्नू उस पार दुर्गा मंदिर के पास । 27. गोमिया प0 गोमिया सरकारी अस्पताल के पास । 28. साडम पुर्वी चटनीयाबाद उपर महल्ला मदरसा के सामने । 29 साडम पुर्वी पं० ग्राम नावाबांध मदरसा के सामने । 30 गोमिया ठाकुर बाड़ी के पास । 31. 32 तुलबुल पं० अंतर्गत हरि मंदिर के पास । तिलेया पं० ग्राम दनिया स्टेशन के पास दुर्गा मण्डप के पास । 33. वारीडारी पं0 ग्राम चगड़ी दुर्गा मंदिर के पास । 34. 35. कुन्दा पं० ग्राम लावालौंग दुर्गा मंदिर के पास। होसिर पश्चिमी रथ टॉड़ शिव मंदिर के पास । 36. महुआटॉड़ पं० महुआटॉड़ थाना के बगल दुर्गा मंदिर के पास । 37. चुट्टे पं० ग्राम चुट्टे के मंदिर के पास । 38. बुद्टे पं० ग्राम खरना शिव मंदिर के पास । 39. करीखुर्द पं0 ग्राम कुर्कनालो बजरंगबली मंदिर के पास । 40. बडकी सिधावारा पं0 ग्राम छोटकी सिधावारा शिव मंदिर के पास । 41. बड़की सिधावारा पं0 ग्राम टिटही सरना मंदिर के पास । 42. बड़की चिंदरी पं0 ग्राम बड़की चिंदरी शिव मंदिर के पास । 43.

44. हजारी पं0 ग्राम हजारी पटवा टोला दुर्गा मंडप के पास ।

हजारी पं० ग्राम हजारी नायक टोला मंदिर के पास । 45. हजारी पश्चिमी पं० ग्राम स्वांग काली मंदिर के पास । 46 लोधी पं० ग्राम लोधी के राजानगर परतिया मस्जिद के पास । 47. चतरोचट्टी पं० ग्राम तिसकोपी हुनमान मंदिर के पास । 48. हुरलुंग पं० ग्राम हुरलुंग करमाटांड मंदिर के पास । 49. 50. हजारी पं0 ग्राम हजारी मोड़ शिव मंदिर के पास। खांग उत्तरी पंo पुराना माईन्स महावीर मंदिर के पास । 51. 52. रवांग उतरी पं० महावीर स्थान शिव मंदिर के पास । गोमिया पं० गोमिया मोड़ काली मंदिर के पास । 53. गोमिया पंo ग्राम पलिहारी गुरूडीह बजरंगबली मंदिर के पास । 54. साडम पं० ग्राम साडम बाजार बजरंगबली मंदिर के पास । 55. साडम पं० साड़म बंगाली टोला दुर्गा मंदिर के पास । 56. साड़म पश्चिमी पंo साड़म बाजार दुर्गा मंदिर के पास (2 अद्द) । 57. होसिर पं0 होसिर दुर्गा मंदिर के पास । 58. पलिहारी गुरूडीह प0 बैंक मोड़ हनुमान मंदिर के पास । 59. 60. कुन्दा पं० ग्राम लावालोंग महावीर मंदिर के पास । होंसिर प0 पं0 होसिर बगियाटोला शिव मंदिर के पास । 61. होसिर पूर्वी पं0 होसिर नरईयाटांड मंदिर के पास । 62. चुट्टे पं० पीपरावार बजरंगबली मंदिर के पास । 63. 64. करिखुर्द पं० करिखुर्द शिव मंदिर के पास । 65. करीखुर्द पं बाराटांड बजरंगबली मंदिर के पास। 66. साडम पं० नैनाटांड दूर्गा मंदिर के पास । लोधी पं० ग्राम तिसरी हरि बोल मंदिर के पास । 67.

🖒 प्रखण्ड :- चन्द्रपुरा

तुरियो पं० अंतर्गत ग्राम तुरियो इन्द्र चुआ सरूहुल पूजा स्थान के पास । 1. 2. तुरियो पं० अंतर्गत ग्राम तुरियो खानोडीह मांझी स्थान के पास । 3 दुग्दा पश्चिमी पं0 अंतर्गत ग्राम बरगाछ कॉलोनी भाजपा कार्यालय के बगल में । तारानारी पंo अंतर्गत ग्राम आमटोला मस्जिद के पास । 4 तारानारी पं0 अंतर्गत ग्राम तारानारी मस्जिद के पास । 5. नर्श पं० अंतर्गत ग्राम नर्रा मस्जिद के पास । तेलो मध्य पं0 अंतर्गत ग्राम तेलो उर्दु मकलब तेलो मस्जिद मुहल्ला के पास । 6. तेलो पूर्वी पं0 अंतर्गत ग्राम दान्डुडीह मस्जिद के सामने । 7. 8 घटियारी पं0 अंतर्गत ग्राम पिपराडीह मस्जिद के पास । सिजुआ पं० अंतर्गत ग्राम पथराकुल्ही स्थित भाजपा कार्यालय के बगल में । 9. 10. तुरियो पं०, ईन्द्र चुआ सरूहुल पुजा स्थान के पास । 11. तूरियो पं०. मांझी स्थान खानोडीह के पास । दुग्दा पं०, विद्यासागर उच्च विद्यालय, दुग्दा गेट के पास । 12. 13. दुग्दा उ० पं० महर्षि मेही आश्रम के पास । 14. अलारगो पं० ग्राम अलारगो मस्जिद के पास । दुग्दा दक्षिणी पं0 पंडित बागेश्वरी पाण्डेय सरस्वती विद्या मंदिर में (2 अद्द) । 15. नर्रा पं० ग्राम नर्रा शिव मंदिर के पास । 16. घटियारी पंo ग्राम घटियारी मदरसा स्कूल के पास । 17. 18. रंगामाटी पश्चिमी पंo सण्डे मार्केट गरीब नवाज के पास । वन्द्रपुरा पं० धामाशाह पथ साह धर्मशाला के पास । 19. 20. चन्द्रपुरा पं० चन्द्रपुरा चर्च रोड अस्पताल के पास । कुरूम्बा पं० रटारी बस्ती स्वा० केन्द्र के पास । 21. 22. दुग्दा पूर्वी पंo अंलर्गत ग्राम दुग्दा बस्ती दुर्गा मंदिर के पास। 23. दुग्दा उतरी पंo अंतर्गत ग्राम दुग्दा स्टेशन , सिजुआ , पटना गैरेज के मोड पर । तारानारी पं0 अंतर्गत ग्राम तारानारी पाण्डेय टोला शिव मंदिर के प्रागण में । 24. दुग्दा दक्षिणी पंo अंतर्गत ग्राम सरहुल पूजा स्थल पर । 25. दुग्ता दक्षिणी पं0 अंतर्गत ग्राम दुग्दा बिनोद बिहारी महतो के प्रतिभा स्थल पर । 26. विल्ज्डीह पं० अंतर्गत ग्राग गिरि टोला दुर्गा मंदिर के सामने । 27 28. तुरियो पं० अंतर्गत ग्राम तुरियो धौड़ा शिव मंदिर के पास। तेलो मध्य पं० अंतर्गत ग्राम तेलो मंडल टोला के हरि मंदिर के पास । 29. तेलो मध्य पंo अंतर्गत ग्राम तेलो देवान बांध बजरंगबली मंदिर के सामने । 30. तेलो पश्चिमी पं0 अंतर्गत ग्राम तेलो लालबांध हनुमान मंदिर के सामने । 31. तेलो पश्चिमी पंo अंतर्गत ग्राम तेलो श्रीनगर टोला हनुमान मंदिर के सामने । 32. तेलो पूर्वी पं0 अंतर्गत ग्राम लेलो दुर्गा मंदिर हटिया टॉड़ के सामने । 33. 34. तेलो पूर्वी पंo अंतर्गत ग्राम तेलो चडरी महादेव मंदिर के सामने । तेलो मध्य पं० अंतर्गत ग्राम भण्डार टोला शिव मंदिर के बगल में । 35. घटियारी पं0 अंतर्गत ग्राम घटियारी शिव मंदिर के पास । 36. रांगामाटी प0 पं0 अंतर्गत ग्राम झारनाडीह शिव मंदिर के सामने । 37. 38. रांगामाटी द0 पं0 अंतर्गत ग्राम निमतल्ला मार्केट सामुदायिक शौचायल के पास। रांगामाटी पूर्वी पं० डी० टाईप खटाल चन्द्रपुरा हनुमान मंदिर के पास । 39. करमाटांड पं0 अंतर्गत ग्राम बुढ़ीडीह दामोदर नदी के सुरक्षा गार्ड के कैम्प के पास। 40. सिजुआ पं० अंतर्गत ग्राम कारी दग्धो शिव मंदिर के पास। 41. चन्द्रपुरा पंo अंतर्गत ग्राम चन्द्रपुरा स्टेशन रोड महावीर मंदिर के पास। 42. कुरूम्बा पंo अंतर्गत ग्राम कुरूम्बा जरूवा बस्ती शिव मंदिर के पास। 43. कुरूम्बा पं० अंतर्गत ग्राम कुरूम्बा काली मंदिर के पास चौक पर । 44. 45. कुरूम्बा पं0 अंतर्गत ग्राम हेड धोवा में दुर्गा मंडप के पास ।

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कुरूम्बा पंo अंतर्गत ग्राम बेडा बस्ती हरि मंदिर के पास । 46. कुरूम्बा पं० अंतर्गत ग्राम नया टोला हरि मंदिर के पास । 47. कुरूम्बा पं० अंतर्गत ग्राम बांधडीह बजरंगबली मंदिर के पास। 48. कुरूम्बा पं० अंतर्गत ग्राम रटारी काली मंदिर के पास । 49. कुरूम्बा पंo अंतर्गत ग्राम रटारी बस्ती बीoएडo कॉलेज के पास । 50. 51. कुरूम्बा पं0 अंतर्गत रटारी बस्ती ईदगाह के पास । कुरूम्बा पं० अंतर्गत ग्राम कुरूम्बा हरि मंदिर के सामने । 52. बेंदियो पं0 अंतर्गत ग्राम बंदियो बस्ती में (5 अद्द) । 53. दुग्दा पूर्वी पं० अंर्तगत ग्राम दुग्दा बस्ती भाट टोला हरि मंदिर के पास। 54. दुग्दा पूर्वी पंo अंतर्गत ग्राम बस्ती के बीचो बीच मंटफ चौक पर । 55. दुग्दा पूर्वी पं० अतर्गत ग्राम फुलझरिया काली मंदिर के विवाह मंडप के सामने । 56 दुग्दा प0 पं0 अंतर्गत ग्राम बडकी टांड शिव मंदिर के पास । 57. दुग्दा प0 पं0 अंतर्गत ग्राम बजरंगबली मंदिर के प्रांगण में । 58. तुग्ता उ० पं० अंतर्गत ग्राम परसाटांड बजरंगबली मंदिर के प्रांगण में । 59. दुग्दा उ० पं० अंतर्गत ग्राम खेलाचन्डी शिव मंदिर के प्रांगण में । 60. दुंग्दा उ० पं० अंलर्गत ग्राम चन्दुवाडीह बस्ती में मनसा मंदिर के पास । 61. अलारगो पंo अंतर्गत ग्राम अलारगो बजरंगबली मंदिर के पास। 62. अलारगो पंo अंतर्गत ग्राम अलारगो सिमरा कुल्ही में शिव मंदिर के पास । 63. तारानारी पं० अतर्गत ग्राम तारानारी बोधीटांड बडा शिव मंदिर के पास। 64 तारानारी पं0 अंतर्गत ग्राम तारानारी हरि मंदिर के पास । 65. बंदियों पं0 अंतर्गत ग्राम लहारबेडा में शिव मंदिर के पास । 66. बंदियों पं0 अंतर्गत ग्राम बंदियों बाजार टॉड हथिया पत्थर के बजरंगबली मंदिर के पास 67. बंदियो पं० अंतर्गत ग्राम बंदियो कोरकोटा हरि मंदिर के पास। 68. बंदियों पंo अंतर्गत ग्राम फतेहपुर शिव मंदिर के पास। 69. दुग्दा द0 पं0 अंतर्गत ग्राम दुग्दा प्रेम नगर पहाड़ी के बजरंगबली मंदिर के पास । 70. नरों पं0 अंतर्गत ग्राम नर्रा टोला हरलाडीह काली मंदिर के पास । 71. नर्रा पं० अंतर्गत ग्राम टोला यादुगढ़ा हरि मंदिर के पास। 72. 73. पपलो पंo अंतर्गत ग्राम शिव एवं दुर्गा मंदिर के पास । पपलो पंo अंतर्गत ग्राम खोदनाटांड हरि मंदिर के पास। 74. 75. तरंगा पं० अंतर्गत ग्राम सुरैया टांड में हरि मंदिर के पास । तरंगा पंo अंतर्गत ग्राम रेदवा बजरंगबली मंदिर के पास। 76. 77. तरंगा पं० अंतर्गत ग्राम जामुनटॉड शिव मंदिर के पास। तारमी पं0 अंतर्गत ग्राम तारमी शिव मंदिर के सामने । 78. तारमी पंo अंतर्गत ग्राम तारमी हनुमान मंदिर के सामने । 79. तारमी पं0 अंतर्गत ग्राम उपर बांध हरि मंदिर के पास । 80. तुरियो पंo अंतर्गत ग्राम तुरियो बस्ती में डेढ़ टोला के काली मंदिर के पास । 81. तुरियो पं० अंतर्गत ग्राम भण्डारडीह सोनाडाली शिव मंदिर के पास । 82. तुरियो पं0 ग्राम राजाबेडा बस्ती में बजरंगबली मंदिर के पास। 83. तुरियो पंo ग्राम चिरूडीह महतो टोला में काली मंदिर के पास। 84. तेलो प0 पं0 ग्राम तेलो खलचो हरि मंदिर के पास । 85. 86. तेलो पूर्वी बेलटांड शिव मंदिर के पास। 87. तेलो पूर्वी पं0 ग्राम बडियाहड टांड मंदिर के सामने । तेलो मध्य पं० ग्राम माईन टोला मनषा मंदिर के पास । 88. घटियारी पं० ग्राम घटियारी लालमटिया शिव मंदिर के पास। 89. रांगामाटी प0 पं0 प्रखण्ड कार्यालय रोड हनुमान मंदिर के पास। 90. रांगामाटी प0 पं0 ग्राम प0 पल्ली चन्द्रशेखरें नाथ शिव मंदिर के पास । 91.

रांगामाटी प0 रांगामाटी पहाडी के पास । 92. रांगामाटी द0 भुरसाबाद मंदिर के पास । 93. करमाटांड घौडा शिव मंदिर के पास । 94. सिजुआ पं0 दामोदा हटिया शिव मंदिर के पास । 95. 96. चन्द्रपुरा पं० चन्द्रुपरा मनसा मंदिर के पास । कुरूम्बा पं० कुरूम्बा यादव टोला बजरंगबली मंदिर के पास । 97. कुरूम्बा पं0 सावडीह बस्ती बजरंगबली मंदिर के पास । 98. कुरूम्बा पं० अमाराटांड बजरंगबली मंदिर के पास । 99. कुरूम्बा पं० चन्दनाबाद बजरंगबली मंदिर के पास । 100. 101. कुरूम्बा पं० ग्राम हरदोवा मंझलीपतरा काली मंदिर के पास । आगरडीह पं० आगरडीह ठाकुर टोला काली मंदिर के पास । 102.

प्रखण्ड :- कसमार

कसमार भाजंपा कार्यालय के पास । 1. गरी पं० भाजपा कार्यालय के पास । 2. बरईकला पं० नौवाजार मस्जिद के पास । 3. खैराचातर पं0 खैराचातर मस्जिद के पास । 4. दांतु पंo ग्राम दांतु मुखिया के आवासीय कार्यालय के पास । 5. खैराचातर पं० खैराचातर स्वा० उपकेन्द्र के पास । 6 हिसिम पं0 केदला स्वा0 उपकेन्द्र के पास । 7. मुरहुलसुदी पं० कृष्ण मुरारी उच्च विद्यालय के पास (2 अद्द)। 8. मधुकरपुर पं० मधुकरपुर मस्जिद के पास । 9. सोनपुर पं० ग्राम खुँटा काली मंदिर के पास। 10. करामार पंठ बट्टी दुर्गा मंदिर के पास। 11 मंजूरा पंo मंजूरा शिवालय के पास। 12. मंजूरा पं० झरमुंगा बजरंगबली मंदिर के पास । 13. मधुकरपुर पं० उपर टोला दुर्गा मंदिर के पास । 14 मधुकरपुर पं0 नीचे टोला दुर्गा मंदिर के पास । 15. मधुकपुर पं0 भूचूंगडीह हरि मंदिर के पास । 16. मधुकरपुर पं० मायापुर हरि मंदिर के पास । 17 मधुकरपुर पुं० जम्हार काली मंदिर के पास । 18. दुर्गापुर पं0 डुण्डाडीह बजरंगबली मंदिर के पास । 19. दुर्गापुर पं० ललमटिया बजरंगबली मंदिर के पास । 20. बरईकला पं0 बरई हरि मंदिर के पास । 21. यरईकला पं० चैनपुर बजरंगबली मंदिर के पास । 22. बगदा पं0 बगदा सार्वजनिक दुर्गा मंदिर के पास । 23. टांगटोना पं0 तेलियाडीह हरि मंदिर के पास। 24. टांगटोना पं0 पुरनी बगीयारी हरि मंदिर के पास । 25. टांगटोना पं0 बगियारी शिवालय के पास । 26. टांगटोना पं० नावाडीह हरि मंदिर के पास ! 27. खैराचातर पं० सार्वजनिक दुर्गा मंदिर के पास । 28. खैराचातर पंo खैराचातर हरि मंदिर के पास। 29. मुरहुलसुदी पं0 कोतोगढा दुर्गा मंदिर के पास । 30.