NTPC VIDYUT VYAPAR NIGAM LIMITED

(A wholly owned Subsidiary of NTPC Limited)

BIDDING DOCUMENTS

FOR

DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI - TANDUR.

BIDDING DOCUMENT NO.: NVVN/C&M/RE-384/2025-26

OWNER/ EMPLOYER: CCI LIMITED

PROJECT MANAGEMENT CONSULTANT (PMC): NVVN LIMITED

(This Document is meant for the exclusive purpose of bidding against this Bid Document No./ Specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued)

NTPC VIDYUT VYAPAR NIGAM LIMITED

(A wholly owned Subsidiary of NTPC Limited)

CONTRACTS & MATERIALS

INVITATION FOR BIDS (IFB)
FOR
DEVELOPMENT OF 2 X 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI - TANDUR

BID DOCUMENT NO: NVVN/C&M/RE-384/2025-26 **DATE: As per NIT in GEPNIC portal**

NTPC VIDYUT VYAPAR NIGAM LIMITED (NVVN) invites online Bids from eligible bidders on **'Single Stage Two Envelope'** bidding basis (Envelope-I: Techno-Commercial Bid & Envelope- II: Price Bid) for aforesaid Package on behalf of CCI Limited.

For the detailed IFB and Bidding Documents please visit at e-procurement portal https://eprocurentpc.nic.in or may contact Manager (Contracts), NTPC VIDYUT VYAPAR NIGAM LIMITED, Engineering Office Complex, Plot No. A-8A Sector 24, Block A, Noida, Uttar Pradesh 201301, Email: nvvncontracts@ntpc.co.in; Tel No: 0120-497246

Registered office: NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003, Corporate Identification Number: U40108DL2002GOI117584, Website: www.nvvn.co.in

BIDDING DOCUMENTS
FOR
DEVELOPMENT OF 2 X 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI – TANDUR

BID DOCUMENT NO.: NVVN/C&M/ RE-384/2025-26

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(Bid Form along with Attachments)

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(Price attachments and Price Schedules)

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Acronyms

BDS	Bid Data Sheet
CIF	Cost, Insurance and Freight
CIP	Carriage and Insurance paid to (place)
CPM	Critical Path Method
EDI	Electronic Data Interchange
EXW	Ex factory, ex works or ex warehouse
FCA	Free Carrier
FOB	Free on Board
FOR	Free on Rail / Road
FP	Bid Forms, Procedures & attachments
GCC	General Conditions of Contract
ICC	International Chamber of Commerce
IFB	Invitation for Bids
ITB	Instructions to Bidders
SCC	Special Conditions of Contract
TS	Technical Specifications and Drawings
UNCITRAL	United Nations Commission on International Trade Law
INCOTERMS	International Rules for interpreting Trade Terms.

Note : The terms EXW, CIF, etc. shall be governed by the rules prescribed in the current edition of INCOTERMS, published by the international chambers of commerce, 38, Cours Atbert 1er. 75008, Paris, France.

SECTION - I

INVITATION FOR BIDS (IFB)

INVITATION FOR BIDS (IFB)
FOR
DEVELOPMENT OF 2 X 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI – TANDUR
(Domestic Competitive Bidding)

Bidding Document No.: NVVN/C&M/RE-384/2025-26 **Date: As per NIT in GEPNIC portal**

1.0 NTPC VIDYUT VYAPAR NIGAM LTD (NVVN) invites on-line bids at Government e-procurement portal of NIC (GePNIC) at website- https://eprocurentpc.nic.in/ on Single Stage Two Envelope Basis (i.e. Envelope-I: Techno-Commercial Bid and Envelope-II: Price Bid) from eligible Bidders for aforesaid package on behalf of CCI Limited (herein after called as Owner/ employer), as per the scope of work briefly mentioned hereinafter.

2.0 **BRIEF SCOPE OF WORK**

The work includes EPC works for development of 2 x 3 MW ground mounted solar PV project for CCI Limited at their factory in Tandur – Telangana. The solar PV plant shall be connected behind the meter and all the requisite approvals are to be obtained by the bidder. The scope also includes comprehensive Operation and maintenance for 10 years and AMC for critical equipments for 10 years.

3.0 CCI intends to finance subject Package through External Commercial Borrowings/ Domestic Commercial Borrowings / Own sources. NVVN shall act as a Project Management consultant for implementation of the project. NVVN shall publish, evaluate the bids and the work shall be awarded to the successful bidder by CCI.

All payments shall be released to the successful bidder by CCI Limited. NVVN shall certify all the works executed by the successful bidder for onward release of payment by CCI Limited during project construction period and during the initial 5 years of O&M period. During the remaining O&M period, certification of works shall be directly carried out by CCI Limited. Bid security shall be in favour of 'NVVN Limited' whereas the Performance security and other Bank guarantees shall be in favour of 'CCI Limited'.

4.0 Detailed specification, scope of work and terms & conditions are given in the Bidding Documents, which are available at the GePNIC (e-tender) portal at https://eprocurentpc.nic.in/. The Bidding Schedule* for the Tender is as under:

Issuance of IFB	As per NIT in GEPNIC portal
Bidding Document Sale Date & Time	As per NIT in GEPNIC portal
Last Date for receipt of queries from bidders (if any) **	As per NIT in GEPNIC portal
Pre Bid Conference date & time	**Not applicable**
Bid Submission Start	As per NIT in GEPNIC portal
Bid Submission End Date & Time*	As per NIT in GEPNIC portal

Bid Opening Date & Time for Techno-Commercial Bid*	As per NIT in GEPNIC portal
Price Bid Opening Date & Time	Shall be intimated by NVVN/System Generated Email.
Cost of Bidding Document	**Not applicable**

Bidders are advised to visit the GePNIC (e-tender) portal of NTPC for updated bidding schedule of the Tender.

**It is to be noted that "No Queries from Bidders, whatsoever, shall be entertained by the Employer/PMC beyond the last date of receipt of Queries/ Pre-Bid Conference (if applicable) as specified at GePNIC portal of NTPC".

Note:

Site survey is mandatory for all the bidders who are willing to participate in this tender. Submission of undertaking for site visit on bidder's letter head is mandatory. Without this undertaking, bids shall be outright rejected. Bidders shall visit the site as per the timelines given in NIT. Last minute request for site visit will not be entertained.

5.0 All bids must be accompanied by Bid Security for an amount of **INR 50,00,000.00** (Indian Rupees Fifty Lakhs only) in the form as stipulated in the Bidding Documents.

ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE BID SECURITY SHALL BE REJECTED BY THE PMC AS BEING NON-RESPONSIVE AND SHALL NOT BE OPENED. BIDDER SHALL SUBMIT THE PROOF OF E-PAYMENT IN SEPARATE SEALED ENVELOPE OR IN THE E-TENDERING PORTAL, IF BID SECURITY IS SUBMITTED THROUGH ELECTRONIC FUND TRANSFER

BANK DETAILS FOR EFT PAYMENT

(i) Bank Name: ICICI Bank Limited
(ii) Branch: CONNAUGHT PLACE BRANCH
(iii) Bank Address: 9A, PHELPS BUILDING, CONNAUGHT PLACE, NEW DELHI- 110001
(iv) IFSC Code: ICIC0000007
(iv)Account No.: 000705008910

-Bid security in the form of Bank guarantee or insurance surety bond is to be submitted in the name of NTPC VIDYUT VYAPAR NIGAM LIMITED.

6.0 QUALIFYING REQUIREMENTS FOR BIDDERS

NVVN RE enlisted bidders, who are qualified based on financial criteria, are eligible for the subject tender.

7.0 A complete set of Bidding Documents may be downloaded by any interested Bidder from the e-Tender Portal as per specified schedule. The tender is invited under e-tendering process. The bidders can enroll themselves on the website https://eprocurentpc.nic.in/. The use of Digital Signature Certificate (DSC) Class-3 key is mandatory for e-tendering activities. Accordingly, bidders should have Digital Signature Certificate (DSC) key of Class 3 to participate in e-tendering. Bidders, if required, can obtain DSC Class-3

key from agencies authorized by Govt. of India. The e-Tender Portal also has the user manuals with detailed guidelines on enrolment and participation in the bidding process.

No hard copy of Bidding Documents shall be issued. Bids shall be submitted ONLY at the e-Tender Portal i.e. https://eprocurentpc.nic.in/

8.0 'Class-I local suppliers' and 'Class-II local suppliers' only are eligible to participate in this tender, as defined in the bidding documents/ Public Procurement (Preference to Make in India), Order 2017 and its subsequent amendments/ revisions issued by DPIIT. The bidders may apprise themselves of the relevant provisions of bidding documents in this regard before submission of their bids."

9.0. Any 'Bidder from a country which shares a land border with India', as specified in the Bidding Documents, will be eligible to bid in this tender only if bidder is registered with the Competent Authority as mentioned in the Bidding Documents.

Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, will be eligible to bid only if the bidder is registered with the same competent authority.

However, the said requirement of registration will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects.

10.0 Transfer of Bidding Documents by one intending Bidder to another is not permissible.

11.0 Downloading/Issuance of Bidding Documents and /or submission of Bid shall not construe that bidder is considered qualified.

12.0 NVVN reserves the right to reject any or all bids or cancel/withdraw the Invitation for Bids (IFB) without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.

13.0 **Address for communication:**

Manager (C&M)
NTPC VIDYUT VYAPAR NIGAM LIMITED
Engineering Office Complex, Plot No. A-8A Sector 24, Block A,
Noida, Uttar Pradesh 201301
Email: nvvncontracts@ntpc.co.in
Corporate Identification Number: U40108DL2002GOI117584,
website: www.eprocurentpc.nic.n
Phone No: 0120-4947246

14.0 **Registered Office**

NTPC VIDYUT VYAPAR NIGAM LIMITED,
NTPC Bhawan, Core-7, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi – 110003
Corporate Identification Number: U40108DL2002GOI117584.
Website: www.nvvn.co.in

15.0 Other Instructions

i. Please use 'Online Bidder Enrollment' link provided on portal https://eprocurentpc.nic.in (GePNIC) to register
ii. Go through Help, FAQ etc. as provided on the above portal.
iii. Class III digital signature (DSC) is required for submission of BID on above portal.
iv. Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of GePNIC.

GePNIC Helpdesk Telephone: 24X7 Customer Support +91-120-4001 002/+91-120-4200 462/ +91-120-4001 005/+91-120-6277 787

NTPC VIDYUT VYAPAR NIGAM LIMITED
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SECTION – II

INSTRUCTIONS TO BIDDERS

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39. Integrity Pact
40. Independent External Monitors
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Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	INSTRUCTIONS TO BIDDERS
	A. Introduction
1.0	**Source of Funds**
1.1	The Employer as defined in Bid Data Sheet (BDS) intends to finance the package named in the BDS, through domestic / own resources/ External Commercial Borrowings.
2.0	**Plant, Equipment and Services**
2.1	For the purposes of these bidding documents, the word “facilities” means the plant and equipment to be supplied and installed, together with the services to be carried out by the contractor under the contract. The words “plant and equipment”, “installation services” etc., shall be construed in accordance with the respective definitions given to them in the General Conditions of Contract.
2.2	**Eligible Bidders** Bidding for the package named in the Bid Data Sheet (BDS) is open to bidders from within the Employer/NVVN's country only, subject to fulfillment of conditions specified in ITB Clause **“Restrictions on procurement from a Bidder of a country which shares a land border with India”.**
3.0	**Cost of Bidding** The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Employer/PMC will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
	B. The Bidding Documents
4.0	**Content of Bidding Documents**
4.1	The facilities required, bidding procedures, contract terms and technical requirements are prescribed in the bidding documents. The bidding documents include the following sections: Section I – Invitation for Bids (IFB) Section II – Instructions to Bidders (ITB) Section III – Bid Data Sheet (BDS) Section IV – General Conditions of Contract (GCC) Section V – Special Conditions of Contract (SCC) Section VI – Technical Specifications (TS)

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	Section VII – Forms and Procedures (FP) Part 1 of 2- Bid Form along with Attachments and Price Schedules Part 2 of 2- Standard Forms & Procedures
4.2	The Bidder is expected to examine all instructions, forms, terms, conditions, specifications and other information in the bidding documents. Failure to furnish all information required as per the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.
4.3	**Mode of Tendering** The Bid is invited under e-tendering process. The bidding documents shall be published on the Government e-procurement portal of NIC (GePNIC) at address https://eprocurentpc.nic.in/ (e-Tender Portal). The bidders can enroll themselves on the portal using the "Online Bidder Enrollment" tab. The use of Digital Signature Certificate (DSC) key is mandatory for e-tendering activities. Accordingly, bidders should have Digital Signature Certificate (DSC) key of Class 3 to participate in e-tendering. Bidders, if required, can obtain digital signature certificate (DSC) Key of Class 3 from agencies authorized by Govt. of India. The said portal also has the user manuals with detailed guidelines on enrollment and participation in the bidding process.
5.0	**Clarification on Bidding Documents**
5.1	A prospective Bidder requiring any clarification to the bidding documents may notify the PMC through 'Seek Clarifications' tab under e-Tender portal or through e-mail at the address indicated in Bid Data Sheet (BDS). The PMC will respond to any request for clarification or modification of the bidding documents that it receives no later than the last date of receipt of queries as specified in Invitation for Bids (IFB). The PMC will post the Clarifications at e-Tender Portal and Bidders can view these clarifications once they are posted at the portal. Bidders are also advised to regularly check at e-Tender Portal regarding posting of clarification, if any. Further, no queries from Bidders shall be entertained after last date of receipt of Queries/ Pre-Bid Conference (if applicable) as specified in IFB. Accordingly, any query (ies) received from Bidders after the cut-off date shall not be considered and bidders to submit the bid based on the bidding documents (and amendments/ Errata/ Clarifications etc. thereof) issued.
5.2	The Bidder is advised to visit and examine the site where the facilities are to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for supply and installation of the facilities. The costs of visiting the site shall be borne by the bidder fully.
5.3	The Bidder and any of its personnel or agents will be granted permission by the Employer/PMC to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the Bidder, its personnel and agents will release and indemnify the Employer/PMC and its personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result

of the inspection.

6.0 **Amendment to Bidding Documents**

6.1 At any time prior to the deadline for submission of bids, the PMC may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the bidding documents.

6.2 The amendments will be posted at e-Tender Portal for viewing by the Bidder. The amendments will be binding on Bidders and it will be assumed that the information contained therein will have been taken into account by the Bidder in its bid. Bidders are also advised to regularly check e-Tender Portal regarding posting of Amendment, if any.

6.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the PMC may, at its discretion, extend the deadline for the submission of bids.

C. Preparation of Bids

7.0 **Language of Bid**

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

The English Translation of the documents shall be carried out by professional translators and the translator shall certify that he is proficient in both languages in order to translate the document and that the translation is complete and accurate. Further, translation shall be authenticated by the Indian Consulate located in the Country where the documents have been issued or the Embassy of that Country in India.

8.0 **Documents Comprising the Bid**

Single Stage Two Envelope Bidding Procedure shall be followed for the subject package as under:

Envelope-I : Techno-Commercial Bid

Envelope-II : Price Bid

The bidder has to submit Techno-Commercial Bid (Envelope-I) and Price Bid (Envelope-II) through e-Tender Portal only. In addition, the documents mentioned in clause no. 8.1.1 have also to be submitted in Original in physical mode before the last date & time of submission of bid. To submit their bid through electronic mode at the e-Tender Portal, bidder has to use their digital signature certificate keys. The bidders are requested to download the entire bidding documents from the e-Tender Portal.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
8.1	**Techno-Commercial Bid (Envelope-I)** The Techno-Commercial Bid shall comprise of the following:
8.1.1	Documents to be submitted in **physical form** in separate sealed envelope (s) duly marked in accordance with ITB clause 15.1 i.e. "Sealing and Marking of Physical Documents": (a) **Attachment 1: Bid Security** Bid security shall be furnished in accordance with ITB Clause 12. Bidder can also submit the Bid Security Online prior to the last date and time for submission of Bid through NEFT/RTGS transfer in the account of NTPC Vidyut Vyapar Nigam Limited as per details given below (i) Bank Name: ICICI Bank Limited (ii) Branch: CONNAUGHT PLACE BRANCH (iii) Bank Address: 9A, PHELPS BUILDING, CONNAUGHT PLACE, NEW DELHI- 110001 (iv) IFSC Code: ICIC0000007 (iv) Account No.: 000705008910 In such case, upon successful e-payment of the Bid Security to NVVN's bank account, payment details shall be submitted by the bidder as a part of its bid, in the e-tendering portal and in a separate sealed envelope, as a proof of e-payment of Bid Security. (b) Deleted. (c) **Attachment 2: Power of Attorney** A power of attorney, duly notarized by a Notary Public, indicating that the person signing the bid has the authority to sign the bid and that the bid is binding upon the Bidder during the full period of its validity in accordance with ITB Clause 13. Power of attorney(s), duly notarized by Notary Public, indicating that the person(s) signing the documents on behalf of Associate(s)/ collaborator(s)/ executants(s) of JV Agreement (if permissible in Section-III, Bid Data Sheet) have the authority to sign the same and the said documents are binding upon them during the full period of their validity. Further, in case of JV bid (if permissible in Section-III, Bid Data Sheet), a power of attorney in favour of the authorized signatory of the lead partner, signed by legally authorized signatory (ies) of other joint venture partner shall also be submitted. (The Authority of the person issuing the Power of Attorney shall also be submitted).

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	Further, Bidder to note that bid can be submitted/digitally signed by only one person. The Power of Attorney must be in the name of person digitally signing the bids. In addition, the scanned copy of above-mentioned physical forms shall be uploaded by Bidder in "Fee Cover" or Techno-commercial Envelope on the e-tender portal. (d) Deleted (e) Deleted
8.1.2	Documents to be submitted **online** through e-tender mode: The Bid Form as per Section-VII, Part 1 of 2, duly completed together with the following Attachments shall be uploaded at the e-Tender Portal in the Pre-Qual/Technical Cover/Envelope (a) Deleted. (b) **Attachment 4: Conformity of the Facilities** The documentary evidence of the conformity of the facilities to the bidding documents may be in the form of literature, drawings and data, and shall include: (i) a detailed description of the essential technical and performance characteristics of the facilities; (ii) a list giving full particulars, including available sources, of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the facilities following completion of facilities in accordance with provisions of contract; and (iii) a commentary on the PMC/Employer's Technical Specifications and adequate evidence demonstrating the substantial responsiveness of the facilities to those specifications. Bidder shall note that standards for workmanship, materials and equipment designated by Employer/PMC in the bidding documents are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to PMC's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Technical Specifications.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	Attachment 4A: Special Tools and Tackles The bidder shall provide the details regarding Special Maintenance Tools and Tackles. The cost of these Tools and Tackles shall be included in the Bid Price. (c) **Attachment 5: Erection Tools and Plant and Safety Equipments & Safety Personal Protective Equipments** List of Erection Tools and Plant and Safety Equipments & Safety Personal Protective Equipments which the bidder proposes to bring to site in case the contract is awarded to him. **Attachment 5A: Commissioning / Start-up spares** List of Commissioning / Start-up spares which the bidder proposes to bring to site in case the contract is awarded to him. (d) **Attachment 6: Quality Assurance Programme** Details regarding the overall quality management & procedures which the bidder proposes to follow during various phases of execution of the contract. (e) **Attachment 7: Additional Information** Additional Information which the bidder wishes to provide in his bid. (f) **Attachment 8: Demonstration Parameter / Guarantee Declaration** The declaration on the demonstration parameters as per PMC's format. **Attachment 8A: Functional Guarantees** The declaration on the guaranteed values of parameters as per PMC's format. (g) **Attachment-9 & 9A: Integrity Pact** The "Integrity Pact" shall be furnished in accordance with the provision of Integrity Pact specified in Bidding documents. (h) **Attachment 10: Details of Foreign Principals of Indian Bidders** The Bidder shall furnish information with regards to disclosure of the details of its foreign principals or associates. (i) **Check List** Other Attachment (s), if any, shall be as specified in BDS.
8.1.3	**General Technical Evaluation (GTE) Conditions:** Bidders shall be required to accept the following mandatory General Technical Evaluation (GTE) condition of the Tender at e-Tender Portal prior to the submission of Bid: **"Do you certify full compliance to all provisions of Bidding Document?"**

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	By accepting above GTE, Bidder shall certify their compliance to all provisions of Bidding Documents including but not limited to the following important provisions: (a) Deleted (b) Fraud Prevention Policy of NTPC/NVVN. (c) Policy for Debarment from Business Dealings of NTPC/NVVN. (d) ITB Clause "Restrictions on procurement from a Bidder of a country which shares a land border with India" (e) All provisions of the Integrity Pact (f) Anti-Bribery and Anti-Corruption (ABAC) Policy of NTPC (g) Conflict of Interest Clause of ITB **Acceptance of above GTE shall be considered as Bidder's confirmation that any deviation to the any provision found anywhere in their Bid Proposal, implicit or explicit, shall stand unconditionally withdrawn, without any cost implication whatsoever to the PMC, failing which the bid shall be rejected and bid security shall be forfeited.** **Note: The Techno-Commercial Bid should not contain any price content entry. In case, the Techno-Commercial Bid is found to contain any price content, such bid shall be liable for rejection.**
8.2	**Price Envelope** The Price envelope submitted by the Bidder shall comprise of the following:
8.2.1	The following Attachments to Price Envelope as per Section-VII, part 1 of 2, duly completed together with Bill of Quantity (BOQ)/Price Schedules shall be uploaded at e-Tender Portal in 'Finance' cover/Envelope: **(Bidders may note that Attachments to Price Envelope together with BOQ/Price Schedules <u>should NOT be</u> uploaded in Pre-Qual/Technical Cover/Envelope at the e-Tender Portal.)** (i) **Attachment 1P: Declaration regarding Import Content in Ex-works price** Bidder may note that CIF value of import content in the Ex-works (India) price quoted in Schedule-1 of the bid, if any, shall be necessarily declared by the bidders in **Attachment-1P**. Bidder may further note that the relevant certificate for claiming the concessional custom duty benefits, if any shall be issued on the aforesaid declaration basis only. In case no such import content is envisaged in the bid or the CIF value of import content to be declared is zero, the bidder shall indicate "NIL" against the CIF value of import content. In cases where no value is indicated by the bidder against the CIF value of import content in **Attachment-1P** or statement/ any declaration like 'later', 'to be furnished later', 'NA' etc. are indicated by the bidder, in such cases the CIF value of import content in the bid shall be considered as "NIL" for the purpose of issuance of relevant certificate for claiming the concessional custom duty

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	benefits, if any. No further claim in this regard shall be entertained by the Employer/PMC. (ii) **Attachment 2P: Not applicable** (iii) **Attachment 3P: Functional Guarantees** The declaration on the guaranteed values of parameters as per Employer/PMC's format. (iv) **Attachment 4P: Not applicable** (v) **Check List** Other Attachment (s), if any, shall be as specified in BDS.
8.3	Price envelope should not contain any matter in respect of Technical and / or Commercial aspects other than the details specifically sought in the Price envelope. If the Technical/commercial matters indicated in Price envelope are found to be in contradiction with the details furnished in Techno-Commercial envelope, the details furnished in Techno-Commercial envelope shall prevail.
8.4	The Envelope-I (Techno-Commercial Bid) & Envelope-II (Price) Bid submitted by the Bidder should be without any deviations and strictly in conformity with the provisions of all bidding documents and amendments/ addenda/ corrigenda/errata/clarifications to the Bidding Documents issued by PMC prior to deadline for submission of bids. **A conditional Price Bid shall run the risk of rejection.**
9.0	**Price Envelope including Price Schedules** The Bidder shall complete the Attachments to Price envelope and the appropriate BOQ (excel sheet) along with Price Schedules (if provided) furnished in the bidding documents as indicated therein, following the requirements of ITB Clauses 10 and 11.
10.0	**Bid Prices**
10.1	Unless otherwise specified in the Technical Specifications, Bidders shall quote for the entire facilities on a "single responsibility" basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation, commissioning, civil & steel structural works (as applicable), O&M for years as specified in Technical Specification/SCC, Completion of the facilities and conductance of Guarantee tests for the facilities including supply of mandatory spares (if applicable). This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the facilities, conducting Guarantee tests and, where so required by the bidding documents, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the bidding documents, all in accordance with the requirements of the General Conditions of Contract and Technical Specifications.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
10.2	Bidders are required to quote the price in the Price Schedule/Price bid for the commercial, contractual and technical obligations outlined in the bidding documents.
10.3	Bidders shall give a breakdown of the prices in the manner and detail called for in the Bill of Quantity (BOQ) (excel format) Further, Bidder are also required to furnish the detailed break-up of their BOQ price in the Price Schedules (if provided along with Bidding documents) in the following manner: **Schedule No. 1** Plant and Equipment including Type Tests charges (if applicable) and Mandatory Spares to be supplied from within the Employer's Country **Schedule No. 2** Local Transportation including Inland transit insurance and other local costs incidental to delivery of Plant & Equipment and Mandatory Spares. **Schedule No. 3** Installation Services including Erection and Civil/Structural Works (as applicable) and O&M (Schedule 3C), Insurance covers other than inland transit insurance, Safety Aspects/Compliance to Safety Rules and other services as specified in the bidding documents. **Schedule No. 4** Goods and Services Tax (GST), applicable on Schedules – 1,2, & 3 , not included in bid price. Bidders shall note that the plant and equipment included in Schedule no. 1 above shall exclude all materials used in civil, building and other construction works, if any. All such materials shall be included and priced under Schedule No.3 (Installation Services).
10.4	In the BOQ/Price Schedules, Bidders shall give the required details and a breakdown of their prices as follows: (a) Schedule 1: Plant and Equipment (including Type Test Charges) and Mandatory Spares to be supplied from within the Employer's country (Schedule No. 2) shall be quoted on EXW (Ex-Factory, Ex-Works, Ex-Warehouse or Off-the-Shelf, as applicable) basis and shall be inclusive of all costs as well as taxes, duties and levies paid or payable on components and raw materials incorporated or to be incorporated in the facilities. (b) Schedule 2: Local Transportation, Inland Transit Insurance and other local costs incidental to delivery of the Plant and Equipment including Mandatory Spares shall be quoted in Schedule-2. (i) Bidders are advised to price their bids in such a manner that Schedule 2 (Local Transportation and Inland Transit Insurance and Other Local Costs Incidental To Delivery Of Plant & Equipment) Price Component of

the bid price should not be more than maximum percentage (as specified in BDS) of the cumulative total of Ex-works Price of Main Equipment indicated in Schedule No.1.

In case the Transportation (including Inland Transit Insurance) is above the maximum percentage specified above, the amount by which it is higher shall be retained while releasing progressive payments due on transportation, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid along with payment due on Commissioning of the Premise.

(c) Schedule 3: Installation Services including Erection and Civil & Allied Works (as applicable) and Operation & Maintenance (O&M) (Schedule 3C) for number of years as specified in BDS/SCC/Technical Specification shall be quoted separately (Schedule No. 3) and shall include rates or prices for all labour, contractor's equipment, temporary works, materials, consumables and all matters and things of whatsoever nature, charges for insurance covers other than inland transit Insurance, charges for Safety Aspects/Compliance to Safety Rules including operations and maintenance services (if applicable), the provision of operations and maintenance manuals, training of employer's personnel, etc., and other services, as identified in the Bidding Documents, as necessary for the proper execution of the Installation Services.

(i) Bidders are advised to price their bids in such a manner that Installation Price Component of the bid price (excluding Civil/Structural works price (if applicable)) should not be less than minimum percentage (as specified in BDS) and should not be more than the maximum percentage (if applicable and specified in BDS) of the cumulative total of Ex-works Price of Main Equipment indicated in Schedule No.1.

In case the Installation Price is below the minimum percentage specified above, the amount by which it is lower shall be retained proportionately from the Ex-works component of Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon completion of installation of the respective equipment and its certification by the Project Manager.

In case the Installation Price is above the maximum percentage specified above, the amount by which it is higher shall be retained while releasing progressive payments due on installation of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid along with payment due on completion of Trial Operation / Completion of Facilities of entire project.

(ii) Bidders are advised to price their bids in such a manner that the Civil Works Price Component of the bid price (including Site Fabricated Structural works price) should not be less than minimum percentage (**as specified in BDS**) and should not be more than maximum percentage (**if applicable and specified in BDS**) of the cumulative total of Ex-works Price of Main Equipment indicated in Schedule No.1.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	In case the Civil Works Price (including Site Fabricated Structural works price) is below the minimum percentage specified above, the amount by which it is lower shall be retained proportionately from Ex-Works component of Contract price while releasing payments due on dispatch of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon completion of Civil Works including Structural works (if any) corresponding to the respective equipment and its certification by the Project Manager. In case the Civil Works Price (including Site Fabricated Structural Works Price) is above the maximum percentage specified above, the amount by which it is higher shall be retained while releasing progressive payments due on completion of civil works (including Site Fabricated Structural works), and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid along with payment due on completion of Trial Operation / Completion of Facilities of entire project. (iii) Bidders are advised to price their bids in such a manner that the component for 'Amount linked to Safety Aspects/ compliance to Safety Rules' should not be less than minimum percentage (**as specified in BDS**) of the cumulative total of Civil + Installation/ Erection + Structural Works portion of the Contract. In case 'Amount linked to Safety Aspects/ compliance to Safety Rules' is less than aforesaid minimum percentage specified of the cumulative total of Civil + Installation/ Erection + Structural Works portion of the Contract, the amount by which it is lower shall be retained proportionately from the other components of Schedule-4 of the Contract price while releasing payments of each RA bill. No interest shall be payable on the amounts linked to Safety Aspects / Compliance to Safety Rules including aforesaid retained amount. The amounts linked to Safety Aspects/ Compliance to Safety Rules including aforesaid retained amount shall be payable in part or full based on safety compliance duly certified by Project Manager and Safety-in-charge on quarterly basis. (iv) Bidders are advised to price their bids in such a manner that the O&M Component should not be less than minimum percentage (**as specified in BDS**) of the cumulative total of EPC Price (i.e Supply (Sch-1), Transportation (Sch-2) and Installation Services (Sch-3) (incl Civil & Safety)) In case O&M Charges are below the minimum price as mentioned, the amount by which it is lower shall be retained from the Ex-Works component of Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro- rata basis upon completion of O&M Period and its certification by the project manager (d) Recommended Spare parts shall be quoted separately in Schedule 5 on EXW basis in accordance with subparagraph (a) above. Local Transportation Charges including Inland Transit Insurance etc., for recommended spares shall also be quoted in Schedule-5 and shall not be included in Schedule No. 2 by the bidder.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	(e) The prices quoted in Schedule Nos. 1,2 & 3 shall be inclusive of all Taxes, Duties, Levies & charges, except Goods and Services Tax (GST), payable in the Employer's country as of seven (7) days prior to the deadline for submission of price bids. Further, all Taxes, Duties, Levies & Charges on the Materials incorporated in Erection and Civil & Allied Works (as applicable) shall also be included in the prices quoted in Schedule No. 3 & no separate payment on this account, whatsoever, shall be made by Employer. Goods and Services Tax (GST) applicable on goods and services specified in Schedule Nos. 1, 2 & 3 shall not be included in respective schedules but shall be quoted separately in Schedule No. 4. The Goods & Services Tax (GST) quoted by the bidder in Schedule No. 4 shall be as applicable in the Employer's country as on seven (7) days prior to the deadline for submission of Price Bids. Due Input Tax credits under GST as per the relevant Govt. Policy, wherever applicable, shall be taken into account by the Bidder while quoting his price.
10.5	The terms EXW, FOB, CIF, etc., shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, 38, Cours Albert 1er, 75008, Paris, France.
10.6	**Benefits / Concessional Custom Duty** **- Solar Photo Voltaic Power Generation Projects** Bidder may ascertain the availability of Custom Duty benefits under the Customs Tariff Act, available on import of Raw Materials/ Sub- Assembly/ Items, which are required for the manufacture and supply of plant and equipment to be incorporated in the facilities under the Contract. The Employer shall issue the required Certificate, as per relevant policies of the Govt. of India, to facilitate the bidders to avail any such benefit under the Contract. For issuance of such Certificate by the Employer, the bidders shall be required to indicate the import content included in their bid price, in Attachment-1P of Price Bid. The relevant Certificate will be issued on this basis only. In addition, Bidder may also like to ascertain the availability of Custom Duty Benefits available for import of construction Equipment, if any, as per the extant Customs Acts & Notification of Govt. of India. Where the Bidder has quoted taking into account the Custom Duty benefits available for import of Construction Equipment, he must give all information required for issue of relevant Certificate by Employer in Attachment-2P. The relevant Certificate will be issued on this basis only and no subsequent change will be permitted. However, if the above certificates are required to be issued by any department/ministry of Government of India or State Government where the Project is located other than Employer, the bidder shall itself be responsible for obtaining such certificate from the concerned department/ministry. In such a case, the Employer may issue a letter of recommendation. Further, the bidders shall themselves be solely responsible for availing the above

	benefits, which they have considered in their bid. In case of failure of the bidders to receive the benefits partly or fully from the Govt. of India and/or in case of any delay in receipt of such benefits and/or withdrawal of such benefits by the Govt. of India, the Employer shall neither be liable nor responsible in any manner whatsoever.
10.7	**Price Basis** Prices quoted by the Bidder shall remain firm and fixed for the entire period of execution of the Contract.
11.0	**Bid Currencies**
11.1	Bidders shall quote all prices in Indian Rupees only.
12.0	**Bid Security**
12.1	The Bidder shall furnish, as part of its Bid, a Bid Security in a separate sealed envelope in the amount and currency as stipulated in the Bid Data Sheet (BDS). In case bid security amount is deposited as EFT, Proof of e-payment of Bid Security, shall be submitted in the e-tendering portal or in a separate sealed envelope.
12.2	The Bid Security shall, at the Bidder's option, be in the form of Electronic Fund Transfer (EFT) or a bank guarantee from any of the banks specified in the Bid Data Sheet (BDS) or an Insurance Surety Bond from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI). Bidder can Submit the Bid Security Online prior to the last date and time for submission of Bid through NEFT/RTGS transfer in the account of NTPC Vidyut Vyapar Nigam Limited as per details given below. (i) Bank Name: ICICI Bank Limited (ii) Branch: CONNAUGHT PLACE BRANCH (iii) Bank Address: 9A, PHELPS BUILDING, CONNAUGHT PLACE, NEW DELHI-110001 (iv) IFSC Code: ICIC0000007 (v) Account No.: 000705008910 Upon successful e-payment of the Bid Security to NVVNs bank account, payment details shall be submitted by the bidder as a part of its bid, in the e-tendering portal or in a separate sealed envelope, as a proof of e-payment of Bid Security. The format of the Bank Guarantee/ Insurance Surety Bond shall be in accordance with the form of bank guarantee/ Insurance Surety Bond towards bid security included in the Bidding Documents. Bid Security shall remain valid for a period of forty-five (45) days beyond the original Bid validity period and beyond any extension of bid validity subsequently requested under relevant clause of ITB.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
12.3	Whenever Bids under Joint Venture route are permitted as per Qualifying Requirement in the Bidding Documents, the Bid Security of the Joint Venture must be on behalf of all the partners of the Joint Venture.
12.4	**Any bid not accompanied by an acceptable bid security in a separate sealed envelope shall be rejected by the PMC as being non-responsive and shall not be opened. In case, the bid security is submitted as EFT, bidder to submit the proof of e-payment of bid security either in separate sealed envelope or in the e-tendering portal.**
12.5	Deleted.
12.6	Subject to clause 12.8 below, the Bid Security of the Bidder whose Techno-Commercial Bid has not been found acceptable, shall be returned along with letter communicating rejection of Techno-Commercial Bid. The Bid Security of the bidders who are unsuccessful after opening of Price Bids shall be returned expeditiously.
12.7	The Bid Security of the successful Bidder to whom the contract is awarded will be returned by the PMC when the said Bidder has signed the Contract Agreement and has furnished the required Performance Securities to the Employer pursuant to relevant clauses of ITB.
12.8	The Bid Security may be forfeited a) If the Bidder withdraws or varies its Bid during the period of Bid validity; b) If the Bidder does not accept the correction of its Bid Price pursuant to ITB Sub-Clause for Arithmetical Correction. c) If the Bidder refuses to withdraw, without any cost to the PMC, any deviation, variation, additional condition or any other mention anywhere in the bid, contrary to the provisions of bidding documents; d) In the case of a successful Bidder, if the Bidder fails within the specified time limit to furnish the required Contract Performance Guarantee/Security Deposit in accordance with relevant clause of ITB. e) If the bidder/his representatives commits any fraud while competing for this contract pursuant to Fraud Prevention Policy of PMC. f) In case the Bidder/Contractor is disqualified from bidding process in terms of Section 3 and 4 of Integrity Pact.
12.9	**CONFIRMATION OF BGs THROUGH STRUCTURED FINANCIAL MESSAGING SYSTEM (SFMS)/ SWIFT** While issuing the physical BGs, the Bidder's Bank shall also send electronic message through secure SFMS (in case of BGs issued from within India) or SWIFT (in case of BGs issued from outside India) to NVVN 's Beneficiary Bank whose details are provided herein below: (i) Bank Name: ICICI Bank Limited (ii) Branch: CONNAUGHT PLACE BRANCH (iii) Bank Address: 9A, PHELPS BUILDING, INNER CIRCLE, NEW DELHI-110001 (iv) IFSC Code: ICIC0000007

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	BG issuing/amending bank must send the BG advice in the form of message format via SFMS (Structured Financial Messaging System) as provided by RBI. The format of the message for confirmation of the BG shall be as below: BG advising message: IFN 760COV/ IFN 767COV via SFMS Field Number: Particulars (to be mentioned in Row 1) 7037: NVVNBG8910 (unique identifier)
12.10.1	Wherever the submission of Bid Security has been prescribed in the Bidding Documents, the Bid must be accompanied by the Bid Security in a separate envelope. The envelope must be clearly marked on top to evidence the presence of bid security and suitable marking instructions to this effect may be included in the bidding documents. In case the Bid Security is deposited by the Bidder/ vendor to NVVNs bank account, bidder to submit the proof of e- payment of bid security either in separate envelope or in the e-tendering portal.
12.10.2	In case of Bidders opting for Bank Guarantee as Bid Security but unable to submit the Original Bank Guarantee in physical form at the tender opening location, before the deadline for submission of bids, following shall also be considered acceptable, subject to para 12.10.2.1 below: (i) The issuing bank shall intimate through their own official e-mail id to concerned C&M department with a copy to Bidder regarding issuance / extension of Bank Guarantee (BG) along with following documents, before the deadline of submission of bids: - a) The scanned copy of the BG. b) SFMS / SWIFT message acknowledgement copy sent to PMC's banker stating the date of sending. c) An undertaking from the issuing Bank strictly as per format enclosed at **Annexure-III to BDS.** SFMS / SWIFT message must be sent to the PMC's bank, details of which are mentioned in Bidding documents. (ii) Bidders shall also be required to upload the scanned copy of the BG on e-Tender Portal in Fee Cover.
12.10.2.1	The bidder shall be required to submit all the documents in the manner as specified at para 12.10.2 above, to reach NVVN before the deadline for submission of bids, **failing which its bid shall be rejected as being non- responsive and shall not be opened.** In such a case, Bidder shall also be required to submit the Original BG in physical form to reach NVVN at the address mentioned in Bidding Documents, not later than 10 days from

	the date of submission of Techno-Commercial bids or before the Price Bid opening, whichever is earlier, failing which its bid shall be rejected and not considered for further evaluation.
13.0	**Period of Validity of Bids**
13.1	The Bid (comprising Techno-Commercial and Price envelope) shall remain valid for a period of one hundred twenty (120) days from the deadline set for submission of Bid. The bid valid for a shorter period shall be rejected by PMC as being non-responsive.
13.1.1	The bidder is required to keep the prices of recommended spares covered under Price Schedule No. 5 valid for a period of six (6) months after Notification of Award for main equipment and mandatory spares.
13.2	In exceptional circumstances, PMC may solicit the Bidder's consent to an extension of the bid validity period. The request and responses thereto shall be made in writing by post, or e-mail. If a Bidder accepts to extend the period of bid validity, the validity of bid security shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.
14.0	**Format and Signing of Bid** The Bids including all the documents uploaded at the e-Tender Portal shall be digitally signed (using the appropriate class of digital signature prescribed at e-Tender Portal) by a duly authorised representative of the Bidder to bind him to the contract. The authorization shall be indicated by written power of attorney as per ITB Clause 8.1.1 (b) and shall be submitted in physical form in a separate sealed envelope/online prior to the deadline for submission of bids.
	D. Submission of Bids
15.0	The Bid [comprising the Bid Form as per Section-VII, Part 1 of 2, together with its Attachments (Techno-commercial and price) and BOQ/Price Schedules] shall be submitted simultaneously at the e-tender portal through e-tender mode in the manner specified elsewhere in bidding document. No Manual/ Physical Copy of the Bid shall be acceptable, except the documents specified to be submitted in physical form as per ITB Clause 8.1.1. Bidder shall upload the completed Bid Form, Attachments pertaining to Techno-commercial envelope along with all annexures under 'Technical Cover' at the e-Tender Portal. The Attachments to Price Envelope, duly completed together with Price Schedule (excel format) shall be uploaded in 'Finance cover' at the e-Tender Portal. Further, the detailed break-up of price in the Price Schedules (if provided along with Bidding documents) shall also be furnished in 'Finance cover'. Bidders may note that Attachments to Price Envelope together with BOQ (excel sheet)/Price Schedule **should not be** uploaded in the 'Technical cover' at the e-Tender Portal.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
	Bidder to further ensure that documents uploaded online are being downloaded properly. PMC shall not be responsible for corrupt files, if any, uploaded online by bidder. Further file related to particular Attachment/Schedule including their annexures/ appendices, if any, shall be given name of that Attachment/Schedule only.
15.1	**Sealing and Marking of Physical Documents**
15.1.1	Documents to be submitted in physical form (as brought out at ITB clause 8.1.1) shall be sealed and marked in the following manner: (i) The bid security furnished in accordance with ITB Clause 12 shall be sealed in a separate envelope duly marking the envelope as "ATTACHMENT-1: BID SECURITY". (ii) ~~The tender fee shall be sealed in separate envelope duly marking the envelope as "ATTACHMENT 1B: TENDER FEE~~". (iii) All other Original documents required to be submitted in physical form in line with ITB Clause 8.1.1 shall be sealed in a separate envelope duly marking the envelope as "Techno-Commercial Bid – Physical Documents" **The envelopes shall then be sealed in an outer envelope.**
15.1.2	The inner and outer envelopes shall: (a) be addressed to the PMC at the address given in the Bid Data Sheet (BDS), and (b) bear the Package name indicated in the Bid Data Sheet (BDS), the Invitation for Bids number indicated in the Bid Data Sheet (BDS), and the statement "DO NOT OPEN BEFORE [date]," to be completed with the time and date specified in the Bid Data Sheet (BDS), pursuant to ITB clause 16 i.e. 'Deadline for Submission of Bids'.
15.1.3	The inner envelopes shall also indicate the name and address of the Bidder.
15.1.4	If the outer envelope is not sealed and marked in the manner specified above, the PMC will assume no responsibility for its misplacement.
16.0	**Deadline for Submission of Bids**
16.1	Bids (both Techno-Commercial and Price) must be submitted online at e-tender portal not later than the time and date stated in the e-Tender Portal.
16.2	The physical documents in line with ITB Clause 8.1.1 shall be submitted before stipulated bid submission time at the address specified in BDS and PMC shall not be liable for loss/non-receipt/late receipt of above documents in postal transit.
16.3	PMC may, at its discretion, extend this deadline for submission of bids by amending the bidding documents in accordance with ITB Clause 6.0 i.e. 'Amendment to Bidding Documents', in which case all rights and obligations of PMC and Bidders will thereafter be subject to the deadline as extended.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
17.0	Deleted
18.0	**Modification and Withdrawal of Bids**
18.1	The bidder may withdraw or modify its bid after the bid submission as per provision available in the e-tender portal. However, no bid can be withdrawn or modified subsequent to the deadline prescribed for submission of bids. Bidder may modify and re-submit its bid prior to the deadline prescribed for submission of bids. However, if the bidder once withdraws its bids, it cannot be submitted again.
18.2	DELETED
18.3	DELETED
18.4	No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period specified in ITB Clause 13. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to ITB Sub-Clause 12.8(a).
	E. Bid Opening and Evaluation
19.0	**Opening of Bids**
19.1	Techno-Commercial Bid Opening
19.1.1	The PMC will first open Techno-Commercial Bid online in the presence of bidders' representatives who choose to attend the opening at the time, on the date and at the place specified in the Bid Data Sheet (BDS). In the event of the specified date for the opening of bids being declared a holiday for PMC, the bids will be opened at the appointed time on the next working day. All important information and other such details as PMC, at its discretion, may consider appropriate, will be announced at the opening.
19.1.2	**In case requisite Bid Security, and Tender Fee (if applicable), as specified in BDS are not submitted before the stipulated bid submission closing date and time then Bid shall be rejected by the PMC as being non-responsive and shall not be opened.**
19.2	Price Bid Opening
19.2.1	After the evaluation process of Techno-Commercial bid is completed, PMC will inform in writing the eligible Bidders regarding date, time and venue set for the opening of Price Bid. Bidders, whose Techno-Commercial Bid is not substantially responsive or does not meet the Qualification Requirements set forth in the bidding documents or who are debarred under PMC's **Policy for Debarment from Business Dealings** relating to some other tender/contract, shall also be informed in writing that their bid has been rejected and their bid security shall be returned, in accordance with ITB clause 12.6.

Clause No.	INSTRUCTIONS TO BIDDERS (ITB)
19.2.2	Price bids of those Bidders, who have been considered qualified and whose Techno-Commercial Bid found to be responsive, will be opened online in presence of the Bidder's authorised representatives who choose to attend. The PMC will open Price Bids at the time, on the date and at the place specified by the PMC. In the event of the specified date for the opening of bids being declared a holiday for the PMC, the bids will be opened at the appointed time on the next working day. All important information and other such details as the PMC, at its discretion, may consider appropriate, will be announced at the opening.
19.2.3	The participating bidders will be able to view the bid prices of all the bidders after online opening of Price Bids by PMC.
19.2.4	**Reverse Auction – Not applicable**
20.0	**Clarification on Bids** During bid evaluation, PMC may, at its discretion, ask the Bidder for a clarification of its bid including documentary evidence pertaining to the reference plants declared in the bid for the purpose of meeting Qualifying Requirement specified in Bid Data Sheet (BDS). The request for clarification and the response shall be in writing, and no change in the price or substance of the bid including substitution of reference plants in the bid by new/additional plant for conforming to Qualifying Requirement shall be sought, offered or permitted.
21.0	**PRELIMINARY EXAMINATION OF TECHNO-COMMERCIAL BIDS**
21.1	PMC will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
21.2	Prior to the detailed evaluation, PMC will initially determine whether each Techno-Commercial bid is of acceptable quality, is generally complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionalities or reservations. A material deviation, objection, conditionality or reservation is one (i) that affects in any substantial way the scope, quality or performance of the contract; (ii) that limits in any substantial way, inconsistent with the bidding documents, the PMC's rights or the successful Bidder's obligations under the contract; or (iii) whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.
21.3	**No deviation, whatsoever, is permitted by PMC to any provision of Bidding Documents. The Bidders are advised that while making their Bid proposals and quoting prices, all conditions may appropriately be taken into consideration.** Bidders shall certify their compliance to the complete Bidding Documents by accepting the following General Technical Evaluation (GTE) of the Tender at e-Tender Portal: **"Do you certify full compliance to all provisions of Bid Doc?"** **Acceptance of above condition shall be considered as Bidder's confirmation that**

	any deviation to the any provision found anywhere in their Bid Proposal, implicit or explicit, shall stand unconditionally withdrawn, without any cost implication whatsoever to the PMC, failing which the bid shall be rejected and bid security shall be forfeited.
21.3.1	The PMC may waive any minor informality, nonconformity or irregularity in a bid that does not constitute a material deviation.
21.4	PMC's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. If a bid is not substantially responsive, it will be rejected by PMC, and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
22.0	**QUALIFICATION**
22.1	Deleted
22.2	PMC, by the examination of Techno-Commercial Bid, will determine to its satisfaction whether the participating bidders are qualified to satisfactorily perform the contract in terms of the qualifying requirements stipulated in the Invitation for Bid (IFB). The determination will take into account the bidder's financial and technical capabilities, in particular its contracts, works in hand, future commitments and current litigation. It will be based upon an examination of documentary evidence of bidder's qualification submitted by the bidder, pursuant to ITB Clause 8.1.2(a) as well as such other information as PMC deems necessary and appropriate. Notwithstanding anything stated anywhere else in the bidding documents, PMC reserves the right to seek in writing information relating to qualifying requirements in addition to details contained in the bid. The bidder shall furnish required information promptly to the PMC.
22.3	A negative determination will result in rejection of the Bidder's Techno-Commercial Bid in which event PMC will not open the Price Bid of the concerned bidder and his bid security shall be returned in accordance with ITB clause 12.6.
22.4	The capabilities of the vendors and subcontractors, proposed in relevant attachment, will also be evaluated for acceptability. Should a vendor or sub-contractor be determined to be unacceptable, the bid will not be rejected, but the Bidder will be required to substitute an acceptable vendor or sub-contractor without any change in the bid price quoted in Price Proposal, prior to award.
23.0	**EVALUATION OF TECHNO-COMMERCIAL BIDS**
23.1	PMC will carry out a detailed evaluation of the Techno-Commercial bids in order to determine whether the technical aspects are in accordance with the requirements set forth in the bidding documents. In order to reach such a determination, PMC will examine and compare the technical aspects of the bids on the basis of the information supplied by the bidders, taking into account the following factors: (a) overall completeness and compliance with the Technical Specifications and Drawings; suitability of the facilities offered in relation to the environmental and

climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the bid. The bid that does not meet minimum acceptable standards of completeness, consistency and detail will be rejected for non-responsiveness.

(b) Any other relevant factors listed in the Bid Data Sheet (BDS), General Conditions of Contract, Special Conditions of Contract and Instruction to Bidders, or that PMC deems necessary or prudent to take into consideration.

(c) **Functional Guarantees**

Bidders shall state the functional guarantees (e.g. performance, efficiency, power consumption) of the proposed facilities in response to the Technical Specifications. In case a minimum (or a maximum, as the case may be) level of functional guarantee is specified in the Technical Specifications for the bids to be considered responsive, bids offering plant and equipment with such functional guarantees less (or more) than the minimum (or maximum) specified may be rejected.

Bidder may note that deviations, variations and additional conditions etc. found anywhere in the bid, shall not be given effect to in evaluation and it will be assumed that the Bidder complies with all the conditions of Bidding Documents. In case the Bidder refuses to withdraw deviations, implicit or explicit, found anywhere in the bid, without any financial implication whatsoever to the PMC, the bid shall be rejected and bid security shall be forfeited.

24.0 **PRELIMINARY EXAMINATION OF PRICE BID**

24.1 After opening of Price bids, The PMC will examine the Price bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.

24.2 **Arithmetical Correction**

Arithmetical errors will be rectified on the following basis.

The Bidder shall complete the Attachments to Price envelope and the appropriate Price Schedules furnished in the bidding documents as indicated therein, following the requirements of ITB Clauses 10 and 11. The price schedule is obtained on a formula based excel file. If there is any discrepancy in the calculated total price due to multiplication or summation error, then quoted unit price shall be considered valid and total price (by summation/multiplication) shall be calculated.

If the Bidder does not accept such correction of errors, its bid will be rejected, and the bid security will be forfeited in accordance with ITB Sub-Clause 12.8.

25.0 **EVALUATION OF PRICE BID**

25.1 The comparison shall be of the EXW Price of Plant and Equipment including Type Test Charges (if applicable) and Mandatory Spares (if applicable) offered from within the NVVN/Employer's country, such price to include all costs as well as duties and taxes paid

or payable on components and raw materials incorporated or to be incorporated in the Plant and Equipment including mandatory spares, plus the cost of Local Transportation, Insurance Covers, all Installation Services and civil/ structural works required under the Contract, plus the Goods and Services Tax (GST) specified by the Bidder in its Bid (applicable on goods and services quoted in Schedules -1, 2 & 3).
The PMC's comparison will also include the costs resulting from application of the evaluation procedures described in ITB Sub Clauses 25.3. However, the Price of recommended spare parts quoted in Price Schedule No. 5 shall not be considered for evaluation of Bids.

25.2 The PMC's evaluation of a bid will take into account the following:

(i) The bid prices indicated in Price Schedules Nos. 1, 2, 3.

(ii) Price Schedule No 06 (if applicable) for recommended spares

(iii) The corrections pursuant to ITB sub-clause 24.2;

(iv) The costs and factors on account of offered functional guarantees of the facilities (if applicable), that will be added to each Bidder's bid price in the evaluation using pricing information available to the PMC, in the manner and to the extent indicated in ITB Sub Clause 25.3 and in the Technical Specifications.

25.3 Pursuant to ITB Sub Clause 25.2, for the purposes of evaluation, the adjustment (if any) specified in the Bid Data Sheets (BDS) will be added to the bid price for each drop (or excess) in the responsive functional guarantees offered by the Bidder, below (or above) either a norm of 100 or the value committed in the responsive bid with the most performing functional guarantees, as specified in the Bid Data Sheets (BDS).

The adjustment factors shall be converted to such currencies as specified in Bid Data Sheets (BDS).

25.3.1 Specific Additional Criteria: The relevant evaluation method, if any, shall be detailed in the Bid Data Sheets (BDS).

25.4 Any adjustments in price that result from the procedures indicated in ITB Sub Clause 25.3 shall be added, for purposes of comparative evaluation only, to arrive at an "Evaluated Bid Price." Bid prices quoted by Bidders shall remain unaltered.

25.5 The method of evaluation is illustrated below:

Illustrative Method of Evaluation

		Any Bidder ------(Equivalent INR)----------
1.	Quoted Bid Price (after considering arithmetical corrections)	
	(i) Ex-works price including type test charges for equipment and mandatory spares	N1

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	(ii) Price for inland trans-portation including inland transit insurance for equipment and mandatory spares — N2 (iii) Price for Installation Services, Civil and allied works, O&M and AMC (for no. of years as specified in Technical Specification) and safety aspects — N3 (v) Total Price — N (N1+N2+N3) 2. Taxes & Duties (not included in 1 above) (i) GST — P 4 Evaluated Bid Price — FEP (N+P) Note: Aforesaid method of evaluation shall be equally applicable for all bidders.
25.6	**PREFERENCE TO MAKE IN INDIA AND GRANTING OF PURCHASE PREFERENCE TO LOCAL SUPPLIERS** Purchase preference shall be given to local suppliers as per methodology specified in **Annexure–II** to Section-III (Bid Data Sheet) of Bidding Documents**.**
26.0	**Contacting the Employer/PMC**
26.1	Subject to ITB Clause 20.0, no Bidder shall contact Employer/PMC on any matter relating to its bid, from the time of the opening of bids to the time the contract is awarded. Any effort by a Bidder to influence Employer/PMC in bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.
	F. Award of Contract
27.0	**Award Criteria**
27.1	Subject to ITB Clause 28 (PMC's Right to Accept any Bid and to Reject any or all bids) and PMC's **Policy for Debarment from Business Dealings**, the Employer will award the Contract to the successful Bidder [whose Techno-Commercial bid has been determined to be substantially responsive and the bidder is determined to be qualified to perform the Contract satisfactorily and whose Price Bid is determined to be the lowest evaluated bid after the Reverse Auction Process (if applicable)], as per methodology indicated in **Annexure-II to BDS.** No contract shall be awarded to a bidder against whom a Debarment Order has been issued as per Employer/PMC's **Policy for Debarment from Business Dealings**.

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27.2	The Bidder will be required to comply with all requirements of the Bidding Documents without any extra cost to the Employer/PMC, failing which his bid security will be forfeited.
27.3	The Employer/PMC reserves the right to vary the quantity of any of the Spares and/or delete any item of Spares altogether at the time of Award of Contract.
27.4	The mode of contracting with the successful bidder will be as briefly indicated below: In the case of successful Bidder, the award shall be made as follows: (ii) **First Contract**: For Ex-works (India) supply of plant and equipment including Type Test charges (if applicable) and mandatory spares (if applicable). (ii) **Second Contract:** For providing all services i.e. inland transportation for delivery at site, inland transit insurance, unloading, storage, handling at site, installation, insurance covers other than inland transit insurance, testing, commissioning and conducting Guarantee tests in respect of all the plant and equipment supplied under the 'First Contract' and Civil & Steel structural works (as applicable) and all other services as specified in the Contract Documents. (iii) **"Third Contract"** for Operation & Maintenance of complete Solar PV plant for a period as specified in the BDS/SCC/Technical Specification from the date of successful completion of commissioning. Both the First & Second Contracts (except O&M Contract) will contain a crossfall breach clause specifying that breach of one will constitute breach of the other Contract which will confer a right on the Employer to terminate the other contracts also at the risk and the cost of Contractor.
28.0	**PMC's Right to Accept Any Bid and to Reject Any or All Bids**
28.1	PMC reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for PMC's action.
29.0	**Notification of Award**
29.1	Prior to the expiration of the period of bid validity, the Employer will notify the successful Bidder in writing by registered letter or by e-mail that its bid has been accepted. The notification of award will constitute the formation of the contract.
30.0	**Signing the Contract Agreement** On receipt of Employer's notification that its bid has been accepted, Bidder shall prepare and finalize the Contract Documents for signing of the formal Contract Agreement and shall enter into the Contract Agreement with the Employer, as per Proforma enclosed with the Bidding Documents, on non-judicial stamp paper of appropriate value within 28 days from the date of the Notification of Award.

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31.0	**Performance Security**
31.1	Within twenty-eight (28) days after receipt of the Notification of Award, the successful Bidder shall furnish performance securities **as specified in BDS** for all the contracts and in the form provided in the section "Forms and Procedures" of the bidding documents, to the Employer.
31.2	In case Deed(s) of Joint Undertaking by the Contractor along with his associate(s)/ collaborator(s) form part of the Contract, then, unconditional Bank Guarantee(s) from such associate(s)/ collaborator(s) towards faithful performance of the Deed(s) of Joint Undertaking for amount(s) specified in the Bid Data Sheets (BDS) shall be furnished within twenty-eight (28) days after Notification of Award. These Bank Guarantees shall be furnished in the form provided in the section "Forms and Procedures" of the bidding documents and shall be valid till such period as specified in the corresponding format for Deed of Joint Undertaking.
31.3	The Bank Guarantees submitted towards Performance Security shall be essentially from any of the Banks listed in Annexure-I to SCC. The Bank guarantee submitted from within India towards Performance Security shall be issued on Non-Judicial Stamp Paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG is executed whichever is higher. In case of guarantees issued by branches outside India for foreign banks, the bank guarantees shall be routed through the correspondent Bank in India for due verification of signatures of the executant and lodgement of claim. The BG issued by a Bank outside India also needs to bear Stamp Duty of appropriate value applicable to the place where BG is to be submitted, the BG will be adjudicated from Collector of Stamps, within 3 months of arrival of BG in India and the expenses incurred in this regard shall be recovered from the Contractor.
31.4	While issuing the physical BG, the Bidder's Bank shall also send electronic message to Employer's Beneficiary Bank whose details are provided in ITB clause 12.0 through secure SFMS (in case of BGs issued from within India) or SWIFT (in case of BGs issued from outside India).
32.0	**Annulment of award**
32.1	Failure of the successful Bidder to comply with the requirements of ITB Clause 30 or ITB Clause 31 shall constitute sufficient grounds for the annulment of the award and forfeiture of his bid security.
	G. Other Instructions
33.0	**Ineligibility for participation in re-tender/ future tenders**
i)	Notwithstanding the provisions specified in ITB Sub-Clause 12.8 and ITB Clause 32, if a

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	bidder after having been issued the Notification of Award, either does not sign the Contract Agreement pursuant to ITB Clause 30 or does not submit an acceptable Performance Security pursuant to ITB Clause 31.1 to 31.4, and which results in retendering of the package, then such bidder/contractor shall be treated ineligible for participation in re-tendering of this particular package. Further, such bidder/contractor shall also be dealt as per the provisions of policy for Debarment from Business Dealings.
34.0	**Time Schedule (programme of performance)** The plant and equipment covered by this bidding document are required to be shipped and installed, and the facilities are to be completed within the period named in the Bid Data Sheet (BDS) after the effective date specified in the Contract Agreement. Bidders are required to base their prices on the time schedule given in relevant appendix to the form of Contract Agreement (Time Schedule) or, where no time schedule is given, on the completion date(s) given in the Bid Data Sheet (BDS). No credit will be given for earlier completion.
35.0	**Corrupt or Fraudulent Practices**
35.1	PMC requires that Bidders, Contractors and Suppliers observe the highest standard of ethics during the procurement and execution of the contracts. In pursuance of this policy, PMC: (a) defines, for the purposes of this provision, the terms set forth below as follows: (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and (ii) "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 PMC, 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 PMC of the benefits of free and open competition; (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question; (c) will declare a firm ineligible, for a period of time as specified in the policy for Debarment from Business Dealings, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing a contract of the PMC.
35.2	Furthermore, Bidders shall be aware of the provision stated in GCC Sub-Clause 42.2.
36.0	**Fraud Prevention Policy**

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36.1	The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to the Fraud Prevention Policy of PMC displayed on its tender website https://ntpctender.ntpc.co.in/ and/or http://www.nvvn.co.in shall immediately apprise PMC about any fraud or suspected fraud as soon as it comes to their notice. If in terms of above policy it is established that the bidder/his representatives have committed any fraud while competing for this contract then the bid security of the bidder shall be forfeited. Bidders shall certify their compliance on "**Fraud Prevention Policy**" of PMC by accepting the following GTE at the e-Tender Portal: **"Do you certify full compliance to all provisions of Bidding Document?"** Acceptance of General Technical Evaluation (GTE) of the Tender at e-Tender Portal shall be considered as bidder's confirmation that they have read the contents of the Fraud Prevention Policy as displayed on tender website at https://ntpctender.ntpc.co.in/ under section 'policy docs' and/or http://www.nvvn.co.in and undertake that they along with their associate/collaborator/ subcontractors / sub vendors / consultants / service providers shall strictly abide by the provisions of the Fraud Prevention Policy.
37.0	**Policy for Debarment from Business Dealings**
37.1	The PMC has in place a Policy for Debarment from Business dealings displayed on the website www.ntpc.co.in/ ntpctender.ntpc.co.in/ http://www.nvvn.co.in. The version of Policy presently followed by NTPC is **as mentioned in BDS**. Business dealings may be withheld or banned with the Bidder/Contractor on account of any of the grounds and following the procedures as detailed in the said Policy for Debarment from Business Dealings. Bidders shall certify their compliance on "**Policy for Debarment from Business Dealings** " of PMC by accepting the following General Technical Evaluation (GTE) of the Tender at e-Tender Portal. **"Do you certify full compliance to all provisions of Bid Doc?"** Acceptance of above GTE shall be considered as bidder's confirmation to the following conditions: (1) Bidder have read the contents of Debarment Policy (version mentioned in BDS) displayed on the website www.ntpc.co.in / ntpctender.ntpc.co.in / http://www.nvvn.co.in and agreed to abide by this policy. a) Bidder have not been Banned/Blacklisted as on date of submission of bid by Ministry of Power or Deptt. of Expenditure, Ministry of Finance. b) Bidder have not employed any public servant dismissed/removed or person convicted for an offence involving corruption or abetment of such offences.

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	c) Bidder's Director(s)/ Owner(s)/ Proprietor/ Partner(s) have not been convicted by any court of law for offences involving corrupt and fraudulent practices including moral turpitude in relation to business dealings with Government of India or NTPC or NTPC's group companies during the last five years. (2) Bidder further confirms as under: that if at any point subsequent to award of Contract, the declarations given above are found to be incorrect, PMC shall have the full right to terminate the Contract and take any action as per applicable laws for breach of contract including forfeiture of Bid Security/Performance Bank Guarantee.
38.0	**Pre-Bid Conference - Not applicable**
39.0	**Integrity Pact** Bidders are required to unconditionally accept all the conditions of the "Integrity Pact (IP)" as per **Attachment-9 & 9A** to the Bidding Documents which has been pre-signed by the PMC. Bidders shall certify their compliance on "**Integrity Pact** " by accepting the following General Technical Evaluation (GTE) of the Tender at e-Tender Portal: **"Do you certify full compliance to all provisions of Bidding Document?"** On Bidder's acceptance to the above GTE condition, Bidder confirms to have read, understood and unconditionally accept & commit to all the contents, terms, conditions and undertakings mentioned in the Integrity Pact which has been pre-signed by the Employer/PMC and enclosed with the Bidding Documents. Where the Joint Venture(s) / Consortium are permitted to participate in the bid pursuant to ITB Clause 8.1.2(a), acceptance of above GTE by bidder shall mean that all the JV Partner(s)/ Consortium members have read, understood and unconditionally accept & commit to all the contents, terms, conditions and undertakings mentioned in the Integrity Pact which has been pre-signed by the PMC and enclosed with the Bidding Documents. On Acceptance of the above GTE, Integrity Pact shall be considered signed by the Bidder / JV Partner(s)/ Consortium members and the same shall come into force from the date of submission of bid. **It may also be noted that subsequent to PMC's evaluation of Bids, resulting into award of Contract to a particular Bidder, the Integrity Pact (Attachment 9A) so submitted shall form an integral part of the Contract.** **Integrity pact of CCI is as per attachment 9A of section VII FORM AND PROCEDURES.**
40.0	**Independent External Monitors (IEM)s of PMC**

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	In respect of this package, the Independent External Monitors (IEMs) would be monitoring the bidding process and execution of Contract to oversee implementation and effectiveness of the Integrity Pact Program. This panel is authorized to examine / consider all references made to it under this tender. The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this package may raise the issue either with the designated 'Nodal Officer' in NVVN or directly with the IEMs address The Independent External Monitors (IEMs) has the right to access without restriction to all Project documentations of the PMC including that provided by the Contractor. The Contractor will also grant the IEMs, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his Project Documentations. The same is applicable to Subcontractors. The IEMs are under contractual obligation to treat the information and documents of the Bidder/ Contractor/ Sub-Contractors/ JV partners/ Consortium member with confidentiality. The Nodal Officer for necessary coordination with Independent External Monitors shall be as under:

(i))	Concerned Group Head in C&M	:	if the issue pertains to awarding of Contract by C&M
(ii)	Concerned Head of Department	:	if the issue pertains to other departments
(iii)	Concerned Head of Department	:	if the issue pertains to post- award execution of Contract

IEM of CCI is mentioned at CCI Website.

41.0 **"Restrictions on procurement from a Bidder of a country which shares a land border with India"**

41.1 Any Bidder (including its Collaborator/Associate/DJU Partner/JV partner/Consortium Member/Assignee, wherever applicable) from a country which shares a land border with India will be eligible to bid in this tender only if bidder is registered with the Competent Authority as mentioned in Special Conditions of Contract (SCC).

Further, any bidder having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, will be eligible to bid only if the bidder is registered with the same competent authority as mentioned in Special Conditions of Contract (SCC).

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	(Definition/Requirement of ToT shall be as specified in DOE OM Ref. No. F.7/10/2021-PPD(1) dated 23.02.2023, enclosed with SCC) Such registration should be valid for the entire period of bid validity or any extension thereof. However, in case the validity period of registration is less than bid validity period, the Bidder shall be required to submit the extension of the validity period of registration before the opening of price bids, failing which the bid shall be rejected. Further the successful bidder shall not be allowed to sub-contract services/works to any "Sub-contractor" from a country which shares a land border with India unless such Sub-contractor is registered with the competent Authority as mentioned in SCC. However, the said requirement of registration will not apply to bidders/sub- contractors from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Bidders may apprise themselves of the updated lists of such countries available in the website of the Ministry of External Affairs.
41.2	"Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.
41.3	"Sub-contractor" (including the term 'Sub-vendor'/Sub-supplier' in certain contexts) means any person or firm or company, every artificial juridical person not falling in any of the descriptions of Sub-contractors stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
41.4	"Bidders from a country which shares a land border with India" / "Subcontractor from a country which shares a land border with India" / "Entity from a country which shares a land border with India" mentioned in para 41.1 above means; a) An entity incorporated, established or registered in such a country; or b) A subsidiary of an entity incorporated, established or registered in such a country; or c) An entity substantially controlled through entities incorporated, established or registered in such a country; or d) An entity whose beneficial owner is situated in such a country; or e) An Indian (or other) agent of such an entity; or f) A natural person who is a citizen of such a country; or g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
41.5	The beneficial owner for the purpose of clause "41.4" above will be as under; a) In case of company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

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	Explanation- i. “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company; ii. “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholdings or management rights or shareholders agreements or voting agreements; b) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more judicial person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership; c) In case of an unincorporated associations or body of individuals, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals; d) Where no natural person is identified under (a) or (b) or (c) above, the beneficial owner is the relevant natural person who holds the position of senior managing officials; e) In case of a trust, the identifications of beneficial owner(s) shall include identification of the author of trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
41.6	An Agent for the purpose of clause “41.4” is a person employed to do any act for another, or to represent another in dealings with third person. [Note: i. A person who procures and supplies finished goods from an entity from a country which shares a land border with India will, regardless of the nature of his legal or commercial relationship with the producer of the goods, be deemed to be an Agent. ii. However, a bidder who only procures raw material, components etc. from an entity from a country which shares a land border with India and then manufactures or converts them into other goods will not be treated as an Agent.] Bidders shall certify their compliance to ITB Clause “Restrictions on procurement from a Bidder of a country which shares a land border with India” by accepting the following General Technical Evaluation (GTE) of the Tender at e-Tender Portal: **“Do you certify full compliance to all provisions of Bidding Document?”** Acceptance of above attribute shall be considered as Bidder's confirmation that Bidder has read and understood the ITB Clause regarding “Restrictions on procurement from a Bidder of a country which shares a land border with India” and its bid is in compliance to this clause. In case it is established that Bidder has provided any false information in pursuance of the aforesaid ITB Clause, while competing for this contract, then its bid shall be rejected

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	and bid security shall be forfeited. In case of a successful bidder, if it is established that the Bidder has not complied with terms of aforesaid ITB Clause, during execution of contract, this would be considered as fraudulent practices as mentioned in 5.1 (j) of "Policy for Debarment from Business Dealings" and shall be dealt accordingly.
42.0	**Conflict of Interest**
42.1	A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Employe/PMC's interests. A bidder may be considered to have a conflict of interest with one or more parties in the bidding process, if: a) they directly or indirectly control, or are controlled by or are under common control of another entity; or b) they have the same legal representative/agent for purposes of their bids; c) they have relationship with each other, directly or through common third party(ies), that puts them in a position to have access to information about or influence on the bid of another Bidder; or d) Bidder and/or any of its allied entity(ies), which directly or indirectly control(s) or is(are) controlled by or is(are) under common control of another entity, has(ve) participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the tender; or e) Bidder participates in more than one bid in this bidding process. For the purposes of this clause the term 'control' shall have the following meaning: "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions exercisable by a person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders' agreements or voting agreements or in any other manner. Note: If two or more CPSEs/State PSEs participate in a tender, they will not be deemed to fall under the 'Conflict of Interest' provisions solely because they are under common control of Government of India / State Government.
42.2	Bidders shall certify their compliance to ITB Clause "Conflict of Interest" by accepting the following General Technical Evaluation (GTE) of the Tender at eTender Portal: **"Do you certify full compliance to all provisions of Bidding Document?"** Acceptance of above GTE shall be considered as Bidder's confirmation that Bidder has read and understood the ITB Clause regarding "Conflict of Interest and its bid is in compliance to this clause. In case it is established that Bidder has provided any false information in pursuance of the aforesaid ITB Clause, while competing for this contract, then its bid shall be rejected and bid security shall be forfeited.

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	In case of a successful bidder, if it is established that the Bidder has not complied with terms of aforesaid ITB Clause, during execution of contract, this would be considered as fraudulent practices as mentioned in para 5.1 (j) of "Policy for Debarment from Business Dealings" and shall be dealt accordingly.
43.0	**Benefits to MSEs (Micro and Small Enterprises)** – NOT APPLICABLE
44.0	**Royalty** The Bid Price shall be inclusive of any Royalties or Seigniorage Fee or Cess or other charges payable on the quarried or mined metal, minerals, or minor minerals, as the case may be, at the rate(s) prevailing as on seven (7) days prior to the deadline set for Price Bid submission.
45.0	**Exemption of GST or any other taxes and duties (if applicable) on Items Manufactured for Grid Connected Solar Photo Voltaic Power Generation Projects** As per extant guidelines of Govt. of India, the benefits of exemption of GST or any other taxes and duties (if applicable on items manufactured for grid connected Solar Photo Voltaic Power Generation Projects) may be available for the items to be supplied under the contract. Bidder may appraise itself of the relevant policies and quote accordingly. The Employer shall issue the requisite certificate (if required) as specified in the relevant policy of Govt. of India. However, if the certificate is required to be issued by any department/ ministry of Government of India or State Government where the Project is located other than Employer, the Bidder shall itself be responsible for obtaining such certificate from the concerned department/ministry. In such a case, the Employer may issue recommendatory letter to the bidder. The Bidder shall be solely responsible for obtaining the benefits of exemption on GST or any other taxes and duties (if applicable) on the items to be supplied under the contract from the Govt. of India. In case of failure of the bidder to receive the benefits partly or fully from Govt. of India or in case of delay in receipt of such benefits, the Employer/PMC shall neither be responsible nor liable in this regard in any manner whatsoever.
46.0	**Anti-Bribery and Anti-Corruption (ABAC) Policy:** The Bidder and its employees along with its Associate/ Collaborator/ Sub- Contractors / Sub-Vendors / Consultants / Service Providers and all other persons associated with business of PMC shall strictly adhere to Anti- Bribery and Anti-Corruption (ABAC) Policy of PMC displayed on tender website https://ntpctender.ntpc.co.in/. Bidders shall certify their compliance on "Anti-Bribery and Anti-Corruption (ABAC) Policy" of PMC by accepting the following GTE at the e-Tender Portal: **"Do you certify full compliance to all provisions of Bidding Document?"** Acceptance of General Technical Evaluation (GTE) of the Tender at e-Tender Portal shall

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	be considered as bidder's confirmation that they and their employees along with their associate / collaborator/ subcontractors / sub vendors / consultants / service providers shall strictly abide by “Anti-Bribery and Anti-Corruption (ABAC) Policy” of PMC as displayed on tender website at https://ntpctender.ntpc.co.in/ under section ‘policy docs’ and undertake that they represent and confirm that they are aware of, understand, and will comply with all applicable laws and regulations relating to anticorruption and anti-bribery and the ABAC Policy of PMC.

SECTION – III

BID DATA SHEET (BDS)

BDS Item No.	ITB Clause Ref., if any	DATA

SECTION - III

BID DATA SHEET (BDS)

NAME OF PACKAGE: **DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI-TANDUR**

The following bid specific data for the Plant & Equipment to be procured, shall amend and/or supplement the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in the ITB.

		A. INTRODUCTION Bidders are required to go through the Guidelines provided at following e-tender portal: E-Tender Portal: https://eprocurentpc.nic.in/nicgep/app
1.0	ITB 1.1 and 2.2	**Name of the Package:** DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI – TANDUR. **Name of the Employer/Owner:** CCI Limited **Name of the Project Management Consultant (PMC):** NTPC VIDYUT VYAPAR NIGAM LIMITED
2.0	ITB 4.3	**Add the following at the end of Para 4.3** Domestic Competitive Bidding among Enlisted Bidders of NVVN

BDS Item No.	ITB Clause Ref., if any	DATA
		B. THE BIDDING DOCUMENTS
3.1	ITB 5.1	**Address of the PMC for Communication:** Manager (C&M) NTPC VIDYUT VYAPAR NIGAM LIMITED Engineering Office Complex, Plot No. A-8A Sector 24, Block A, Noida, Uttar Pradesh 201301 **Email: nvvncontracts@ntpc.co.in** Corporate Identification Number: U40108DL2002GOI117584, Phone No: 0120-4947246
3.2	ITB 5.3	Permission shall be arranged by the Employer to enter upon the premises and lands for the purpose of such inspection, but only upon the express condition that the Bidder, its personnel and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.
		C. PREPARATION OF BIDS
4.1	ITB 8.1.1 (b)	Tender Fee: Not Applicable
4.2	ITB 8.1.1 (C) & (d)	**Attachment-3I: Deed of Joint Undertakings - NOT APPLICABLE]** **Attachment-3L: JV Agreement - NOT APPLICABLE**
4.3		**Deleted**

BDS Item No.	ITB Clause Ref., if any	DATA
4.4	ITB 8.1.1 & 15.1	**Add the following at the end of Clause 8.1.1 & 15.1** If the Bid security and tender fee (if applicable) is submitted online through Electronic Fund Transfer (EFT), then physical documents are not required. Scanned Copy of the documents required as per ITB clause 8.1.1 shall be considered acceptable.
4.5	ITB 8.1.2 (a) Cl 19.2.1, Cl 20, Cl 22.1, 22.2 & 22.3	**deleted**
4.6	ITB 8.1.2 (a)	**deleted**
4.7		Deleted.
4.8		Deleted.
4.9		Deleted.
4.10	ITB 8.1.2(a)	Whether Joint Ventures are permitted : NO Whether Associate/Collaborator permitted : NO
4.11		Deleted.
4.12	ITB 8.1.2 (h)	**Attachment 8A**: Functional Guarantees
4.13	ITB 8.1.2 (g)	**Attachment-9: INTEGRITY PACT:** APPLICABLE (BOTH PMC & EMPLOYER)

BDS Item No.	ITB Clause Ref., if any	DATA
4.14	ITB 8.1.2(h)	**Attachment 10: Details of Foreign Principals of Indian Bidders**
4.15	ITB 8.1.2 (j)	**Attachment 11: Declaration regarding Local content in bid price** Methodology regarding Purchase Preference is specified Annexure–II to BDS as per DPIIT circular dated 04.06.2020 & 16.09.2020 regarding “Make in India”. The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. **Solar PV modules including solar PV cells and Inverter shall be necessarily procured from Class-I supplier only.** Declaration regarding local content as per the Employer/PMC’s format, for granting of purchase preference. In case a bidder does not submit the aforesaid declaration or statement/any declaration like ‘later’, ‘to be furnished later’, ‘NA’ etc. are indicated by the bidder, then the Bidder is liable not to be considered as a local supplier and may not be eligible for any purchase preference”/ **“its bid is liable to be considered non-responsive and may be rejected”.
4.16	8.1.2(j)	**Attachment 12: Technical Data Sheet**
4.17		Deleted.
4.18		Deleted
4.19		Deleted
4.20		Deleted
4.21	ITB 8.2.1 (iii)	**Attachment 4P: Price Adjustment Data: Not Applicable**

BDS Item No.	ITB Clause Ref., if any	DATA
5.1	ITB 10.3	Mandatory Spares : Applicable Type Test Charges: Not Applicable
5.2	ITB 10.4(b) (i)	**For Transportation and Inland Transit Insurance** **Maximum Percentage: 1 %** i.e Bidders are advised to price their bids in such a manner that Transportation including Transit Insurance Component (Schedule 2A & Schedule-2B) of the bid price should not be more than 1% of the Ex-works Price of Main Equipment and mandatory spares (Sch-1A & Sch-1B). In case the Transportation including the Transit Insurance is above the maximum percentage specified above, the amount by which it is higher shall be retained proportionately from the Ex-Works component of Main Equipment (Sch-1A) and mandatory spares (Sch-1B) Contract price while releasing payments due on transportation, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon Commissioning of the Project.
5.3	ITB 10.4(c) (i)	**For Installation Price Component including Civil/Structural works price** Minimum Percentage: 20% Maximum Percentage : Not Applicable i.e Bidders are advised to price their bids in such a manner that Installation Price Component of the bid price including Civil / Structural works price should not be less than % (above mentioned) of the Ex-works Price of Main Equipment. In case the Installation and Civil & Structural price is below the minimum percentage specified above, the amount by which it is lower shall be retained proportionately from the Ex-Works component of Main Equipment (Sch-1A) and mandatory spares (Sch-1B) Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon completion of installation of the respective equipment and its certification by the Project Manager.
5.4	ITB 10.4(c) (ii)	Deleted
5.5	ITB 10.4(c) (iii)	**For Amount linked to Safety Aspects/ compliance to Safety Rules**

BDS Item No.	ITB Clause Ref., if any	DATA
		Bidders are advised to price their bids in such a manner that the component for 'Amount linked to Safety Aspects/ compliance to Safety Rules' should not be **less than 3% of the cumulative total of Service Portion of the Contract, i.e. Civil + Installation/ Erection + Structural Works.** In case 'Amount linked to Safety Aspects/ compliance to Safety Rules' is less than aforesaid minimum percentage specified of the cumulative total of Service Portion of the Contract, i.e. Civil + Installation/ Erection + Structural Works, the amount by which it is lower shall be retained proportionately from the other components of Schedule-3A and Schedule-3B and of the Contract price while releasing payments of each RA bill. No interest shall be payable on the amounts linked to Safety Aspects / Compliance to Safety Rules including aforesaid retained amount. The amounts linked to Safety Aspects / Compliance to Safety Rules including aforesaid retained amount shall be payable in part or full based on safety compliance duly certified by PMC/Project Manager on quarterly basis.
5.6	ITB 10.4(c) (iv)	**For O&M Charges** Bidders shall quote their O&M charges for first year and O&M charges from 2nd year till 10th year shall be auto calculated based on O&M charges for 1st year and annual escalation factor @ 5.25%. First year O&M Cost shall not be less than 1.5% of the EPC price. In case total O&M Cost for 10 years is less than 19.09 % of EPC price [*Supply of Main Equipment Sch-1A and mandatory spare Sch-1B , Transportation (Sch-2A&2B), Installation services including Civil & Safety Main Equipment (Sch-3A, Sch-3B and Sch-3D)*], the amount by which it is lower shall be retained from the Ex-Works component of Main Equipment Sch-1A and mandatory spare Sch-1B Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro- rata basis every year upon completion of O&M Period and its certification by the project manager.
6.1	ITB 12.1	Amount of Bid Security: **INR 50,00,000.00** (INR Fifty Lakh only)
6.2	ITB 12.2	For online payment of Bid security, bidders can do online transfer of Bid security through NEFT/RTGS to NVVN's Bank account whose details are provided below.

		(i) Bank Name: ICICI Bank Limited (ii) Branch: CONNAUGHT PLACE BRANCH (iii) Bank Address: 9A, PHELPS BUILDING, CONNAUGHT PLACE, NEW DELHI- 110001 (iv) IFSC Code: ICIC0000007 (v) Account No.: 000705008910

BDS Item No.	ITB Clause Ref., if any	DATA
		While carrying out online transfer, Bidders shall ensure to enter "EMD Fee - Tender No.-Vendor Name" in the Text /Remarks / Reason field. Bidder shall intimate the details of same through email to nvvncontracts@ntpc.co.in and also upload the details in the "Fee Section" folder in GepNIC in the following format Tender No. : Vendor Name : UTR Reference : Amount: Date of Transfer: Transferor Bank: (Signature of Vendor with Seal) List of Banks for BG Name of the Banks are specified at Annexure-I to BDS.
6.3	ITB 12.2	**D. SUBMISSION OF BIDS** The documents to be furnished in physical form shall be addressed and submitted to the following address:
7.0	ITB 15.1.2 & 16.2	Manager (C&M), NTPC VIDYUT VYAPAR NIGAM LIMITED, 5th Floor, Engineering Office Complex Plot No. A-8A, Sector-24,NOIDA (UP), India-201 301 Email: nvvncontracts@ntpc.co.in Deadline for Bid Submission- as indicated at e-Tender Portal .
8.0	ITB 16.1	**E. BID OPENING AND EVALUATION** Location of Bid Opening NTPC VIDYUT VYAPAR NIGAM LIMITED Engineering Office Complex, Plot No. A-8A Sector 24, Block A, Noida, Uttar Pradesh 201301
9.1	ITB 19.1.1	

BDS Item No.	ITB Clause Ref., if any	DATA
		Date and Time for Techno-Commercial Bid Opening: Please refer e-Tender Portal. **Date and Time of Opening of Price Bid:** Shall be intimated separately by the PMC.
9.2	ITB 19.2.1	Opening of Price bid shall be done expeditiously for all the responsive/accepted bids and shall be intimated by system generated intimation/email.
9.3	ITB 19.2.4	Whether Reverse Auction applicable ***:*** **NO**
10.1	ITB 25.2 (iv) & 25.3 & 25.5	**The bid evaluation factor shall be as indicated below:** Bidder have to quote Price (INR) for 6 MW with 10 years of O&M with AMC (including Taxes & Duties) - L The ranking shall be carried and the bidder with lowest L' shall be declared successful bidder for the said Package. Award Criteria will be on the basis of Lowest Evaluated Bid Price (EP) discovered by e-tendering process Any Bidder ---- (Equivalent INR) -- 1. Quoted Bid Price (after considering arithmetical corrections) (i) Schedule 1:Ex-works price for equipment and mandatory spares N1 (ii) Schedule 2: Local Transportation and Inland transit Insurance and Other local costs incidental to Delivery of Plant and Equipment including mandatory spares N2 (iii) Schedule 3: Price for Installation Services (Schedule-3A), Civil works (Schedule-3B),, O&M and AMC (as specified in Technical specification) (Schedule-3C) and safety aspects (Schedule-3D), N3

BDS Item No.	ITB Clause Ref., if any	DATA
		(iv) Total Price N (N1+N2+N3) 2. Taxes & Duties (not included in 1 above) GST P 4 Evaluated Bid Price FEP (N+P) Note: 1 Aforesaid method of evaluation shall be equally applicable for all bidders. 2. Successful Bidders to furnish detailed Break- up of schedules 1,2&3 before award of work.
10.2	ITB 25.3	Type of Transaction and Source of exchange rates: Bills Selling Exchange Rate established by STATE BANK OF INDIA Date of exchange rate: Deadline set for submission of Bids
10.3	ITB 25.3.1	Specific Additional Criteria : Not applicable
11.0	ITB 31.1	The Contractor shall, within twenty-eight (28) days of the Notification of Award, provide securities for the due performance of the Contract for **Ten Percent (10%)** of Contract Price of all the Contracts to the Employer, with an initial validity up to 15 months after the Completion of Facilities of the entire Project under the Contract. However, in case of delay in Completion of Facilities, the validity of all the contract performance securities shall be extended by the period of such delay. After the end of successful completion of period mentioned above, CPG shall be returned to agency provided agency has submitted CPG @10% of O&M and AMC Contract price and Security against Equipment Performance Guarantee during O&M Period. The BG towards O&M Performance and AMC shall be submitted prior to return of the Contract Performance Guarantee (CPG) under the subject package. The above O&M and AMC Performance Security shall be initially valid upto 90 days after the end of Operation & Maintenance (O&M) and AMC period as specified in the Technical Specifications. The above security amount shall be payable to the Employer without any condition whatsoever.

BDS Item No.	ITB Clause Ref., if any	DATA
		Security against Equipment Performance Guarantee during O&M Period: BG for O&M with AMC. The successful Bidder, to whom the work is awarded, shall provide security equal to 0.1 x G x R (Where G is Annual Generation corresponding to CUF applicable for that year and R = Rs. 6.71 per kWh) in million INR for 10 years of O&M with AMC period as specified in the Technical Specification.
12.0	ITB 34.0	Time to complete the facilities from the date of Notification of Award **:** ***7 months***
12.1		The program for supplying, installing, commissioning, completing the facilities and site delivery of all Mandatory spares covered in the package shall be in the form of Master Network identifying the Key phases in various areas of total works, like design, procurement, manufacture and field activities including civil construction and erection works. In addition, key milestone dates (10-15 nos.) shall also be identified for the complete facilities under the package. The Master Network shall conform to the following schedule dates for the key milestones. ---------- ------Sl. Activity Months from NOA* No. ---------- - - - - Start Finish ---------- - - - - **AS GIVEN IN APPENDIX TIME SCHEDULE TO CONTRACT AGREEMENT IN SECTION VII – FORMS** ----------
12.2		The successful bidder shall be required to submit a detailed integrated PERT Network (L2 Schedule) matching with the above work schedule. The L2 Schedule shall, inter-alia, include

BDS Item No.	ITB Clause Ref., if any	DATA
		at least following activities for each systems listed above, showing their inter-relationship and duration so as to meet the above mentioned milestone details. (i) Milestones to be incorporated in L2 Network to be submitted: a. Ordering on sub vendor (wherever applicable) b. Approval for connectivity of the solar PV project from DISCOM/TRANSCO, as applicable c. Start of engineering d. Completion of engineering e. Start of manufacturing/fabrication f. Completion of manufacturing/fabrication g. Commencement of Supplies h. Completion of supplies of all items i. Completion of site delivery of mandatory spares. j. Commencement of Civil works k. Completion of Civil works l. Start of Erection m. Completion of Erection n. Commissioning o. PG test & Completion of Facility
13.3		The master network and the key milestone dates will be discussed with the successful Bidder and agreed upon after the issue of Notification of Award. Engineering Drawing and Data Submission Schedule shall also be discussed and finalised after the issue of Notification of Award.
13.4		After the Notification of Award, the contractor shall plan the sequence of work of manufacture, supply and erection to meet the above stated dates of successful completion of facilities and shall ensure all work, manufacture, shop testing, inspection and

BDS Item No.	ITB Clause Ref., if any	DATA
		shipment of the equipment in accordance with the required construction/ erection sequence.
14.0	ITB 38.0	**Address for pre-bid conference:** *Not applicable*
		G. Other Instructions
15.0	ITB 39.0 & ITB 8.1.2 (g)	**INTEGRITY PACT (IP) :** APPLICABLE (Both PMC & Employer)
16.0	ITB 40.0	**Independent External Monitors (IEM)s:** APPLICABLE (Both PMC & Employer)
17.0	General	Documents such as Letter of Undertakings, Deed of Undertakings etc. which are specified to be furnished on Non-Judicial stamp paper of appropriate/ requisite value, shall be stamped as per Indian Stamp Act.
18.0	ITB clause 37.1	The version of Policy for Debarment from Business dealings presently followed by NTPC is Rev.04
19.0	ITB Clause 43.0	**Benefits to MSEs (Micro and Small Enterprises)** - NOT APPLICABLE
20.0		**ANNEXURES ENCLOSED WITH BDS** **ANNEXURE-I:** List of Banks **Annexure-II:** Preference to Make In India and granting of purchase preference to local suppliers **Annexure-III:** Format of Undertaking (To be sent by Issuing Bank through official email-I

LIST OF BANKS ACCEPTABLE FOR SUBMISSION OF BANK GUARANTEE FOR BID SECURITY **Annexure I**

SCHEDULED COMMERCIAL BANK LIST

A. SCHEDULED PUBLIC SECTOR BANKS

1 Bank of Baroda
2 Bank of India
3 Bank of Maharashtra
4 Canara Bank
5 Central Bank of India
6 Indian Overseas Bank
7 Indian Bank
8 Punjab National Bank
9 Punjab & Sind Bank
10 State Bank of India
11 UCO Bank
12 Union Bank of India

B. SCHEDULED PRIVATE BANKS (INDIAN BANKS)

1 Axis Bank Limited
2 Bandhan Bank Limited
3 CSB Bank Limited
4 City Union Bank Limited
5 DCB Bank Limited
6 Dhanlaxmi Bank Limited
7 Federal Bank Limited
8 HDFC Bank Limited
9 ICICI Bank Limited
10 IndusInd Bank Limited
11 IDFC FIRST Bank Limited
12 Jammu & Kashmir Bank Limited
13 Karnataka Bank Limited
14 Karur Vysya Bank Limited
15 Kotak Mahindra Bank Limited
16 Nainital Bank Limited
17 RBL Bank Limited
18 South Indian Bank Limited
19 Tamilnad Mercantile Bank Limited
20 Yes Bank Limited
21 IDBI Bank Limited

C. SCHEDULED FOREIGN BANKS

1 AB Bank PLC
2 American Express Banking Corporation
3 Australia & Newzealand Banking Group Limited
4 Barclays Bank Plc
5 Bank of America
6 Bank of Bahrain & Kuwait B.S.C.
7 Bank of Ceylon
8 Bank of China Limited
9 Bank of Nova Scotia
10 BNP Paribas

11 Citi Bank NA
12 Cooperatieve Rabobank U.A./ Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.
13 Crédit Agricole Corporate and Investment Bank
14 CTBC Bank Co Ltd
15 DBS Bank India Limited (Subsidiary of DBS Bank Ltd.)
16 Deutsche Bank A.G.
17 Doha Bank Q.P.S.C
18 Emirates NBD Bank P.J.S.C.
19 First Abu Dhabi Bank PJSC
20 FirstRand Bank Ltd
21 Hong Kong and Shanghai Banking Corporation Limited
22 Industrial & Commercial Bank of China
23 Industrial Bank of Korea
24 J.P. Morgan Chase Bank N.A.
25 JSC VTB Bank
26 KEB Hana Bank
27 Kookmin Bank
28 Mashreqbank P.S.C.
29 Mizuho Bank Ltd
30 MUFG Bank, Ltd
31 NatWest Markets Plc
32 NongHyup Bank
33 PT Bank Maybank Indonesia TBK
34 Qatar National Bank (Q.P.S.C.)
35 Sberbank
36 SBM Bank (India) Limited (Subsidiary of SBM Group)
37 Shinhan Bank
38 Societe Generale
39 Sonali Bank PLC
40 Standard Chartered Bank
41 Sumitomo Mitsui Banking Corporation
42 United Overseas Bank Ltd
43 UBS AG
44 Woori Bank

D. SMALL FINANCE BANKS

1 AU Small Finance Bank Limited
2 Capital Small Finance Bank Limited
3 Equitas Small Finance Bank Limited
4 ESAF Small Finance Bank Limited
5 Suryoday Small Finance Bank Limited
6 Ujjivan Small Finance Bank Limited
7 Utkarsh Small Finance Bank Limited
8 North East Small Finance Bank Limited
9 Jana Small finance Bank Limited
10 Shivalik Small Finance Bank Limited
11 Unity Small Finance Bank Limited,

Note - Any Addition/ Deletion/ Modification in Bank list shall be as per changes in Second Schedule List by RBI from time to time.

* ***Bidder to take note of NTPC letter ref. NTPC/FC/CS/BG/01 dated 03.09.2014 and SBI letter ref. CAG-I/AMT-1/2014-15/370 dated 04.09.2014 attached herewith this Annexure-I to BDS***

एनटीपीसी
NTPC

एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)

केन्द्रीय कार्यालय/Corporate Centre

Ref. No.: NTPC/FC/CS/BG/01

Date : 03rd September 2014

Deputy General Manager,
State Bank of India,
CAG Branch,
12 th floor, Jawahar Vyapar Bhavan, 1, Tolstoy Marg,
New Delhi 110 001

Kind Atten: Sh. Sandeep Mishra

Sub: Format of the Bank Guarantee (BG) issued by State Bank of India – reg.

Dear Sir,

NTPC Limited is India's largest Power Company and a 'Maharatna PSU' with a significant presence in the entire value chain of power generation business. The procurement process of NTPC requires its participating Bidders to submit Bank Guarantees (BGs) as Bid security/other securities in a fixed format provided by NTPC.

It has been observed recently that BGs issued by various branches of State Bank of India are inserting the following additional clause.

QUOTE

Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee of agent of beneficiary shall not be entertained by the bank. Any invocation of guarantee can be made only by the beneficiary directly.

UNQUOTE

The inclusion of the aforesaid clause in the BGs restricts the rights of NTPC under the BG and it may not be possible for NTPC to accept the aforesaid clause in the BGs submitted to us by our Bidders. It may also be mentioned that incorporation of the above additional clause in the BG results in the BG being returned by NTPC and consequently rejection of the bids of parties that have submitted such BGs.

In view of the above, it is requested that please take up at appropriate levels so that suitable instructions are issued to all your branches not to incorporate any such additional clause and henceforth BGs may be issued strictly as per NTPC format only.

Kindly acknowledge the receipt of this letter

Yours faithfully,

(K.P.Gupta)
General Manager (Finance)

Copy for Kind information: ED(CC&M) for kind of n.o.

एन टी पी सी भवन स्कोप काम्पलैक्स, 7, इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110003 टेल/Tel. : 24360100, फैक्स/Fax : 011-24361018
NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003, वेबसाइट/Website : www.ntpc.co.in

भारतीय स्टेट बैंक
State Bank of India

कॉरपोरेट लेखा समूह शाखा, जवाहर व्यापार भवन,
11-12 वां तल, 1, टॉलस्टाय मार्ग, नई दिल्ली–110 001
Corporate Accounts Group Branch, Jawahar Vyapar Bhawan,
11th & 12th Floor, 1, Tolstoy Marg, New Delhi-110 001

Tel. : 23374525, 23374505, 23374541 (AMT-1), 23353022 (DGM & COO), 23701043, 23359506 (A & A), 23352995 (CS), 23352968 (IB)
Fax : 23353101 (Sectt.), 23352793 (CS), 23353029 (IB)

Shri K.P. Gupta,
General Manager (Finance),
NTPC Limited
Scope Complex, 7, Institutional Area,
Lodhi Road,
New Delhi: 110 003.

CAG-I/AMT-1/2014-15/370 04.09.2014

Dear Sir,

Format of the Bank Guarantee (BG) issued by State Bank of India

We refer to your letter dated 3rd September 2014 wherein you have requested for excluding bidders/vendors of NTPC from insertion of additional Clause restraining assignment/transferability of BG.

Looking at our relationship with NTPC, as a very special case, we have since obtained waiver from our Authorities for excluding NTPC from insertion of the referred clause for BGs issued in your favour.

We are taking steps to issue suitable instructions to our offices for exclusion of this clause for BGs issued in favour of NTPC. In case any bidder or vendor submits to you a Bank Guarantee issued by any of our Branches containing the additional clause as mentioned above, request you to please bring it to our notice and advise us so that we can take-up with the concerned Branch for excluding it.

This is for your information and necessary action please.

Yours faithfully,

(Sandeep Mishra)
Deputy General Manager &
Relationship Manager, AMT-1

Annexure-II to BDS

Sub: Preference to Make In India and Eligibility for Participation/ granting of PurchasePreference to Class-I local suppliers- regarding

It is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of Goods and Services in India with a view to enhancing income and employment. In this regard, the following guidelines, concerning the procedure to be adopted for granting Eligibility for Participation/purchase preference to local suppliers, are hereby issued:

1.0 Definitions:

a) **'Local content'** means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the goods, services orworks procured (excluding net domestic indirect taxes) minus the value of imported content in the goods, services or works (including all customs duties) as a proportion ofthe total value, in percent.

b) **'Class-I local supplier'** means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed.

'Class-II local supplier' means a supplier or service provider, whose goods, services orworks offered for procurement, meets the minimum local content as prescribed for 'Class- II local supplier' but less than that prescribed for 'Class-I local supplier'.

'Non-Local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier'.

c) **'L1'** means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

d) **'Margin of purchase preference'** means the maximum extent to which the evaluated bid price of a 'Class-I local supplier' may be above the L1 for the purpose of purchase preference.

e) **Fraud Prevention Policy** – shall mean the policy related to prevention of fraud displayed on NTPC tender website http://www.ntpctender.ntpc.co.in/

f) **Policy & Procedure for Debarment from Business Dealings** – shall mean the policyrelated to Debarment from Business Dealings forming part of Bidding Document.

2.0 Eligibility for Participation/Purchase Preference:

Only Class-I and Class-II Local Suppliers are eligible to Bid. Bids received (if any) from Non-Local Supplier shall be out rightly rejected.

3.0 Purchase Preference

3.1 Margin of Purchase Preference: The margin of purchase preference shall be 20%.

3.2 Purchase preference shall be given to 'Class-I local suppliers' as specified hereunder:

- Among all qualified bids and substantially responsive bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
- If L1 is not 'Class-I local supplier', the lowest evaluated bidder among the 'Class-I local supplier', will be invited to match the lowest evaluated bid (L1) price subject to Class-I local supplier's evaluated price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the lowest evaluated bid (L1) price.
- In case such lowest eligible 'Class-I local supplier' fails to match the lowest evaluated bid (L1) price, the 'Class-I local supplier' with the next higher evaluated bid within the margin of purchase preference shall be invited to match the lowest evaluated bid (L1) price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the lowest evaluated bid (L1) price, the contract may be awarded to the L1 bidder.

(ii) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by NVVN.

(iii) For the purpose of matching of lowest evaluated bid (L1) price, the Class-I local supplier would have to necessarily reduce all components of the quoted price on pro-rata basis. The reduction should not apply on the evaluation loading on account of functional guarantees and other loadings (if any, which are notdependent on quoted price). Further, the Contract shall be awarded on such revised/ reduced quoted price. The summation of the revised / reduced quoted price and the evaluation loading on account of functional guarantees and other loadings (if any) shall be equal to the lowest evaluated bid (L1) price.

4.0 Minimum Local Content

4.1 The local content requirement to categorize a Bidder/Supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirementis minimum 20%.

5.0 Verification of Local Content:

5.1 The 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide, in the Bid Form/relevant Attachment of Techno- Commercial Bid, self-certification / declaration that the Item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier' and shall give details of the location(s) at which the local value addition is made.

5.2 In case the total bid price of the supplier / bidder is in excess of INR 10 crore, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) orfrom a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content during execution prior to submission of last bill for payment.

In case aforesaid Certificate furnished by Contractor/Vendor is not in line with the declaration in respect of Local content in their bid, same shall be treated as false declaration.

5.3 False declarations will be dealt in line with the Fraud Prevention Policy and Policy & Procedure for Debarment from Business Dealings of NTPC.

5.4 In case of false declaration / violation of the provision of PPP-MII Order, if a bidder has been debarred / banned by NTPC, then the fact and duration of debarment should be promptly brought to the notice of the Member-Convenor of the Standing Committee (as per para 16 of PPP-MII Order) and the Department of Expenditure through Ministry of Power, GOI.

5.5 A supplier who has been debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP) shall not be eligible for evaluation/preference, as applicable, under the aforesaid procedures for duration ofthe debarment. The 'Class-I local supplier'/ 'Class-II local supplier' shall be required to furnish a confirmation in this regard in the Bid Form/relevant Attachment of Techno-Commercial Bid.

6.0 Local Sourcing

6.1 The Bidder/its Sub-vendors must be Class-I local supplier for Item(s) mentioned at *clause no. 41 of GTR (if applicable) in Technical Specifications, as applicable or as per relevant government circular including Annexure I items in the MNRE Circular Public Procurement (Preference to Make in India) to provide for Purchase Preference (linked with local content) in respect of Renewable Energy (RE) Sector and/or any other appliable circulars/notifications etc, in case such item(s) are Self Manufactured/Bought-out**. BIDDER TO REFER LATEST GOVERNMENT GUIDELINES WITH RESPECT TO THE ABOVE.**

6.2 The Bidder / Contractor are requested to encourage and promote domestic manufacturing and production of goods and services by sourcing goods and services applicable under the contract / package from domestic suppliers / service providers. In this regard, Bidder shall also follow guidelines / advisory issued by Government of India from time to time, to the extent applicable to them, regarding promotion of local sourcing of goods including Bought out Items and servic

F. No. 283/22/2019-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy

Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003
Dated: 17th June, 2021

OFFICE MEMORANDUM

Sub: Public Procurement (Preference to Make in India) to provide for Purchase Preference (linked with local content) in respect of Renewable Energy (RE) Sector.

Reference is invited to MNRE's Order of even no. dated February 09, 2021, which superseded the earlier order of even no. dated September 23, 2020, on the above mentioned subject.

2. Para 7 of the aforesaid Order provides for a mechanism, in the form of a Committee, to examine the grievances in consultation with stakeholders and recommend appropriate actions to the Competent Authority in MNRE.

3. Further para 8 of the said Order mentions as follows:

"The complaint fee of Rs.2 Lakh or 1% of the value of the local item being procured (subject to maximum of Rs.5 Lakh), whichever is higher, shall be paid in the form of online transaction or Demand Draft, drawn in favour of IREDA. In case the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest."

4. It is hereby conveyed that the grievances/complaints under the subject Order dated February 09, 2021 may be addressed to the Secretary, Ministry of New & Renewable Energy (MNRE), Block-14, C.G.O. Complex, Lodhi Road, New Delhi-110003, along with payment of requisite complaint fee as prescribed in para 8 of the said Order.

5. The details of the bank account of Indian Renewable Energy Development Agency Limited (IREDA), wherein complaint fee can be paid, are as follows:

Bank Name	IndusInd Bank
Account Title	IREDA - MNRE MAKE IN INDIA A/C
Account No.	100136782501
Branch Code	0005
IFSC Code	INDB0000005
Bank Address	IndusInd Bank, GK-II, Dr Gopal Das Bhawan, 28, Barakhamba Road, New Delhi-110001

6. This issues with the approval of Secretary, MNRE.

17/6/21

(Mohd Azmal Mansoori)
Scientist-B
Email: azmal.mnre@gov.in

To:
All Concerned

Copy to: **NIC, MNRE,** for uploading on MNRE website for dissemination of information.

Copy for internal circulation to: Sr. PPS to Secretary/ Sr. PPS to JS (AKS) / Dir (RG)/ Sci-D (SK)

F. No. 283/22/2019-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy

Block No. 14, C.G.O. Complex,
Lodhi Road, New Delhi – 110003
Dated: 09th February, 2021

ORDER

Sub: Public Procurement (Preference to Make in India) to provide for Purchase Preference (linked with local content) in respect of Renewable Energy (RE) Sector.

Ref: Department for Promotion of Industry and Internal Trade (DPIIT) Notification No.P-45021/2/2017-PP (BE-II) dated 4th June, 2020 and dated 16th September, 2020.

The Government of India, Department for Promotion of Industry and Internal Trade (DPIIT) issued Public Procurement (Preference to Make in India), Order 2017 for encouraging 'Make in India' and promoting manufacturing and production of goods and services in India with a view to enhancing income and employment. Further, DPIIT vide order's No.P-45021/2/2017-PP (BE-II) dated 4th June, 2020 and 16th September, 2020, have issued the revised Public Procurement (Preference to Make in India) Order 2017.

2. In the light of the Public Procurement (Preference to Make in India) Order 2017, this Ministry had issued O.M. No. 146/57/2018-P&C dated 11th December, 2018 covering certain products related to renewable energy sector under the Public Procurement (Preference to Make in India) Order and specifying the Minimum Percentage of local content required for such renewable energy products. Further, in pursuance of revised Public Procurement (Preference to Make in India) Order 2017, dated 04.09.2020, this Ministry had issued an Order No. 283/22/2019-GRID SOLAR dated 23.09.2020 on the above mentioned subject.

3. In furtherance of Para 19 of the DPIIT Notification No.P-45021/2/2017-PP(BE-II) dated 16.09.2020 and in supersession of all the aforementioned orders issued by this Ministry, the following has been decided:

i. For the purpose of this order, the definitions of various terms used in the order, and provisions relating to (i) Eligibility of 'Class-I local supplier' / 'Class-II local supplier' / 'Non-local suppliers' for different types of procurement, (ii) purchase preference, (iii) exemption to small purchases, and (iv) margin of purchase preference, shall be the same as in DPIIT order dated 16.09.2020, referred to above and extracts of the same given at **Appendix.**

ii. In procurement of all goods and services or works in respect of which there is sufficient local capacity and local competition as in Annexure-I, only "Class–I local supplier", shall be eligible to bid irrespective of purchase value.

iii. Only 'Class I local supplier' and 'Class-II local supplier', as defined under the DPIIT Notification No.P-45021/2/2017-PP(BE-II) dated 16.09.2020, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement

of all goods, services or works, not covered by sub- para 3 (ii) above, and with estimated value of purchases less than Rs.200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

iv. For the purpose of this order, 'Works' means all works as per Rule 130 of GFR 2017, and will also include 'turnkey works', Engineering, Procurement and Construction (EPC) contracts and service contracts including System Integrator (SI) contracts.

4. The list of items, in respect of which, local capacity with sufficient competition exists as per **Annexure-I**, will be reviewed at regular intervals with a view to increase number of items in this list.

5. Purchase preference shall be given to local suppliers in accordance with **para 3A & 3B** of DPIIT Order dated 16.09.2020, and extracts of the same given at **Appendix.**

6. Further, it has been decided to constitute a committee for independent verification of self-declarations and auditor's / accountant's certificates on random basis and in the case of complaints. The composition of the committee is given below:

Chairperson	DG, NISE
Member	Dir(JKJ)
Member	Dir(Wind)
External Expert	Dir(Technical),IREDA
Convener	Dir(RG)

7. Further, it has also been decided to constitute a committee to examine the grievances in consultation with stakeholders and recommend appropriate actions to the Competent Authority in MNRE. The composition of the Committee is given below:

Chairperson	EA
Member	Dir(Wind)
Member	Dir(JKJ)
Convener	Dir(RG)

8. The complaint fee of Rs.2 Lakh or 1% of the value of the local item being procured (subject to maximum of Rs.5 Lakh), whichever is higher, shall be paid in the form of online transaction or Demand Draft, drawn in favour of IREDA. In case the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

9. All other conditions, not stipulated in this order, shall be as laid down in the DPIIT's order No.P-45021/2/2017-PP (BE-II) dated 16.09.2020.

10. This order shall be applicable in respect of the procurements made by all attached or subordinate offices or autonomous body under the Ministry of New & Renewable Energy, Government of India including Government Companies as defined in the Companies Act, and /or the States and Local Bodies making procurement under all Central Schemes/ Central Sector Schemes where the Scheme is fully or partially funded by Government of India. The aforesaid order shall also be applicable in respect of funding of capital equipment by IREDA, PFC and REC, for all RE projects, for which the bids are issued on or after 1st April, 2021.

11. Procuring entities as defined in the DPIIT's Order dated 16.09.2020 are advised to revise their tender documents fully complying with the said DPIIT's Order and the subsequent Orders that would be issued in this regard by DPIIT/this Ministry from time to time.

12. All tenders for procurement by Central Government Agencies have to be certified for compliance of the PPP-MII Order by the concerned procurement officer of the Government Organization before uploading in the portal.

13. In pursuance of the provision of para 13 of the DPIIT Order, 2020, equipment used in the renewable energy sector which are manufactured under license from foreign manufacturers holding intellectual property rights and where there is a transfer of technology agreement, if any, are listed as under Annexure-II. However, **Annexure-II** will undergo regular review to check for those items in the list for which sufficient local manufacturing capacity and competition have got developed and which meet minimum local content of 50% now, so that these items become eligible for inclusion in Annexure-I of this order and the provisions as contained in para 3 above of this order start becoming applicable in respect of these items too.

14. In terms of para 13A of DPIIT's Order dated 16.09.2020, the procuring entities, while procuring Solar PV Cells beyond 250 MW per annum, shall prescribe in their respective tenders that foreign companies shall enter into a joint venture with an Indian company to participate in the tender.

15. In order to further encourage Make in India initiative and promote manufacturing and production of goods and services in India, general guidelines as enclosed at **Annexure-III** may be adopted in an appropriate manner according to the circumstances by the procuring entities in their tendering process.

16. This issues in line with the approval from Hon'ble MoS (IC) for NRE and Power.

09/02/21

(Mohd Azmal Mansoori)
Scientist-B
Email: azmal.mnre@gov.in

To:

1. All Ministries/ Departments of Government of India (As per list)
2. Secretary (Coordination), Cabinet Secretariat
3. PS to PM, Prime Minister's Office
4. Vice Chairman, NITI Aayog
5. Chief Secretaries of all States/UTs
6. Director General, Comptroller and Auditor General of India
7. Secretary, DPIIT, Chairman of Standing Committee for implementation of Public Procurement Order, 2017
8. Joint Secretary, DPIIT, Member-Convener of Standing Committee for implementation of Public Procurement Order, 2017
9. Chairperson, CEA
10. CMDs of CPSEs under MNRE & MoP
11. All Group Heads in MNRE

Appendix

Extracts of important provisions contained in DPIIT Order No.P-45021/2/2017-PP (BE-II) dated 16th September, 2020

1. Definitions:

'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier under this Order.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for Class-I local supplier' under this Order.

'Non-Local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier under this Order.

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'.

2. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement

a) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

b) Only 'Class I local supplier' and 'Class-II local supplier', as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered

Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

c) For the purpose of this Order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

3A. Purchase Preference

a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.

b) In the procurements of goods or works, which are covered by para 2(b) above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.

ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price, In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

c) In the procurements of goods or works, which are covered by para 2(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.

ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.

iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly, In case none of the 'Class-I local supplier' within the margin

of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

3B. Applicability in tenders where contract is to be awarded to multiple bidders-

In tenders where contract is awarded to multiple bidders subject to matching of L1 rates or otherwise, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

a) In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only Class I local suppliers'

b) In other cases, 'Class-II local suppliers' and 'Non local suppliers' may also participate in the bidding process along with 'Class I local suppliers' as per provisions of this Order.

c) If 'Class I local supplier' qualify for award of contract for at least 50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% if the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/ 'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract for at least 50% of the tendered quantity.

d) First purchase preference has to be given to the lowest quoting 'Class I local supplier', whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class I local supplier', does not qualify for purchases preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class I local supplier' falling within 20% margin of purchase preference, and so on.

e) To avoid any ambiguity during bid evaluation process, the procuring entities may stipulate its own tender specific criteria for award of contract amongst different bidders including the procedure for purchase preference to 'Class I local supplier' within the broad policy guidelines stipulated in sub-paras above.

4. Exemption of small purchases: Procurements where the estimated value to be procured is less than Rs.5 Lakh shall be exempt from this Order. However, it shall be ensured by procuring entities that **procurement is not split for the purpose of avoiding the provisions of this Order.**

5. **Minimum local content:** The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. Nodal Ministry/ Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier'/ 'Class-II local supplier'. For the items, for which Nodal Ministry/ Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20 % for 'Class-I local supplier' / 'Class-II local supplier' respectively.

6. **Margin of Purchase Preference:** The margin of purchase preference shall be 20%.

7. **Specifications in Tenders and other procurement solicitations.**

a) Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.

b) Procuring entities shall endeavor to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of 'Class-I local supplier' / "Class-II local Supplier' who would other be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.

c) Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.

d) **Reciprocity Clause**

i. When a Nodal Ministry/Department identifies that Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Government and other procurement agencies under their administrative control and GeM for appropriate reciprocal action.

ii. Entities of countries which have been identifies by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry/Department, except for the list of items published by the Ministry/Department permitting their participation.

iii. The stipulation in (ii) above shall be part of all tenders invited by the Central Government procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry/Department.

iv. State Governments should be encouraged to incorporate similar provisions in their respective tenders.

v. The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.

e) Specifying foreign certifications/ unreasonable technical specifications/ Brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.

f) "All administrative Ministries/Departments whose procurement exceeds Rs.1000 Crore per annum shall notify/update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."

ANNEXURE–I

List of items of goods and services with sufficient local capacity and competition:

A. Small Hydro Power

1. Turbine
2. Generator
3. Penstock pipelines
4. Control panel
5. Governors
6. Cables
7. Valves
8. Transformers
9. Switchgears

B. Wind Power

1. Gear box,
2. Blades,
3. Rotor,
4. Generator,
5. Tower,
6. Hub,
7. Parts of controller,
8. Bearings,
9. Yaw mechanism components,
10. Nacelle

C. Off Grid/ Decentralised Solar Power

1. Solar street lights
2. Solar home lighting systems
3. Solar power packs
4. Micro grid
5. Solar water pumps
6. Inverters
7. Batteries

8. Other solar PV balance of system components for Off Grid/Decentralized solar power projects.

D. Grid connected Solar Power Projects

1. Solar modules
2. Solar inverters

E. Biomass Gasifier

1. Biomass gasifier reactor
2. Feed hopper
3. Ash removal system
4. Ash pump
5. Cyclone
6. Hot gas filter
7. Gas blower
8. Gas piping
9. Control panel
10. Platforms and ladders
11. Water seals
12. Gas burner for start up
13. Automatic gas burner

F. Biomass Cogeneration

1. Boiler and its auxiliaries including ESP
2. Turbines/ generator & its auxiliaries
3. Electrical evacuation and distribution system
4. Bagasse/biomass fuel storage and handling equipment
5. Ash handling systems
6. Cooling tower or air cooled condensers and its auxiliaries
7. Water treatment plant
8. Control system
9. Interface piping
10. EOT crane

11. ETP

G. Municipal Solid Waste (MSW) Projects

1. Boiler
2. Flue gas cleaning system
3. Grab crane system
4. Waste processing system
5. Leachate treatment plant
6. Chimney
7. Water/air condenser
8. Turbine-generator,
9. Water treatment plant
10. Ash treatment plant
11. Control and instrumentation system

H. Waste to Energy (biogas/ bio-CNG)

1. Feed mixer
2. Tank
3. Mixing agitator
4. Feeding pump
5. Digester tank
6. Stirring agitator
7. Double membrane balloon
8. Liquid & gas piping systems
9. Biogas purification system
10. B-CNG booster compressor
11. B-CNG filling header
12. Cylinder casket
13. CNG dispenser
14. Power generator

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ANNEXURE-II

The items manufactured under license from foreign manufacturers holding intellectual property rights and where there is a transfer of technology.

- Presently there is no entry for this Annexure.

ANNEXURE-III

General guidelines to be adopted selectively in an appropriate manner by the procuring entities in their tender documents.

1. The bidder shall have to be an entity registered in India in accordance with law.
2. The bids shall be in the language as prescribed by the tenderer/procurer.
3. The bids shall be in Indian National Rupees (INR) only in respect of local content only.
4. Indian subsidiaries of foreign bidders shall meet the qualifying criteria in terms of capability, competency, financial position, past performance etc.
5. The bidder shall follow Indian laws, regulations and standards.
6. To be eligible for participation in the bid, foreign bidders shall compulsorily set up their manufacturing units on a long term basis in India as may be specified by the tenderer/ procurer.
7. Similar or better technology than the technology offered in respect of material, equipment and process involved shall be transferred to India. Along with the transfer of technology, adequate training in the respective field shall also be provided.
8. Country of origin of the equipment/material shall be provided in the bid.
9. For supply of equipment / material from the country of origin other than India, the bidder shall submit performance certificate in support of satisfactory operation in India or a country other than the country of origin having climatic and operational conditions including ambient temperature similar to that of India for more than --- years (to be specified by the procurer).
10. The technologies/ products offered shall be environmentally friendly, consuming less energy, and safe, energy efficient, durable and long lasting under the prescribed operational conditions.
11. The supplier shall ensure supply of spares, materials and technological support for the entire life of the project.
12. The manufacturers/ supplier shall list out the products and components producing Toxic E-waste and other waste as may be specified. It shall have an Extended Producers Responsibility (EPR) so that after the completion of the lifecycle, the materials are safely recycled / disposed of by the Manufacturer/ supplier and for this, the Manufacturer/supplier along with procurer has to establish recycling / disposal unit or as may be specified.
13. Domestic Content requirement (based on the cost of the product) shall be in accordance with the conditions laid down in respective Order(s) of the sectors on Public Procurement (Preference to Make in India) to provide for purchase preference (linked with local content).

14. The equipment/ material sourced from foreign companies may be tested in accredited labs in India before acceptance wherever such facilities are available.

15. The Tender fee and the Bank Guarantee (BG) shall be in Indian Rupees only.

16. The bidder shall have to furnish a certificate regarding cyber security/safety of the equipment/process to be supplied/services to be rendered as safe to connect.

17. Applicable safety requirements shall be met. Regular safety audit shall be carried out by the manufacturer/ supplier.

18. Statutory laws/regulations including the labour and environmental laws shall be strictly complied with during supply, storage, erection, commissioning and operation process. A regular compliance report shall be submitted to the procurer/appropriate Authorities.

19. Formation of new joint venture in India shall be permitted only with the Indian companies.

20. Tendering by the agent shall not be accepted.

21. The original test report in the language prescribed by the procurer shall generally be accepted. Preferably the translated test report shall not be accepted. However, the notarized translation of test reports shall be accepted.

22. Certification/compliance as per the Indian Standards/ International Standards/ Indian Regulations/ specified Standards shall be mandatory, where ever applicable.

23. Quality assurance of the product shall be carried out by the procurer or an independent third party agency appointed by the procurer. Manufacturing Quality Plan as approved by the procurer shall be followed by the manufacturer/supplier.

24. Wherever required, the foreign supplier shall establish fully functional service centers in India and shall keep spares/material locally for future needs of utilities.

25. Arbitration proceedings shall be instituted in India only and all disputes shall be settled as per applicable Indian Laws.

Annexure–III to BDS

Format of Undertaking
(To be sent by Issuing Bank through official email-ID)

From: xxxbank@xx.in

To: xxx@ntpc.co.in

We have issued BG No. …… dated..... for an amount of Rs. …… on behalf of… .....[Name of Bidder] towards Bid Security / EMD for Tender No. …… in favour of.....[Name of PMC].

Please find enclosed the soft copy of the Bank Guarantee and SFMS acknowledgement. This SFMS is sent on..... (date).

Any demand / claim made by the 'PMC' shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder till the validity period mentioned in the Bank Guarantee.

However, in absence of the physical copy of aforementioned BG with the PMC, we undertake that PMC's demand / claim will be binding and conclusive on us without the physical copy of aforementioned BG till fourteen (14) days from the due date of submission of Techno-Commercial bids.

We undertake not to cancel the aforementioned BG No. .....without written consent / instruction from PMC.

(Name of Bank Official)
Authority No. …….

SECTION – IV

GENERAL CONDTIONS OF CONTRACT (GCC)

General Terms & Conditions of Contract

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PART-I: INSTRUCTIONS TO TENDERER:

1. GENERAL:

1.1. The tender should be addressed to the officer who has invited the tenders.

1.2. Any offer made in response to this tender, when accepted by the Cement Corporation of India Ltd., will constitute a contract between the parties.

2. SUBMISSION OFTENDER:

2.1. Two-Part Bid procedure in electronic form shall be adopted for preparation, submission and evaluation of the bids.

2.2. The bidder should digitally sign the bid submitted. Softcopy of the bids (Techno-Commercial Bid and Price Bid) and Annexure-9 shall be uploaded through the portal on or before the submission time and date as stipulated in the bidding document.

2.3. Other conditions:

i. The tenderer has to declare at Annexure-9 that he has not been debarred from tendering for contracts in any of the departments of Govt./Semi Govt./Public Sector Undertaking and Local Bodies.

ii. The tenderer has to certify at Annexure-9 that the information given by him/them in the tender documents is correct and if at any stage the same is found to be incorrect, the contract will be liable to be terminated/rescinded and action may be taken against him/them by the Corporation for damages.

iii. In the event of the tender being submitted by a firm, each partner thereof must sign it separately. In the event of the absence of any partner, it must be signed, on his behalf, by a partner holding power of attorney authorizing to doso.

iv. In the case of a company, the tender should be signed in the manner as laid down in the said Company's Article of Association.

v. A true copy of the partnership deed (and Articles and Memorandum of Company) duly attested should be furnished.

vi. Tenders received after the specified time & date are liable to be rejected.

vii. Tenders not submitted / uploaded in the prescribed formats and not completed in all respect are liable to be rejected.

viii. In case of sale of tender document, the tender documents are non-transferable. Only those firms, who have purchased the tender documents, can participate in the tender.

ix. Tenderers shall not be entitled to claim any costs, charges, expenses or incidentals for or in connection with the preparation and submission of their tenders even though the Corporation may decide to withdraw the "Notice Inviting Tender" or reject any/all tender(s) without assigning any reasons thereof.

2.4. The bidder shall prepare the bid and submit the bid online on "Electronic Tendering System" in following manner.

Part -A: Techno-Commercial Bid:

The following documents duly filled in, signed and stamped are to be up-loaded On-Line through **www.cci-etender.com** in the prevalent e-tendering partner.

1. The scanned copy of covering letter (Annexure:1)
2. Submission of Earnest money through e-Payment (through e-tendering portal Gateway)/ through BG as per format, wherever applicable.
3. Declaration (Annexure:9), duly filled in and stamped, on Bidder's letterhead.
4. Scanned Copy of Integrity Pact (Annexure: 2) (This is to be submitted for tenders with values, which exceeds the prescribed value of tender).
5. Copy of GST Registration Certificate.
6. Copy of the PAN card of the company. (in case of proprietary firm it can be inthe name of the proprietor).
7. Certificate if any officer of Corporation is related to bidder or not (Annexure:3).
8. List of unexecuted orders in hand as per Annexure :4.
9. Additional information to be furnished (Annexure:5).
10. Copy of foreign collaboration, if applicable.
11. The Annual Turnover of the firm of bidder as per audited balance sheet for last 3 financial years.
12. Reference from the Bankers indicating financial status of the company.
13. The certificate from the appropriate Govt. Authority certifying that the bidder is the manufacturer of items for which offer is submitted.
14. MSME certificate with Udyog Adhar no. (For MSME Vendor).

Part -B: Price bid: To be submitted on-line as per **"PRICE BID"** format only.

3. OPENING OFTENDER:

3.1. Part-A i.e. Techno-Commercial bid will be opened electronically on specified date and time as given in the NIT. Bidder(s) can witness electronic opening of bid.

3.2. Part-B i.e. Price bid will be opened electronically of only those bidder(s) whose Part-A Techno-Commercial Bid is found to be Techno-Commercially acceptable by CCI. Such bidder(s) will be intimated date of opening of Part-B Price bid, through their valid email IDs as mentioned by them.

4. CLEARUNDERSTANDING:

When a tenderer submits his tender documents in response to this tender, he is deemed to have understood fully about the requirement, terms and conditions. No extra payment will be made or any other claim whatsoever entertained on the pretext that the tenderer did not have a clear idea of any particular point(s).

5. VALIDITY OFOFFER:

Tender shall remain valid for acceptance for **120** days or as may be specified, from the date of opening of commercial bid. No revision/modification in the tendered rate will be allowed during the period of original validity of tender or the extended period except for any reduction/ revision as may be asked for specifically by CCI during negotiations.

6.AWARD OFCONTRACT:

6.1. The Corporation reserves the right:

i. To accept in its sole and unfettered discretion any tender for whole or part quantities/part work or to reject any or all tenders without assigning any reasons thereof and without entitling the tenderer to any claim whatsoever.

ii. To award the contract to more than one firm, either at equal price or at different prices.

iii. To enter into parallel contracts simultaneously or at any time during the period of the contract with one or more tenderer(s), as the Corporation may deem fit.

iv. To place adhoc order simultaneously or at any time during the period of the contract with one or more tenderer(s) for such quantity and for such jobs as the Corporation deem fit.

6.2. Normally no price negotiation will be conducted. Tenderers are advised to quote lowest rates on firm basis in their offers.

6.3. Firms, which have failed to fulfill earlier contractual obligations, may not be considered.

6.4. If no separate agreement has been signed by the parties to the contract, the LOI/ Order resulting from this tender including all negotiation and detailed order to be issued subsequently, with its terms and conditions and stipulation as agreed to by the tenderer and to the extent modified during negotiations, constitutes the contract agreement relating to the work between the successful tenderer and the Corporation and the parties shall be bound by the terms and conditions and all provisions of this contract.

6.5. The Corporation does not bind itself to accept the lowest or any tender and to assign any reason for non-acceptance of the same.

6.6. The Corporation shall mean and include the administrative and executive officers of its Corporation Office at New Delhi as well as of factories/ projects as the case may be who are identified to deal with matter relating to this contract on its behalf.

7. In case of the due date of sale/ submission/opening of tender falling on Government holiday(s), the succeeding working day/date will be treated as due day/date automatically. However, the time will remain unchanged.

8. The tenderer should have adequate experience in the related field and should furnish supporting documents giving details of similar job executed during last three years as per format enclosed (Annexure-8).

9. INTEGRITY PACT & INDEPENDENT EXTERNAL MONITOR (IEM):

9.1. The tenderers should go through the Integrity Pact (Annexure-2) in detail and should submit the same, duly signed by Proprietor/Director/Partner as per Clause 4 of Part A. The conditions of the Integrity Pact, shall be applicable, during the period of the contract or extension thereof. In case the contract is sub-let by the successful Tenderer with the permission of the Corporation, the Principal Contractor/successful Tenderer shall take responsibility for adoption of Integrity Pact by the sub-contractor.

9.2. The person signing Integrity Pact shall not approach the court while representing the matters to present IEM &he/she will await their decision in the matter.

9.3. IEM shall oversee the compliance under the Integrity Pact. The details of present IEM is given in the CCI website.

9.4. The stakeholders may approach the IEM regarding any unethical terms / practices of the organization.

9.5. The IEM would examine all complaints received by them.

9.6. The IEM is expected to resolve issues raised by bidder regarding any aspect of the tender, which allegedly restricts competition or displays bias towards some bidders.

9.7. Vendors/Bidders having any grievance/complaint relating to the tender at any stage may approach the IEM directly, preferably by email. The IEM will look into their grievances/ complaints Promptly, objectively and independently

10. MSME ACT- As per MSME Act-2012, 25% of the total tendered quantity shall be reserved for the vendors, registered with MSME, with quoted landed cost within the band L-1 +15%, provided they agree to supply at the landed cost of L-1. Out of the 25% of tendered quantity, 20% shall be reserved to the MSME entrepreneurs' with SC/ST category. Besides out of 25% total procurement from MSMEs, 3% procurement shall be from MSMEs owned by women. For award of this quantity, the vendors shall have to submit the valid MSME certificate (with SC/ST category, if any) along with the techno-commercial bid of the tender. This shall be possible only if the L-1 bidder is not MSME. In case of more than one such MSME, the quantity shall be shared proportionately.

11. START UP INDUSTRIES- For industries which have started the business during last 3 financial years, the submission of the credentials like audited balance sheets, performance certificates for materials supplied during last 3 years may not be mandatory for the purpose of meeting the eligibility criteria of the tender. They can submit the documents for the financial years during which their manufacturing unit was in operation. However the list & documents of plant and machineries etc. are required to be submitted.

PART-II: GENERAL TERMS AND CONDITIONS

1. EARNEST MONEYDEPOSIT:

1.1. All tenderers including those registered with the Corporation should furnish earnest money, as specified, through e-Payment (through e-tendering portal Gateway) in favor of Cement Corporation of India Limited, New Delhi. Tender received without the Earnest money deposit, as specified in the tender, will be liable for rejection. Any other money held by or pending with the Corporation against any other contract will not be generally adjusted/ treated as EMD for this tender.

1.2. Earnest money will be forfeited if the rates are revised/or modified upward during the validity period or extended period. Earnest money will also be forfeited if the security deposit is not furnished within 15 days from the date of LOI or work not started after acceptance of the tenderer's offer by CCI.

1.3. The Earnest money deposit will not bear any interest.

1.4. The Earnest money deposit of successful tenderers would be adjusted towards the Security deposit and that of others will be refunded, except in the cases mentioned in 1.2 above and mentioned in Clause 2.3below.

1.5. Public Sector Undertakings (Central/State) and SSI units registered with NSIC and MSME are exempted from submission of Earnest money deposit. The MSME and SSI units shall furnish a documentary proof to the effect that they are registered with NSIC along with the tender documents.

2. SECURITYDEPOSIT:

2.1. The amount of Security deposit as specified in the special terms and conditions of the tender/LOI, shall be deposited by the successful bidder within 15 days of acceptance of offer of issue of Rate Contract/P.O.

2.2. Failure to furnish Security Deposit in accordance with the conditions of the tender as mentioned in 2.1 above will be considered to be breach of contract which would give the Corporation the right to terminate the contract and forfeit the EMD amount. For such breach of contract, the Corporation will also be entitled to take any other course of action against the successful tenderer as it may deem fit like stoppage of business dealings/ debarring from tendering, etc.

2.3. The Security deposit may be made either by bank draft or bank guarantee in favor of Cement Corporation of India Ltd. from any nationalized bank in the prescribed form valid for a period of 6 months beyond the date of completion of contract with a further claim period of 3 months. The Earnest money will be adjusted towards portion of security deposit, in the case of successful bidder.

2.4. If work is not started after acceptance of offer by successful bidder, EMD/SD will be forfeited.

2.5. In the event of any approved upward revision in the value of the contract the successful bidder will, on receiving intimation, make further deposit as specified by the Corporation towards the increased value of the contract.

2.6. The security deposit will not bear any interest. The Corporation reserves the right to adjust security deposit towards any amount due to it from the successful tenderer against this contract or against any other contract with this Corporation and in such an event the successful tenderer on receipt of notice from the Corporation shall make further deposit to restore the security deposit to the full amount.

2.7. The security deposit shall be liable to be forfeited wholly or partly at the sole discretion of the Corporation, should the successful tenderer either fail to complete the jobs assigned to him/them as per agreed time schedule or to fulfill his/their contractual obligations or to settle in full his/their dues to the Corporation.

2.8. The Corporation is empowered to deduct from the security deposit or from any other outstanding amount any sum that may be fixed by the Corporation as being the amount of loss or losses or damages suffered by it due to delay in performance or non-performance of any of the conditions of the tender/contract. The Corporation will, however, not be bound to prove any demonstrable loss or damages suffered.

2.9. The Corporation shall have a lien over all or any money that may become due and payable to the contractor under this contract or any other contract or transaction of any other nature either all alone or jointly with other and unless the Contractor pays and clears the claim of the Corporation immediately on demand, the Corporation shall be entitled at all times to deduct the said sum due from the contractor from any money/security deposit with which may have become payable to the contractor or may become due at any future date under this contract or any other contract or transaction whatsoever between the contractor and the Corporation without prejudice and in addition to the other rights of the Corporation to recover the amount of any such claim by other remedies legally available.

2.10. Bank Guarantee as required under this contract or agreed to against any advance made by the Corporation/ contract performance/equipment performance/ guarantee etc. shall be extended by the Contractor whenever so required by the Corporation and without any question for covering the period of completion and finalisation of work, performance etc. Failure to do so shall entitle the Corporation to encash the bank guarantee against it towards any dues, recoveries L.D. etc.

3. MEMBER OF THE CORPORATION NOT INDIVIDUALLYLIABLE:

3.1. No Director or official or employee of the Corporation shall in any way be personally bound or liable for acts or obligations of the Corporation under the contract or answerable for any default or omission in observance or performance of any of the acts, matters or things which are here in contained.

4. CORPORATION NOT BOUND BY PERSONALREPRESENTATION:

4.1. The contractor shall not be entitled to any increase in the rates or any other right or claim whatsoever by reason of any representations, explanation or statement or alleged representation, promise or assurance given or alleged to have been given by any employee of the Corporation.

5. NON-PERFORMANCE OF CONTRACT / CANCELLATION OF CONTRACT-RIGHT OF THECORPORATION:

5.1. The Corporation reserves the right to cancel the contract if the contractor fails to carry out the jobs assigned to him as per contract and as per the instructions given by authorized representative of the Corporation. In addition, Corporation may also take any other remedial measures in such an event as described hereunder.

5.2. Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the tenderers, their partners agents or servants to any officer servant or representative of the Corporation for obtaining or for execution of this or any other contract or for receiving payments under the contract shall in addition to the criminal liability he may incur will subject to tenderer to cancellation and the Corporation shall be entitled to deduct the amount so payable from any money otherwise due to the tenderer under this or any other contract. Any question or dispute as to whether the tenderers have incurred any liability under the clause shall be settled by the Corporation in such manner and on such evidence of information as it may deem fit and sufficient and the Corporation decision in this regard shall be final and conclusive.

5.3. In case of any compelling circumstances or for any other reasons and in the opinion of the Corporation, the contract needs to be determined and terminated at the stage during the execution, the Corporation shall be entitled to do so, giving one month's notice in writing. In such an eventuality, no compensation whatsoever for any arrangement is made by the contractor or for any liabilities incurred by him or any consequential loss will be payable by the Corporation except the payment for work actually done at contracted rates, after making good all dues recoveries L.D. if any etc. CCI also reserves its right to suspend the contract for any compelling reasons if in the opinion of the Corporation it is so required. In such an eventuality, the time of completion will be extended to the extent of suspension period but no claim whatsoever for any damages, increase in rates, idle wages machinery etc. will be payable to the contractor.

5.4. The Corporation also reserves the right to make risk purchase from the open market by tender or by any other mode of purchase at the risk and cost of supplier in respect of such quantities that the supplier fails to deliver in accordance with the schedule of delivery agreed to, after giving due notice to the supplier.

6. SUB-LETTING OFCONTRACT:

6.1. The contractor shall not sublet or assign this contract or any part thereof without obtaining prior written permission of the Corporation. In the event of the contractors subletting or assigning the contract or any part thereof without such permission, the Corporation shall have the right to rescind the contract and contractor shall be liable to the Corporation for any loss or damage which the Corporation may sustain in consequence or arising out of such cancellation. Even, in case subletting is permitted by the Corporation the party to whom subletting is proposed, will be subject to approval of the Corporation. However, the Corporation will not recognize any contractual obligations with the persons or party to whom the contract has been sublet including compensation under workman's compensation Act and the Contractor will be held responsible for the satisfactory, due and proper fulfillment of the contract.

7. CHANGES INCONSTITUTION:

7.1. Where the contractor is a partnership firm, a new partner shall not be introduced in the firm except with the previous consent in writing of the Corporation which may be granted only upon furnishing of a written undertaking by the partner to perform the contract and accept all liabilities incurred by the firm and under the contract prior to the date of such undertaking.

7.2. On the death or retirement of any partner of the Contractor's firm before complete execution and performance of the contract, the Corporation may, at its option rescind the contract and in such case the contractor shall have no claim, whatsoever, for compensation of any kind, consequential loss etc. against the Corporation.

7.3. Without prejudice to any of the rights or remedies under this contract, if the contractor is a proprietorship concern and proprietor dies during the subsistence of the contract, the Corporation shall have the option to terminate the contract without paying compensation of any kind consequential loss etc. to any claimant i.e. legal heirs and successors.

8. FORCE MAJEURECONDITIONS:

8.1. If any time during the continuance of the agreement/contract it becomes impossible by reasons of war, or war like operations, strikes, lock-outs, riots, civil commotion, epidemical sickness, pestilence, earthquake, fire, storm, or floods, the contractor shall during the continuance of such contingencies, not be bound to execute the contract during this period as per agreement/ contract time schedule. The work shall be resumed immediately the contingencies has have ceased or otherwise determined and contractor's obligations shall continue to be in force for correspondingly extended period after the resumption of execution. The contractor shall however, intimate the corporation by registered post about such acts at the beginning and end of the above causes of delay within ten days of occurrence and cessation of such force majeure conditions.

8.2. In the event of delay lasting over one month, if arising out of cause of force majeure the Corporation reserves the right to cancel the order/ contract without any compensation whatsoever, and/or any consequential loss etc.

8.3. Only events of Force Majeure, which affect the work at the time of its occurrence shall be taken into cognizance. The Corporation shall not be liable to pay any extra costs or increased rates due to delay under Force Majeure conditions. Only appropriate extension of time will be granted.

9. NOTICE:

9.1. Any notice hereunder may be served on the contractor by registered post/ mail at his last known address. Proof of issue of any such notice at this address shall be conclusive proof of having received the notice by contractor.

10. DISPUTE RESOLUTION

10.1 Amicable Settlement through Mediation

10.1.1. In the event of any dispute, controversy, or claim arising out of or in connection with this Agreement, including its interpretation, performance, or termination, the Parties

shall first make all reasonable efforts to resolve the dispute amicable through mutual discussion and negotiation.

10.1.2. If the Parties fail to resolve the dispute within 30 (thirty) days from the date of written notification of the dispute by one Party to the other, the dispute shall be referred to mediation. The mediation shall be conducted in accordance with the provisions of the mediation Act, 2023, or any statutory amendment or re-enactment thereof.

10.1.3. The mediator shall be:

a. A retired High Court Judge, or

b. A retired high-ranking officer with relevant technical expertise.

10.1.4. If the Parties fail to agree on the appointment of a mediator within 15 (fifteen) days of reference to mediation, the mediator shall be appointed in accordance with the procedure prescribed under the Mediation Act,2023.

10.1.5. The mediation process shall commence within 15 (fifteen) days from the date of appointment of the mediator and shall be concluded within 60 (sixty) days unless extended by mutual consent of the Parties.

10.1.6. The costs of mediation, including mediator fees, shall be shared equally by the Parties unless otherwise agreed in writing.

10.1.7. Any settlement reached through mediation shall be recorded in writing, signed by both Parties, and shall have the same binding effect as a judgment or decree under law.

10.2. Judicial Remedies

10.2.1. If the mediation process fails to resolve the dispute reached, either Party shall be entitled to seek judicial remedies before the competent courts as specified herein.

10.2.2. The courts having Jurisdiction at New Delhi shall have exclusive jurisdiction over all disputes, controversies, or claims arising out of or relating to this agreement.

10.3. Governing Law & Applicability of AMRCD

10.3.1. This Agreement and any dispute arising out of or in connection with it shall be governed by and construed in accordance with the laws of India.

10.3.2. In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes relating to Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14th December, 2022 and the decision of AMRCD on the said dispute will be binding on both the parties.

11. JURISDICTION:

11.1. It is hereby agreed by the parties here that only the following Courts shall have Jurisdiction to decide or adjudicate upon any dispute which may arise out of or be in connection with the agreement:-

i) Courts at Delhi / New Delhi for contracts awarded for Corporate Office, NewDelhi.

12. LAWS GOVERNING THECONTRACT:

12.1. This contract shall be governed by the laws of Union of India inforce.

13. WAIVER NOT TO IMPAIR THE RIGHT OF THECORPORATION:

13.1. Any delay in exercising or omission to exercise any right, power or remedy accruing to the corporation upon any default under this contract shall not impair any such right, power or remedy or shall be construed to be inaction of the Corporation in respect of any such default or any acquiescence by the Corporation effect or impair any right, power or remedy of the Corporation under this contract.

14. CONDITION GIVEN BY THETENDERER:

14.1. With the acceptance of the terms and conditions described in this tender any terms and conditions given by the tenderers contrary to those conditions shall be treated as withdrawn by the tenderer(s).

ii) Courts at Diphu / Guwahati for contracts awarded for BokajanUnit.

iii) Courts at Ponta Sahib / Shimla for contracts awarded for RajbanUnit.

iv) Courts at Tandur / Hyderabad for contracts awarded for TandurUnit.

15. OTHER COMMERCIAL TERMS ANDCONDITIONS:

15.1. PRICES:

i) Prices quoted shall be firm during the tenure of the contract and shall be inclusive of packing, forwarding charges and on F.O.R./F.O.T. station of dispatch/destination.

ii) Any statutory levy / variation in the GST on the items ordered (final finished items for which rates are quoted) at the rates prevailing on the date of scheduled delivery or at the rates prevailing on the date of supply whichever is lower, shall be borne by the Corporation. However, supplier has to furnish documentary evidence i.e. Notification for such levy/variation.

iii) Prices are to be quoted on firm basis and there shall be no variation of the same during the period of contract unless specifically agreed to and provided in the contract.

iv) If the dispatches are made within the scheduled time, prices as per the contract will be payable. However, if the dispatches are delayed, the Corporation will have the option to either charge liquidated damages or rate difference calculated on the basis of prices pertaining to the schedule date of dispatch and/or prices applicable to the actual date of dispatch i.e. prevailing rate, whichever is higher i.e. ordered value minus liquidated damages or prevailing rate whichever is lower, will be paid. However, extension in the validity of the contract will be required if the dispatches are made after expiry of the contract. If at any time, during the said period, the supplier reduces the sale price of such stores or sell such stores to any other person at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the Corporation and the price payable under the contract for the stores supplied after the date of coming into force such reduction or sale, shall stand correspondingly reduced.

15.2. GOODS& SERVICETAX:

i) The IGST/CGST/SGST, if applicable, will be paid on the cost of the finished goods being supplied, as per the rate (%) prevailing at the time of scheduled delivery period, subject to the supplier claiming the same as separate item on their bill.

ii) The supplier shall furnish the following certificate on the body of the bill claiming aforesaid amount of IGST/CGST/SGST.

iii) "It is certified that the goods, on which GST has been charged, have not been exempted under the GST or the rules made there under. The amount charged on account of GST on those goods are not more than what is payable under the provisions of the relevant act, or the rules made there under:"

15.3. PACKING ANDMARKING:

i) All machinery equipment, hardware items and materials prone to deterioration shall be adequately packed to protect them against all damages, pilferage, rust etc. during transit and from atmosphere. Packing shall be adequate and suitable for transport by rail/ road as required. Each package shall contain order no. and date and name of consignee.

ii) Each consignment must relate to one purchase order only. Where dispatch of material against more than one orders in a single consignment/ case is warranted, the material against each order should be packed separately. Order numbers should be visibly marked outside all packages for easy identification.

iii) Any loss, damages or pilferage in transit due to faulty/ inadequate packing or on any other account will be to the account of the supplier.

iv) All packing and forwarding charges are to be borne by the supplier.

15.4. **DELIVERY AND LIQUIDATED DAMAGES(LD)**:

i) The successful tenderer, on receipt of Purchase Order, will finalize a detailed manufacturing schedule keeping in view the overall delivery schedule as per the order. He will indicate the completion dates of critical activities and on approval by CCI, the same will form the basis for monitoring the progress when the items are taken up for manufacture. The copies of the schedule shall be forwarded to Inspecting Authority besides Material Management Department.

ii) LD for delay in delivery shall be levied @ ½% per fortnight or part thereof on the belated supplies against each indent subject to maximum of 5% of the delayed portion of supplies against that indent. The corporation will, however, not be bound to prove that it has suffered to the extent of LD claimed. The LD for delay in delivery shall be levied on the landed cost at CCI's units inclusive of basic prices, taxes, duties & freight etc.

iii) The time and date of delivery is the essence of the contract and the goods must be dispatched within the time and subject to the conditions specified. For such breach of contract, the Corporation will be entitled to take any other course of action against the supplier as it may deem fit like stoppage of business dealings/ debarring from tendering etc.

15.5. **FREIGHT:**

i) Stores, ordered for, must be dispatched in such a way that the total freight charges whether based on cubic measurement or weight should be minimum keeping in view that the under load consignment are to be avoided.

ii) The supplier shall obtain clear and unconditional Railway Receipt/ Parcel way bills/ lorry receipts from the Carriers.

iii) The supplier shall have to make arrangements for the dispatch of all over size dimensional consignments to purchaser's site and shall be responsible for taking permission, if necessary, from the concerned authorities for the movement of such oversize consignments from the station of dispatch to destination station. All expenses incurred in this connection shall be borne by the supplier.

15.6. **INVOICING:**

i) Two copies (one of which should be in original) of invoice, packing list/ delivery challan along with Railway receipt/ Lorry receipt/ Parcel waybill, Inspection certificate issued by the inspecting authority or similar other documents as above should be sent to the consignee. The documents as above should be sent within 72 hours from the dispatch of the consignments to avoid payment of demurrage/ wharfage. Any demurrage/ wharfage paid by the Corporation due to non/late receipt of documents will be to the account of supplier. The scanned copy of such documents may also be forwarded to the consignee through e-mail.

ii) A telegraphic intimation giving details of RR/Lorry receipt/ Parcel way bill, consignment details, such as no. of packages, weights and values shall be sent to the consignee in advance.

iii) One copy of invoice pre-receipted along with copies of packing list, delivery challan, inspection certificate issued by the inspection authority shall be sent to the paying authority. In case the dispatch documents are to be sent through bank, advance copy of the invoice shall be sent to the paying authority within 72 hours of the dispatch of the consignments.

iv) One copy of the invoice along with a copy of packing list delivery challan shall be sent to the Officer who has placed the order.

v) If any extra charges including wharfage or demurrage are incurred in taking delivery of the consignment due to supplier's failure to observe the conditions mentioned above same will be recovered from the supplier.

15.7. **INSPECTION**:

i) Pre-inspection at supplier's work will be carried out by P&I Dept. of CCI/ Unit/ any other agency at the sole discretion of CCI.

ii) All inspection calls will be issued from the works and not Sales Office with the stamp of the supplier, giving a clear notice of 21 days from the date of stamp of the Post Office when any items are offered for inspection.

iii) Inspection will cover checking of all items being manufactured by the supplier at his own works, at the works of his sub-supplier and also of any of his bought out items.

iv) The supplier will provide all facilities including tools, instruments and other apparatus to inspecting officer to facilitate inspection and avoid delay in work on this account.

v) The test would normally be conducted as per BIS standards wherever available and in other cases as per prevalent engineering practices for consignments, checking of material will be done for chemical analysis, physical properties, visual inspection, non-magnetic property, test certificates and other non-destructive tests (if specified in the purchase order). Test verification of chemical composition will be done in a Govt. laboratory/ Govt. approved laboratory/any other reputed laboratory at the discretion of CCI wherever required.

vi) The Inspector will have access to the premises/ workshop of supplier, his sub-supplier at all reasonable times to undertake inspection, take samples, take any other measurement or readings and to check the progress of any of the items.

vii) Inspection will include checking of raw materials manufacturing procedures, stage inspection (as per stages to be indicated/ required by CCI during execution) and final inspection. The manufacturer shall, always keep all detailed records about the stage inspection, and CCI inspector will be at liberty to check those records on demand.

viii) For any sub-contracted items, supplier will inspect them himself before offering them to CCI for inspection. In this regard, the supplier will submit his inspection report along with all documents while giving inspection call for sub-contracted items.

ix) The supplier will immediately on receipt of the order, draw an inspection plan with CCI for identifying the stages at which checking is to be done to meet with CCI's requirements.

x) Final inspection will be carried out when the material/equipments are ready in all respect preferably before painting. The extent and type of inspection will depend upon type of equipment/ item and its function in general and will include items like checking of critical dimensions, physical tests, straightness/ flatness and surface finish, checking of hardness of components, carrying out load/ no load trials, dynamic/ static balancing, leakage and hydraulic tests contract impression, tooth profile and back lash etc.

xi) The manufacturer will supply to the inspector all test certificates and records of their own internal inspection at the time of final inspection. These will include manufacturing records, destructive and non destructive tests, impulse test etc.

xii) If the inspector has advised the supplier to do certain rectification before dispatch of materials, these instructions will be carried out and materials will not be dispatched without these rectifications. Inspection by CCI inspectors will not absolve the supplier from his responsibility regarding the quality of materials supplied by him or his sub-contractors/ sub-suppliers. CCI will have the right to reject the materials if after their receipt at site, it is found that the rectifications advised by CCI were not carried out or the items do not give the specified performance as per the specifications and the guarantees.

xiii) For long delivery items, the supplier will send a monthly progress report indicating the latest status of each item/assembly to enable CCI to know the progress of work.

xiv) Notwithstanding the stage/final inspection done at the works of supplier, CCI reserves the right to inspect or test the goods at its destination site and any 1defects/short-comings noticed will be made good by the supplier/work as per contracted time schedule, at his own expenses.

xv) CCI reserves the right to inspect any bought out item and in this regard the supplier will submit all necessary records, data and documents so as to enable CCI inspector to undertake inspection.

xvi) No material will be dispatched under any circumstances without clearance from CCI Corporate Office.

xvii) All costs involved in connection with inspection/testing will be borne by the supplier.

15.8. **WARRANTY REGARDING QUALITY OF MATERIALSSUPPLIED:**

i) Supplier shall guarantee that all the items supplied by them whether manufactured by them or their sub-contractor or purchased from any other source and supplied to the corporation shall be new and free from all defects arising due to defective material or manufacturing defects. Items supplied shall be first class workmanship with effective design.

ii) The supplier shall warranty to replace, rectify or repair free of cost at the factory site, the component or part of item proved to have become unserviceable due to any of the above defects within period of 12 months from the date of use of the material or 18 months from the date of dispatch of item(s) whichever is earlier. In the event of the supplier not complying with the above within a reasonable time, the corporation will have the option to rectify/repair or replace the defective part(s)/component after giving three weeks notice to the supplier and recover the cost from the supplier.

15.9. CCI reserves the right to request for diversion of dispatch of materials to any of its other units. Difference in taxes, duties and freight charges if any, shall be borne by CCI.

15.10. In the event of negotiations, only downward revision of rates will be allowed. Any change in techno-commercial terms as agreed earlier, will not be permitted at this stage. Hence any qualifying remarks in the price bid revised/ negotiated offer will not be entertained and shall render the tender liable for rejection and forfeiture of earnest money deposit.

16. NON- OBSTANTECLAUSE:

16.1. Notwithstanding anything contained herein or elsewhere; the decisions taken by Cement Corporation of India will be final and binding upon all the concerned including all the parties to the present tender document and process therewith.

ANNEXURE-1

(On the letterhead of the bidder)

Covering Letter

To,
The (Tendering Authority)
Cement Corporation of India Limited,
…… (Address of Unit / Corporate Office)

Bidder's Ref No.:

Dear Sir,

With reference to your NIT No. …….. Dated ……,
I/We am/are hereby uploading the scanned copies of the following documents online for your reference:

S.No.	Item	Yes/No/NA
1	Scanned copy of covering letter (Annexure-1)	
2	Submission of EMD (Cash/DD/BG/ Gateway)	
3	Copy of GST Registration Certificate and PAN Card	
4	Partnership Deed / Memorandum & Article of Association	
5	Balance Sheet for last 3 financial years	
6	Scanned Copy of duly filled and signed Integrity Pact Annexure-2	
7	Udyog Aadhar Number (For MSME bidders)	
8	Annexure 3 (Declaration of relation to officer of CCI)	
9	Annexure 4 (unexecuted / present contracts / jobs in hand)	
10	Annexure 5 (Bidder's firm/company profile)	
11	Annexure 6 (Details of plant & machinery installed)	
12	Annexure 7 (Details of testing facilities installed)	
13	Annexure 8 (Details of orders executed including CCI during the last three years)	
14	Annexure 9 (Declaration letter of having read and understood the GTC)	

(For and on behalf of Bidder/Contractor)
(Office Seal)

INTEGRITYPACT

Between

Cement Corporation of India Limited (CCI) hereinafter referred to as "The Principal", and ----------hereinafter referred to as "The Bidder/Contractor"

Preamble:

ThePrincipalintendstoaward,underlaiddownorganizationalprocedures,contract/sfor ----------ThePrincipalvalue full compliance with all relevantlaws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.Section1 - Commitments of the Principal

1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the followingprinciples:-

a) No employee of the Principal, personally or through familymembers,will in connectionwiththetenderfor, ortheexecution ofacontract, demand, takea promise foror accept,for selfor thirdperson, anymaterialor immaterialbenefit whichthe person is not legally entitled to.

b) The Principal will, during the tender process treat all Bidder(s) with equity and reason, The Principal will inparticular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential additional informationthroughwhichthe Bidder(s) could obtainanadvantageinrelation to the tender process or the contract execution.

c) ThePrincipalwillexcludefromtheprocessallknownprejudiced persons.

(2)IfthePrincipalobtainsinformationontheconduct ofanyof its employees which is a criminaloffence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinaryactions.

Section2-CommitmentsoftheBidder(s)/contractor(s):

(1) The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a) The Bidder(s)/Contractor(s) will not, directlyorthroughanyotherpersonor firm, offer,promiseor givetoanyofthe Principal's employees involved inthetenderprocess orthe executionofthe contract or to any third personany materialorotherbenefit which he/she is not legally entitled to,inorder to obtaininexchangeanyadvantageofany kindwhatsoever duringthetenderprocessor duringtheexecutionofthe contract.

b) The Bidder(s)/Contractor(s) will not enter with other Bidders into anyundisclosed agreement or understanding, whether formal orinformal. This applies in particulartoprices, specifications, certifications, subsidiary contracts, submission ornon-submissionof bids or anyother actions to restrict competitivenessorto introduce cartelisationinthebidding process.

c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PCAct; furtherthe Bidder(s)/Contractor(s) will not use improperly;forpurposesof

competition or personal gain,orpassontoothers,anyinformation or document provided by the Principalas part ofthe business relationship, regardingplans,technical proposalsandbusinessdetails, including information contained or transmitted electronically.

d) The Bidder(s)/Contractor(s)of foreignoriginshall disclose the name andaddress of the Agents/representatives in India, if any.Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any, Furtherdetailsasmentionedin the "GuidelinesonIndian AgentsofForeign Suppliers'shallbedisclosedbythebidder(s) /Contractor(s).Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in 'Indian Rupees only.

e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, iscommitted toor intends to maketoagents,brokers oranyother intermediaries inconnection withthe award of the contract

f) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or beanaccessory tosuchoffences.

g) Bidder(s)/Contractor(s) signing IP shallnot approach the court while Representingthe matters to IEMs and he/shewillawaittheirdecision in the matter.

h) In caseofajointventure, allthepartners ofthejointventures tosigned the IP

i) Any violation of Integrity Pact would entail disqualification of the Bidders and exclusionfromfuturebusiness dealings, aspertheexisting Provision of GFR, 2017, PC act, 1988 and other Financial Rules/Guidelines etc.as maybeapplicableto theoriginationconcerned.

j) In the event of any dispute between the management and the contractor Relating to thosecontracts where integrity pact is applicable, in case,both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required the Organizations may adopt any mediation rule for this purpose. In case, the dispute remains unresolved even after mediation by the panel Of IEMs, theorganizations may take further action as per the terms & Conditions of the contract.

Section3-Disqualificationfromtenderprocessandexclusionfromfuturecontracts:

(1) Ifthe Bidders(s)/Contractor(s), beforeaward orduring execution hascommitted a transgression through aviolation ofSection 2, above or in any other formsuch as to put hisreliabilityorcredibilityinquestion,theprincipalisentitledtodisqualifythe

Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed for such reason.

(2) Ifthe Bidder/Contractor has committedaserioustransgressionthrougha violation of sector-2 such as to put his reliability or credibility into question, the principal isentitled also to exclude the Bidder/Contractor from future contract award processes.The imposition and duration of the exclusion will be determined by the severity of the transgression.The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors with the company hierarchyof the Bidder and the amount of the damage.The exclusion will be imposed for a minimum of 6 months and maximum of3 years.

(3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him andhas installed a suitable corruption prevention system, the Principal may revokethe exclusion prematurely.

(4) Atransgression isconsidered to haveoccurred if in light ofavailable evidence no reasonable doubt is possible.

Section4-CompensationforDamages:

(1) Ifthe Principal has disqualified the Bidder(s) fromthe tender process prior to the award according toSection 3,the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2If thePrincipal hasterminatedthecontract accordingtoSection 3,orifthe Principal MM entitled to terminate the contractaccording toSection 3,thePrincipal shallbeentitledtodemandandrecoverfromtheContractorliquidateddamagesof the Contract value or the amount equivalent to Performance Bank Guarantee.

Section5-Previoustransgression:

(I)TheBidderdeclaresthatnoprevioustransgressionsoccurredinthe last3 years with anyotherCompany in anycountryconforming to the anticorruption approach or withany other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

Section6-EqualtreatmentofallBidders/Contractors/Sub-contractors:

(1) The Bidder(s)/ Contractor(s) undertake(s) to demand fromall subcontractorsthe commitmentconsistent withthis IntegrityPact,andtosubmit it to thePrincipal before contract signing.

(2) ThePrincipalwillenterintoagreementswithidenticalconditions as this one with all Bidders andContractors.

(3) ThePrincipal will disqualify from the tender process allbidders who do not sign this Pact or violate its provisions.

Section-7-Criminalchargesagainstviolatingbidder(s)/Contactor(s)/Subcontractors:

Ifthe Principal obtainsknowledge of conduct of aBidder, Contractoror Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section8-IndependentExternalMonitor/Monitors:

(1) The Principal appoints competent and credible Independent ExternalMonitor for this Pact.The task of theMonitor is to review independently and objectively, whether and to what extent the parties comply withthe obligations under this agreement.

(2) TheMonitorisnotsubjecttoinstructionsbythe representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman, CCI.

(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the righttoaccess withoutrestriction to all tender documentation ofthe Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstrationofa valid interest, unrestricted andunconditional accessto his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.

(4) Assoon as theMonitor notices, or believes to notice,a violationofthis agreement,hewillsoinformthe Management of the Principal and request the Management todiscontinueortakecorrectiveaction,ortotakeother relevant action.

Themonitorcaninthisregardsubmitnon- binding recommendations. Beyond this, the Monitor has no right to demand from the partiesthattheyact ina specific manner, refrainfromactionor tolerateaction.However, the independent External Monitor shall give an opportunity to the Bidder/Contractor to present its case before making its recommendations to the Principal.

(5) The Monitor will submit a written report to the Chairman, CCI within 5 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasionarise, submit proposals for correcting problematic situations.

(6) Monitorshallbeentitledtocompensationonthesametermsasbeingextendedto /providedtoIndependentDirectorsontheCCIBoard.

(7) Ifthe Monitor has reported to the Chairman CCI, a substantiated suspicion ofan offence underrelevant IPC/PCAct, andtheChairman,CCI has not, withinthereasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor mayalso transmit this informationdirectly to the Central Vigilance Commissioner.

(8) Theword'Monitor/wouldincludebothsingularandplural.

(9) Independent External Monitor shall be required to maintain confidentially of the informationacquired and gathered duringtheir tenure/role as independent Monitor.Any breach in this regard would be subject to the legal judicial systemof India.

(10) Independent External Monitor(s) shall be required to furnishan Undertakingand disclose before taking any assignment that he/she has no interest in the matter or connected with the party(Bidder/Contractor) in any manner.

Section9—Pactduration:

Thispactbegins whenbothparties have legallysignedit.Itexpires fortheContractor12 months after the last payment under the contract and for allother bidders 6 months after the contract has been awarded.If any claim is made/lodged during this time, the same shall bebindingand continue tobevaliddespite thelapseofthispactasspecifiedabove, unless it is discharged/determined by Chairman ofCCI.

Section10—Otherprovisions:

(1) This agreement is subject toIndianLaw.Placeofperformanceand jurisdiction is the Registered Office of the Principal, i.e. New Delhi.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

((3)IftheContractorisapartnershiporaconsortium,this agreementmustbe signedbyallpartnersorconsortium members.

(4)Should one or several provisions of this agreement turn out to be invalid, the remainder ofthis agreement remains valid. Inthis case, the parties will strive to come to an agreement totheir original intentions.

(For and on behalf of the Principal) (ForandonbehalfofBidder/Contractor)
(Office Seal) (Office Seal)

Place _____
Date _____

Witness1: Witness2:

(Name&Address)_____ (Name&Address)_____

_____ _____

_____ _____

CEMENT CORPORATION OF INDIA LTD.
(A GOVT.OF INDIA ENTERPRISE)

We/ I hereby declare that the following officer(s) of the Corporation are related to us/me

Sr.No.	Name of the Officer	Post held	Place of Posting

Note: In case no officer is related 'Nil' is to be mentioned in the box above.

Signature of tenderer
(Name / full address withseal)

CEMENT CORPORATION OF INDIA LTD.
(A GOVT.OF INDIA ENTERPRISE)

UNEXECUTED / PRESENT CONTRACTS / JOBS IN HAND OF THE BIDDER

We/I hereby declare the following:

Sr.No.	Name of Client	Nature of Work	Tonnage	Approx. value of contract (Rs. In Lakhs)	Date of start	Stipulated date of completion

Note: In case of no such details 'Nil' is to be mentioned above.

Signature of tenderer
(Name / address with seal)

Place:
Date:

CEMENT CORPORATION OF INDIA LTD.
(A GOVT.OF INDIAENTERPRISE)

BIDDER'S FIRM/COMPANYPROFILE

FORMAT FOR ADDL. INFORMATION TO BE FURNISHED BY THE TENDERERS (REFER SPL. TRUCTIONS PART III SPL. TERMS & CONDITIONS)		
1.	Name of the Firm	
2.	Complete Postal address: a. Head Office/Corporate Office b. Factory c. Other branches (incl. Delhi office, if any) d. Phone	
3.	Whether Public Sector/Private Sector/Joint Sector etc.	
4.	Type of Organization	Proprietary/Partnership/Limited/any other type
	A. In case of Proprietors/Partnership	
i)	Name of the Proprietors/Partners	
ii)	Whether business/Partnership is registered	
iii)	Date of commencement of business	
iv)	Status of Income Tax assessment (Please attach copy of Valid Income Tax clearance certificate)	
v)	Name & address of the Bankers (Please attach reference letter from your banker)	
	B. In case of Limited Liability Company or Company Limited by Guarantees	
i)	Amount of paid-up Capital	
ii)	Name of Directors	
iii)	Date of Registration of Company	
iv)	Copies of last three years audited balance Sheets of company (including Profit & Loss Statement) to be enclosed.	
5.	Name & address of the Bankers (Please attach reference letter from your banker)	
6.	Date of commencement of production of item for which tender is being submitted Annual turnover for last 3 financial years of the category/item for which tender is being submitted	1. Amount Rs. In Lakhs 2. Amount Rs. In Lakhs 3.Amount Rs In Lakhs

Signature of Tenderer: _____

Name of the Signatory: _____

Date :

ANNEXURE – 6

DETAILS OF PLANT & MACHINERY INSTALLED

Name of Firm: _____ _____

Sr. No.	Machinery	Size/ Capacity	Qty	Year of Manufacture	General Condition

Signature of Tenderer: _____

Name of the Signatory: _ Designation:

_____ Seal of the Company /Firm:

ANNEXURE – 7

DETAILS OF TESTING FACILITIES INSTALLED

Name of Firm: _____ _____

Sr. No.	Machinery	Size/ Capacity	Qty	Year of Manufacture	General Condition

Note : Also specify if test facilities like Radiography, Magnetic crack detection ultrasonic, physical test and chemical test facilities are available. Also indicate routine and type-testing facilities.

Date :

Signature of Tenderer: _____

Name of the Signatory: _____

Designation: _____

_____Seal of the Company /Firm: _

_____

ANNEXURE – 8

DETAILS OF ORDERS EXECUTED INCLUDING CCI DURING THE LASTTHREE YEARS

Name of Firm: _____ _____

Sr. No	Type of Items (Give details)	Name of the Party to whom supplied	Value	Date of Order	Delivery Date	Date of Actual Completion

Date :

Signature of Tenderer: _____

Name of the Signatory: _____

Designation: _____

Seal of the Company/Firm: _____

ANNEXURE – 9

(On the letterhead of the bidder)

DECLARATION LETTER OF HAVING READ AND UNDERSTOOD THE GTCTO BE UPLOADED DULLY FILLED, SIGNED ANDSTAMPED

Ref. No. of bidder: …….. Date:……..

We/I have read the Part – I (Instructions to tenderers), Part- II (General Terms & Conditions) available on tender portal of www.cci.ltd.in and Part- III (Special Terms & Conditions) & Part- IV (Technical Specifications) of NIT No. ……..…and have understood them completely and accept. Our offer is in confirmation to all the terms and conditions of the tender including all corrigendum/ addendum, if any. Therefore the Part I, II, III, IV and Corrigendum / Addendum, if any, shall constitute the complete tender document. In the event of award of contract to us, the complete tender documents shall be considered for constitution of contract agreement.

We/I also confirm that no tampering is done with original tender documents. We understand that any tampering of tender documents will lead to rejection of our bid/ Action for disqualification in participation of Tenders in CCI.

We/I hereby declare that We/I have not been debarred from tendering for contracts in any of the departments of Govt./Semi Govt./Public Sector Undertaking and Local Bodies.
We/I certify that the information given by us/me in the tender documents is correct and if at any stage the same is found to be incorrect, the contract will be liable to be terminated/rescinded and action may be taken against us/me by the Corporation for damages.
We are/I am duly authorized/empowered to sign all the tender documents.

We/I also understand that in case of any wrong / mal practice / deviation / breach of contract is done by us / me, action for debarring can be taken against us / me by way of show cause notice, and appropriate action considering reply / no reply by us / me.

Yours faithfully,

Date:

Signature of Tenderer: _____

Name of the Signatory: _____

Designation: _____

Seal of the Company /Firm: _____

SECTION – V

SPECIAL CONDTIONS OF CONTRACT (SCC)

SPECIAL CONDITIONS OF CONTRACT

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

Name of Package: DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT AT CCI TANDUR

Bid Document No.: NVVN/C&M/RE-384/2025-26

Special Conditions (SCC) No.	GCC Clause Ref., if any	Special Conditions
1	Part-I (Instruction to Tenderer) General	Add the following: **The Employer is:** **Name of Employer/Owner** : Cement Corporation of India Limited (CCI/Corporation) **Address of Employer:** Cement Corporation of India Limited Karankote, Telangana 501158 Tandur, Telangana. Project Manager: GM (Tandur) – CCI Limited **Project Management Consultant (PMC): NTPC Vidyut Vyapar Nigam Limited (NVVN)** **Address of Project Management Consultant:** NTPC Vidyut Vyapar Nigam Limited 5th Floor, Engineering Office Complex Plot No. A-8A, Sector-24,NOIDA (UP), India-201 301 PMC (NVVN Limited) has floated the tender on behalf of the Employer (CCI Limited) for 'Development of 2 x 3 MW Ground mounted solar power project for CCI Limited at CCI – Tandur. PMC shall evaluate the bids. Subsequently, Notification of Award (NOA) shall be issued by the Employer.
2	Part-I (Instruction to Tenderer) Clauses 2 to 8	GCC Part-I (Instruction to Tenderer) clauses 2 to 8 stand Deleted
3	Part-I (Instruction to Tenderer) Clauses 10 to 11	GCC Part-I (Instruction to Tenderer) clauses 10 to 11 stand Deleted
	Part-II (Clauses 1,2,6)	GCC Part-II clauses 1,2 and 6 stand deleted
4	15.1 Prices	GCC Clause 15.1 (iv) stands deleted.
	15.4	GCC Clause 15.4 stands deleted.

Special Conditions (SCC) No.	GCC Clause Ref., if any	Special Conditions
5	15.7 Inspection	GCC Clause 15.7 stands replaced as follows: All the materials/equipments shall be inspected by PMC after receipt at site. Bidder shall ensure that necessary approvals/clearances for the materials/equipments from PMC before dispatching the same to the site. All the relevant test certificates, dispatch documents and other supporting documents are to be submitted by the bidder.
6	Part-II (General Terms and conditions) Clauses 15.8 to 15.10	GCC Part-II (General Terms and conditions) Clauses 15.8 to 15.10 stand deleted.
7	Part-II (General Terms and conditions) Annexures – 1,4 to 9	GCC Part-II (General Terms and conditions) Annexures – 1,4 to 9 stand deleted
8		**Definitions** The following words and expressions shall have the meanings hereby assigned to them: “Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly. “Contract Documents” means the documents listed in Article 1.1 (Contract Documents) of the Form of Contract Agreement (including any amendments thereto). “GCC” means the General Conditions of Contract hereof. “SCC” means the Special Conditions of Contract. “Day” means calendar day of the Gregorian Calendar. “Month” means calendar month of the Gregorian Calendar. “Employer/Owner” means the …… (designation) of CCI-Tandur and includes the legal successors or permitted assigns of the Employer. "Project Manager" means the person appointed by the Employer to perform the duties delegated by the Employer. “Project Management Consultant” means person(s) nominated by the employer for performing the designated pre-tendering activities, project supervision and inspection activities of the project on behalf of the employer. “Contractor” means the person(s) whose bid to perform the Contract has been accepted by the Employer and is named as such in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor. “Subcontractor,” including vendors, means any person to whom

Special Conditions (SCC) No.	GCC Clause Ref., if any	Special Conditions
		execution of any part of the Facilities, including preparation of any design or supply of any Plant and Equipment, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns. "Contract Price" means the sum specified in Article 2.1 (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract. "Facilities" means the Plant and Equipment to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract. "Plant and Equipment" means permanent plant, equipment, machinery, apparatus, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor), but does not include Contractor's Equipment. "Installation Services" means all those services ancillary to the supply of the Plant and Equipment for the Facilities, to be provided by the Contractor under the Contract; e.g., transportation 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 construction materials required), installation, testing, pre-commissioning, commissioning, operations & maintenance required for achieving Completion of Facilities, the provision of operations and maintenance manuals, training of Employer's Personnel etc. "Contractor's Equipment" means all plant, facilities, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant and Equipment, or other things intended to form or forming part of the Facilities. "Site" means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site. "Effective Date" means the date from which the Time for Completion shall be determined as stated in Article 3 (Effective Date for Determining Time for Completion) of the Form of Contract Agreement. "Time for Completion" means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained in accordance with the stipulations in the SCC and the relevant provisions of the Contract. "Commissioning" shall be as defined in Technical Specification. The same is reproduced here. "Commissioning" of the system shall refer to the date on which the System at each location / premise starts generating electric energy for continuous Five (05) hours using instruments and meters including 'Behind the meter' connection. Declaration of commissioning shall be certified by NVVN.

Special Conditions (SCC) No.	GCC Clause Ref., if any	Special Conditions
		"Completion of Facilities"/" Completion of facilities of Entire Project"/ "Completion" means that all the systems are commissioned, PG tests conducted and put in a tight and clean condition and punch points attended and the date of commencement of Operation and maintenance period has been declared by Owner, based on certification by NVVN. "Guarantee Test(s)" means the test(s) specified in the Technical Specifications to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Technical Specifications. "Defect Liability Period" means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof). "Goods and Services Tax" or "GST" means taxes levied under the Central Goods and Services Tax Act, Integrated Goods and Services Tax Act, Goods and Services Tax (Compensation to States) Act, and various State/Union Territory Goods and Services Tax Laws and applicable cesses, if any under the laws in force (hereinafter referred to as relevant GST Laws).
9		**Construction of the contract:** The Contracts to be entered into between the Employer and the successful bidder shall be as under: - First Contract: For Ex-works (India) supply of Plant and Equipment including type test charges (if applicable) and Mandatory spares. - 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, testing and commissioning and conducting guarantee tests in respect of all the Plant and Equipment supplied under the 'First Contract' and all other services specified in the Contract Documents. - "Third Contract" for Operation & Maintenance of complete Solar PV plant with AMC for a period of 10 years from the date of successful completion of commissioning. The award of separate Contracts shall not in any way dilute the responsibility of the Contractor for the successful completion of the Facilities 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.
10		**Severability** If any provision or condition of the Contract is prohibited or rendered

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		invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.
11		**Country of Origin** "Origin" means the place where the materials, equipment and other supplies for the Facilities are mined, grown, produced or manufactured, and from which the services are provided. For the purpose of this contract, Country of Origin will be considered as India.
12		**Scope of Facilities** Unless otherwise expressly limited in the Technical Specifications, the Contractor's obligations cover the provision of all Plant and Equipment including structural steel and the performance of all Installation Services and civil works, allied works etc. required for the design, the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Pre-commissioning and delivery) of the Plant and Equipment and the installation, completion, commissioning and performance testing of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Technical Specifications. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labour, materials, equipment, spare parts and accessories; Contractor's Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer. The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract. The scope of work also includes comprehensive Operation and Maintenance (O&M) of Solar Photo Voltaic Plant with AMC for a period of 10 years from the date of completion of Facilities of entire project. During the entire contract period, no spares/ equipments shall be provided by the employer and all the required spares/tools/ equipments are to be provided by the contractor without any additional cost to the employer.
13		**Time for Completion: 7 months from the date of issuance of LOA** Further, Bidder is also to provide comprehensive Operation and Maintenance (O&M) of Solar Photo Voltaic Plant with AMC for a period of 10 years from the date of completion of Facilities of entire project.
14		**Mandatory spares:** All the spares for the equipment under the Contract will strictly conform to the Specification and other relevant documents and will be identical to the corresponding main equipment/ components supplied under the Contract and shall be fully interchangeable. All the mandatory spares covered under the Contract shall be

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		produced along with the main equipment as a continuous operation and the delivery of the spares will be effected along with the main equipment in a phased manner and the delivery would be completed by the respective dates for the various categories of equipment as per the agreed network. . The inspection requirement finalised for the main equipment will also be applicable to the corresponding spares. In case the Contractor fails to supply the mandatory spares in the terms stipulated above, the Employer shall be entitled to purchase the same from the alternate sources at the risk and the cost of the Contractor and recover from the Contractor, the excess amount paid by the Employer over the rates worked on the above basis. In the event of such risk purchase by the Employer, the purchases will be as per the Works and Procurement Policy of the Employer prevalent at the time of such purchases and the Employer at his option may include a representative from the Contractor in finalising the purchases. The Contractor shall warrant that all spares supplied will be new and in accordance with the Contract Documents and will be free from defects in design, material and workmanship. The contractor must replenish the stock of mandatory spares used by him during the O&M period, within a period of one month of drawl from the store and provide the reconciliation of mandatory spares stock at the end of every month of O&M period. At the end of 10 years O&M period, the contractor shall ensure to return all the mandatory spares used by him during the contract period so that the minimum stock at the end of the O&M period shall be as per the list mentioned in the schedule of quantities, failing which the employer shall procure the same at the risk and cost of the contractor.
15		**Terms of Payment** The Contract Price shall be paid as specified in Appendix 1 (Terms and Procedures of Payment) to the Contract Agreement. The procedures to be followed in making application for and processing payments shall be those outlined in the same Appendix 1. No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof. Bidder shall raise only one invoice in a month for all the payments due/ works done in previous month/period.
16		**Performance Security** The Contractor shall, within twenty-eight (28) days of the Notification of Award, provide securities for the due performance of the Contract for **Ten Percent (10%)** of Contract Price of all the Contracts, with an initial validity up to ninety (90) days beyond the end of scheduled Defect Liability Period of the last equipment covered under the Contract.

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		However, in case of delay in completion of the defect liability period, the validity of all the contract performance securities shall be extended by the period of such delay. The performance security shall be denominated in the currency of the Contract and shall be in the form of unconditional bank guarantee provided in Section-VII (Forms and Procedures)-Form of Performance Security of the bidding documents. After the end of successful completion of period mentioned above, CPG shall be returned to agency provided agency has submitted CPG @10% of O&M with AMC Contract price and Security against Equipment Performance Guarantee during O&M Period with AMC. The BG towards O&M with AMC Performance shall be submitted prior to return of the Contract Performance Guarantee (CPG) under the subject package. The above O&M with AMC Performance Security shall be initially valid up to 90 days after the end of Operation & Maintenance (O&M) period as specified in the Technical Specifications. The above security amount shall be payable to the Employer without any condition whatsoever. **Security against Equipment Performance Guarantee during O&M with AMC Period:** The successful Bidder, to whom the work is awarded, shall provide security against Equipment performance guarantee equal to 0.1 x G x R (Where G is Annual Generation corresponding to CUF applicable for that year and R = Rs.6.71 per kWh) in million INR for 10 years (O&M with AMC period as specified in Technical Specification) as per contract. Example: Annual Generation (G) = Capacity (kW) x CUF of the year x No of hours. For First year, G = 6000 x 22% x 365.25 x 24 = 11571120 kWh BG amount = 0.1 x 11571120 x 6.71 = INR 77,64,222.00 For second year, CUF = (22 – 22 x (2-1) x 0.007) = 21.85% BG amount = INR 77,11,284.00 **Note: Mode of submission of Performance security shall be as per Employer instruction.**
17		**Taxes and Duties** Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Sub-contractor or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.

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18		**Program of Performance** Within twenty-eight (28) days after the date of notification of award of Contract, the Contractor shall prepare and submit to the Project Manager a detailed program of performance of the Contract, made in the form of PERT Network and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and pre-commission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in Appendix 4 (Time Schedule) to the Contract Agreement and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion given in the SCC and any extension granted, and shall submit all such revisions to the PMC/Project Manager. **Maintenance of Records of Weekly Progress Review Meetings** The Contractor shall be required to attend all weekly site progress review meetings organized by the PMC. The deliberations in the meetings shall inter alia include the weekly program, progress of work (including details of manpower, tools and plants deployed by the contractor vis-a-vis agreed schedule), inputs to be provided by Employer, delays, if any, and recovery program, specific hindrances to work and work instructions by Employer. Record of Hindrances / events that lead to slow/ stoppage of smooth execution of work shall also be maintained. The minutes of the weekly meetings shall be recorded. These recordings shall be jointly signed by the PMC and the Contractor.
19		**Setting Out/Supervision/Labour** The Contractor shall be responsible for the true and proper setting-out of the Facilities. The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand. The Contractor shall be responsible for obtaining all necessary permit(s) from the appropriate authorities for the entry of all labour and personnel to be employed on the Site. The Contractor shall at all times during the progress of the Contract use its best endeavour to prevent any unlawful, riotous or disorderly conduct or behaviour by or amongst its employees and the labour of its

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		Subcontractors.
20		**Safety:** PMC has formulated Safety Rules for Construction & Erection of Power Plants is displayed at https://nvvn.co.in/assets/files/NTPC_SAFETY_RULES.pdf and or https://ntpctender.ntpc.co.in/Heading/NTPC_Safety_Rules.pdf These Safety Rules lay down the safety requirements for safe execution of project activities, responsibilities of the Contractor, and all concerned involved in Construction and Erection. The Contractor, including his sub-contractors, while executing the Works, shall strictly comply with these Safety rules and statutory requirements (including amendments thereof), as applicable, in respect of safety of personnel, equipment and materials at site area under execution of the Contractor. **In addition to above, b. Safety clauses relevant to solar projects as per latest CEA guidelines (as mentioned in Technical Specification) are applicable.**
21		**Completion of the Facilities** As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor. The Project Manager shall notify the Contractor in writing of any defects and/or deficiencies (if any) within seven (7) days after receipt of the Contractor's notice, and the rectifications are to be done by the contractor. The Contractor shall supply the operating and maintenance personnel and all raw materials, utilities, facilities, services and all other items required for Commissioning of the Facilities. If the Employer is satisfied with the completion of facilities of entire facilities as per the provisions of the Contract, Employer shall take-over the facilities after completion of facilities of entire project and shall hand over the facilities to the Contractor for care and custody of the facilities during O&M period. Contractor shall sign the form of indemnity-cum-undertaking agreement for the solar plant handed over by the contractor for performance of O&M contract. The Contractor shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto upto the completion of O&M period.
22		**Applicable Rate for Liquidated Damages** **A) Liquidated Damages for delay in successful Completion of Facilities shall be as under:** If the contractor fails to achieve the successful Completion of Facilities within the agreed work schedule, the Contractor shall pay to the

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		Employer as liquidated damages and not as penalty, a sum calculated at the following rates: (0.5% divided by 7) per day of the contract value corresponding to the capacity not commissioned — for each day of delay in successfully achieving the Commissioning for the Premise (including behind the meter connectivity) as per the scope of work and work schedule defined in the Contract. **B) Maximum Deduction for Liquidated damages for delay:** The total amount of liquidated damages for delay under the contract will be subject to a maximum of five percent (5%) of the total Contract Price **[total of First & Second Contract]** excluding O&M
23		**Defect Liability** The Defect Liability Period shall be twelve (12) months from the date of Completion of the Facilities. 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 Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes: (a) improper operation or maintenance of the Facilities by the Employer (b) operation of the Facilities outside specifications provided in the Contract (c) normal wear and tear If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due to the Contractor or claimed under the Performance Security. If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part

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		cannot be used by the Employer because of any of the aforesaid reasons. In addition, the Contractor shall also provide an extended warranty for any such component of the Facilities and during the period of time as may be specified in the SCC. Such obligation shall be in addition to the defect liability specified above.
24		**Functional Guarantees** The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in Appendix 8 (Functional Guarantees) to the Contract Agreement, subject to and upon the conditions therein specified. If, for reasons attributable to the Contractor, the guaranteed level of the Functional Guarantees specified in Appendix 8 (Functional Guarantees) to the Contract Agreement are not met either in whole or in part, the Contractor shall, within a mutually agreed time, at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall seek the Employer's consent to repeat the Guarantee Test. If the specified Functional Guarantees are not established even during the repeat of the Guarantee Test, the Employer may at its option, either (a) Reject the Equipment and recover the payments already made, or (b) Terminate the Contract and recover the payments already made, or (c) Accept the equipment after levy of liquidated damages in accordance with the provisions specified in Appendix-8(Functional Guarantees) to the Contract Agreement. The Contractor shall attain the functional guarantees for each termination/generation solar meter as given in Technical Specification after/before Commissioning of each premise and before the attainment of Completion of Facilities of Entire Project. **LD on account of non-achievement of functional Guarantees shall be as mentioned in Technical Specification (SCHEDULE 4: PERFORMANCE TEST AND LIQUIDATED DAMAGES)** **LD Calculation for shortfall in generation shall be as mentioned in technical Specification (SCHEDULE 4: PERFORMANCE TEST AND LIQUIDATED DAMAGES)**
25		**Limitation of Liability** Except in cases of criminal negligence or willful misconduct,

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		(a) neither Party shall be liable to the other Party, 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, which may be suffered by the other Party in connection with the Contract, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer and (b) 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 any obligation of the Contractor to indemnify the Employer with respect to patent infringement. (c) the aggregate liability of the Employer to the Contractor, whether under the Contract, in tort or otherwise, at any point of time during the execution/performance of the Contract, shall not exceed the 'total Contract Price less payments already released to the Contractor'.
26		**Loss of or Damage to Property; Accident or Injury to workers; Indemnification** The Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property (other than the Facilities whether accepted or not), arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents. The Contractor shall further take Fire and peril insurance policy covering the risk of fire, damage, theft of material/ equipment/ properties after completion of the work(s) throughout the O&M period on **replacement cost basis**. During O&M period, Insurance is to be taken in the name of Employer from any reputed agency with Employer's consent or from any nationalized agency
27		**Power of Attorney:** The instruments such as Power of Attorney etc which are presently specified to be furnished on non-judicial stamp paper of appropriate/requisite value, shall be stamped as per Indian Stamp Act.
28		**Insurance:** The contractor at its expense shall take out and maintain in effect or cause to be taken out and maintained in effect, during the construction period, the Erection All Risk policy set forth the sums equivalent to the contract price and other appropriate insurances till handover of the Solar Power System to the Employer after completion of facility. Insurance for the Solar Power System throughout the O&M Period shall be taken by the contractor at its cost for fire and burglary, in

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		favour of the Employer, for replacement value of the system. Also, the contractor shall take out and maintain relevant insurance policies for labour as per applicable labour laws/Acts/Rules, throughout the contract period.
29		**Termination for Contractor's Default** The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this SCC clause: (a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC (c) if the Contractor, in the judgement of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this Sub-Clause : "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. "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. (d) If the Contractor, sub-contracts any part of the works in violation of the provision of GCC If the Contractor (a) has abandoned or repudiated the Contract (b) has without valid reason failed to commence work on the Facilities promptly or has suspended the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed (c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause

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		(d) refuses or is unable to provide sufficient materials, services or labour to execute and complete the Facilities in the manner specified in the program furnished at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this clause. Upon receipt of the notice of termination under this clause, the Contractor shall, either immediately or upon such date as is specified in the notice of termination, (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below (c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination (d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Works and to the Plant and Equipment as at the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors (e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities. The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer's use of such equipment, any Contractor's Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities. Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at

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		its cost remove or arrange removal of the same from the Site. The Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as at the date of termination, the value of any unused or partially used Plant and Equipment on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition subject to the following: i. Any sums due to the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract. ii. If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined. iii. If the sum that the Contractor is entitled to be paid, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess. If such excess is greater than the sums due to the Contractor, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due to the Contractor, the Employer shall pay the balance to the Contractor. The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.
30		**Deleted**
31		**Assignment** The Contractor shall not, without the express prior written consent of the Employer, assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.
32		**No Claim for interest or damage** Contractor shall not be entitled to any interest or damage in case of any delay on the part of the Employer to pay the amount due upon measurement or as per Contract or otherwise. Contractor shall also not be entitled to interest upon any guarantee/ security/ retention money or payments in arrears or upon any balance which may on the final settlement of his account be due to him. No claim for interest or damage will be entertained or be payable by the Employer in respect of any amount or balance which may be lying with the Employer or may become due upon settlement/adjudication of any dispute, difference or misunderstanding between the parties by way of arbitration or court proceedings or otherwise or in respect of any delay or omission on the part of the Employer in making intermediate or final payment or in respect of any amount/damage which may be claimed through arbitration or court proceedings or in any other respect whatsoever.

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33		**Labor laws and Regulations and compliance thereof** The Contractor and his Sub-Contractors shall indemnify the Employer, from any action taken against the Employer by any competent authority in connection with the enforcement of the applicable laws, regulations, notifications, on account of contravention of any of the provisions therein, including amendments thereto. If the Employer is caused to pay or otherwise made liable, such amounts as may be necessary for non-observance of the provisions stipulated in the laws, rules, notifications including amendments, if any on the part of the Contractor and/or his Sub-Contractors, the Project Manager / Employer shall have the right to deduct any such money from any amount due to the Contractor including his performance security, under the Contract. The Employer shall also have the right to recover from the Contractor any sum required or estimated as required for making good any loss or damage suffered / likely to be suffered by the Employer, on this account. It is specifically agreed that the Contractor and his Sub-Contractors shall obtain all the necessary registration, licenses, permits, authorizations etc. required under various enactments/ Regulations enforced from time to time, specifically registration as employer under Provident Fund Act and Contract Labor Regulation & Abolition Act, and the Employer shall not be liable for any violation by the Contractor in this regard. The employees of the Contractor or his Sub-Contractor(s) shall in no case be treated as the employees of the Employer at any point of time. The Contractor and his Sub-Contractors shall be liable to make all due payments to all their employees and ensure compliance with labor laws. If the Employer, is held liable as 'PRINCIPAL EMPLOYER' or otherwise to incur any expenditure or to make any contributions under any legislation of the Government or Court decision, in respect of the employees of the Contractor or his Sub-Contractors, then the Contractor would reimburse the amounts of such expenditure/contribution so made by the Employer. In case the ESI act is not applicable to the area where the Work is executed, as evidenced by the Certificate/Letter submitted to this effect from the local authorities, the Contractor shall be liable to arrange and pay for the expenses towards the medical treatment in respect of all labor employed by him for the execution of the Contract. During the entire period of Contract, the Contractor and his Sub-Contractors shall, at all times abide by the following Acts/ Statutes related to Human Resources: 1. Factories Act, 1948; Contract Labor (Regulation & Abolition) Act, 1970; 2. EPF & MP Act, 1952; 3. Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996; 4. ESI Act, 1948; 5. Minimum Wages Act, 1948; 6. Payment of Wages Act, 1936;

Special Conditions (SCC) No.	GCC Clause Ref., if any	Special Conditions
		7. Payment of Bonus Act, 1965; 8. Payment of Gratuity Act, 1972; 9. Workmen's Compensation Act, 1923; 10. ID Act, 1947; 11. Maternity Benefit Act, 1961; 12. Inter-State Migrant Workmen (Regulation of Employment & Conditions of Service) Act, 1979; 13. Fatal Accidents Act, 1855 14. Model Welfare Code The above will deem to include all relevant/applicable rules made thereunder, regulations, notifications and bye laws of the State or Central Govt. or the local authority and any other labor law (including rules) regulations, bye laws as well as those that may be passed or notification that may be issued under any labor law present and in future either by State or Central Govt. or by local authority
34		**Royalty** The Civil works component of the Contract Price shall be inclusive of any Royalties or Seigniorage Fee or Cess or other charges payable on the quarried or mined metal, minerals, or minor minerals, as the case may be, at the rate(s) prevailing as on seven (7) days prior to the deadline set for Price Bid submission.
35		**Closing of contract** The closing of the first and second contract shall be effected after the warranty period/Defect Liability Period is successfully completed and the CPG of the Contractor is returned/ discharged. It shall be the responsibility of the contractor to submit the drawings, QA documents, O&M Manuals, List of Spares, As Built drawings, deliverables, etc., as applicable, in a timely and sequential manner so that the contract closing activities are not delayed/impeded. The Employer shall also use its best endeavors to expedite all activities leading to successful closure of the contract. The Employer will review and approve the documents submitted by the Contractor in a timely and expeditious manner and the approvals shall not be unreasonably withheld.
36		**Contract documents** The Contractor shall provide free of cost to the Employer all the engineering data, drawing and descriptive materials submitted with the bid, to form a part of the Contract immediately after Notification of Award.

LIST OF BANKS ACCEPTABLE FOR SUBMISSION OF BANK GUARANTEE FOR ADVANCE PAYMENTS, PERFORMANCE SECURITIES AND SECURITIES FOR DEED OF JOINT UNDERTAKING

SCHEDULED COMMERCIAL BANK LIST

A. SCHEDULED PUBLIC SECTOR BANKS

1 Bank of Baroda
2 Bank of India
3 Bank of Maharashtra
4 Canara Bank
5 Central Bank of India
6 Indian Overseas Bank
7 Indian Bank
8 Punjab National Bank
9 Punjab & Sind Bank
10 State Bank of India
11 UCO Bank
12 Union Bank of India

B. SCHEDULED PRIVATE BANKS (INDIAN BANKS)

1 Axis Bank Limited
2 Bandhan Bank Limited
3 CSB Bank Limited
4 City Union Bank Limited
5 DCB Bank Limited
6 Dhanlaxmi Bank Limited
7 Federal Bank Limited
8 HDFC Bank Limited
9 ICICI Bank Limited
10 IndusInd Bank Limited
11 IDFC FIRST Bank Limited
12 Jammu & Kashmir Bank Limited
13 Karnataka Bank Limited
14 Karur Vysya Bank Limited
15 Kotak Mahindra Bank Limited
16 Nainital Bank Limited
17 RBL Bank Limited
18 South Indian Bank Limited
19 Tamilnad Mercantile Bank Limited
20 Yes Bank Limited
21 IDBI Bank Limited

C. SCHEDULED FOREIGN BANKS

1 AB Bank PLC
2 American Express Banking Corporation
3 Australia & Newzealand Banking Group Limited
4 Barclays Bank Plc
5 Bank of America
6 Bank of Bahrain & Kuwait B.S.C.
7 Bank of Ceylon
8 Bank of China Limited
9 Bank of Nova Scotia
10 BNP Paribas
11 Citi Bank NA

12 Cooperatieve Rabobank U.A./ Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.
13 Crédit Agricole Corporate and Investment Bank
14 CTBC Bank Co Ltd
15 DBS Bank India Limited (Subsidiary of DBS Bank Ltd.)
16 Deutsche Bank A.G.
17 Doha Bank Q.P.S.C
18 Emirates NBD Bank P.J.S.C.
19 First Abu Dhabi Bank PJSC
20 FirstRand Bank Ltd
21 Hong Kong and Shanghai Banking Corporation Limited
22 Industrial & Commercial Bank of China
23 Industrial Bank of Korea
24 J.P. Morgan Chase Bank N.A.
25 JSC VTB Bank
26 KEB Hana Bank
27 Kookmin Bank
28 Mashreqbank P.S.C.
29 Mizuho Bank Ltd
30 MUFG Bank, Ltd
31 NatWest Markets Plc
32 NongHyup Bank
33 PT Bank Maybank Indonesia TBK
34 Qatar National Bank (Q.P.S.C.)
35 Sberbank
36 SBM Bank (India) Limited (Subsidiary of SBM Group)
37 Shinhan Bank
38 Societe Generale
39 Sonali Bank PLC
40 Standard Chartered Bank
41 Sumitomo Mitsui Banking Corporation
42 United Overseas Bank Ltd
43 UBS AG
44 Woori Bank

D. SMALL FINANCE BANKS

1 AU Small Finance Bank Limited
2 Capital Small Finance Bank Limited
3 Equitas Small Finance Bank Limited
4 ESAF Small Finance Bank Limited
5 Suryoday Small Finance Bank Limited
6 Ujjivan Small Finance Bank Limited
7 Utkarsh Small Finance Bank Limited
8 North East Small Finance Bank Limited
9 Jana Small finance Bank Limited
10 Shivalik Small Finance Bank Limited
11 Unity Small Finance Bank Limited,

Note - Any Addition/ Deletion/ Modification in Bank list shall be as per changes in Second Schedule List by RBI from time to time.

* ***Bidder to take note of NTPC letter ref. NTPC/FC/CS/BG/01 dated 03.09.2014 and SBI letter ref. CAG-I/AMT-1/2014-15/370 dated 04.09.2014 attached herewith this Annexure-I to SCC.***

एनटीपीसी
NTPC

एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)

केन्द्रीय कार्यालय/Corporate Centre

Ref. No.: NTPC/FC/CS/BG/01

Date : 03rd September 2014

Deputy General Manager,
State Bank of India,
CAG Branch,
12 th floor, Jawahar Vyapar Bhavan, 1, Tolstoy Marg,
New Delhi 110 001

Kind Atten: Sh. Sandeep Mishra

Sub: Format of the Bank Guarantee (BG) issued by State Bank of India – reg.

Dear Sir,

NTPC Limited is India's largest Power Company and a 'Maharatna PSU' with a significant presence in the entire value chain of power generation business. The procurement process of NTPC requires its participating Bidders to submit Bank Guarantees (BGs) as Bid security/other securities in a fixed format provided by NTPC.

It has been observed recently that BGs issued by various branches of State Bank of India are inserting the following additional clause.

QUOTE

Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee of agent of beneficiary shall not be entertained by the bank. Any invocation of guarantee can be made only by the beneficiary directly.

UNQUOTE

The inclusion of the aforesaid clause in the BGs restricts the rights of NTPC under the BG and it may not be possible for NTPC to accept the aforesaid clause in the BGs submitted to us by our Bidders. It may also be mentioned that incorporation of the above additional clause in the BG results in the BG being returned by NTPC and consequently rejection of the bids of parties that have submitted such BGs.

In view of the above, it is requested that please take up at appropriate levels so that suitable instructions are issued to all your branches not to incorporate any such additional clause and henceforth BGs may be issued strictly as per NTPC format only.

Kindly acknowledge the receipt of this letter

Yours faithfully,

(K.P.Gupta)
General Manager (Finance)

Copy for Kind information: ED(CC&M) for kind of info

एन टी पी सी भवन स्कोप काम्पलैक्स, 7, इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110003 टेल/Tel. : 24360100, फैक्स/Fax : 011-24361018
NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003, वेबसाइट/Website : www.ntpc.co.in

भारतीय स्टेट बैंक
State Bank of India

कॉरपोरेट लेखा समूह शाखा, जवाहर व्यापार भवन,
11-12 वां तल, 1, टॉलस्टाय मार्ग, नई दिल्ली–110 001
Corporate Accounts Group Branch, Jawahar Vyapar Bhawan,
11th & 12th Floor, 1, Tolstoy Marg, New Delhi-110 001

Tel. : 23374525, 23374505, 23374541 (AMT-1), 23353022 (DGM & COO), 23701043, 23359506 (A & A), 23352995 (CS), 23352968 (IB)
Fax : 23353101 (Sectt.), 23352793 (CS), 23353029 (IB)

Shri K.P. Gupta,
General Manager (Finance),
NTPC Limited
Scope Complex, 7, Institutional Area,
Lodhi Road,
New Delhi: 110 003.

CAG-I/AMT-1/2014-15/370 04.09.2014

Dear Sir,

Format of the Bank Guarantee (BG) issued by State Bank of India

We refer to your letter dated 3rd September 2014 wherein you have requested for excluding bidders/vendors of NTPC from insertion of additional Clause restraining assignment/transferability of BG.

Looking at our relationship with NTPC, as a very special case, we have since obtained waiver from our Authorities for excluding NTPC from insertion of the referred clause for BGs issued in your favour.

We are taking steps to issue suitable instructions to our offices for exclusion of this clause for BGs issued in favour of NTPC. In case any bidder or vendor submits to you a Bank Guarantee issued by any of our Branches containing the additional clause as mentioned above, request you to please bring it to our notice and advise us so that we can take-up with the concerned Branch for excluding it.

This is for your information and necessary action please.

Yours faithfully,

(Sandeep Mishra)
Deputy General Manager &
Relationship Manager, AMT-1

CONTRACT CLOSING

CERTIFICATE NO.	CERTIFICATE DESCRIPTION
CCP-05	Scope Completion Certificate
CCP-10	Certificate regarding Labour Payments and Statutory Requirements to be furnished by Contractor.
CCP-11	"No Demand Certificate" byContractor
CCP-12	Certificate for Completion of Warranty Period

CERTIFICATE NO.	CERTIFICATE DESCRIPTION
CCP-13	Certificate for Return of BGs/Indemnity Bonds etc.

ANNEXURE-IV to SCC

F. No. DPE/7(4)/2017-Fin.
Government of India
Ministry of Finance
Department of Public Enterprises
Block No. 14, CGO Complex,
Lodi Road, New Delhi-110003
Dated the 24th February, 2023

To,

Chief Executives of all CPSEs

Subject:- Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017 - regarding

Sir/Madam,

The undersigned is directed to reiterate the instructions as contained in Department of Expenditure O.M. No. 7/10/2021-PPD(1) dated 23rd February, 2023 (copy enclosed) to all CPSEs for their information and strict compliance.

Encl : As stated

24/2/2023
(Kailash Bhandari)
Deputy Director
Tel : 2436-6247

Copy to :- Shri Kanwalpreet, Director (PPD), Department of Expenditure, Room No. 264-C, North Block, New Delhi.

No.F.7/10/2021-PPD (1)
Government of India
Ministry of Finance
Department of Expenditure
Procurement Policy Division
264-C, North Block, New Delhi.
23.02.2023.

Order (Public Procurement No. 4)

Subject: Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017.

Attention is invited to Order (Public Procurement No. 1) issued vide F.6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No. 2) issued vide F.6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No. 3) issued vide F.6/18/2019-PPD dated 24.07.2020, Office Memorandum (OM) No. F.18/37/2020-PPD dated 08.02.2021, OM No. F.12/1/2021-PPD(Pt.) dated 02.03.2021 and OM No. F.7/10/2021-PPD dated 08.06.2021. In this regard, the following is hereby ordered under Rule 144(xi) (as amended vide OM No. F.7/10/2021-PPD dated 23.02.2023) on the grounds stated therein, in supersession to all of the above mentioned Orders/ clarifications:

Requirement of registration:

2. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in **Annexure I**.

3. Any bidder (including an Indian bidder) who has a Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in **Annexure I**.

4. The requirement of registration for cases covered by paragraph 2 above has been applicable since 23.07.2020. The requirement of registration for bidders covered by paragraph 3 above will be applicable for all procurements where tenders are issued/ published after 01.04.2023.

5. In tenders issued after 23.07.2020 or 01.04.2023, as the case may be, the provisions of requirement of registration of bidders and of other relevant provisions of this Order shall be incorporated in the tender conditions.

Applicability:

6. Apart from Ministries/ Departments, attached and subordinate bodies, notwithstanding anything contained in Rule 1 of the GFRs 2017, the Order shall also be applicable

BI
NV

a) to all Autonomous Bodies;

b) to all public sector banks and public sector financial institutions;

c) to all Central Public Sector Enterprises;

d) to all procurement in Public Private Partnership projects receiving financial support from the Government or public sector enterprises/ undertakings; and

e) Union Territories, National Capital Territory of Delhi and all agencies/ undertakings thereof.

7. This order will not be applicable for cases falling under **Annexure II**.

Definitions:

8. "*Bidder*" for the purpose of the Order (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.

9. "*Tender*" for the purpose of the Order will include other forms of procurement, except where the context requires otherwise.

10. *"Transfer of Technology"* means dissemination and transfer of all forms of commercially usable knowledge such as transfer of know-how, skills, technical expertise, designs, processes and procedures, trade secrets, which enables the acquirer of such technology to perform activities using the transferred technology independently. (Matters of interpretation of this term shall be referred to the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade, and the interpretation of the Committee shall be final.)

11. *"Specified Transfer of Technology"* means a transfer of technology in the sectors and/ or technologies, specified in paragraph 15, occurring on or after 23.07.2020.

12. *"Bidder (or entity) from a country which shares a land border with India"* for the purpose of the Order means

(a) An entity incorporated, established or registered in such a country; or

(b) A subsidiary of an entity incorporated, established or registered in such a country; or

(c) An entity substantially controlled through entities incorporated, established or registered in such a country; or

(d) An entity whose beneficial owner is situated in such a country; or

(e) An Indian (or other) agent of such an entity; or

(f) A natural person who is a citizen of such a country; or

(g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

13. *Beneficial owner* for the purposes of Para 12 (d) will be as under:

(i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation:-

a. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;

b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

(ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

(iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

(v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

14. "*Agent*" for the purpose of the Order is a person employed to do any act for another, or to represent another in dealings with third persons.

[Note:

i. A person who procures and supplies finished goods from an entity from a country which shares a land border with India will, regardless of the nature of his legal or commercial relationship with the producer of the goods, be deemed to be an Agent for the purpose of this Order.

ii. However, a bidder who only procures raw material, components etc. from an entity from a country which shares a land border with India and then manufactures or converts them into other goods will not be treated as an Agent.]

Sensitive Sectors/ Technologies (relevant only for the provisions on ToT arrangements):

15. (i) Certain sectors and technologies have been identified as sensitive from the national security point of view. The sectors listed in Schedule I to this Order are considered Category-I sensitive sectors. The sectors listed in Schedule II to this Order are considered Category-II sensitive sectors. The technologies listed in Schedule III are considered sensitive technologies.

(ii) For Category-I sensitive sectors, bidders with ToT arrangement in any technology with an entity from a country which shares a land border with India shall require registration.

(iii) For Category-II sensitive sectors, bidders with ToT arrangement in the sensitive technologies listed in Schedule III, with an entity from a country which shares a land border with India shall require registration.

(iv) In Category-II sensitive sectors, the Secretary (or an officer not below the rank of Joint Secretary to Government of India, so authorized by the Secretary) of the Ministry/ Department of the Government of India is empowered, after due consideration, to waive the requirement of registration for a particular item/ application or a class of items/ applications from the requirement of registration, even if included in Schedule III. The Ministry/ Department concerned shall intimate the Department for Promotion of Industry and Internal Trade (DPIIT) and National Security Council Secretariat (NSCS) of their decision to waive the requirement of registration. Ministries/ Departments of the Government of India are not required to consult the DPIIT/ NSCS before deciding and are only required to intimate the decision to DPIIT/ NSCS. If any point is raised by DPIIT/ NSCS, it should be considered in future procurements; ongoing procurement for which the waiver was granted need not be interrupted or altered.

16. Based on security considerations, a Ministry/ Department in a Category II sensitive sector or other Ministries/ Departments may recommend to DPIIT inclusion of any other technology in the list of sensitive technologies, either generally or for their Ministry/ Department.

Sub-contracting in works contracts

17. In works contracts, including turnkey contracts, contractors shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "contractor from a country which shares a land border with India" shall be as in paragraph 12 above. This shall not apply to sub-contracts already awarded on or before 23.07.2020.

[Note: Procurement of raw material, components, etc. does not constitute sub-contracting.]

Certificate regarding compliance

18. An undertaking shall be taken from bidders in the tender documents **(Annexure III)** that the extant guidelines for participation in the tenders (which should include conditions for implementation of this Order) have been complied with. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for debarment and further legal action in accordance with law.

Validity of registration

19. In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

Government e-Marketplace (GeM)

20. GeM shall remove non-compliant entities from GeM unless/ until they are registered in accordance with this Order.

Model Clauses/ Certificates

21. Model Clauses and Model Certificates which may be inserted in tenders/ obtained from Bidders are given at Annexure-III. While adhering to the substance of the Order, procuring entities are free to appropriately modify the wording of these clauses based on their past experience, local needs etc.

23/02/2023

(Kanwalpreet)
Director(PPD)
Tel.No. 2309 3811; email: kanwal.irss@gov.in

To

1. Secretaries of all Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities.
2. Secretary, Department of Public Enterprises with a request to immediately reiterate these orders in respect to public enterprises.
3. Secretary, Department of Financial Services with a request to immediately reiterate these orders in respect to public sector and public sector financial institutions.
4. Secretary DPIIT with a request to take action as provided under Annexure I.
5. Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi.
6. CEO/ GeM with a request to ensure implementation of this order on GeM.

Schedule I

List of Category-I Sensitive sectors:

Sr.No.	Sector
(i)	Atomic Energy
(ii)	Broadcasting/ Print and Digital Media
(iii)	Defence
(iv)	Space
(v)	Telecommunications

Schedule II

List of Category-II Sensitive sectors:

Sr.No.	Sector
(i)	Power and Energy (including exploration/ generation/ transmission/ distribution/ pipeline)
(ii)	Banking and Finance including Insurance
(iii)	Civil Aviation
(iv)	Construction of ports and dams & river valley projects
(v)	Electronics and Microelectronics
(vi)	Meteorology and Ocean Observation
(vii)	Mining and extraction (including deep sea projects)
(viii)	Railways
(ix)	Pharmaceuticals & Medical Devices
(x)	Agriculture
(xi)	Health
(xii)	Urban Transportation

Schedule-III

List of Sensitive Technologies:

Sr.No.	Sensitive Technologies
(i)	Additive Manufacturing (e.g. 3D Printing)
(ii)	Any equipment having electronic programmable components or autonomous systems (e.g. SCADA systems)
(iii)	Any technology used for uploading and streaming of data including broadcasting, satellite communication etc.
(iv)	Chemical Technologies
(v)	Biotechnologies including Genetic Engineering and Biological Technologies
(vi)	Information and Communication Technologies
(vii)	Software

ANNEXURE I

Competent Authority and Procedure for Registration

A. The Competent Authority for the purpose of registration under this order shall be/ continue to be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)*. [This Committee was already constituted under Order (Public Procurement) No.1].

B. The Registration Committee shall have the following members*:

   i. An officer, not below the rank of Joint Secretary, designated for this purpose by DPIIT, who shall be the Chairman;

   ii. Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;

   iii. Any other officer whose presence is deemed necessary by the Chairman of the Committee.

   iv. With effect from 01.04.2023, an officer (ordinarily not below the rank of Joint Secretary) representing the National Security Council Secretariat.

C. DPIIT shall lay down the method of application, format etc. for such bidders as covered by the Order.

D. On receipt of an application seeking registration from a bidder covered by Para 2 and 3 of this order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.

E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.

F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.

G. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by the Central Government and its bodies specified in para 6 of this order, but also for procurement by State Governments and their agencies/ public enterprises etc. No fresh registration at the State level shall be required.

H. The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will

not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.

I. For national security reasons, the Competent Authority shall not be required to give reasons for rejection/cancellation of registration of a bidder.

[*Note:

(i) In respect of application of the Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government. However, the requirement of political and security clearance as per para D shall remain and no registration shall be granted without such clearance.

(ii) Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc. and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

ANNEXURE II

Special Cases

A. In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed, notwithstanding anything contained in this order and without reference to the Competent Authority. Exceptions to this shall be decided in consultation with DEA.

B. This order shall not apply to procurement by Indian missions and by offices of government agencies/ undertakings located outside India.

C. This order will not apply to bidders (or entities) from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given on the website of the Ministry of External Affairs.

D. Procurement of spare parts and other essential service support like Annual Maintenance Contract (AMC)/ Comprehensive Maintenance Contract (CMC), including consumables for closed systems, from Original Equipment Manufacturers (OEMs) or their authorized agents, shall be exempted from the requirement of registration.

ANNEXURE III

Model Clause/ Certificate/ Undertaking to be inserted in tenders etc.

[While adhering to the substance of the Order, procuring entities and GeM are free to appropriately modify the wording of the clause/ certificate based on their past experience, local needs etc.

The conditions relating to specified ToT (as shown in italics) should be incorporated only in the tenders which attract the restrictions due to specified ToT.]

A. Model Clauses for Tenders (including tenders issued manually or any electronic portal including GeM):

I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. *Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority.*

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means: -

(a) An entity incorporated, established or registered in such a country; or
(b) A subsidiary of an entity incorporated, established or registered in such a country; or
(c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
(d) An entity whose beneficial owner is situated in such a country; or
(e) An Indian (or other) agent of such an entity; or
(f) A natural person who is a citizen of such a country; or
(g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. [To be inserted in tenders for Works contracts, including Turnkey contracts] The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution

Model Certificate for Tenders:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model Certificate for Tenders for Works involving possibility of sub-contracting:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any

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work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model additional certificate by Bidders in the cases of specified ToT:

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder does not have any ToT arrangement requiring registration with the competent authority."

OR

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder has valid registration to participate in this procurement."

B. Model Certificate for GeM (to be taken by the GeM from seller during registration on GeM. GeM should also obtain this certificate from all existing bidders as soon as possible):

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this vendor/ bidder is not from such a country and does not have any specified Transfer of Technology (ToT) from such a country or, if from such a country or if having specified ToT from such a country has been registered with the Competent Authority. I hereby certify that this vendor/ bidder fulfills all requirements in this regard and is eligible to be considered for procurement on GeM. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

***

No.F.20/33/2022-PPD
Government of India
Ministry of Finance
Department of Expenditure
Procurement Policy Division
*****

513, Lok Nayak Bhavan,
Khan Market, New Delhi,
25.05.2023

OFFICE MEMORANDUM

Subject: Exemption for sourcing of Solar PV Modules from the provisions contained in the Department of Expenditure's Orders regarding restriction under Rule 144 (xi) of General Financial Rules, 2017-reg.

The undersigned is directed to refer Ministry of New & Renewable Energy (MNRE) OM No. 283/60/2020-GRID SOLAR-Part(3) dated 22.05.2023 vide which MNRE has requested for inclusion of Solar PV Modules in the list of items mentioned in DoE's OM of even number dated 04.08.2022. (copy enclosed)

2. In this context, it has now been decided that procurement of Solar PV Modules by Central Public Sector Enterprises (CPSEs), required for their business activities involving setting up of renewable energy projects, has also been exempted from the provisions of Department of Expenditure's OM No. 6/18/2020-PPD dated 23.07.2020 under Rule 144 (xi) of the GFRs, 2017 (amended vide OM No. 07/10/2021-PPD(1) dated 23.02.2023), upto 31.12.2024.

3. This is issued with the approval of Finance Secretary.

Usha Rani
25/05/2023

(Usha Rani)
Under Secretary(Procurement Policy)
Tel.24621304
email: usha.rani64@gov.in

To
Sh. Bhupinder Singh Bhalla,
Secretary,
Ministry of New & Renewable Energy,
Room No.102, Block No.14, C.G.O. Complex,
Lodhi Road, New Delhi - 110 003.
Tel.: 24361481, 24362772; email: secy-mnre@nic.in

Copy to: Secretary Department of Public Enterprises with a request to reiterate the above instructions to CPSEs.

No F 20/33/2022-PPD
Government of India
Ministry of Finance
Department of Expenditure
Procurement Policy Division
*****

264-C, North Block, New Delhi.
4th August, 2022.

OFFICE MEMORANDUM

Subject: Granting of exemption from the applicability of Department of Expenditure (DoE) OM No. 6/18/2019-PPD dated 23.07.2020 w.r.t. restriction under Rule 144 (xi) of General Financial Rules (GFRs), 2017.

The undersigned is directed to refer Ministry of New & Renewable Energy (MNRE) OM F.No.283/60/2020-GRID SOLAR-Part(3) dated 25.07.2022 and to the deliberations of the Committee of Secretaries, and to convey that it has been decided to grant exemption to Central Public Sector Enterprises (CPSEs) from the provisions of Department of Expenditure's OM No. 6/18/2020-PPD dated 23.07.2020 under Rule 144 (xi) of the GFRs, 2017, upto 31.12.2024, for the following items, required for their business activities involving setting up of renewable energy projects:

SN	Items
1.	Solar PV Cells, Glass, Wafers, EVA, Backsheet, Frames.
2.	Inverters
3.	Trackers
4.	Battery Energy Storage System Components [Cells, Battery Packs, Power Conditioning System]

2. This is issued with the approval of competent authority.

04/8/22

Kanwalpreet
Director (Procurement Policy)
Tel.: 23093811
email: kanwal.irss@gov.in

To

Shri Indu Shekhar Chaturvedi, Secretary,
Ministry of New & Renewable Energy,
Room No.102, Block No.14, C.G.O. Complex, Lodhi Road,
New Delhi - 110 003.
Tel.: 24361481, 24362772; email: secy-mnre@nic.in

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

(Section-VI)

Index

Sl. No.	Description	Reference
1.	Project Specific details	Annexure-A
2.	Location & site details	Annexure-A1
3.	Submission of Techno-Commercial Bids	Annexure-A2
4.	Scope of work	Schedule-A
5.	O&M Guidelines	Schedule-B
6.	Technical specifications	Schedule-C
7.	PERFORMANCE GUARANTEE TESTs	Schedule-D
8.	Remote Monitoring System	Schedule-E
9.	Quality Certification, Standards and Testing for Grid-Connected Solar PV Systems/Power Plants	Appendix-1
10.	Sample Project Completion Report for Grid-Connected Solar PV Systems/Power Plants	Appendix-2
11.	Inspection and maintenance schedule	Appendix-3
12.	Monthly O&M report	Appendix-4
13.	Additional Requirement for Ground Mounted	Appendix-5

PART-A

Annexure-A

Particulars	Description
Brief scope of works	Development of 6 MW (2 x 3 MW) ground mounted solar PV project for CCI Limited at CCI-Tandur (Telangana) including 10 years of O&M
To be awarded	By CCI Limited
Project Management Consultant (PMC)	NVVN
Name of premises / locations along with CUF and capacity	As Per Annexure-A1.
Contract period for completion of facilities	7 months
O&M Period	10 Years from the date of Completion of Facilities.
Supply of mandatory spares	Required (as per Price Schedule)
Requirement of site survey	Mandatory
Remote monitoring system	Required (through SCADA)
Milestone schedule	Attached as annexure
Electrical Interconnection Details	
Evacuation Voltage	As per State solar policy/SERC/Discom/TRANSCO/as per project specific requirement. To be connected at 6.6 kV.
Power for Construction	Construction power will be provided at one point (near the identified site) free of cost. Necessary arrangement including cabling, metering, etc. to draw power at required locations shall be done by bidder within the quoted price.
Water	Water shall be provided at one point (near the identified site) free of cost for construction and periodical cleaning of modules. However necessary arrangement including pipe laying, pumping, metering, etc. to draw water at required locations shall be done by bidder within the quoted price. Also, for O&M period, water shall be provided subject to the condition that water is consumed @ 5000 litres per MWp per cycle. Bidder to provide water meter, to monitor the usage of water during O&M period. Usage of water above this limit will be chargeable @ INR 5 per litre.
Type of interconnection	Behind the meter with Reverse Power Relay
Performance Parameters / Guarantees	

Minimum values of PR	75%.
GHI Values	Shall be as per PV Syst Software 7.4.5 version or latest version using Meteonorm 8.1 data.
Calculation of penalty in case of Shortfall of PR	In case of shortfall in PR, tariff factor is ₹ 6.71/kWh and shall be calculated as stated at sl. No i in schedule -D.
calculation of penalty for shortfall in equipment performance	In case of shortfall in annual CUF, tariff factor is ₹ 6.71/kWh and shall be calculated as stated at sl. No ii in schedule -D.
Special conditions	Deviation limit: (+) 15%.
	Solar PV modules and Solar PV cells shall be from the models and manufacturers included in ALMM List-I (for solar PV modules) and ALMM List-II (for solar PV cells). In case list II of ALMM is not released, Bidder shall submit a certificate from Manufacturer certifying that solar cells meet the DCR criteria specified for list II.
	Extended warrantee of 10 years from manufacturers shall be taken for solar panels, Inverters, CCTV, SCADA and solar meters. For further details pl. refer to Schedule C. The capacity of the system shall be designed at 40 degree C ambient temperature.
Boundary wall	GI chain link net with PVC Coating fencing, as per CPWD specification
Cement	Cement shall be issued free of cost by CCI at CCI's Store/Packing plant. Transportation, Storage, reconciliation, etc. all in bidder's scope.
Transformer(s)	Oil type/ Dry type
Additional requirement	1. CMCS room (site), 2. Inverter room(site), 3. PLC & IO Panel(CMCS Room), 4. Storeroom (site – Existing room is to be repaired) 5. Security room (site), 6. SCADA (CMCS room), 7. CCTV controls (CMCS room), etc. as mentioned elsewhere in Scope and Technical specifications.
Security during O&M period	Shall be in the scope of bidder for 24 Hrs. x 365 days x 10 years.
Site Visit	**It is mandatory for bidders to visit the site and collect all necessary information required for installation of solar PV plant, before submission of their bids. No additional claim shall be entertained in this regard. A confirmation to this effect to be submitted along with the bid in the letter head, by the bidder.**

	For site visit, please contact: **Sh. Sanjay Singh** **Email: sanjaysinghnvvn@ntpc.co.in** **Mob:+91-7982255096**

ANNEXURE-A1

Sl No.	Location / Description	AC Capacity (KW)	CUF	RT / GM	Minimum DC/AC Ratio
1	**CCI Tandur (Telangana)**	**2 x 3000**	**22%**	**GM**	**1.3**

RT: Rooftop solar GM: Ground mounted solar

The DC to AC ratio stated above is the minimum. However, bidder may increase the same to comply the CUF requirements

SCHEDULE A

1. SCOPE OF WORK

The Solar Photo Voltaic (PV) installation on various premises / buildings as mentioned in Annexure A1 of Section VI on shadow free area. The final plant capacity shall be as per the detailed engineering and approved design.

A. The bidder shall be exclusively responsible for preliminary assessment of site & electricity arrangements, security and determining layout for setting up of Solar PV Plants and O&M activities for a period as stated in Annexure-A. Durning O&M period, Security of the site for 24 Hrs. x 365 days x 10 years shall also be in bidder scope.

B. The project site shall be handed over to the bidder on as is where is basis. The bidder should inspect and examine the site and its surroundings and should satisfy himself as to the nature of the site, the quantities and nature of work, materials necessary for completion of the work and their availability, means of access to site and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his offer.

C. Design, engineering, supply, civil construction, erection, testing and Commissioning of the system as per design and specifications and connecting to existing Mains / ACDB / feeder Pillars and interfacing internal electrical loads of Project's License's network/electrical loads. The bidder would have to take approval for the interfacing of the Project with Grid/Electrical Loads from distribution licensee/ CEIG etc. as applicable. The proposed project shall be terminated at the internal electrical network of CCI Limited (behind the meter) along with a Reverse Power Relay to prevent flow of solar power into the grid.

D. The bidder shall commence supply of materials/equipments only after obtaining connectivity approval from DISCOM/TRANSCO/statutory authority as applicable, for Behind the meter connectivity. If any other additional legal and Statutory clearances are required for installation and operation the plant in full capacity are required, the same shall be arranged by the bidder. Any fees related to these approvals shall be borne by the bidder.

E. The bidder shall provide a suitable Solar PV module cleaning/ water washing system. The bidder shall also arrange water from the nearest service water line with necessary CPVC piping, pumping, metering or any other suitable arrangement and provide adequate number of waters taps with isolating valves as per site requirement.

F. The bidder shall Provide a SCADA system. This SCADA shall transmit various parameters of inverter, Solar energy meter and weather data to the remote monitoring system. The bidder shall arrange for Internet connection including operational charges and all other necessary accessories for Operation of the SCADA throughout the contract period within the quoted price.

G. All materials, manpower, scaffolding materials, machinery, tools, and tackles, transportation & loading/unloading, packaging and unpackaging, safe storage, watch and ward, etc. all inclusive, shall be arranged by the bidder within the quoted price. Scope shall cover all type of transportation of materials inside the working site and manpower etc. required to execute and complete the work. Underground cabling work/ Overhead lines, if required to evacuate solar project to the consumer's panels shall also be in the scope of bidder.

H. Commissioning of the system shall refer to the date on which the entire System (2 x 3 MW) starts generating electric energy for continuous Five (05) hours using instruments

and meters, including 'Behind the meter' connection. Declaration of commissioning shall be certified by NVVN.

I. "Completion of Facilities" means that the systems under the contract have been successfully commissioned, PG tests conducted and put in a tight and clean condition and punch points attended and the date of commencement of Operation and maintenance period has been declared by Owner, based on certification by NVVN.

J. Obtaining approval for Behind the meter connectivity. Any fee related to registration of project / NOC / from any of the state departments and maintaining its validity throughout the O&M period shall be borne by the bidder. Before connecting the solar PV plant to the Owner's system, PTW shall be obtained by the bidder from the owner.

K. It should be ensured by the bidder that any property of the employer is not getting damaged during installation and O&M period. If any damage is caused by the bidder, the same is to be rectified immediately by the bidder within the quoted price and without any additional cost to Owner.

L. Bidder shall take all necessary safety measures during erection as well as during operation and maintenance including compliance to specific safety guidelines at Chapter X, sl. No 121 of CEA safety regulations 2023.

M. Bidder has to submit the standard operating procedure (SOP) /Safety protocol before start of work for Engineer-In-Charge/Owner authorized representative approval. Records of Toolbox Talk and Attendance of Labour shall form part of the supporting documents for claiming amount linked to safety.

N. Insurance:

   i. Before commencement of the work, the Bidder shall ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work. Liquidation, Death, Bankruptcy etc., shall be the responsibility of Bidder. Further the Bidder may refer to relevant clauses of GCC, SCC and the Contract Agreement of IFB. Bidder shall also take an Erection All Risk (EAR) Policy for the total contract value, excluding the O&M cost. Owner should be mentioned as Principal/Co-insured in the EAR policy.

   ii. Bidder shall take third party liability insurance for deployed workmen, employees against any damage, loss, injury, or death arising out of the O&M work.

   iii. The Bidder shall further take Fire and peril insurance policy and burglary insurance covering the risk of damage, theft of material/ equipment/ properties after completion of the work(s) throughout the O&M period, in favour of the owner. The insurance shall be for the replacement value of the project to ensure guaranteed minimum generation.

O. Bidder has to provide comprehensive Operation and Maintenance (O&M) of the plants for a period stated in annexure-A from the date of Completion of Facilities.

P. Warranty and guarantees: The Bidder shall also provide warrantee from manufacturers for Solar Modules, PCU/Inverter, SCADA, CCTV and Generation Solar Meter as stated in schedule C. The responsibility of operation of warranty and guarantee clauses and claims/ settlement of issues arising out of said clauses shall be responsibility of the Bidder and Owner will not be responsible in any way for any claims whatsoever on account of the above for the period of the contract.

Q. During O&M period, the bidder shall be responsible for supply of all spare parts as required from time to time for scheduled and preventive maintenance, major overhauling of the plant, replacement of all defective equipment including defective PV Modules, Inverters, Transformers etc. and maintaining log sheets for operation detail, deployment

of staff for continuous operations and qualified engineer for supervision of O&M work, complaint logging & its attending. All PV modules shall be cleaned regularly, and water washed at least once a week. The Minimum Annual CUF at evacuation point/delivery point required to be achieved in the first year and subsequent years after acceptable module degradation factor are mentioned in Annexure-A in bid document. All the testing and metering instruments required for Testing, Commissioning (including PG test) and O&M shall be arranged by the bidder.

The bidder's representatives shall be deployed to monitor the solar power plant during solar hours throughout the O&M period . Further, security of the plant for 24 Hrs. x 365 days throughout the O&M period is also in the scope of the bidder.

During O&M period of initial 5 years, NVVN shall be coordinating between the contractor and the Employer as a PMC. Thereafter, O&M activities shall be directly coordinated between the contractor and the Employer.

R. While designing through PV Syst, soiling loss of minimum 4% shall be considered and loss due to non-availability of systems shall be considered as 1%. Auxiliary consumption shall be considered as at least 0.75% and P90 values should match minimum CUF.

2. SUBMISSION OF PROJECT COMPLETION REPORT (PCR)

The bidder shall submit the Project Completion Report (both in editable soft copy and signed hard copy) after commissioning of the project as per the Scope of RFS to NVVN for certification and onward submission to Owner as per the Format provided by Owner.

This shall also include relevant technical details, warrantee/guarantee certificates along with sr. no. of models before release of final payment in a format that shall be given by Employer. For details pl refer Appendix 2.

3. PROJECT INSPECTION

The project progress will be monitored by PMC and the projects will be inspected for quality at any time during erection, commissioning or after the completion of the project either by officer(s) from Owner/PMC or any agency/ experts designated / Authorized by Owner from time to time. PMC may depute a technical person(s) from its list of empaneled experts/ agencies updated from time to time/any Third party to oversee the implementation as per required standards inspection, verification, monitoring of system installed and also to visit the manufacturer's facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required. The cost of Inspection to be carried out by PMC shall be borne by PMC. The cost of re-inspection, if any shall be borne by Bidder. The projects shall be inspected at any time during erection, commissioning or after the completion of the project. All the inspections at site shall be carried out by NVVN (PMC).

4. Evacuation of power

Bidder has to terminate the solar power at existing 6.6 kV HT Switchgear. In order to do that, bidder need to carry out extension of existing 6.6 kV HT Switchgear and then accommodate two 6.6 kV feeder of suitable rating to evacuate the solar power, for which space is available. The proposed solar PV project shall be set up in the configuration of 2 x 3 MW as per the owner's requirement. Since there is no spare panel that can be used in existing 6.6 kV Switch Gear for feeding the solar power, two additional panels are required at both ends of the existing 6.6kV Switch Gear. Integration of newly added 6.6 kV feeder for evacuation of Solar power with

existing 6.6 kV HT Switchgear shall be in the scope of bidder. All the equipment, materials and services, whether explicitly stated or otherwise and that are necessary for extension, shifting and to make the systems successful operational, shall be in the scope of the vendor only.

The distance between Solar site and existing substation is approx. 1 km. HT cable laying/laying of overhead lines, solar meter and fabrication of cable trench etc. between solar site and existing substation to make system successfully operational shall be in bidder scope.

Any civil work required at existing substation to make system successfully operational shall be in bidder's scope.

SCHEDULE-B

OPERATION & MAINTENANCE (O & M) GUIDELINES TO BE MANDATORILY FOLLOWED BY BIDDERS

1) The bidder shall be responsible for all the required activities for successful operation and maintenance of the Ground mounted solar PV system for a period of 10 years from the date of Completion of Facilities of the entire package.

2) O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation. All spares/equipments/tools/materials/consumables, etc. as required for O&M of the plant throughout the O&M period of 10 years shall be supplied by the bidder within the quoted price. No additional cost except the O&M price as mentioned in Price Schedule 3C shall be payable to the bidder, during the O&M period.

3) Deputation of qualified and experienced engineer/ technicians throughout the O&M period at project site. The supervision during O&M period for 24 Hrs. x 365 days x 10 years shall be in the scope of the bidder, within the quoted price.

4) The modules shall be cleaned with a periodic interval of 7 days or earlier as per actual site conditions.

5) Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.

6) Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for equipment and materials as per the manufacturer's / supplier's recommendations. Further, the bidder shall ensure that the PV modules' peak capacity is not less than 90%, as per the manufacturer's warrantee before handing over the system at the end of O&M period.

7) All the testing and metering instruments required for Testing, Commissioning and O&M shall be calibrated or have valid calibration certificate. All the testing and metering instruments required for Testing, Commissioning and O&M shall be arranged by the bidder.

8) If negligence/ mal-operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.

9) The bidder shall furnish the previous month's generation data to Owner positively by 1st week of every month.

10) Online Performance Monitoring, controlling, troubleshooting, maintaining logs & records. A maintenance record register is to be maintained by the operator with effect from Commissioning to record the regular maintenance work carried out as well as any preventive and breakdown maintenance along with the date of maintenance, reasons for the breakdown, duration of the breakdown, steps taken

to attend the breakdown, etc.

11) The bidder shall send the periodic plant output details to Owner for ensuring the CUF. The periodic output report shall also include grid outage authenticated by customer and also monthly CUF and cumulative running CUF for the year.
12) In case of any fault in the system, the bidder has to ensure a response time of 24 hours and maximum expected turnaround time of 72 hours (under special circumstances, additional time limit may be considered with prior approval of employer).

SCHEDULE – C

TECHNICAL SPECIFICATIONS

1. Solar PV modules

i. The PV modules shall be purchased from class-I local supplier. Bidder shall ensure that Solar PV modules and Solar PV cells shall be from the models and manufacturers included in ALMM List-I (for solar PV modules) and ALMM List-II (for solar PV cells) as per MNRE's orders and amendments issued time to time.

ii. The PV modules used must qualify to the latest edition of IEC standards or equivalent BIS standards, i.e. IEC 61215/IS14286, IEC 61853-Part I/IS 16170-Part I, IEC 61730 Part-1 &Part 2 and IEC 62804 (PID). For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701.

iii. The temperature co-efficient power of the PV module shall be equal to or better than – 0.40%/°C.

iv. Solar PV modules of MONO-PERC and minimum capacity 540 Wp are to be used with yearly degradation factor not more than 0.7%.

v. The PV Module efficiency should be minimum 22%. Fill factor shall be at least 0.75.

vi. Solar PV module shall have valid BIS registration.

vii. All electrical parameters at STC shall have to be provided.

viii. The PV modules shall be equipped with IP 65 or better protection level junction box with required numbers of bypass diodes of appropriate rating and appropriately sized output power cable of symmetric length with MC4 or equivalent solar connectors.

ix. Solar PV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. The warrantee must be provided by the manufacturer on its letter head.

If module(s) fail(s) to exhibit such power output in the prescribed time span, the Contractor will either deliver additional PV Module(s) to compensate the missing power output for complete

period of 25 years with no change in area of land used or replace the PV Module(s) with no change in area of land used.

x. The bidder should get a material warranty from the manufacturer for the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than ten (10) years from the date of purchase which shall not be before the date of LOA and not before the date of obtaining legal/statutory clearance for establishment and operationalization of the solar PV plant for full capacity.

   a) Defects and/or failures due to manufacturing.
   b) Defects and/or failures due to quality of materials.
   c) Nonconformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the bidder has to get the modules replaced without any additional cost to owner.

xi. Modules deployed must use a RF identification tag laminated inside the glass. The following information must be mentioned in the RFID used on each module:

   a) Name of the manufacturer of the PV module
   b) Name of the manufacturer of Solar Cells.
   c) Month & year of the manufacture (separate for solar cells and modules)
   d) Country of origin (separately for solar cells and module)
   e) I-V curve for the module Wattage, Im, Vm and FF for the module
   f) Unique Serial No and Model No of the module
   g) Date and year of obtaining IEC PV module qualification certificate.
   h) Name of the test lab issuing IEC certificate.
   i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.
   j) Nominal wattage +3%
   k) Brand Name, if applicable.

xii. Unique Serial No, Model No, Name of Manufacturer, Manufacturing year, 'Made in India' logo and module wattage details should be displayed inside the laminated glass.

xiii. The modules shall be fitted with water syphoning arrangement wherever necessary to prevent water stagnation at the bottom edge of modules.

xiv. The PV cells in a crystalline silicon module shall be protected by encapsulation between front glass and back sheet/back glass. The glass shall be made of high transmissivity and front surface shall give high encapsulation gain.

xv. Bidder shall submit Self-certified Electro- Luminescence (EL) Test reports of all the Crystalline Silicon based PV Modules being offered to Owner.

xvi. SPV module shall perform satisfactorily with ambient temperatures between -10°C & +60°C and shall be able to withstand mechanical load as per IEC requirement.

2. Inverter/PCU

i. Inverters/PCU should be purchased from Class I supplier and shall comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683, IEC 62116, IS 16221 (Part 2), IS 16169 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.

ii. Maximum Power Point Tracker (MPPT) shall be integrated in the inverter/PCU to maximize energy drawn from the array. Charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/enclosures should be IP 65 or better (for outdoor)/ IP 54 or better (indoor) and as per IEC 529 Specifications.

iii. All inverters/PCUs shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, Surge, etc. PCU/inverter should also be DG set interactive. The PCU/Inverter should also have provision of charge controller in case of systems. The PCU/Inverter shall have a minimum comprehensive warranty of 10 years from the date of purchase, which shall not be before the date of LOA and not before the date of obtaining legal/statutory clearance for establishment and operationalization of the solar PV plant for full capacity.

iv. The PCU/ inverter shall have an overloading capacity of minimum 30%.

v. Typical technical features of the inverter shall be as follows-

a) Switching devices: IGBT/MOSFET

b) Control: Microprocessor/DSP

c) Nominal AC output voltage and frequency: as per CEA/State regulations

d) Output frequency: 50 Hz

e) Grid Frequency Synchronization range: as per CEA/State Regulations

f) Ambient temperature considered: -20°C to 60°C

g) Humidity: 95 % non-condensing

h) Protection of Enclosure: IP-54 (Minimum) for indoor and IP-65(Minimum) for outdoor.

i) Grid Frequency Tolerance range: as per CEA/State regulations

j) Grid Voltage tolerance: as per CEA/State Regulations

k) No-load losses: Less than 1% of rated power

l) Inverter efficiency (Min.): >93% (In case of 10 kW or above with in-built galvanic isolation)

Inverter efficiency (Min.): >97% (In case of 10 kW or above without inbuilt galvanic isolation)

m) THD: < 3%

n) PF: > 0.9 (lag or lead)

o) Should not inject DC power more than 0.5% of full rated output at the interconnection point and comply to IEEE 519.

p) The PCU / inverter shall have a minimum comprehensive warranty of 10 years from the date of purchase which shall not be before the date of LOA and not before the date of obtaining legal/statutory clearance for establishment and operationalization of the solar PV plant for full capacity.

q) The PCU/Inverter shall be capable of controlling power factor dynamically. PCU/inverter should be equipped with components required to support reactive power.

r) PCU/inverter shall be able to provide inverter inside parameters to SCADA system for remote monitoring, storing and report generation purpose.

vi. The output power factor of inverter should be suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustain fault in feeder line and against the lightning on feeder.

vii. All the Inverters should contain the following clear and indelible Marking Label & Warning Label as per IS16221 Part II, clause 5. The equipment shall, as a minimum, be permanently marked with:

a) The name or trademark of the manufacturer or supplier.

b) A model number, name or other means to identify the equipment,

c) A serial number, code or other marking allowing identification of manufacturing location and the manufacturing batch or date within a three-month time period.

d) Input voltage, type of voltage (a.c. or d.c.), frequency, and maximum continuous current for each input.

e) Output voltage, type of voltage (a.c. or d.c.), frequency, maximum continuous current, and for a.c. outputs, either the power or power factor for each output.

f) The Ingress Protection (IP) rating

viii. Marking shall be located adjacent to each fuse or fuse holder, or on the fuse holder, or in another location provided that it is obvious to which fuse the marking applies, giving the fuse current rating and voltage rating for fuses that may be changed at the installed site.

ix. In case the consumer is having a 3-ϕ connection, 3-ϕ inverter shall be provided by the bidder as per the consumer's requirement and regulations of the State.

x. Inverter/PCU shall be capable of complete automatic operation including wake-up, synchronization & shutdown.

xi. Bidder shall provide facility of remote monitoring of the data from the Inverter, weather monitoring instruments and solar energy meters. .

xii. Integration of PV system with Grid & Grid Islanding:

a) The output power from SPV would be fed to the inverters/PCU which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization.

b) In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over

voltage conditions shall also be provided, if not available in inverter.

c) MCB/MCCB or a manual isolation switch, besides automatic disconnection to grid, would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

xiii. PCU front panel shall be provided with display (LCD or equivalent) to monitor the following:

A. DC power input
B. DC input voltage
C. DC current
D. AC output power
E.AC voltage (all the 3 phases)
F.AC current (all the 3 phases)

xiv. Protection required in Inverter (minimum)

A. Input side disconnection switch
B. Earth leakage /Ground fault monitoring
C. DC reverse polarity protection
D. DC over voltage / current limitation protection
E. AC short circuit/Earth fault protection
F. AC over voltage / current limitation protection
G. DC and AC side surge protection (MOV)in built
H. Anti- islanding protection

xv. The PCU shall have arrangement for adjusting DC input current and should trip against sustainable fault downstream and shall not start till the fault is rectified.

xvi. The PCU shall be able to withstand an unbalanced load conforming to IEC standard and relevant electricity condition. The PCU shall include appropriate self-protective and self-diagnostic features to protect itself and the PV array from damage in the event of PCU component failure or from parameters – beyond the PCU's safe operating range due to internal or external causes.

xvii. PCU shall go to shutdown/standby mode, with its contacts open, under the following conditions before attempting an automatic restart after an appropriate time delay.

a) When the power available from the PV array is insufficient to supply the losses of the PCU, the PCU shall go to standby/shutdown mode.

b) The PCU control shall prevent excessive cycling of shut down during insufficient solar irradiance.

c) Inverter room and UPS rooms shall be separate and air-conditioned. . Air conditioning requirement shall be of 30% higher capacity as per BTU calculated by considering room size and heat dissipated by equipment like inverter, UPS etc.

3. Module Mounting Structure (MMS)

i. Supply, installation, erection, and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the work.

ii. The design calculations shall be supplemented with neat sketch and reference to various clauses of technical specification and Indian standards. For MMS design analysis and determination of forces, where computer program (STAAD) is used, the contractor shall submit a write- up on computer program used and its input and output data for review and approval of Owner. It may be ensured that the design has been certified by a recognized Lab/ Institution/chartered Engineer in this regard and submit wind loading calculation sheet to PMC. After approval by the PMC, the hardcopies of the drawings shall be submitted to the Employer.

iii. Module mounting structures shall be made of Hot Dip Galvanized Mild Steel (MS).

iv. MMS Steel shall be as per latest IS 2062:2011 and galvanization of the mounting structure shall be in compliance of latest IS 4759. MMS Aluminium shall be as per AA6063 T6. For Aluminium structures, necessary protection towards rusting need to be provided either by coating or anodization.

v. All bolts, nuts, fasteners shall be of stainless steel of grade SS 304 or hot dip galvanized, panel mounting clamps shall be of aluminium and must sustain the adverse climatic conditions. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.

vi. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame and associated fasteners, nuts & bolts.

vii. The upper edge of the module must be covered with wind shield so as to avoid build air ingress below the module. Slight clearance must be provided on both edges (upper & lower) to allow air for cooling.

viii. Suitable fastening arrangements such as grouting and calming should be provided to secure the installation against the specific wind speed. The bidder shall be fully responsible for any damage to SPV System caused due to high wind velocity within guarantee period as per technical specification.

ix. The structures shall be designed to allow easy replacement, repairing and cleaning of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. Necessary testing provision for MMS to be made available at site.

x. Adequate spacing shall be provided between two panel frames and rows of panels to facilitate personnel protection, ease of installation, replacement, cleaning of panels and electrical maintenance.

xi. The structure shall be designed to withstand operating environmental conditions for a minimum period of 25 years.

xii. Module Mounting Structures shall be designed as per IS 875 part III. Basic wind speed shall be as per IS 875 (Part 3) based on survey of India Political map printed in 2002 and its latest editions.

xiii. The Mounting structure shall further take into account cyclonic winds in coastal area and structures in coastal areas shall be painted with marine paint.

xiv. Aluminum frames should be avoided for installations in coastal areas.

xv. No welding is allowed on the mounting structure.

4. Metering

The Solar Photo Voltaic (PV) system shall consist of following energy meters:

a) Generation Solar meter(s): To keep record for total generation of the plant at each termination. The solar meter shall be having warranty for a minimum period of **10 years** from the date of purchase, which shall not be before the date of LOA and not before the date of obtaining legal/statutory clearance for establishment and operationalization of the solar PV plant for full capacity. In case solar meter is supplied by DISCOM and is not having warrantee of 10 years, Bidder has to bear the cost of its replacement in case of any defect.

b) The installation of meters including CTs & PTs, wherever applicable, shall be carried out by the bidder as per the terms, conditions and procedures laid down by the concerned SERC/DISCOMs.

c) Solar energy meters shall be connected to the SCADA for onward integration with remote monitoring system. .

d) In case access to the generation solar meter is not available for remote metering, another energy meter shall be provided for remote metering.

5. **Array Junction Boxes:**

i. The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminum /cast

aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JBs shall be such that input & output termination can be made through suitable cable glands. Suitable markings shall be provided on the bus-bars for easy identification and cable ferrules will be fitted at the cable termination points for identification.

ii. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP 65 or better standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry, Single /double compression cable glands should be provided.

iii. Polyamide glands and MC4 Connectors may also be provided. The rating of the junction box shall be suitable with adequate safety factor to interconnect the Solar PV array.

iv. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.

v. Junction boxes shall be mounted on the MMS such that they are easily accessible and are protected from direct sunlight and harsh weather.

6. DC Distribution Box (DCDB):

i. DC Distribution Box are to be provided to receive the DC output from the PV array field.

ii. DCDBs shall be dust & vermin proof conform having IP 65 or better protection, as per site conditions.

iii. The bus bars are made of EC grade copper of required size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the inverter along with necessary surge arrestors. MCB shall be used for currents up to 63 Amperes, and MCCB shall be used for currents greater than 63 Amperes

7. AC Distribution Box (ACDB):

i. AC Distribution Panel Board (DPB) shall control the AC power from inverter, and should have necessary surge arrestors, if required. There is interconnection from ACDB to mains at LT Bus bar while in grid tied mode.

ii. All switches and the circuit breakers, connectors should conform to IEC 60947:2019, part I, II and III/ IS 60947 part I, II and III.

iii. The isolators, cabling work should be undertaken as part of the project.

iv. All the Panels shall be metal clad, totally enclosed, rigid, floor/wall mounted, air -insulated, cubical type suitable for operation on 1-ϕ/3-ϕ, 415 or 230 volts, 50 Hz (or voltage levels as per CEA/State regulations).

v. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.

vi. All indoor panels will have protection of IP 54 or better, as per site conditions. All outdoor panels will have protection of IP 65 or better, as per site conditions.

vii. Should conform to Indian Electricity Act and CEA safety regulations (till last amendment).

viii. All the 415 or 230 volts (or voltage levels as per CEA/State regulations) AC devices / equipment like bus support insulators, circuit breakers, SPDs, Voltage Transformers (VTs) etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.

   a) Variation in supply voltage: as per CEA/State regulations

   b) Variation in supply frequency: as per CEA/State regulations

ix. The inverter output shall have the necessary rated AC surge arrestors, if required and MCB/ MCCB. RCCB shall be used for successful operation of the PV system, if inverter does not have required earth fault/residual current protection.

x. CODE AND STANDARDS: -

IS	Details
IEC 60947/ IS13947	Low-voltage switchgear and control gear
IS 2705	Current Transformers
IS 3043	Code of practice for earthing.
IS 3072	Code of practice for installation and maintenance

	of Switchgear
IS 3156	Voltage Transformers
IS 3202	Code of practice for climate proofing of electrical equipment.
IS 3231	Electrical relays for power system protection.
IS 13703 /IEC 60269	HRC Cartridge fuses
IS 10118 (4 parts)	Code of practice for selection, installation and maintenance of switchgear and control gear.
IEC 60255	Electrical Relays

8. Protections

The system should be provided with all necessary protections like earthing, Lightning, and Surge Protection as per CEA Safety regulations 2023 as described below.

i. Earthing Protection

a) The earthing shall be done in accordance with latest Standards. This specification is intended to outline the requirement of earthing for Solar Array (DC Side) and AC power block side of Solar PV Plant. It is not the intent of the specification to specify all details of design and construction since the bidder has full responsibility for engineering and implementation of earthing system meeting the functional requirement. Any additional equipment, material, services which are not mentioned herein but are required for installation, testing and commissioning of earthing system for safe and satisfactory operation of plant shall be included under scope of the bidder.

b) Each array structure of the PV yard, Low Tension (LT) power system, earthing grid for switchyard, all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly as per IS 3043-2018. Other applicable standards are as follows:

IS: 3043	Code of practice for Earthing.
IEEE: 80	IEEE guide for safety in AC substation grounding
IEEE: 837	Standard for qualifying permanent connections used in substation grounding

IS: 2309	Code of Practice for the protection of building and allied structures against lightning.
IS: 802	Code of practice for the use of Structural Steel in Overhead Transmission Line Towers.
IS: 2629	Recommended practice for hot dip galvanizing of iron & steel
IS: 2633	Method for testing uniformity of coating on zinc coated articles
IS: 513	Cold rolled low carbon steel sheets and strips
IS: 6745	Methods for determination of mass of zinc coating on zinc coated iron & steel articles.
IS 2062	HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL — SPECIFICATION
IS: 4736	Hot-dip Zinc coating for MS Tubes.
IS: 458	Precast Concrete Pipes (With and Without Reinforcement)
UL-467	Grounding and Bonding Equipment
IEC 62561-7	Requirements for earthing enhancing compounds
	CEA regulations for electrical safety-2010
	Indian Electricity Rules/ Indian Electricity Act.

c) Metallic frame of all electrical equipments shall be earthed by two separate and distinct connections to earthing system, each of 100% capacity.

d) Separate instrument earthing shall be done for PLC and remote I/Os.

e) Separate earthing is required for inverters and UPS

f) Separate earthing is required for electrical switchgears.

ii. **Lightning Protection**

a) The SPV power plants shall be provided with lightning & over voltage protection, if required. The main aim in this protection shall be to reduce the overvoltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc.

b) The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors (Las). Lightning protection should be

provided as per NFC17-102:2011/IEC 62305 standard.

c) Lightning Mast / conductor, placed at strategic locations, shall be used to protect the arrays against lightning protection.

d) The protection against induced high-voltages shall be provided by the use of Metal Oxide Varistors (MOVs)/Franklin Rod type LA/Early streamer type LA.

e) The lightning protection shall be provided to CMCS building as well.

iii. **Surge Protection**

a) Internal surge protection, wherever required, shall be provided.

b) It will consist of three SPD type-II/MOV type surge arrestors connected from +ve and –ve terminals to earth.

9. CABLES

i. All cables should be of the latest edition of IEC/equivalent BIS Standards (ISI marked) along with IEC 60227/IS 694, IEC 60502/IS 1554 standards.

ii. DC Cables used for inter-connecting SPV modules as well as Modules to SCB's shall conform to the requirements of EN 50618:2014/IS 17293:2020 applicable for DC cable for photovoltaic system. The connectors used for interconnecting the modules and connectors used for connecting the strings and/or to the String Combiner Box, i.e. field connectors to be mated shall be of same make and model, otherwise they shall be tested for Inter-compatibility.

iii. Cables should be flexible and should have good resistance to heat, cold, water, oil, abrasion etc.

iv. Armored cable should be used and overall PVC type ‘A’ pressure extruded insulation or XLPE insulation should be there for UV protection

v. Cables should have Multi Strand, annealed high conductivity copper conductor on DC side and copper/FRLS type Aluminum conductor on AC side. For DC cabling, multi-core cables shall not be used.

vi. Cables should have operating temperature range of -10°C to +80°C and suitable voltage rating.

vii. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop less than 2% (DC Cable losses). Cable sizing calculation is to be submitted.

viii. The size of each type of AC cable selected shall be based on minimum voltage drop. Cable sizing calculation is to be submitted.

ix. The electric cables for DC systems for rated voltage of 1500 V shall conform to BIS 17293:2020.

x. DC cables are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable is easily identified.

xi. AC Cables shall run in cable trays mounted horizontally or vertically on cable tray support system which in turn shall be supported from floor, ceiling, overhead structures, trestles, pipe racks, trenches or other building structures

xii. All cable trays including covers to be provided.

xiii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.

xiv. Communication cables need to be protected from harmonics. All communication cable from solar PV modules and communication cables for PLC and remote I/Os, inverter communication up to SCADA to be laid through antirust pipe.

xv. Instrument cables need to be protected from harmonics and to be laid through antirust pipe.

10. DRAWINGS & MANUALS:

i. Operation & Maintenance manual/user manual, Engineering and Electrical Drawings shall be supplied along with the power plant. The bidder has to obtain approval of Engineering and electrical drawings from NVVN.

ii. The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc.

iii. The Manual should also include all the Dos & Don'ts of Power Plant along with Graphical Representation with indication of proper methodology for cleaning, Operation and Maintenance etc.

iv. Step by step maintenance and troubleshooting procedures shall also be given in the manuals.

v. Bidders should also educate the owner's representatives during their O&M period.

vi.

11. TRANSFORMERS

i. Dry type/oil type step-up transformer of appropriate rating, along with all protections, switchgears, Vacuum circuit breakers, cables etc. and required civil work. Transformer shall be constructed in accordance to IS: 2026, IS: 11171, Indian Electricity Act 2003, BEE Guideline & CEA notifications and equivalent to any other international standard. Transformers shall be complete & functional in all respects. The other important construction particulars shall be as below.

a) The transformers shall be housed in metal protective housing, having a degree of ingress protection. The enclosure shall be provided with suitable hardware (as required).

b) The conductors shall be of electrolytic grade copper free from scales & burrs.

c) Transformer windings shall be of class F insulation or better.

d) The core shall be constructed from non-ageing, cold rolled, grain oriented silicon steel laminations.

e) The maximum losses for transformer shall not be more than the values specified in latest energy conservation building code (ECBC) of BEE.

f) The fittings/accessories, including protection/monitoring device generally required for satisfactory operation of the transformer, are to be provided.

g) Suitable rain shed arrangement shall be provided to keep transformer under that arrangement.

h) Painting shall be as per employer's requirement (will be finalized during detailed engineering)

i) Type and routine test shall be conducted as per IS11171.

ii. In case the bidder/contractor has conducted such specified type test(s) within last ten years as on the date of techno commercial bid opening, he may submit the type test reports to the owner for waiver of conductance of such type test(s). These reports should be for the test conducted on the equipment similar to those proposed to be supplied under this contract and test(s) should have been conducted at an independent laboratory. In case the bidder is not able to submit report of the type test(s) conducted within last ten years from the date of bid opening, or in case the type test report(s) are not found to be meeting the specification requirements the bidder shall conduct all such tests under this contract at no additional cost to the employer at an independent laboratory or in presence of the Owner's representative and submit the test reports.

iii. Transformer shall be provided with suitable ventilation system to ensure the temperature rise limits under most severe condition while in service however all tests and performance shall correspond to air natural cooling.

iv. All transformer signals like winding temp., pressure and relay etc. status shall be considered in SCADA.

12. **Data Monitoring**:

i. Data monitoring of inverters, solar meters and pyranometer shall be done through SCADA which shall be connected to remote monitoring system.

ii. Transformer data shall be required in SCADA through 4-20 mA output.

iii. Meters installed in system with CT and PT indication shall be required in SCADA through 4-20 mA output/DO/AO, wherever feasible.

iv. Remote Monitoring and data acquisition through SCADA with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and Comprehensive O&M/control to be ensured by the supplier. Provision for interfacing this data on any other Agency server and remote monitoring system shall be

kept. The Contractor must ensure the yearly availability and connectivity of the RMS system to be at least 99%.

v. Measurement of Solar PV parameters at Inverter level: These Inverter parameters shall have provision of data logging through Mod Bus (RS-485) protocol.

vi. Solar Irradiance: An integrating Pyranometer (Class II or better) shall be provided, with the sensor mounted on a Horizontal plane at a shadow free suitable location near solar arrays within the premises. The pyranometer shall be connected to SCADA.

vii. Temperature: Temperature probes for recording the PV Cell temperature shall be provided at one of the modules at shadow free area within premises and shall be integrated with SCADA.

viii. Inverter running, healthiness, faults status and power (active and reactive) signal shall be connected through SCADA.

ix. Inverter, UPS, PLC, Remote I/Os, meters communication shall be transfered to SCADA without interruption and time lagging.

x. Storage of all data (trends, alarm and analog signals) shall be stored for a minimum period of 4 years.

xi. All charges inclusive of cost of wi-fi/internet connection and data charges throughout the contract period shall be borne by the bidder.

xii. Daily, Weekly, Monthly & Yearly power generation report comprising Active Power & Energy, Reactive Power & Energy, Apparent Power Energy shall be incorporated in SCADA.

13. Provision of SCADA /SERVER Operator Workstation (OWS) at CMCS Room

Contractor shall provide complete SCADA system with all accessories, auxiliaries and associated equipment and cables for the safe, efficient and reliable operation of entire solar plant and its auxiliary systems. Further, manufacturer's warranty shall be provided for SCADA system and accessories for a period of 10 years.

Bidder shall include in his proposal all the Hardware, Software, Panels, Power Supply, HMI, Gateway, Networking equipment and associated Cable etc. needed for the completeness even if the same are not specifically appearing in these specifications.

SCADA System shall have the provision to perform the following functions:

i) Remote control of HT/LT Breakers both in hard and soft signal.

ii) Control of Inverter active and reactive power as per requirement.

iii) SCADA shall also be able to acquire, display and store real time data, status and alarm signal from following equipment included but not limited to as required or offered under the scope of this specification:

a) HT/LT Switchgear panel
b) Power conditioning unit (PCU)/ Inverter
c) UPS and Battery charger (if required) as per requirement
d) Weather Monitoring Equipment
e) TEM/ABT/MFM meter, numerical relay, fire alarm panel, GPS time synchronization unit and transformer
f) Any other equipment required as per specification

Display of status of major equipment in Single Line/Mimic Diagram. Mimic Diagram colour shall comply to IS 11954: Guide for colour coding of electrical mimic diagrams

Remote monitoring of essential parameters of plant on the web using popular web browser without requirement of additional software.

SCADA shall provide real time performance monitoring according to IEC 61724 standard.

Contractor shall provide Split ACs of suitable capacities decided by load requirement in SCADA /CMCS room. PLC and remote I/Os room shall be separate in CMCS building. Air conditioning required shall be of 30% higher capacity as per BTU calculated by considering room size and heat dissipated by equipment like PLC and remote I/Os etc.

Contractor shall provide the two power supply feeders (UPS AC) and one raw supply feeder of suitable rating to cater all the load requirements of SCADA panel/cabinet/control desk. System remain in service in case of single power supply failure/power supply module failure. Suitable alarm shall be generated in case of any power supply failure.

SCADA, & other associated electrical system shall be placed at the identified location inside CMCS Room.

Sl. No.	Description	Quantity
1	Engineering cum Operator workstation (EWS+OWS) (Server with Monitor)	2 Set
2	Chairs for Control Desk	4 Nos.

Licenses for Remote Monitoring of SCADA - 2 Nos with provision of Concurrent viewing for all users. Provision of data telemetry/remote communication to Owner's PI server.

Original License of SCADA and Engineering software shall be provided for two sets by the bidder.

The two sets Desktop PC shall be provided with latest windows and hardware configuration for industrial application with monitor minimum 24 inch.

All breaker control shall be from installed SCADA. Control scheme shall be programmable soft logic.

Daily, Weekly, Monthly & Yearly power generation report shall be incorporated in SCADA.

Weather Monitoring Equipment signal shall be required in SCADA.

14. CCTV

i. The intent of the specification is to define the functional & design requirements for the CCTV System meant for gathering video information from the various areas of the power plant with display and recording facilities with night vision and motion sensors as per requirement.

ii. The Contractor shall be responsible for selection, design, engineering, manufacture, testing at manufacturer's works/site, installation of all the equipment supplied as covered in this specification and commissioning of the system meeting the intent & functional requirements of the specification. All the power supply (UPS), cables, cable trays, power packs, erection hardware (viz. junction boxes, brackets glands, nut-bolts, conduits etc.) and mounting are also included in Contractor's scope.

iii. The Contractor's scope shall also include successful demonstration of functional requirements specified herein complete in all respects.

iv. The Contractor shall guarantee satisfactory performance of the equipment under stipulated variations of voltage and frequency.

v. The design and manufacture shall be such that equipment / components of same type and rating are interchangeable.

vi. The number of camera units, servers, network switches, wireless equipment etc. and their locations shall be finalized during detailed engineering for effective functional requirements. Minimum number of cameras shall be 10 Nos.

vii. Any other equipment, module, software required for the safe and satisfactory operation, control, protection, monitoring, testing and maintenance of the system shall also be included by the Bidder within the lump sum quoted price.

viii. The equipment furnished under this section shall meet the requirements of all the applicable international codes and standards or their latest amendment Codes and Standards. Camera certification has to be CE/FCC/UL or equivalent.

ix. The monitoring of these cameras shall be done at CMCS Room or as finalized in detailed engineering.

x. Comprehensive warranty for 10 years to be provided for complete CCTV offerings.

The CCTV System along with all its components i.e., network switches, storage devices, servers, LAN switches, cameras etc. shall be powered from UPS system. The contractor shall also provide local power distribution boxes as required for sub-distribution of UPS supply.

The CCTV system shall be able to provide surveillance of different locations in the plant, entry gate and all across periphery. The exact locations shall be decided during detailed engineering. It shall be ensured that the whole plant is covered with CCTV Network.

The CCTV system shall be designed as a standalone IP based network architecture. The system shall use video signals from different cameras at different locations, process the video signals for viewing on monitors at different locations and simultaneously record all the video streams using H.264 or better compression technique. Joystick and mouse-keyboard controllers shall be used for Pan, Tilt, Zoom and other functions of desired cameras.

The monitoring of these cameras shall be done at CMCS Room or as finalized in detailed engineering. The required no. of hardware/software licenses to meet the requirements shall be supplied by the contractor.

Camera server shall be provided with a minimum of 28 TB of storage space to store recordings of all cameras. All recordings shall have camera ID, Location, Date and time of recording and the same shall be stored for a minimum period of 1 month.

The camera & Video Management Software shall conform to ONVIF profile S, G, T and M or latest available applicable ONVIF profile at the time of detail engineering.

The camera OEM Should have valid H.265 HEVC Certificate and should be listed on following official website of HEVC.

The network cameras supplied must be manufactured in accordance with the ISO 9001&14000 standards

The product shall include a tamper-resistant hardware module, certified to at least Common Criteria EAL4.

The proposed camera should have NIST SP500-267 Approval.

The Camera to be provided by the bidder all the components / parts / assembly / software used in the offered hardware and software, should not be complying to GB28181, GB/T 28181-2011; GB/T28181-2011; GBT 28181-2011; GBT28181-2011 standards. There should be no option to activate or deactivate these standards in the camera web page/Settings.

15. Plant Illumination system:

i. A comprehensive illumination system shall be provided in the entire project. Each building shall be provided with adequate light fittings,6A/16A socket, fans, etc. Exhaust fans shall also be provided in toilets, battery room (if available) etc

ii. All outdoor lighting system shall be automatically controlled by synchronous timer or photocell. Provision to bypass the timer or photocell shall be provided in the panel.

iii. Lighting system in CMCS room:

AC lighting system 415V, 3Phase, 4wire, will be fed from lighting panels Control Board (LPs) which in turn will be fed from the lighting distribution boards (LDBs) of AC Switch board MCC.

iv. LED Luminaires shall be used for the lighting of all the indoor & outdoor areas. However, for DC lighting & hazardous areas conventional type luminaires shall be used.

v. Drawings for plant illumination system covering CMCS, Inverter room, Store room, Transformer yard, periphery, etc. are to be submitted for approval before implementation.

16. Auxiliary Power Supply system:

i. All non-critical auxiliary loads shall be fed directly from ACDB. However, emergency, and important load shall be fed from suitable sized Uninterrupted Power Supply (UPS).

Sl No	Equipment Name	Option-1 ACDB	Option-2 UPS AC
1.	SCADA including remote RTU/IO panel		✓
2.	Fire Detection /Alarm Panel		✓
3.	Emergency Lighting		✓
4.	CCTV		✓
5.	Inverter's Auxiliary supply (if applicable)		✓
6.	Energy Meter/MFM		✓
7.	switchgear space heater	✓	
8.	Illumination, Fan supply etc	✓	
9.	Module washing system	✓	
10.	Other non-critical auxiliary loads	✓	

ii. The UPS shall have an overload capacity of 125 % rated capacity for 10 minutes and 150 % rated capacity for 10 seconds.

PART-C

CIVIL WORKS for Ground mounted solar PV Projects

C-1 TOPOGRAPHY SURVEY AND SOIL INVESTIGATION

1.0 Topographical Survey

Bidder shall conduct the Topographical Survey for the allocated plot in the proposed solar project. The scope of work and technical specification for the same is as below:

1.1 Scope of Work

The Bidder shall carry out the Topographical Survey and prepare Plans (Survey Maps) and report of the entire area for locating the Solar PV Power plant and its other systems.

Carrying out the Benchmark (GTS) to site(s) under survey by parallel levelling, establishing and constructing benchmark, grid and reference pillars in the field and spot level survey of the entire area at specified intervals and development of the contours. Bidder can also use DGPS for establishing the coordinates.

2.0 Geotechnical Investigation

The scheme for geotechnical investigation shall be approved by Owner before execution. The Bidder shall carry out geotechnical investigation for establishing the sub-surface conditions and to decide type of foundations for the structures envisaged, construction methods, any special requirements/treatment called for remedial measures for sub-soil/ foundations etc. in view of soft sub-soils, aggressive sub-soils and water, expansive/swelling soils etc. prior to commencement of detailed design/drawings.

The Bidder shall obtain the approval of **geotechnical investigation scheme** for the field and laboratory testing before undertaking the geotechnical investigation work.

2.1 Foundation System

Foundation system for various facilities shall be designed and adopted as per the geotechnical investigation report and relevant IS standard.

i. The Contractor shall submit survey maps of the site in 1:10,000 scale indicating grid lines and contour lines, demarcating all permanent features like roads, railways, waterways, buildings, power lines, natural streams, trees etc. The topography drawing shall also cover at least 50-meter-wide area of the adjacent area

(beyond the assigned plot area) and match the grids of the adjacent solar plot.

ii. The Existing drainage pattern of the site, the possibility of water-logging and high flood level of the area shall also be captured in the documents.

iii. Geotechnical investigation: Minimum 1 No. of borehole of 5m depth shall be carried out in every 12.5 acres of land. Few Earth Resistivity tests & Trial pits shall be carried out as per layout.

iv. The Geotechnical investigation report shall contain field and laboratory observations/ data/ records, analysis of results and recommendations on type of foundation for different type of structures envisaged for all the areas of work. Recommendations on treatment for soil, foundation, based on subsoil characteristics, soft soils, aggressive chemicals, expansive soils, etc. shall also be covered in the report, as applicable.

v. All structures/ equipment shall be supported either on suitable open foundation (isolated, combined, raft) or pile foundation depending on type of structures/ facilities, sub-strata, topography, etc. No foundation shall rest in black cotton soil. All foundation system shall be designed in accordance with the latest revisions of relevant Indian Standards.

vi. Minimum depth of foundation shall be 1.0m below ground level. Level of Ground water table for design purpose shall be considered as per the recommendation of geotechnical investigation report.

C-2 SITE LEVELLING AND GRADING

1.0 Site levelling and grading:

1.1 Site levelling works involves the following works:

1) Site levelling works/scheme shall match with the specific functional requirement of Solar PV optimum generation considering the full utilization of the plot area for the desired capacity and consideration from the boundary and fencing requirements.
2) Site grading level shall be fixed with due reference to site drainage of the whole area, existing drainage pattern and system requirements.

1.2 Based on the spot level, contour survey done and meeting above requirements, bidder can propose different site grade levels. The site levelling may be carried in

patches/blocks. Bidder may also propose the site leveling and grading matching with the **natural topography** of the land considering the optimized use of the land, however bidder shall ensure to meet the desired power generation capacity in the allotted plot area.

1.3 All buildings & switchyard area/sub-station area shall be constructed in levelled area. No foundation shall be allowed on back filled soil and in that case the depth of foundations shall reach up to NGL. Final Level will be approved in detail engineering.

i. All works related to site clearance including removal of bushes, trees, levelling, grading, finishing and other additional works shall be carried out by the Contractor within the quoted price. Mandatory permission/ licenses/ statutory clearances from Competent Authorities for site levelling activities like removal of tree and bushes, undertaking blasting related works, disposal of cutting material etc. shall also be carried out by the contractor.

ii. Site levelling works/scheme shall match with the specific functional requirement of Solar PV optimum generation considering the full utilization of the plot area for the desired capacity and consideration from the boundary and fencing requirements.

iii. Bidder shall also ensure that no water ponding and flooding occurs in the low-lying areas & effective drainage is provided in the whole plot area, in all kinds of site levelling and grading or plant at natural topography schemes, bidder has to ensure to provide proper and effective drainage system. After performing the optimization of levels from the detailed site survey by the Contractor, the final formation level of the plot in various areas shall be finalized. The area shall be suitably cut and filled to suit the layout requirement. The site levelling and grading scheme incorporating the above aspects shall be submitted to owner for approval.

2.0

C-3 BOUNDARY WALL, FENCING AND GATE

i. Chain link fencing shall be provided both for site boundary and fencing of transformer yard.

ii. The fencing shall comprise of GI with PVC coated. welded wire mesh fencing of minimum 4 mm diameter (including PVC coating) of mesh size 50mmX50mm of height 1.8m above the toe wall with a 400mm high galvanized barbed wire at the top, such that total fence height of 2.2m above the toe wall is achieved. The diameter of the steel wire for chain link fence (excluding PVC coating) shall not be less than 4.0 mm. The PVC coated chain link will be stretched by the clips at 0.5m intervals to three strands of galvanized high tensile spring steel wire (HTSSW) of 4.0mm diameter interwoven with chain link wire mesh and kept under tension which in turn are attached to the fence post with security nuts and bolts.

iii. All nuts, bolts, fasteners, clamping strips, clamps, clips, etc., shall be galvanized. All fence posts shall be of 50 x 50 x 5 MS angles spaced at 3.0m c/c distance. All corner posts will have two stay posts and every tenth post will have transverse stay post. Suitable concrete foundations for the post and stays shall be provided based on the prevailing soil conditions. All posts of fencing shall be painted with chlorinated rubber paint over a suitable primer.

iv. Toe walls either of brick masonry with bricks of minimum 50 kg./sq.cm crushing strength or of hollow concrete block masonry or stone masonry shall be provided between the fence posts all along the run of the fence with suitable foundation. Toe wall shall be minimum 200mm above the formation level with 75mm thick P.C.C. coping (1:2:4) and shall extend minimum 250mm below the formation level. Toe wall shall be provided with weep holes of suitable size at appropriate spacing.

v. Main Gate: Mild Steel frame gate woven with chain linking having minimum span 4 m conform to IS: 2062 shall be provided. The gate shall be complete with the guide track, castor wheel, all fitting and fixture like hinges, aldrops, locking arrangement, posts etc. The width of approach road shall

cover the gate width at the main entrance with a suitable transition. All members used in gates shall be finished by cleaning of steel surfaces and applying zinc chrome or zinc phosphate primer, followed by two coats of synthetic enamel paint. For finishing coat suitable colour pigment shall be added. All paints including primer shall be of reputed brand/manufacturer. The method of application shall be as per the recommendations of the manufacturer.

C-4 DESIGN OF MODULE MOUNTING STRUCTURE & CIVIL WORKS

1. **Design criteria for module mounting structure (MMS)**

The design calculations and drawings for MMS shall as per relevant Indian standards be submitted for prior approval of Engineer in Charge.

2. **Design Parameters:**

A. MMS design & analysis to be done on computer software (preferably STAAD) and the Bidder shall submit a write-up on the computer program used and its input (soft format) and output data for review and approval.

B. An increase in allowable stresses of structural materials should not be considered during design and analysis.

C. Wind pressure for following loads shall be considered as follows:

(1) Dead Load of steel with all members, fittings & panels.
(2) Load due to fair wind direction on design tilt angles of solar mounting structural members.
(3) Load due to adverse wind direction on design tilt angles of solar mounting structural members.
(4) Load on the side face of mounting structural members.

D. Wind pressure coefficient, load and load combination shall be as per Indian standards (latest revision) such as IS: 875, IS: 800, IS 801.

3. **Vertical Deflection and Horizontal Sway Limits:**

Limiting Deflection: The limiting permissible vertical deflection for structural steel members shall be as per following:

a) Maximum vertical deflection in purlin = Span / 180,
b) Maximum vertical deflection in rafter (cantilever span) = Span / 180 and
c) Maximum lateral deflection in column/vertical post = Height / 240
d) All deflection limits can also be as per the serviceability limit defined by the module manufacturer & tracker manufacturer OR the proposed deflection limits duly approved by the module manufacturer during detailed engineering.

4. **Materials Specification & Coating for Structural Steel Works:**

<table>
<tr><th colspan="7">A. Hot-rolled/Cold-formed steel sections:</th></tr>
<tr><th rowspan="2">Members</th><th rowspan="2">Reference code</th><th rowspan="2">Yield strength, min, MPa</th><th colspan="2">Non-Coastal</th><th colspan="2">Coastal Area</th></tr>
<tr><th>Coating, Reference code</th><th>Min Thickness (mm)</th><th>Coating Reference code</th><th>Min Thickness (mm)</th></tr>
<tr><td>Column/ Vertical Post</td><td rowspan="2">IS 2062 / IS 1079</td><td rowspan="2">250</td><td rowspan="5">70 micron (IS 4759) (minimum)</td><td>2.0</td><td rowspan="5">110 micron (IS 4759) (minimum)</td><td rowspan="4">3.0</td></tr>
<tr><td>Bracing/Rafter/ Beam/Purlin</td><td>2.0</td></tr>
<tr><td>Steel Tubes in all sections</td><td>IS 1161</td><td>240</td><td>2.0</td></tr>
<tr><td>Hollow Steel in all sections</td><td>IS 4923</td><td>240</td><td>2.0</td></tr>
<tr><td>Coupler/Plate/ Cleat Splice/Sag Angle</td><td>IS 2062</td><td>250</td><td>2.0</td><td>2.0</td></tr>
<tr><td></td><td></td><td>Yield strength, MPa</td><td>Coating Class Designation</td><td></td><td></td><td></td></tr>
<tr><td>Rafter/ Beam/ Purlin (Pre-Galvanized steel sections)</td><td>ASTM A653M / IS 1079</td><td>255-550</td><td>Z600 (ASTM A653M/ IS 277)</td><td>1.6</td><td colspan="2">Not recommended in coastal areas</td></tr>
<tr><td>NOTE:</td><td colspan="6">1. Minimum elongation % shall be as per relevant Standard and Code.
2. Materials shall be fabricated in the shop.
3. Minimum coating requirement mentioned above in the table.
4. All structural calculations of cold formed steel section for checking the adequacy for strength and deflection criteria is to be done taking into consideration the maximum permissible negative tolerance over specified BMT i.e, the lower limit of BMT is to be considered.
5. The tolerance on Base Metal Thickness (BMT) thickness of steel shall be as given in IS 1852.</td></tr>
</table>

B. Hot-dip Aluminium-Zinc alloy metallic coated sheet steel strip and sheet sections:					
Members	**Reference code**	**Yield strength, MPa**	**Coating Class Designation**	**Min Thickness (mm)**	**Coastal Area**
Rafter/ Beam	**ASTM A792M**	250 - 550	**AZM 165** (ASTM	**1.2**	**Not recommende**

	/ IS 15961		A792M) / (IS 15961)		**d in coastal areas**
Purlin	ASTM A792M / IS 15961	250 - 550	**AZM165** (ASTM A792M) / (IS 15961)	0.9	Not recommended in coastal areas
NOTE:	1. Minimum elongation % shall be as per relevant Standard and Code. 2. Materials shall be fabricated in the shop. 3. Minimum coating requirement mentioned above in the table. 4. All structural calculations of cold formed steel section for checking the adequacy for strength and deflection criteria is to be done taking into consideration the maximum permissible negative tolerance over specified BMT i.e, the lower limit of BMT is to be considered. 5. The tolerance on Base Metal Thickness (BMT) thickness of steel sheets and coils shall be as given in IS/ISO 16163				

Painting of Steel Surfaces embedded in Concrete : For the portion of Steel surfaces completely embedded in Concrete as reinforcement or otherwise for foundation systems, the surface shall be prepared by Manual Cleaning and provided with Primer Coat of Chlorinated Rubber based Zinc Phosphate Primer of Minimum 50 Micron Dry Film Thickness (DFT).

Bidder shall also use principles governing design that shall prevent or reduce the risks of corrosion as per IS 9172 and other relevant IS codes.

5. Connections:

Sl No	Connection	Grade
1	Solar PV module to purlin/structure connection.	SS304, A2-70
2	Bolts required to loose and tighten seasonally for seasonal tilting in the module mounting structure.	
3	Other structural fixed connections.	HDG 5.6 & 8.8
4	Foundation Anchoring.	HDG 4.6

Note: Fastener shall conform to IS 1367

A. SS304 Fasteners (nuts, bolts, washers and U-bolts) shall be of corrosion-resistant austenitic steel. SS 304 Fasteners shall have a good anti-seize finish with proper wax coating for better durability and firm resistance to all types of failure including seasonal removal and re-fixing of bolts.

B. All fasteners shall be provided according to the connection design requirement. All bolts shall be tightened with designed torque mechanically

immediately after the erection of MMS to avoid any possible damage due to any incidental storm during the erection stage.

C. One set of fasteners shall consist of one hexagonal head nut, one hexagon shape bolt, and two washers. The bots and nuts with inbuilt washers may also be provided.

D. In the ground mounting structure system with seasonal tilt arrangement, the column post and rafter/beam at seasonal tilt point of rotation shall be preferably hinged plate and bolt system.

6. Foundation System

Top of concrete/ height of collar for MMS foundation shall be minimum 300mm above Finish ground level. The proposed foundation system for MMS shall be based on findings/results of the approved geo technical investigation report. Following kind of foundation may be provided:

1. Short pile foundation (Min. 300mm dia.)
2. Rock anchor with concrete collar (Min. 700 sq.cm.)
3. Isolated, strip or raft foundation
4. Concrete ballast foundation

7. List of applicable Indian standards

IS 2062 - Hot Rolled Medium and High Tensile Structural Steel.
IS 811 - Cold Formed Light Gauge Structural Steel Sections.
IS 1161- Steel Tubes for Structural Purposes.
IS 4923 - Hollow steel sections for structural use.
IS 4759 - Hot-dip zinc coatings on structural steel and other allied products
IS 4736 - Hot-dip zinc coatings on mild steel tubes
IS 1868 - Anodic coatings on aluminium and its alloys.
IS 2629 - Recommended practice for hot-dip galvanizing of iron and steel.
IS 15961 - Hot dip aluminium-zinc alloy metallic coated steel strip and sheet (plain)
IS 9172 -Recommended design practice for corrosion prevention of steel structures.

i. The layout, design calculations and drawings for RCC structure, CMCS, Steel structure, foundation system, road work, drainage, etc. shall be submitted for prior approval of owner before the commencement of construction.

ii. CMCS Building: For the operation and maintenance of SPV Plant one Central Monitoring and Control Station (CMCS) with Switchgear room shall be provided. The CMCS building shall consist of the following:

1. PLC and remote I/Os room shall be separate in CMCS building. Air condition require shall be of 30% higher capacity as per BTU calculated by considering room size and heat dissipated by equipment like PLC and remote I/Os etc.
2. Inverter and UPS room shall be separate in CMCS building. Air condition require shall be of 30% higher capacity as per BTU calculated by considering room size and heat dissipated by equipment like inverter and UPS room etc.
3. Electrical switchgear room shall be separate in CMCS building and for ventilation exhust and celling fan shall be done.
4. Toilets (Male and female).

iii. Inverters, battery room, ACDB and Switchgear room shall be based on manufacturer recommendation, easy passage of O&M persons and cable trench layout required. The CMCS shall be RCC framed structure with bricks/concrete blocks masonry walls.

Security Room: A prefabricated security room near the entry of the main gate.

Storeroom: The existing room shall be renovated by replacing the roof sheets and carrying out necessary repairs to ensure the room is weatherproof.

v. The buildings and allied works shall be designed to meet NATIONAL BUILDING CODE (SP: 07 2016) requirements. The finish floor level of all buildings shall be minimum 450 mm above from Finish graded level.

vi. The CMCS building shall be made of RCC framed structure with bricks/ concrete blocks masonry walls. The thickness of outer

masonry walls shall be minimum 230mm in case of bricks and minimum 200mm thick in case of concrete blocks.

vii. The following finishing schedule shall be followed:

Room	Floor Finish	Internal Wall finish	External wall finish	Ceiling finish
CMCS (excluding toilet)	Heavy duty vitrified ceramic tiles (600mm x 600mm x 9mm) with skirting	Acrylic emulsion	Exterior emulsion paint	Acrylic distemper
Toilet	Heavy duty anti-skid ceramic Tiles (9mm thick) and dodo 2100 mm	Acrylic distemper	Exterior emulsion paint	Acrylic distemper

A standard colour scheme for the different buildings/structures shall be prepared by the Contractor and the approval of the Owner shall be obtained before the commencement of work.

viii. CMCS False ceiling: 15 mm thick mineral fiber board, in tile form of size 600mm x 600mm, along with galvanized light gauge rolled form supporting system in double web construction pre painted with steel capping, of approved shade and color, to give grid of maximum size of 1200x600 mm as per manufacturers details including supporting grid system, expansion fasteners for suspension arrangement from RCC, providing openings for light fixtures, etc., all complete.

ix. Roof Finish: Cast-in-situ RCC slab (designed to carry minimum imposed load of 150 kg/sq.m) with decking sheet (RCC slab with permanent formwork). The slab formwork decking sheet shall be permanently color coated profile sheet with minimum 0.6mm

thickness of grade SS255 as per ASTM A653M / grade G250 as per AS 1397 coated with zinc of class designation Z275 or aluminium zinc alloy of class designation AZ150 or similar. The decking sheet shall meet the strength, deflection, and other functional requirements. Height of parapet wall shall be 900mm. Rainwater harvesting system is to be provided for the CMCS building.

x. Windows, Doors, Ventilators and Rolling Shutters: Powder coated (minimum thickness of powder coating 50 microns) aluminum framework with glazing. The windows shall be provided with suitable aluminum grille.

xi. Bidder can also propose uPVC extruded casement/sliding windows and doors with complete fitting and accessories as per CPWD specifications.

x. Doors of toilet areas shall be made of steel framed solid core flush shutter as per IS 2202. The minimum size of the door provided shall be 2.1 m high and 1.2 m wide. However, for toilets minimum width shall be 0.75 m and office areas minimum width shall be 1.20 m.

xi. Doors and windows on external walls of the buildings shall be provided with RCC sunshade. All external door of CMCS shall be provided with Collapsible metal grille with locking system.

xii. Metal rolling shutters and rolling grills as IS: 6248

xiii. Glazing: All accessible ventilators and windows of all buildings shall be provided with min. 4mm thick float glass, tinted for preventing solar radiations. For single glazed aluminum partitions and doors, toughened float glass of 10 mm thickness shall be used. All glazing work shall conform to IS 1083 and IS 3548. The glass to used should be from a reputed brand/manufacturer and as approved by owner.

xiv. Plumbing & Sanitary:

CMCS building room shall have attached toilet for both genders. Each toilet shall have the following minimum fittings of ISI approved of a reputed brand (subject to approval from Engineer in charge).

1) Wall mounted WC (Western type) 390 mm high with all fittings.

2) Wall mounted Urinal (430 x 260 x 350 mm size) with all fittings for the male toilet only.
3) Washbasin (550 x 400 mm) above the platform with all fittings.
4) Bathroom mirror (600 x 450 x 6 mm thick) with hardboard backing.
5) CP brass towel rail (600 x 20 mm) with C.P. brass brackets.
6) Soap holder and liquid soap dispenser.

All fittings, fastener, grating shall be brass with chromium plated as per relevant IS code. Necessary CPVC (fresh water) /UPVC (sewage water) plumbing lines shall be provided for CMCS room building. The bidder shall design & provide packaged sewerage treatment plant/septic with soak pit for CMCS and Security room assuming that a total of 5 people shall use the facility. The wastewater/effluents from the sewerage plants/septic tank shall meet the state pollution control board requirement.

xv. The Inverter Rooms shall be made of Pre-Engineered Buildings (PEB). The architectural and civil works drawing of Pre-Engineered - Inverter Rooms are provided in the technical specification and as per general industrial practice. Bidder shall prepare the detailed fabrication and civil construction drawings and submit to owner for approval before the start of work.

15E General civil works:

i. Water supply: CPVC pipes conforming to IS 15778 shall be used for all potable hot and cold-water distribution supply and plumbing works. Syntax or equivalent make PVC storage water storage tank conforming to IS: 12701 shall be provided over the roof of the CMCS complete with all fittings including float valve, stopcock etc. Minimum capacity of the tank shall be 500 litre. All necessary pipelines from the source and pumping arrangement shall be provided within the quoted price.

ii. All external surfaces shall have 18 mm cement plaster in two coats and internal surfaces shall have 12 mm cement plaster. Acrylic wall putty shall be used for internal wall.

iii. Brickworks shall be using at least class designation 7.5 of approved quality as per IS: 1077, IS: 2212 and IS: 3495. Concrete

blocks shall be of a minimum compressive strength of 7.5 N/mm2 and shall be of Grade-A as per IS: 2185The external wall for the building shall be 230 mm thick walls and internal wall 230/115 thick as per requirements. The external wall of CMCS facing the transformer area shall be as per IS: 1646 - Code of practice for fire safety of buildings (general): electrical installations. The thickness of the damp- proof course shall be a minimum of 40 mm.

iv. All RCC works shall be designed mix as per IS 456 (2000), from an NABL approved laboratory/ a Government Institute. Fly ash-based Portland pozzolana cement conforming to IS: 1489 (Part-1) shall be used for superstructure. For sub-structures, PPC/PSC shall be used based on the final Soil Investigation report. Cement will be issued free of cost by CCI from CCI's store/Packing plant at Tandur. Cement will be issued as per the design / drawing according to the nominal mix, as per the CPWD consumption pattern or design mix wherever applicable. Cement consumption is allowed as per the CPWD / DSR-2023 coefficient for cement consumption. Permissible variation limit for cement consumption is (+/-) 3% consumption of cement as per CPWD norms (Cement will be issued at free of cost basis for incorporation of the work). Excess consumption over +3% will attract penal recovery at market value +10% as overheads. Reconciliation of cement shall be carried out between the bidder and CCI on a monthly basis and final reconciliation shall be completed before submission of final bill.

v. Coarse and Fine aggregate for concrete shall be crushed stones as per IS 383.

vi. Reinforcement steel shall be of high strength deformed TMT steel bars of grade Fe-500D and shall conform to IS: 1786

vii. The following minimum grades of concrete for design mix and nominal mix shall be adopted for the type of structures noted against each unless not specified elsewhere.

M 25 - All RCC structural elements above and below ground level, precast concrete, MMS foundation, cable trench, oil pit, Grade Slab, Paving, culverts & road. Design mix to be submitted for approval of owner on priority, before commencement of construction works.

M-20 (Equivalent nominal Mix of 1:1.5:3) - Fencing work.

M-15 (Equivalent Nominal Mix of 1:2:4) - Base slab of drains.

M-10 (Equivalent Nominal Mix of 1:3:6) - Plain Concrete Cement.

Concrete mixer with digital weigh batcher along with printing facility for printing the batch slips, shall be used for batching of concrete wherever weigh batching is applicable.

viii. All loads shall be considered in line with IS: 875. Seismic loads for design shall be in accordance with IS: 1893 and relevant Standards. Minimum 75mm thick PCC shall be provided wherever RCC structure is laid over the ground.

ix. Structural steel design shall be carried out as per IS 800 and IS 801

15F Transformer Yard Civil Works

i. Transformer and equipment's foundations shall be founded on piles/isolated spread footings depending on the final geotechnical investigation report. Metering yard equipment's structures shall be designed as per IS 801 and IS 800.

ii. Transformer foundations shall have its own pit which would cover the area of the transformer and cooler banks, so as to collect any spillage of oil or oil drainage in case of emergency. The oil pit shall be filled with granite stones of 40 mm size uniformly graded.

iii. The bidder can propose soak pit under Transformer or Burnt oil pit at a distance connected to transformer soak pit depending upon oil quantity in Transformers. It shall be sized to accommodate the oil volume of the transformer connected to it, without backflow. The Gravel-filled level under transformer shall be in accordance with FGL outside pit and transformer bottom level.

iv. The area around the transformer and equipment's shall be covered with gravel and galvanized chain link fence of height min 1.8 m with fence posts and gates shall be provided. The portion of the fence covering towards rail track shall be made of a removable type for movement of the transformer during erection /removal. In addition, a small gate, 1.2 m wide shall be

provided for an entry. The transformer yard fencing work shall conform to CEIG requirements.

v. Transformer track rails shall conform to IS 3443. The requirement of a fire barrier wall between transformers shall be as per Electricity Rules and IS 1646 recommendations.

15G Pipe/ Cable rack & trenches:

i. Trenches shall be constructed in reinforced cement concrete and wall thickness minimum 100 mm. The top of trenches shall be kept at least 100 mm above the gravel level so that rainwater does not enter the trench. Trench walls shall not foul with the foundations.

ii. Outdoor Cable Trenches: RCC cable trenches shall be constructed in the switchyard and pre-cast RCC removable covers with lifting arrangement, edge protected with suitable galvanized angle iron designed to withstand self-weight of top slab + a concentrated load of 150 kg at center of span on each panel.

iii. Indoor Cable Trenches: RCC indoor cable trenches shall be provided with 50X50X4 mm angles grouted on the top edge of the trench wall for holding minimum 6 mm thick mild steel checkered plate covers (600-1200 mm in length except at ends & bends) conform to IS: 3502 with lifting arrangement.

iv. Trench Drainage: The trench bed shall have a slope of approx. 1/500 along the run & 1/250 perpendicular to the run. Incase straight length exceeds 30 m, suitable expansion joint shall be provided at appropriate distances.

15H Plant drainage system:

i. Surface drainage system shall be designed considering ‘maximum hourly rainfall intensity’. The minimum value of surface run off coefficient shall be considered as 0.6 in the design of drainage system. The drainage system shall be designed as per the IRC specifications and prevailing industry practices

ii. All Buildings shall be provided with plinth protection all around, sloped towards side drains. Plinth Protection shall be 75mm mm

thick PCC laid over well compacted 75mm well grades brick ballast base.

iii. Grade level shall be fixed with due reference to highest high flood level of the receiving body of water. Laying of Hume pipe shall be in line with IS: 783.

iv. The plant drainage system shall be connected to the existing drain, as per site requirement.

15I Electrification of buildings:

Electrification of all building shall be carried out as per IS 732-1989, IS: 4648-1968 and other relevant standards.

15J Roads:

i. The approach road to the Solar Power Plant shall originate from the existing main road and connect to CMCS building, all the Inverter Rooms, and transformer/metering yard. All the other roads connecting the remaining areas shall be treated as internal road. The approach road shall be 4.5 meter wide with minimum 500 mm wide shoulder on both sides.

ii. The internal roads shall be provided to other areas viz module cleaning station or any other area not mentioned in the scope elsewhere. This road shall connect to the approach road.

iii. The methodology of road construction with material specifications shall be in line with IRC/MORTH.

15K Design criteria:

i. Basic wind speed : 180 km per hour

ii. Corrosive category : C3

Grouting

Cement mortar (1:2) grout with non-shrink additives shall be used for grouting below base plate of a column. The grout shall be high strength grout having a minimum characteristic compressive strength of min 30 N/mm^2 at 28 days.

Structural Steel

Structural steel design shall be carried out as per IS 800 and IS 801. Structural steel shall conform IS 2062 / IS 1079 or equivalent, Pipe shall be as per medium/high grade of IS 1161, Chequered plates shall conform to IS 3502 and Hollow steel sections for structural use shall conform to IS 4923.

Structural Steel/Steel Sheet Painting

All non-hot dip galvanised structural steel (excluding Module Mounting & SCB structure)/ Outdoor metal containers/ Enclosure/ Rolling shutter items shall be provided with paint designed for a minimum maintenance-free life of fifteen (15) years (high durability) as per **ISO 12944 and IS 800 or equivalent for its corrosion category**. For finishing coat suitable colour pigment shall be added. All paints including primer shall be of the reputed brand/manufacturer and as approved by the Engineer-In-charge. The method of application shall be as per the recommendations of the manufacturer. For corrosive category of refer appendix of site-specific data.

1.0 LIST OF APPLICABLE INDIAN STANDARDS

Indian codes, and/or standards shall govern, in all the cases wherever they are available. In case of a conflict between such codes and/or standards and the specifications, the stringent provisions shall govern. Such codes and/or standard referred to shall mean the latest revision, amendments/changes adopted and published by the relevant agencies. In case of any further conflict in this matter, the same shall be referred to the Engineer-in-charge, whose decision shall be final and binding.

Other internationally acceptable standards shall be accepted, only if, no Indian Standards are existing. However, other standards also will be accepted if the Bidder establishes that the works are meeting the requirements of Indian Standards also.

A brief list of Indian Standards applicable to these works is as below:

General

IS: 875-I	**Code of Practice for Design Dead Loads for Building and Structures**
IS: 875-II	**Code of Practice for Design Imposed Loads for Building and Structures**
IS: 875-III	Code of practice for design loads (other than earthquake) for buildings and structures.
IS: 1893	Criteria for earthquake resistant design of structures.
IS: 4326	Code of Practice for earthquake resistant design and construction of buildings

Foundations

IS: 1080	Code of practice for design and construction of shallow foundations in soils (other than raft, ring and shell)
IS: 1904	Code of practice for structural safety of building foundations
IS: 2950	Code of practice for design and construction of raft foundations.
IS: 4091	Code of Practice for Design and Construction of Foundations for Transmission Line Towers and Poles
IS: 6403	Code of Practice for determination of bearing capacity of shallow foundations
IS: 8009	Code of Practice for foundation settlement calculations

IS: 2911	Design & Construction of Pile Foundation – Code of Practice

Concrete Structures

IS: 456	Code of practice for plain and Reinforced concrete
IS: 3370	Code of practice for concrete structures for the storage of liquids.
IS: 3414	Code of Practice for design and installation of joints in buildings
IS: 5525	Recommendation for detailing of reinforced concrete works
IS: 6313	Code of practice for anti-termite measures in buildings
IS: 13920	Ductile detailing of Reinforced Concrete Structures subjected to Seismic forces
IS: 1904	Code of practice for design and construction of foundations in soils general requirements

Steel Structures

IS: 800	Code of practice for use of structural steel in general building construction
IS: 801	Code of practice for use of cold-formed light gauge steel structure members
IS: 802	Code of Practice for use of Structural Steel in over Head Transmission Line Towers.
IS: 806	Code of practice for use of steel tubes in general building construction.
IS: 808	Dimensions for hot rolled steel beam, column channel and angle section
IS: 811	Specification for Cold Formed Light Gauge Structural Steel Sections
IS: 813	Scheme of symbols for welding
IS: 1079	Hot Rolled carbon Steel Sheet and Strip – Specification
IS: 2062	Hot Rolled Medium and High Tensile Structural Steel – Specification
IS: 4923	Hollow steel sections for structural use.
IS 1161	Steel tubes for structural purpose
IS: 2721	Galvanised steel chain link fence fabric – Specification

Painting and Coating

IS: 4736	Hot-dip zinc coatings on mild steel tubes
IS: 4759	Hot-dip zinc coatings on structural steel and other allied products – Specification
IS:1868	Anodic coatings on aluminium and its alloys
IS 2395-I	Painting of Concrete, Masonry and Plaster Surfaces – Code of: Operations and Workmanship
IS 2395-II	Code of practice for painting concrete, masonry and plaster surfaces: Schedule
IS 1477-I	Code of Practice for Painting of Ferrous Metals in Buildings: Pre-treatment
IS:1477-II	Code of practice for painting of ferrous metals in buildings: Painting
ISO 12944-1	Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 2: Classification of environments
ISO 12944-5	Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 5: Protective paint systems

Water supply and sanitary

IS: 1239	Mild steel tubes and tubulars and other wrought steel fittings
IS: 1172	Code of basic requirements for water supply, drainage and sanitation
IS: 1742	Code of Practice for building drainage
IS: 2527	Code of practice for fixing rainwater gutters and down pipes for roof drainage.
IS: 15778	Chlorinated polyvinyl chloride pipes for potable hot and cold water distribution supplies
IS: 16088	Chlorinated polyvinyl chloride pipes for automatic sprinkler fire extinguishing system
IS: 10124	Fabricated PVC fittings for potable water supplies
IS: 4985	Un-plasticized PVC pipes for potable water supplies
IS: 13592	Un-plasticized Polyvinyl Chloride (PVC-U) Pipes for Soil and Waste Discharge System Inside and Outside Buildings Including Ventilation and Rainwater System
IS: 12818	Un-plasticized polyvinyl chloride (PVC-U)screen and casing pipes for bore/tubewell
IS: 2470	Code of Practice for installation of septic tanks

Lining

IS 3872	Lining of Canals with Burnt Clay Tiles - Code of Practice.
IS 3873	Laying cement concrete/stone slab lining on canals - Code of practice.
IS 4515	Stone Pitched Lining for Canals - Code of Practice.
IS 7113	Soil-Cement Lining for Canals - Code of Practice.
IS 7873	Code of practice for lime concrete lining for canals.
IS 9097	Guide for laying lining of canals with hot bitumen or bituminous felts.
IS 10430	Criteria for Design of Lined Canals and Guidance for Selection of Type of Lining.
IS 10646	Canal linings - Cement concrete tiles.
IS 11809	Lining for canals by stone masonry - Code of practice.
IRC:SP:50	Guidelines on urban drainage.

Miscellaneous

IS: 1905	Code of Practice for structural use of un-reinforced masonry
IS: 3067	Code of Practice for general design details and preparatory works for damp proofing and water proofing of buildings
SP: 6	Handbook for structural engineers (all parts)
SP: 7	National Building Code of India
SP: 16	Design Aids for reinforced concrete to IS:456
SP: 20	Handbook on masonry design and construction
SP: 22	Explanatory handbook on codes for earthquake engineering

SP: 24	Explanatory handbook on Indian Standard Code of Practice for plain and reinforced concrete
SP: 25	Handbook on causes and prevention of cracks in buildings
SP: 32	Handbook on functional requirements of industrial buildings
SP: 34	Handbook of concrete reinforcement & detailing
IRC: 37	Guidelines for design of flexible pavements
IRC: 42	Guidelines on Road Drainage
IRC: 58	Guidelines for the design of rigid pavements for highways
IRC: 73	Geometric design of roads

17. Miscellaneous:

i. Connectivity: The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the SERC regulation for Grid connectivity and norms of DISCOM/TRANSCO and amended from time to time. The Bidder must take approval/NOC from the concerned DISCOM/TRANSCO for the connectivity, technical feasibility, and synchronization of Project with DISCOM/TRANSCO network and submit the same to Owner before Commissioning Project. Reverse power relay shall be provided by Bidder for Behind the Meter connection), as per the requirement of DISCOM/TRANSCO or any other statutory authority.

ii. Safety measures: Electrical safety of the installation(s) including connectivity with the grid must be taken into account and all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA Safety Regulation 2023 etc. or its latest amendments must be followed.

iii. Danger boards, Caution Boards should be provided as and where necessary as per IE Act /IE rules as amended up to date.

iv. Shadow analysis: The shadow analysis report with the instrument such as Solar Pathfinder or professional shadow analysis software of each site should be provided and the system shall be installed only in shadow free space. Lower performance of the system due to shadow effect shall be liable for penalty for lower performance.

v. Firefighting system – Portable fire extinguishers/sand buckets shall be provided wherever required as per norms.

vi. Bidder should dispose off the packing material, surplus items, unused materials, waste etc. generated during construction, as per applicable Rules and standards.

Concrete wastes and dead mortar if any are to be removed and the area is to be cleaned immediately.

vii. The bidder shall take fully responsible for safety of manpower, materials and premises. The contractor shall take special care for safe working at height, electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003, CEA guidelines and other applicable standard practices.

viii. The bidder shall provide a display board mentioning the details of the project.

ix. Even if the plant is transferred by Owner to Owner's authorized representative, all obligations of the successful bidder related to O&M of the plant up to 10 years shall remain the same as per the terms and conditions of the contract.

x. Stickers as per Owner requirements e.g. instructions/ guidelines/ danger mark.

ADDITIONAL REQUIREMENTS FOR GROUND MOUNTED SOLAR PROJECTS

PART B1

1. The scope of work covers the following activities and services in respect of all the equipment & works specified and covered under the specifications and read in conjunction with "Scope of Supply & services" elaborated elsewhere. The scope of supply shall include design, engineering, manufacture, testing at works, dispatch, transportation, transit insurance, receipt, unloading, and storage of all equipment/ materials, statutory approvals from state/central govt. bodies if required, not limited to, those mentioned in the following:
    a) Solar Panels
        i. Adequate Capacity of Solar PV Modules of suitable rating so as to achieve the CUF specified in annexure-1A, part A but in no case, DC capacity shall be less than 130% of the rated AC inverter capacity
        ii. The designed array capacity at Standard Test Conditions (STC) shall be suitably determined to meet the proposed guaranteed generation output at the point of interconnection by the contractor in his bid. The contractor shall take care of first year degradation also by installing additional DC capacity as the CUF calculations will not factor the first year degradation of the modules.
    b) Module Mounting Structures (MMS)
    c) Inverters/ Power Conditioning Units of suitable rating along with MPPT Mechanism (Applicable as per Design)
    d) String Monitoring Unit (SMU) along with Mounting Structure (Applicable as per Design)
    e) Array Junction Boxes, Distribution Boxes and Fuse Boxes: MCBs/ Isolators, Surge Arrestors with String Monitoring Capabilities and with proper Lugs, Glands, Ferrules, Terminations and Mounting Structures
    f) Solar Cables along with Lugs, Glands, Ferrules, Straight/ Y-Connectors and other materials required for proper Cable Termination at both the ends.
    g) Step-up oil Transformers as mentioned in Technical Specification (Inverter Duty) as per Inverter Manufacturer/design requirements.

TECHNICAL REQUIREMENTS

Sr. No.	TRANSFORMER	INVERTER TRANSFORMER
	VA Rating & Quantity	As per system requirement
	Voltage Ratio (KV)	System voltage/Inverter Voltage
	Duty, Service & Application	Continuous Solar Inverter application and converter duty (Outdoor)
	Winding	Two /three winding
	Frequency	50 Hz
	Nos. of Phase	THREE
	Vector Group & Neutral earthing	As per Inverter manufacturer recommendation
	Cooling	As per system requirement such as KNAN/ONAN
	Tap Changer	As per system requirement OCTC +/- 10% (min.)
	Impedance at 75^0C	
	a) Principal Tap	As per system requirement & as per Inverter manufacturer recommendation.
	b) Other Taps	
	Permissible Temperature rise	

	over an ambient of 50 deg C (irrespective of tap)(without altitude correction)	
	a) Top Oil	50 deg.C
	b) Winding	55 deg.C
	SC withstand time (thermal)	2 sec.
	Fault Level & Bushing CT	As per system requirement
	Termination	Through cable box (IP55).
	Bushing rating, Insulation class (Winding & bushing)	As per relevant IS/IEC
	Noise level	AS PER NEMA TR-1
	Loading Capability	Continuous operation at rated MVA on any tap with voltage variation of +/-10%, also transformer shall be capable of being loaded in accordance with IS: 6600/ IEC60076-7.
	Flux density	Not to exceed 1.9 Wb/sq.m. at any tap position with +/-10% voltage variation from voltage corresponding to the tap. Transformer shall also withstand following over fluxing conditions due to combined voltage and frequency fluctuations: a) 110% for continuous rating. b) 125% for at least one minute. c) 140% for at least five seconds. Bidder shall furnish over fluxing char. up to 150%
	Constructional Feature	As per CBIP,IS 2026
	Indicative Minimum Fittings	WTI, OTI, Buchooltz, PRV, top & bottom filter valve, sampling, drain valve, MOG. Rainhood/Snowhood as applicable
	Winding	Electrolytic grade copper free from scales & burrs.
	Core	M4 grade or better
	Bushing	11 kV shall be oil communicating type with porcelain insulator. LV Bushing ≤ 3.6 kV, epoxy type bushing allowed as alternate to porcelain type LV bushing palms shall be silver/tin plated.
	Gasket	weather proof, hot oil resistant, nitrile rubber based gasket

Note:-

- Inverter Transformer shall have copper/Aluminum Shield winding between LV & HV windings. Each LV winding must be capable of handling non-sinusoidal voltage with voltage gradient as per relevant applicable standards and Inverter manufacturer recommendation. Also each shield winding shall be taken out to tank with two separate connection from shield to bushing with proper support with 2 nos. relevant voltage (as per system requirement) shield bushings and same shall be brought down along with support insulator from tank & copper flat up to the bottom of the tank for independent grounding.
- Harmonic Factor and dc bias component as per Inverter manufacturer recommendation must be taken into account while designing the transformer.
- The adverse effect on life of transformer due to cloud intermittency and solar generation loading cycle must be compensated through suitable design (as applicable).
- The thermal design of Inverter Transformer needs to consider the temperature dependent performance of the Inverter. It is to in accordance with Inverter output and under worst condition it should not limit Inverter output.
- For multi winding transformer, it is recommended to have close coupling and equal impedances on each of LV winding to HV winding and to have high enough impedance (8% min. based on one LV winding rating) between two LV windings in order to decouple these windings.
- Single Line Diagram (SLD) will be finalized during detailed engineering however the kVA rating of any LV winding inverter transformer shall not be less than total kVA capacity of Inverters connected to respective LV winding.
- CODES AND STANDARDS

Transformers	IS:2026, IS:6600, IEC:60076
Bushings	IS:2099, IEC:60137,IS 3347 ,IS 12676
Insulating oil	IEC 61099/IS16081
Bushing CTs	IS:2705
Indian Electricity Act 2003, BEE Guideline & CEA notifications	

- Painting shall be as per owner's requirement. Firewall, soak pit, Fire protection system associated with Inverter transformer shall be followed as per statutory requirement.
- Type and routine test shall be conducted as per latest IS 2026. In case the bidder/contractor has conducted such specified type test(s) within last ten years as on the date of bid opening, he may submit the type test reports to the owner for waiver of conductance of such type test(s). These reports should be for the test conducted on the equipment same to those proposed to be supplied under this contract and test(s) should have been conducted at an independent laboratory. In case the bidder is not able to submit report of the type test(s) conducted within last ten years from the date of bid opening, or in case the type test report(s) are not found to be meeting the specification requirements the bidder shall conduct all such tests under this contract at no additional cost to the employer and submit the test reports for approval

h) Indoor/ Outdoor 415V/6.6/11/33 KV Switchgear Panels including Vacuum Circuit Breakers, Current transformers, Voltage Transformers, Relays and other Accessories for complete Protection at the Plant evacuation point.
i) Auxiliary Transformers of adequate rating for Plant internal consumption, as per design and as per system requirement.
j) AC Distribution Panels with sufficient number of output Feeders required for Auxiliary Power Distribution
k) DC and AC Power Cables of appropriate sizes with Cable Termination Kits
l) LT Power and Control Cables including end Terminations and other required accessories for both AC & DC Power
m) Cable from Solar Array Field to 415V/ 6.6/11/33 KV Switchgear Panel at Plant Switchyard along with Insulators, Cable Termination Kits, Earth Electrodes and other associated accessories
n) Design & Construction of Transmission Line/ Cable from Plant take off point to the designated evacuation point.
o) Materials and accessories, which are required for satisfactory and trouble-free operation and Maintenance of the above equipment like Module Cleaning System, Supply of Spares for all Equipment, Supply of Tools and Tackles etc.
p) Bidder has the option to use Al / Cu cables between string combiner box and inverter.

2. The scope of Civil design and Construction work shall include all works required for the Project and should be performed specifically with respect to following (but not limited to):
    a) Conducting Geotechnical Investigation and Topographical Survey of the Plant Area
    b) Earthwork for Site Grading, Cutting, Filling, Levelling & Compaction of Land, as required
    c) Construction and Erection of GI with PVC chain link fencing around the PV Array Field
    d) Construction of Main control /inverter room along with necessary facilities.
    e) Construction of Water Drainage system & Sewage Network
    f) Underground cabling trench (IF REQUIRED)
3. All the drawings, SLD's, layouts submitted by bidder shall be vetted by a recognized 3rd party institution/NIT/IIT/NISE/charted engineer/any government recognized institution, before submission of the same to PMC for approval. Write-ups for justification of design & drawing calculations shall also be provided if required. Declaration shall be provided by 3rd party agency & successful bidder on their respective letter heads that the all the design & drawing which ever they are submitting for approval it is as per the relevant clauses of the bid document.
4. Seeking any Approval and clearances required from Government departments, wherever applicable and the cost associated for registration/security deposit/any other charges if any shall be borne by Bidder.
5. HT SWITCHGEAR: CODES AND STANDARDS

    The bidder shall make proper arrangements for evacuation of power at existing electrical system of the owner. Further bidder shall take utmost care while designing that any fault in the solar plant side should not interfere the existing electrical system of the owner and vice versa. The SLD and its rating shall be finalised during detailed engineering and hence bidder is advised to have site visit. All standards, specification and codes of practices referred to herein shall be the latest editions including all applicable official amendments and revisions as on date of opening of Techno commercial bid. In case of conflict between this specification and those (IS Codes, Standards etc.) referred to herein, the former shall prevail. All work shall be carried out as per the following standards and codes

Sl No	IS Code	Name Of Equipment
a)	IS: 722	AC electricity meters.
b)	IS: 996	Single phase small AC and universal electrical motors.
c)	IS: 1248	Direct Acting indicating analogue electrical measuring instruments and Accessories.
d)	IS/IEC: 60947	Degree of protection provided by enclosures for low voltage switchgear and control gear.
e)	IS: 2544	Porcelain post insulators for systems with nominal voltages greater than 1000 Volts.
f)	IS: 2705	Current transformers.
g)	IS: 3156	Voltage Transformers
h)	IS: 6005	Code of practice for phosphating of iron and steel.
i)	IS: 5082	Specification for wrought aluminium and aluminium alloy bars, rods, tubes and selections for electrical purposes.
j)	IEC: 61850	Communication Standard for Numerical relays
k)	IEC: 61131-3	Automation Standard for Numerical relays
l)	IS: 9046	AC contactors for voltages above 1000 volts and upto and including 11000 Volts.
m)	IS: 13703	Low voltage fuses
n)	IS: 9385	HV fuses
o)	IS: 9431	Specification for indoor post insulators of organic material for system with nominal voltages greater than 1000 volts upto and including 300 kV
p)	IS: 9921	A.C. disconnectors (isolators) and Earthing switches for voltages above 1000 V
q)	IS: 11353	Guide for uniform system of marking and identification of conductors and apparatus terminals.
r)	IS: 13118	Specification for high voltage AC circuit breakers.
s)	IEC: 60099-4	Metal oxide surge arrestor without gap for AC system
t)	IEC: 62271-1	High-voltage switchgear and controlgear – Part 1: Common specifications for alternating current switchgear and controlgear
u)	IS/IEC: 62271-100	High voltage alternating current circuit breakers.
v)	IS/IEC: 62271-200	High voltage metal enclosed switchgear and control gear.
w)	IEC: 60947-7-1	Terminal blocks for copper conductors
x)	IS :513 (2008)	Cold Rolled Low Carbon Steel Sheets and Strips

5.1. TECHNICAL PARAMETERS

A. SYSTEM PARAMETERS		
a)	Nominal System voltage	6.6Kv/11kV/33kV or as per system
b)	Highest System voltage	7.2/12kV/36kV or as per system
c)	Rated Frequency	50Hz
d)	Number of phases/ poles	Three
e)	System neutral earthing	Solidly Earthed
f)	One minute power frequency withstand voltage(Without altitude correction)	
	- for Type tests	As per system requirement
	- for Routine tests	as per system
g)	1.2/50 microsecond Impulse withstand voltage (without altitude correction)	As per system requirement
h)	Minimum system fault level	**As per syatem requirement**
i)	Short time rating for bus bars, circuit breakers, current transformers and switchgear assembly.	**As per syatem requirement**
j)	Dynamic withstand rating	2.5 times of system fault current
k)	- Space heaters	240 V AC single phase with neutral solidly earthed
l)	Minimum/Maximum ambient air temperature	-20/60 deg. C
m)	Internal Arc testing	As per system fault current
n)	Insulation co-ordination shall be done as per IEC 60071-2 with respect to the altitude and ambient conditions of site.	

B. BUS BARS		
a)	Continuous current rating at maximum ambient:	As Per Requirement
b)	Temper Rise allowed above maximum ambient	As per IEC 62271-1, 2017

C. SWGR. CUBICLE CONSTRUCTIONAL REQUIREMENTS		
a)	Colour finish	
	Exterior	RAL9002 (Main body) RAL 5012 (Extreme end covers)

b)	Cable entry	
	Power Cables	Bottom
	Control Cables	Bottom
c)	Earthing conductor	Galvanized steel strip
d)	Service Continuity of swgrs (LSC2B-PM)	as per IS/IEC 62271-200

D. CIRCUIT BREAKERS		
a)	The circuit breakers current rating shall be selected from the load current at an ambient temperature range.	
b)	Short circuit breaker Current	
	a) A.C. component	as per system requirement
	b) D.C. component	As per IS: 13118 or IEC-62271
c)	Short Circuit making current	2.5 times of system fault current (peak)
d)	Operating Duty	O-3 min-CO-3 min-CO
e)	Total break time	Not more than 4 cycles
f)	Total make time	Not more than 5 cycles
g)	Operating Mechanism	Motor wound spring charged stored energy type as per IEC-62271

E. CURRENT TRANSFORMER		
a)	Secondary Current	1A
b)	Class of Insulation	Class E or better
c)	Rated output of each	Adequate for the relays and devices connected, but not less than five (5) VA.
d)	Accuracy class	
	Protection	Class PS for Differential & REF and Core Balance CTs (CBCT); 5P20 for other protection CTs;
	Measurement	0.2s class for Main outgoing feeder panel at main polling switchgear (solar plant end) and 0.5 class for other VCB panel
e)	Instrument Security Factor for Measurement CTs	5
f)	CT Ratio	CT ratio of each individual panels shall be decided during detailed engineering stage. Minimum CT primary side current shall be 110% of rated current.

F. VOLTAGE TRANSFORMERS

a)	Rated Voltage Factor	1.2 continuous for all VTs, and 1.9 for 8 Hours for star connected VTs.
b)	Class of insulation	Class E or better
c)	Other parameters	BUS & Line PT-0.5 Class, 0.2Cl for metering VA req. shall be adequate for application. 3P for door interlocks & protection, Additional open delta core with damping resistor shall be provided in all VT's to prevent damage on account of Ferro-Resonance conditions

5.2. SWITCHGEAR PANEL GENERAL CONSTRUCTION (OR AS PER SYSTEM REQUIREMENT)

5.3.1. The switchgear boards shall have a single front, single tier, fully compartmentalized, metal enclosed construction complying with clause No. 3.102 of IEC 62271-200, comprising of a row of free standing floor mounted panels. Each circuit shall have a separate vertical panel with distinct compartments for circuit breaker truck, cable termination, main busbars and auxiliary control devices. The adjacent panels shall be completely separated by steel / Aluzinc sheets except in bus bar compartments where insulated barriers shall be provided to segregate adjacent panels. The Service Class Continuity of Switchgears shall be LSC 2B-PM (as per IS/ IEC 622771-200). However, manufacturer's standard switchgear designs without inter panel barriers in busbar compartment may also be considered.

5.3.2. The circuit breakers and bus VTs shall be mounted on withdrawable trucks which shall roll out horizontally from service position to isolated position. For complete withdrawal from the panel, the truck shall rollout on the floor or shall roll out on telescopic rails. In case the later arrangement is offered, suitable trolley shall be provided by the Bidder for withdrawal and insertion of the truck from and into the panel. Testing of the breaker shall be possible in isolated position by keeping the control plug connected.

5.3.3. The trucks shall have distinct SERVICE and ISOLATED positions. It shall be possible to close the breaker compartment door in isolated position also, so that the switchgear retains its specified degree of protection. Circuit Breaker rack-in and rack-out from Service to Test, Test to Isolated position, or vice-versa shall be possible only in the compartment door closed condition. While switchboard designs with doors for breaker compartments would be preferred, standard designs of reputed switchgear manufacturers where the truck front serves as the compartment cover may also be considered provided the breaker compartment is completely sealed from all other compartments and retains the IP-4X degree of protection in the Isolated position. In case the latter arrangement is offered, the Bidder shall explain how this sealing is achieved and shall include blanking covers one for each size of panel per switchboard in his total Techno commercial bid price.

5.3.4. The switchgear assembly shall be dust, moisture, rodent and vermin proof, with the truck in any position SERVICE, ISOLATED or removed, and all doors and covers closed. All

doors, removable covers and glass windows shall have gaskets all round with synthetic rubber or neoprene gaskets.

5.3.5. The control / relay compartments shall have degree of protection not less then IP 5X in accordance with IS/IEC 60947. However, remaining compartments can have a degree of protection of IP 4X. All louvers, if provided, shall have very fine brass or GI mesh screen. Tight fitting gourmet / gaskets are to be provided at all openings in relay compartment. Numerical Relays shall be fully Flush mounted on the switchgear panels at a suitable height.

5.3.6. Enclosure shall be constructed with rolled steel / Aluzinc sections. The doors and covers shall be constructed from cold rolled steel sheets of 2.0 mm or higher thickness. Gland plates shall be 2.5 mm thick made out of hot rolled or cold rolled steel sheets and for non-magnetic material it shall be 3.0 mm.

5.3.7. The switchgear shall be cooled by natural air flow.

5.3.8. Aux Supply: - DC supply shall be used for control and protection system of switchgear. In case UPS AC supply are considered for auxiliary control and protection supply for switchgear, then suitable rated AC/DC converter/power pack shall be used to meet the DC control supply requirement of switchgear panels.

5.4 CIRCUIT BREAKERS

5.4.1. The circuit breakers shall be of Vacuum type

5.4.2. They shall comprise of three separate, identical single pole interrupting units, operated through a common shaft by a sturdy operating mechanism.

5.4.3. Circuit breaker shall be restrike free, stored energy operated and trip free type. Motor wound closing spring charging shall only be acceptable. An anti-pumping relay shall be provided for each breaker, even if it has built-in mechanical anti-pumping features. An arrangement of two breakers in parallel to meet a specified current rating shall not be acceptable.

5.4.4. Plug and socket isolating Contacts for main power circuit shall be silver plated, of self-aligning type, of robust design and capable of withstanding the specified short circuit currents. Thickness of silver plating shall not be less than 10 microns.

5.4.5. Motor windings shall be provided with class E insulation or better. The insulation shall be given tropical and fungicidal treatment for successful operation of the motor in actual site condition.

5.4.6. Mechanical indicators shall be provided on the breaker trucks to indicate OPEN / CLOSED conditions of the circuit breaker, and CHARGED / DISCHARGED conditions of the closing spring. An operation counter shall also be provided. These shall be visible without opening the breaker compartment door.

5.4.7. The closing coil and spring charging motor shall operate satisfactorily at all values of control supply voltage between 85% to 110% rated DC voltage. The shunt trip coil shall operate satisfactorily under all operating conditions of the circuit breaker upto its rated short circuit breaking current at all values of control supply voltage between 70% to 110% of rated DC voltage. The trip coil shall be so designed that it does not get energized when its healthiness is monitored by two indicating lamps (Red) and one trip coil supervision relay.

5.4.8. Circuit breaker shall be provided with inter pole barriers of insulating materials. The use of inflammable materials like Hylam shall not be acceptable.

5.5 CONTROLS AND INTERLOCKS

5.5.1. Rotary type Control switches shall be provided in each switchgear panel. The circuit breaker will normally be controlled from SCADA through closing and shunt trip coils. The control switch and local control console of the relay flush mounted on the switchgear would normally be used only for testing of circuit breaker in isolated position, and for tripping it in an emergency.

5.5.2. The basic control scheme shall be programmable soft logics.

5.5.3. Facilities shall be provided for mechanical tripping of the breaker and for manual charging of the stored energy mechanism for a complete duty cycle, in an emergency.

5.5.4. Each panel shall have two separate limit switches, one for the Service position and the other for isolated position.

5.5.5. Auxiliary Contacts of breaker may be mounted in the fixed portion or in the withdrawable truck as per the standard practice of the manufacturer and shall be directly operated by the breaker operating mechanism.

5.5.6. The contacts of all limit switches and all breaker auxiliary contacts located on truck portion and fixed portion shall be silver plated, rated to make, carry and break 1.0A 240V DC (Inductive) / 10A 240V AC. Contacts of control plug and socket shall be capable of carrying the above current continuously.

5.5.7. Movement of truck between SERVICE and ISOLATED positions shall be mechanically prevented when the breaker is closed. An attempt to withdraw a closed breaker shall not trip it.

5.5.8. Closing of the breaker shall be possible only when truck is either in TEST/ISOLATED or in-SERVICE position and shall not be possible when truck is in between.

5.5.9. Reverse blocking and Inter tripping shall be implemented in switchgear boards level. All required interlock shall be provided for safe operation of switchgears. Capacitive voltage detection or other alternative suitable arrangement (VT shall not be used) shall be used for outgoing feeder backdoor (cable chamber) open interlock.

5.6 NUMERICAL RELAYS AND NETWORKING

5.6.1. All circuit breaker feeders shall be provided with communicable numerical relays (IED, i.e. Intelligent Electronic Device) complying with IEC-61850, having protection, control, measurement and monitoring features. These relays shall be networked and suitably interfaced with the Solar data monitoring and control system for dynamic SLD display, status monitoring, measurements, event / alarm displays, reports, etc. The relays shall be flush mounted on panel front with connections from the inside.

5.6.2. The numerical relay shall be capable of measuring and storing values of a wide range of quantities, events, faults and disturbance recordings.

5.6.3. All numerical relays shall have freely programmable optically isolated binary inputs (BI) and potential free binary output (BO) contacts as per the requirement of control schematics. The quantities of such input / outputs shall be finalized during detailed engineering.

5.6.4. All the numerical relays shall have communications on two ports, local front port communication to laptop and rear port on IEC 61850. All numerical relay shall have key pad / keys to allow relay settings from relay front. All hand reset relays shall have reset button on the relay front. Relay to be self or hand reset shall be software selectable. Manual resetting shall be possible from remote.

5.6.5. Master trip (86) and non-86 trips shall be software configurable to output contacts and no separate master trip relay shall be used.

5.6.6. All numerical relays shall have provision of both current and voltage inputs. Relays shall be suitable for both residually connected CT input as well as CBCT input. Number of CT inputs shall be adequate for protections detailed elsewhere but not less than 4 sets, 3 nos. for phase fault & 1 no. for earth fault. Relays shall be suitable for CT secondary current of 1A. All other feeders relays shall have provision for 3 VT inputs.

5.6.7. Relays shall have self-diagnostic feature with self-check for power failure, programmable routines, memory and main CPU failures and a separate output contact for indication of any failure.

5.6.8. All cards / hardware of numerical relays shall be suitable for operation in Harsh Environmental conditions with respect to high temperature, humidity & dust.

5.6.9 Software need to configure, monitor and manage the numerical relays (IED's) for circuit breaker protection shall be provided by bidder to M/s. CCI.

5.6.10 Numerical Relays configuration, monitoring and managing shall be from SCADA station for easily diagnosis and rectification of faults.

5.6.11 Numerical Relays output shall be used in SCADA software as well as in hardware for providing interlocks of circuit breaker in order to achieve fail safe operation with safety.

5.7 OTHER PROTECTIONS AND CONTROL FUNCTIONS IN THE RELAYS

5.7.1. The numerical relay shall be able to provide supervisory functions such as trip circuit monitoring, circuit breaker state monitoring, PT and CT supervisions and recording facilities with Post fault analysis.

5.7.2. The numerical processor shall be capable of measuring and storing values of a wide range of quantities, all events, faults and disturbance recordings with a time stamping using the internal real time clock. Battery backup for real time clock in the event of power supply failure shall be provided.

5.8 BUSBARS AND INSULATORS

5.8.1. All Busbar and jumper connections shall be of high conductivity aluminium alloy. They shall be adequately supported on insulators to withstand electrical and mechanical stresses due to specified short circuit currents.

5.8.2. Busbar cross-section shall be uniform throughout the length of switchgear. Busbars and other high voltage connection shall be sufficiently corona free at maximum working voltage.

5.8.3. Busbar insulators shall be of arc and track resistant, high strength, non-hygroscopic, non-combustible type and shall be suitable to withstand stresses due to over-voltages, and short circuit current.

5.9 EARTHING AND EARTHING DEVICES

5.9.1. A copper / galvanized steel earthing bus shall be provided at the bottom and shall extend throughout the length of each switch board. It shall be bolted/ welded to the framework of each panel and each breaker earthing contact bar.

5.9.2. The earth bus shall have sufficient cross section to carry the momentary short-circuit and short time fault currents to earth as indicated under switchgear parameters without exceeding the allowable temperature rise.

5.9.3. Separate earthing trucks shall be provided by the Contractor for maintenance work. These trucks shall be suitable for earthing the switchgear busbars as well as outgoing / incoming cables or busducts. The trucks shall have a interlock to prevent earthing of any live connection.

5.9.4. As an alternative to separate earthing trucks the Bidder may also offer built-in earthing facilities for the busbars and outgoing / incoming connections, in case such facilities are available in their standard proven switchgear design. The inbuilt earthing switches shall have provision for short circuiting and earthing a circuit intended to be earthed. These switches shall be quick make type, independent of the action of the operator and shall be operable from the front of the switchgear panel. These switches shall have facility for padlocking in the earthed condition.

5.10 PAINTING

All sheet steel work shall be pretreated, in tanks, in accordance with IS: 6005.. The phosphate coating shall be "Class-C" as specified in IS: 6005. Finishing paint shade for complete panels excluding end covers shall be RAL9002 & RAL5012 for extreme end covers of all boards, unless required otherwise by the Employer.

5.11 INSTRUMENT TRANSFORMERS

5.11.1. All current and voltage transformers shall be completely encapsulated cast resin insulated type, suitable for continuous operation at the ambient temperature prevailing inside the switchgear enclosure, when the switchboard is operating at its rated load. The class of insulation shall be E or better.

5.11.2. All instrument transformers shall withstand the power frequency and impulse test voltage specified for the switchgear assembly. The current transformer shall further have the dynamic and short time ratings at least equal to those specified for the associated switchgear and shall safely withstand the thermal and mechanical stress produced by maximum fault currents specified when mounted inside the switchgear for circuit breaker modules.

5.11.3. Current transformers may be multi or single core and shall be located in the cable termination compartment. All voltage transformers shall be single phase type. The bus VTs shall be housed in a separate panel on a truck so as to be fully withdrawable.

5.11.4. All voltage transformers shall have suitable HRC current limiting fuses on both primary and secondary sides. Primary fuses shall be mounted on the withdrawable portion. Replacement of the primary fuses shall be possible with VT truck in isolated position.

5.12 SURGE ARRESTOR

The surge arrestors shall be provided as per system requirement and shall be of metal oxide, gapless type generally in accordance with IEC 60099-4 and suitable for indoor duty. These shall be mounted within the switchgear cubicle between line and earth, preferably in the cable compartment.

5.13 CONTROL SUPPLY AND SPACE HEATER SUPPLY

5.13.1. Each switchboard shall be provided at least two (02) Nos of DC feeders for the control supply.

5.13.2. In case two DC sources are provided, then suitable rated blocking diodes in both circuit has to be provided. Alternately Bidder can provide source selection switch.

5.13.3. One suitable rated 240V single phase AC supply feeder per switchboard / Switchboard section for space heater supply. Bidder shall provide necessary switch and fuse to receive, isolate and distribute to each panel.

5.14 SPACE HEATER

5.14.1. Each switchgear panel shall be equipped with thermostatically controlled space heater(s), suitably located in breaker and cable compartments to prevent condensation within the enclosure. The space heater shall be connected to 240V single phase AC auxiliary supply available in the switchgear, through switches and fuses provided separately for each panel.

5.14.2. A 240V single phase 50 Hz AC plug point shall be provided in the interior of each cubicle with ON-OFF switch for connection of hand lamp.

5.15 TYPE TESTS

All critical equipments as mentioned below to be supplied shall be of type tested design. During detailed engineering, the contractor shall submit for PMC/Owner's approval the reports of all the following type tests carried out not earlier *ten* years from the date of bid opening. These reports should be for the test conducted on the equipment similar to those proposed to be supplied under this contract and the test(s) should have been either conducted at an independent laboratory or should have been witnessed by PMC.

A)	Reports of the type tests carried out on circuit breakers
B)	Reports of the type tests carried out on transformers

5.16 MANDATORY SPARES

5.16.1 The bidder has to provide all the mandatory spares as mentioned in the Schedule of quantities (Price schedule) within the quoted price. The spares are to be handed over to the employer at their Store. During the O&M period, the contractor may use the mandatory spares on returnable basis. In such a case, the mandatory spares are to be replenished within a period of 1 month, without any additional cost. If the bidder fails to maintain the minimum stock of mandatory spares as mentioned in the schedule of quantities at any point in time during the tenure of the contract, the employer reserves the right to procure the same and keep in the store at the risk and cost of the bidder.

5.16.2 List of Mandatory spares are as follows:

	Mandatory Spares		
1	Solar PV Module	1 % of total DC capacity	
2	String Inverter with A.C. Combiner box (as applicable)	2% of total population for highest capacity	
3	MCCB	2 nos. of each type and rating	
4	**6.6kV Circuit Breakers (For metal enclosed swgr)**		
4a	For ICOG switchgear	1 no. of breaker replaceable for all feeders	
5	6.6kV RMU, if offered for Project	1 complete set interchangeable for all types	
6	Electrical Bushing for 6.6kV RMU (if replaceable type)	1 no. of each type	
7	6.6 kV Current Transformer for metal enclosed HT switchgear	3 nos. of each type and rating	
8	6.6 kV Potential Transformer for metal enclosed HT switchgear	3 nos. of each type and rating	
9	6.6 kV Surge Arrestor for HT switchgear for metal enclosed HT switchgear	3 nos. of each type and rating	
10	Earthing Trolley	1 no. of each type and rating	
11	Numerical relay For ICOG switchgear (6.6 kV HT Switch Gear)	1 no. of each type	
12	6.6kV Switchgear-Voltage Detecting Insulator(VDI) and Voltage Presence Indicator(VPI)	10% of total population	
13	Electronic Cards for PCU	1 number for each rating	
14	IGBT Unit for PCU	5% of total population	
15	Semiconductor Fuse	5% of total population	
16	AC Fuse of rating more than 10 Amp	25 nos. of each rating	
17	String Combiner Box	0.5% of total population	
18	SCADA ethernet switch	5% of total population for each type	
19	SCADA firewall getway	1 nos. of each type	
20	Module Connector Set (Male & Female) with wire	set	300
21	DC Cable (SPV Module to SCB)	m	300
22	DC Cable (SCB to PCU) of highest size(if applicable)	m	100
23	Inverter station Auxiliary transformer (Highest size)	1 No	
24	**Spares related to UPS/Battery charger**		
24.1	UPS/Battery charger for inverter station/sub pooling system	5% of total population for each type and rating	
24.2	Electronic Cards for UPS/ battery charger (inverter station and CMCS)	5% of total population for each type and rating	
25	**Spares related to Inverter Transformer**		
26	Inverter Transformer (of higher size and replaceable for all ratings)	No.	1
27	Set of Valves for Inverter transformer	set	1
28	WTI with contacts of Inverter transformer	Nos.	1
29	OTI with contacts of Inverter transformer	Nos.	1
30	Buchholz relay complete of Inverter transformer	Nos.	1
31	Pressure Relief Device of Inverter Transformer	Nos.	1
32	Magnetic Oil Gauge (MOG) of Inverter Transformer	Nos.	1
33	HV and LV Bushing with metal parts and gaskets of Inverter Transformer (Each Type)	Nos.	1

SCHEDULE D

i. PERFORMANCE GUARANTEE TEST FOR GROUND MOUNTED SOLAR PV

The Performance Guarantee (PG) Test shall be carried out by the bidder after successful commissioning of the system and certification for the same is to be obtained from NVVN. PG Test shall be carried out by measuring Performance Ratio (PR) and comparing to the Guaranteed PR of 75%. The test shall be repeated for each location having inverter of having different make or type of control. In case there are more than one similar inverter, the test shall be decided based on mutual consent. The mathematical formula for calculating PR is given below:

PR% =	AC Yield (KWh) X 100
	(Installed Capacity (kWp)) X (Global Inclined Insolation(kWh/m2))

a. For the purpose of measuring Global Inclined Insolation (GII), another pyranometer shall be installed on returnable basis, mounted at the plane of the module, at free of cost.
b. Measuring instruments to record on site data will include a pair of pyranometers (horizontal and inclined with sensitivity of 7µV/(W/m2), temperature sensor, signal converter.
c. The Bidder will be responsible to conduct the PG test only after achieving the physical completion and synchronization of the plant and complying the relevant requirements from utility.
d. The PG test will be conducted for durations in which irradiance level is greater than 750 W/m2 and the test

will continue until a total horizontal radiation of 5 kWh/m2 has been achieved.

e. The PR values shall be computed based on actual energy generated at solar meters.

f. If failed to achieve the guaranteed performance levels, the bidder will at its own cost rectify all the defects identified during the test and take necessary steps/efforts to pass the PR test within the stipulated time span. Subsequent to rectification the PR will be restarted.

g. During PG test, if there is a grid outage, those time slots will not be considered. If the values are again below the guaranteed performance levels, bidder will be liable to pay Liquidated Damages (LD) to Owner, which shall be calculated as below:

Short fall in PR(%)=ΔPR=Target PR-Achieved PR

Shortfall in Generation=ΔE =(ΔPR/Achieved PR))x measured Generation

- Yearly shortfall in Generation (ΔE Yearly =ΔE X (Annual GHI/5)

Applicable Liquidated Damages (LD) =N x R x ΔEyearly

Where R= tariff factor i.e. ₹6.71 / kWh (For illustration only. Actual amount is as per annexure A)

N=11.37

A Sample Calculation for 1.0 MWpCapacity of Solar PV Plant

Capacity of the sample plant= 1.0 MWp

Global Horizontal Insolation of Site (GY)=1977 kWhr/m2-year

Measured Global Horizontal Insolation- GHITEST=5 kWhr/m2

Measured Global Inclined Insolation- GIITEST=5.213 kWhr/m2

Capacity of the plant where PG test be conducted= 1.0 MWp

Say, Solar Meter Generation corresponding to radiation>750 W/m2= 3800 kWhr

Measured PR= 3800 × 100/(1000 x 5.213)=72.89%

Shortfall in PR=75%-72.89%=2.11%

Shortfall in Generation for test period = (2.11/72.89) x 3800 = 110 kWhr

Yearly Shortfall in Generation= 110 x (1977/5) = 43,494 kWhr

Applicable LD= N x R X ΔEyearly =11.37 x 6.71 x 43494 = INR 33,18,274.70/-

h. The cap on LD for not achieving the desired and guaranteed PR of 75% shall be 25% of the contract value awarded excluding the O&M Cost.

ii. Equipment performance guarantee

a. Further the Bidder is liable to maintain the minimum guaranteed Annual CUF measured at Delivery Point for the 10 operational years, failing which the Bidder is liable to pay the LD for shortfall in generation. The LD shall be equal to shortfall in energy corresponding to energy equivalent to modified guaranteed Annual CUF multiplied by the Tariff

factor i.e. INR ΔE x Tariff factor, where ΔE is yearly shortfall in energy corresponding to energy equivalent to modified guaranteed Annual CUF and Tariff factor (as mentioned in Annexure-A of 'Scope of Work and Technical specifications). The LD shall be recovered from O&M BG and thereafter from O&M payment. The cap on LD for shortfall in generation shall be 10% of the Annual Energy corresponding to guaranteed CUF for that year multiplied by Tariff Factor. In the case of invocation of the O&M BG due to shortfall in generation, the bidder shall resubmit a BG of originally envisaged value immediately.

The bidder shall obtain certification of CUF for the initial 5 years of O&M from NVVN and thereafter from CCI.

CUF is a measure of how efficiently a solar plant operates, considering the maximum possible generation that could occur if the plant operated at full capacity (100% of the time). It is calculated as:

CUF (%) =	Actual Generation (in MWh or kWh) x 100
	Maximum Possible Generation (in MWh or kWh)

Where:

- Actual Generation is the energy generated by the plant over a specified period.
- Maximum Possible Generation is the total amount of energy that could be generated if the plant were running at full capacity for the entire period.

b. The modified guaranteed annual CUF shall be calculated based on the shortfall in energy during PG Test, if any.

c. For determining the Annual CUF, the annual module degradation shall be taken as 0.7% cumulative from 2nd operational year. The duration for which the Generation was interrupted due to non-availability of Grid during solar hours or any other reasons not attributable to Bidder shall not be taken into account for calculation of Annual CUF.

d. Let us understand with the illustrative example already given at Schedule 4, Clause(i),

i. Case 1: If there is no shortfall in generation during PG test:

For example, a sample 1.0 MW Solar Plant with the desired minimum annual CUF of 22%. The 1st year generation (G) is 19,28,520 kWhr.

Further, for the 2nd operational year, considering the module degradation of 0.7% per annum, the annual target generation for 2nd operational year shall be equal to = 1928520*(1-0.007) i.e. 19,15,020.36 kWhr.

Further for the 3rd operational year, considering the module degradation of 0.7% per annum, the annual target generation for 3rd operational year shall be equal to = 1928520*(1-2*(0.007)) i.e. 19,01,520.72 kWhr.

This will continue till the end of 10th operational year.

ii. Case 2: If there is shortfall in generation during PG test:

For example, a sample 1.0 MW Solar Plant with the desired minimum annual CUF of 22%. The 1st year generation (G) is 19,28,520 kWhr. Now if the shortfall in annual energy during PG test is 1,46,562.92 kWhr, then the modified annual energy generation (G1) target for 1st year shall be 17,81,957.08 kWhr. The modified guaranteed annual CUF for the 1st year shall be equal to 17,81,957.08 *100/(8766*1000)= 20.33%.

Futher, for the 2nd operational year, considering the module degradation of 0.7% per annum, the annual target generation for 2nd operational year shall be equal to = 17,81,957.08 *(1-0.007) i.e. 17,69,483.38 kWhr.

Further for the 3rd operational year, considering the module degradation of 0.7% per annum, the annual target generation for 3rd operational year shall be equal to = 17,81,957.08*(1-2*(0.007)) i.e. 17,57,009.68 kWhr.

This will continue till the end of 10th operational year.

Appendix 1

Quality Certification, Standards and Testing for Grid-Connected Solar PV Systems/Power Plants

Solar PV Modules/Panels	
IEC 61215 and IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61701:2011	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853- 1:2011 / IS 16170-1:2014	Photovoltaic (PV) module performance testing and energy rating –: Irradiance and temperature performance measurements, and power Rating.
IEC 62716	Photovoltaic (PV) Modules – Ammonia (NH3) Corrosion Testing (as per the site condition like dairies, toilets etc)
IEC 61730-1,2	Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part 2: Requirements for Testing
IEC 62804	Photovoltaic (PV) modules – Test method for detection of potential induced degradation. IEC 62804-1: Part 1: Crystalline Silicon
Solar PV Inverters	
IEC 62109 or IS : 16221	Safety of power converters for use in photovoltaic power systems – Part 1: General requirements, and Safety of power converters for use in photovoltaic power systems Part 2: Particular requirements for inverters. Safety compliance (Protection degree IP 65 or better for outdoor mounting, IP 54 or better for indoor mounting)
IS/IEC 61683 latest (as applicable)	Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)
IEC 60068-2 /IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditioners and Inverters
IEC 62116:2014/ IS16169	Utility-interconnected photovoltaic inverters – Test procedure of islanding prevention measures

Bidder to submit reports/ document in support of compliance to the above standards to NVVN for certification.

APPENDIX 2

Sample Project Completion Report			
Financial year :			
Approval No.:			
Proposal Title :			
Installed by agency :			
Project initiated by :			
Title of the Project :		Capacity	
Category of the organization / beneficiary:		Name of the contact person:	
Address of contact person :			
State :		District/City :	
Mobile:		Email :	
Telephone No. :		Website :	
Other info			
Electricity Distribution CompanyName :			
Electricity consumer account no. as per electricity bill :		as on Date :	
Technology Description & System Design /Specification			
(Compliance to BIS/IEC Standards is mandatory)			
1. Module			
Capacity/Power of each PV Module(Wp) :	1.		1. Nos: 2. Nos:
Cumulative Capacity ofModules (KWp):			
Solar cell technology :			
Module efficiency (in Percentage) :			
2. Inverters			
Type of inverter :			
Make of inverter :			
Capacity/Power of each PCU/inverters (VA) :	Capacity / Power Nos.		
Capacity/Power of PCU / inverters(KVA) :			
Inverter efficiency (Full load) :			
(in percentage)			

3. Metering Arrangement			
Any other details:			
Make and Type of Meter :			
Metering Details:			
4.. Other informations			
Units of electricity generated by the solar plant as per meter (in KWh):			
Monitoring Mechanism :			
No. of personnel to be trained in O&M			
Grid connectivity level			
Grid connectivity level phase :		Grid connectivity level Voltage :	

The following to be included in Project Completion Report:

1. Warrantee/guarantee certificates in the name of owner with sr. no. for solar panels, inverters, and solar meters and others
2. Module ALMM reference no. in latest MNRE List.
3. Inverter supplier certificate for Class 1 Supplier.
4. PR test report.
5. Discom connectivity certificate/approval.
6. CEIG approval, if any
7. Layout of Panels.
8. Photographs of the system

Bidder to submit the Project Completion report to NVVN for certification.

APPENDIX 3

INSPECTION AND MAINTENANCE SCHEDULE - Indicative

Component	Activity	Description	Interval	By
Module Mounting structure	Inspection	Check whether the MMS are properly in tightened position and check for corrosion.	Quarterly	Site in charge
PV Module	Cleaning	Clean any bird droppings/ dark spots on module	Immediately	Site in charge
	Cleaning	Clean PV modules with plain water or mild dishwashing detergent. Do not use brushes, any types of solvents, abrasives, or harsh detergents. Use soft cloth wipers/mops during cleaning.	As per the site conditions and at least once a week	Site in charge
	Inspection (for plants > 100 kW**p**)	Use infrared camera to inspect for hot spots;bypass diode failure IV testing of strings/modules (if performance degrades faster than allowed degradation)	Annual	Site in charge
PV Array	Inspection	Check the PV modules and rack for any damage. Note down location and serial number of damagedmodules.	Annual	Site in charge
		Replacement of deformed MC4/Y connectors	Immediately	Site in charge
	Inspection	Determine if any new objects, such as vegetation growth, are causing shading of the array and move them if possible.	Quarterly	Site in charge
	Vermin Removal	Remove bird nests or vermin from array and rack area.	Quarterly	Site in charge

Component	Activity	Description	Interval	By
Junction Boxes	Inspection	Inspect electrical boxes for corrosion or intrusion of water or insects. Seal boxes if required. Check position of switches and breakers. Check operation of all protection devices.	Annual	Site in charge
		Thermography of JBs	**Quarterly**	Site in charge
Wiring	Inspection	Inspect cabling for signsof cracks, defects, lose connections, overheating, arcing, short or open circuits and ground faults.	Annual	Site in charge
Spare Parts	Management	Manage inventory of spare parts. To ensure that the amount of power being generatedis typical of the conditions. Inspect Inverter housing or shelter for physical Maintenance, if required. Inverter spares/Cards to be stored indoor. Modules to be kept in covered conditions.	As needed	Site in charge
Inverter	Service	Filter Cleaning	As needed Every month	Site in charge
		Filter replacement	once in a year or as per OEM recommendations.	Site in charge
Instruments	Validation	Spot-check monitoring instruments (pyranometer etc.) with standard instruments to ensure that they are operational and within specifications.	Annual	Site in charge

Component	Activity	Description	I terval	By
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc.	Annual	Site in charge
		Electrical testing of Transformers	Annual	
		DGA of transformers. (33 kV Class & Above)	Every SIX months	
Tracker (if present)	Inspection	Inspect gears, gear boxes, bearings as required.	Annual	Site in charge
	Service	Lubricate tracker mounting bearings, gearbox as required.	Bi-annual	Site in charge
Plant	Monitoring	Daily Operation and Performance Monitoring	Daily	Site in charge
Log Book	Documentation	Document all O&M activities in a workbook available to all service personnel	Continuous	Site in charge

Monthly O&M report is to be submitted to NVVN for review for a period of initial 5 years of O&M and thereafter, the reports are to be directly submitted to CCI.

APPENDIX 4

Monthly O & M Report - Indicative

Month and year:

Name of the Bidder:

LOA No:

Project Capacity:

Address of the site:

Monthly Measured GHI:
Monthly CUF%:

Part A

Component	Activity	Description	Date	Signature of contractor	Signature of custodian of building	*Remarks
PV Module	Cleaning	Immediately clean any bird droppings/ dark spots on module.				
	Cleaning	Clean PV modules with plain water or mild dishwashing detergent.				
	Inspection (for plants > 100 kW**p**)	Infrared camera inspection for hot spots; bypass diode failure.				
PV Array	Inspection	Check the PV modules and rack for any damage.				
	Inspection	If any new objects, such as vegetation growth etc., are causing shading of the array. Remove if any.				

Component	Activity	Description	Date	Signature of contractor	Signature of custodian of building	*Remarks
	Vermin Removal	Remove bird nests or vermin from array and rack area.				
Junction Boxes	Inspection	• Inspect electrical boxes for corrosion, intrusion of water orvermin. • heck position of switches and breakers. • Check status of all protection devices.				
Wiring	Inspection	Inspect cabling for signs of cracks, defects, lose connections, corrosion, overheating, arcing, short or open circuits, and ground faults				
Inverter	Inspection	• O bserve instantaneous operational indicators on t hefaceplate. • Inspect Inverter housing or shelter for any physical				
Inverter	Service	Clean or replace any airfilters.				
Instruments	Validation	Verify monitoring instruments (pyranometer etc.) with standard instruments to verify their operation within tolerance limits.				

Component	Activity	Description	Date	Signature of contractor	Signature of custodian of building	*Remarks
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc.				
Plant	Monitoring	Daily Operation and Performance Monitoring.				
Spare Parts	Management	Manage inventory of spareparts.				
Log Book	Documentation	Maintain daily log records.				
Tracker (if any)	Inspection	Inspect gears, gear boxes, bearings, motors.				
	Service	Lubricate bearings, gear asrequired.				

Signature of the Authorized signatory of the Contractor.

Signature of the Authorized signatory of the Employer/PMC

Part B

Date	Generation kWh	Grid outage (hh:mm)	Inverter down period (hh:mm)	Remarks
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Total generation for the month in kWh:

CUF for month in %: Cumulative CUF till date for financial year:

Cumulative generation since commissioning in kWh:

Signature of the Authorized signatory of the Contractor

Signature of the Authorized signatory of the Employer/PMC

	Appendix-5	INDICATIVEVENDORLIST SUB-SYSTEM: C&I	DOC NO. : REVISIONNO.00 PAGE:1

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
1.	Battery (Lead Acid - Plante)/forUPS/Intelligent Battery Charger	III		Hoppeckebatteriengmbh&co kg	Germany	A	
				Exide	Kolkata	A	
2.	Inverter			Class-I suppliers			
3.	Transformers:						
	Power Transformer			ABB	Sweden	A	
				ABB	Vadodara	A	
				Toshiba	Japan	A	
				CG Power & Industrial Solutions Ltd	Mandideep	A	
				BHEL	Bhopal	A	
				Siemens	Mumbai	A	
				GE T&D India Limited	Naini	A	
				GE T&D India Limited	Vadodara	A	
				TELK	Angamally	A	
	Dry Type Transformer			ABB	Savli		
				Raychem	Pune		
				Toshiba	Hyderabad		
				BHEL	Jhansi		
				Kirloskar Electric Company Limited	Pune		
				Voltamp	Savli		
				Ames Impex	Mehsana, Gujarat		
				Sudhir Power Ltd	Silvassa		
				Hammond Power Solutions	Hyderabad		
	Auxiliary Oil Filled Transformers			BHEL	Jhansi		
				Indotech Transformers	Chennai		

INDICATIVE LIST

				Kanohar	Meerut		
				Kirloskar Electric Company Limited	Mysore		
				Schneider	Vadodara		
				Transformers & Rectifiers Ltd.	Ahmedabad		
				CG Power & Industrial Solutions Ltd	Malanpur		
				Voltamp	Savli		
				Shree Abhirami Engineering	Sri Peramubudur		
				TESLA TRANSFORMERS INDIA LIMITED	Bhopal		
4.	Battery (Ni-Cd) for UPS / IntelligentBatteryCharger	III		Saftindialimited	Bengaluru	A	
				HBL power	Hyderabad	A	Upto 990AH(H type)
				Saft	France/Sweden	A	
				HoppeckeBatterienGmbh& Co Kg	Germany	A	
5.	Battery Charger	II		Amararaja	Tirupati	A	
				HBL-Power System	Hyderabad	A	
				Chhabielectrical	Jalgaon	A	
				ChloridePower	Kolkata	A	
				Statcon	Hapur	A	Up to 220, V 850 A
				Dubas	Banglore	A	Up to 220 V, 250 A
				SaftNifePowerSystems	Singapore	A	
				Masstek	Jalgaon	A	
6.	ControlDesk	III		PyrotechWorkspaceSolutions Pvt Ltd	Udaipur	A	BOIshallbeasperLOAapproved sources
				CosmosMediaProductsPvt Ltd	GreaterNoida	A	1. Hblockshouldbefromknurr Germany. 2. Completeintegratedmosaicgrid should be procured from NVVN approved sources like Pro Plan/Subklew 3. solidacrylicsurfaceshouldbe procured from Du Pont/NVVN approved sources 4. ExtrudedAlprofilestructure should

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
							beprocuredfromHindalco(With Knurr design)
				AdarshaControlSystemPvt Ltd	Bengaluru	A	1.MosaicitemsshouldbefromNVVN approved sources.2. Acrylic solid surface (ASS) should be procured from Du Pont /NVVN approved sources3.woodworksaretobedone by M/S C K Furn Bangaluru
7.	Fiberoptic cable	III		KECInternationalLtd	Mysore	A	
				AparIndustriesLimited	Valsad	A	
				HFCL	Goa	A	
				Aksh Fibre	Bhiwadi	A	
				Finolex	Pune/Goa	A	
				M/S BirlaCable Limited	Rewa	A	
				Jiangsu Tongguang	China	A	
				R&M	Switzerland	A	
				Molex	UK	A	
				Corning	USA	A	
				PolycabIndiaLtd	Halol	A	
				U M Cable	Silvasa	A	
8.	Fire alarm panel	II		Notifier	USA	A	
				Autronica	Norway	A	
				TYCO	USA	A	Simplex Brand
				BoschSecuritySystem	Bengaluru	A	Detector, Hooter, MCP, Modules, PanelshallbefromM/sBoschMake
				Schrack	Austria	A	
				Edwards	Mexico	A	
				ToshniwalIndustrialPvtLtd	AJMER	A	M/sNotifierMake Fire AlarmPanel
				M/sShieldfiresafety and security ltd	UK	A	

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
				Jhonson Controls	USA	A	Simplex Brand
9.	Instrument Cables (F,G& T/C Cables)	III		Tempsens instruments (i)Pvt Ltd-unit-II	Udaipur	A	0.5SQMMF&GTYPE CABLES
				HavellsIndia	Alwar	A	TypeF cable
				Paramount Communicationltd	Khuskhera	A	PVC,FRLStype
				Polycab	Daman	A	PVC,FRLStype
				Delton	Faridabad	A	PVC,FRLStype
				KEI	Bhiwadi	A	
				ElkeyTelelinks	Faridabad	A	PVC,FRLStype
				CORDS	Kaharani	A	PVC,FRLStype
				CORDS	Bhiwadi	A	PVC,FRLStype
				Nicco	Kolkata	A	PVC,FRLStype
				UniversalCable	Satna	A	PVC,FRLStype
				Thermocables	Hyderabad/Mahboobnagar	A	A, B, F&G
				GuptaPower Infrastructure Ltd.	Khurdha	A	PVC,FRLS,Shielded,MultiPair, TwistedTypeA,B, F&G
				CMI	Faridabad	A	PVC,FRLStype/0.5SQMMF&G TYPE CABLES
				AdvanceCablesPvtLtd	Bengaluru	A	0.5SQMMF&GTYPE CABLES
				GemscabIndustriesLtd	Bhiwadi	A	0.5SQMMF&GTYPE CABLES
				AparIndustriesLimited	Valsad	A	0.5SQMMF&GTYPE CABLES
				SuyogElectricalsLtd	Halol	A	0.5SQMMF&GTYPE CABLES
				SpecialCablesPvt Ltd	Rudrapur	A	0.5SQMMF&GTYPE CABLES
				T C Communication	Ghaziabad	A	PVC,FRLStype
				TEW&C	USA	A	
				Habia cables	Sweeden	A	
				Kerpen cables	Germany	A	
				Lapp cables	Germany	A	

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
				GoyoleneFibers(India)Pvt Ltd	Silvassa	A	F&GtypeCable
				ThermoelecrtaBv	Netherland	A	
10.	24V Intelligent Battery chargerDC/DCDB/BHMS	III		ChabbiElectricals	Jalgaon	A	Rectifier module, Controller module andBatteryHealthmonitoringsystem shall be of M/s VERTIV make
				Eltek SGS Pvt Ltd	Gurgaon	A	Unit-IIforassemblyandfunction testing only
				MasstechControlsPvt Ltd	Jalgaon	A	RectifiermodulesshallbeofSetec, China
				VertivEnergyPvtLtd	Mumbai	A	Rectifier module, Controller module andBatteryHealthmonitoringsystem shallbeof M/SVERTIVChina
11.	MasterSlaveClock System	II		SignalsandSystemsPvt.Ltd. (SANDS)	Chennai	A	
				Masibus	Gandhinagar	A	
				SertelElectronicsPvt.Ltd.	Chennai	A	
				HopfElectronikGmbH	Germany	A	
				Hathway	USA	A	
				MeinBerg	Germany	A	
				MoserBaer AG	Switzerland	A	
12	PLCBasedSCADASystem (Ref Note 4)	I	SQP	Rockwell	Sahibabad	A	
				Emersonautomationsolution Intelligent platforms Pvt Ltd	Bengaluru	A	PLCmodulesfromEmersonUSA
				ABB	Bengaluru	A	
				Honeywell	PUNE	A	1-PLCmodulesshouldbeprocured from M/s Honeywell Co Ltd, Korea. AllMajor BOIFrom NVVN Approved Make

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
				Siemens	Nashik	A	
				PhoenixContactElectronics GmbH	Germany	A	
				MitsubishiElectric Corporation	Japan USA	A	iQFandiQRPLCseries Iconics SCADA
				SchneiderElectricSystem India Pvt Ltd	Chennai	A	ModulesFromSchneider,FranceAnd AllMajorBOIFromNVVNApproved Make
				SchneiderElectricIndiaPvt Ltd	Bengaluru	A	ModulesFromSchneider,FranceAnd AllMajorBOIFromNVVNApproved Make
13	PLC SystemIntegrators	I		TrinityTouchPrivateLimited	Palwal, Haryana	A	SystemIntegratorof Phoenix GermanyMake
				Virtual Automation	Ranga Reddy	A	Systemintegratorforschneidermake
				CotmacElectronicsPvtLtd	Pune	A	SystemintegratorforSeimensmake
				Tech-Masters	Hyderabad	A	SystemintegratorforEmerson ManagementIPmake
				PowertechSwitchgear(I) Pvt Ltd	Sonepat	A	Systemintegratorforschneidermake
				UnityIndustrial Automation Pvt Ltd	Delhi	A	SystemintegratorforRockwellmake
				EMCONS	Ranchi	A	SystemintegratorforRockwellmake
				M D Industries	Vadodara	A	Systemintegrator forM/s Emerson make system
				Velox automation	Surat	A	Systemintegrator for Siemens make
				VisionComptel	Kolkata	A	SystemintegratorforEmersonmake
				Adaptiveengineering Private limited	Ahemdabad	A	Systemintegratorforschneidermake
				GreenwaveSolutionsPrivate Limited	Kolkata	A	SystemintegratorforRockwellmake
				DreamzAutomation	Ghaziabad	A	Systemintegrator for Siemens make

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
				CreativeRobotics	Ghaziabad	A	SystemintegratorforHoneywell make
				KrutiTechnoEngineerPvtLtd	Chhapraula(GB nagar)	A	Systemintegrator for Siemens make
				EDSInstruments&Systems pvt Ltd	Chennai	A	SystemintegratorforHoneywell make
				Delsys automation Technologiespvtltd	Chennai	A	SystemintegratorforEmersonmake
				HindustanControland Equipment Ltd	Kolkata	A	SystemintegratorforEmersonmake
				VollkraftEngineeringAnd Consultant(P) Ltd	Kolkata	A	SystemintegratorforEmersonmake
				SSMInfotechSolutionPvtLtd	Surat	A	Systemintegratorforschneidermake
				SunIndustrialAutomation	Chennai	A	Systemintegratorforschneidermake
				NetwareComputers	New Delhi	A	SystemintegratorforHoneywell make
				ArmaxAutomationPrivate Limited	Bengaluru	A	SystemintegratorforEmerson make
				NandiPowertronics	Bengaluru	A	SystemintegratorforMitsubishi make
				LadderAutomationSolution Pvt Ltd	Gurugram	A	ForM/sHoneywellmakeSystem
				DivyaEngineers	Chennai	A	ForM/sSiemensmakesystem
14	UPS with ACDB	III		FujiElectric	Kancheepuram	A	UPS systemslessthan10KVA
				VertivEnergyPvtLtd	Pune	A	upto125KVAfor1phase&300 KVA for 3 phase
				VertivEnergyPvtLtd	Mumbai	A	Upto 160 KVA
				HitachiHirelPower Electronics Pvt Ltd	Sanand	A	Upto120KVA,SinglephaseIGBT
				FujiElectric	Pune	A	Upto 100 KVA singlephase

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
				KELTRON	TRIVENDRUM	A	
				Merlin&Gerin	France	A	
				Gutor	Switzerland	A	
				AEG(Saft)	Germany	A	
				FujiElectric	Japan	A	
				PowerOneMicroSystem	Bangalore	A	20 KVA
15	SMFlead-acidbatteryfor microprocessor Basedfirealarmpanel	III		Exide	Kolkata	A	
				AmaraRaja	Trupati	A	
				HBLPowerSystem	Hyderabad	A	
MC- 1	BlankPanels/ Cabinets	III		MainContractorApproved Sources			
MC- 2	CompressionFittings(SS)	III		MainContractorApprovedSources			
MC- 3	ComputerFurniture	III		MainContractorApprovedSources			
MC- 4	Deskfor OWS/EWS/Printer/Server	III		MainContractorApprovedSources			
MC- 5	FRPJunctionBox	III		MainContractorApprovedSources			
MC- 6	GraphicInterfaceUnit	III		MainContractorApprovedSources			
MC- 7	ImpulsePipes/Tubes	III		MainContractorApprovedSources			
MC- 8	LevelIndicator(Float& Board type)	III		MainContractorApprovedSources			
MC- 9	MiniUPS-TypeC configuration	III		MainContractorApprovedSources			
MC- 10	Printer(Inkjet/Laser)	III		MainContractorApprovedSources			

INDICATIVE LIST

Sl. No.	ITEM	QP/INS CAT.	QPNo. -	ACCEPTABLESUPPLIERASPER DATABASE, M/s	PLACE	SCAPPL Status	REMARKS
MC-11	TerminalBlock	III		MainContractorApprovedSources			
MC-12	Instrumentationvalve&Fitting	III		MainContractorApprovedSources			
MC-13	Weather station panel (comprisingofPyranometer, anemometer&thermometer etc.)	III		Anymake-modelwith VDE/CE/UL/ CSAmarkingorBISapproved withCML no			
MC-14	OperatorWorkstation	III		MainContractorApproved Sources			DELL/HP/IBM/LENEVO/COMPAQ/FUJITSU OR OEM APPROVED
MC-15	Container	III		MainContractorApprovedSources			
MC-16	CCTV	III		MainContractorApprovedSources			

LEGENDS:

1.0SYSTEMSUPPLIER/SUBSUPPLIERAPPROVALSTATUSCATEGORY

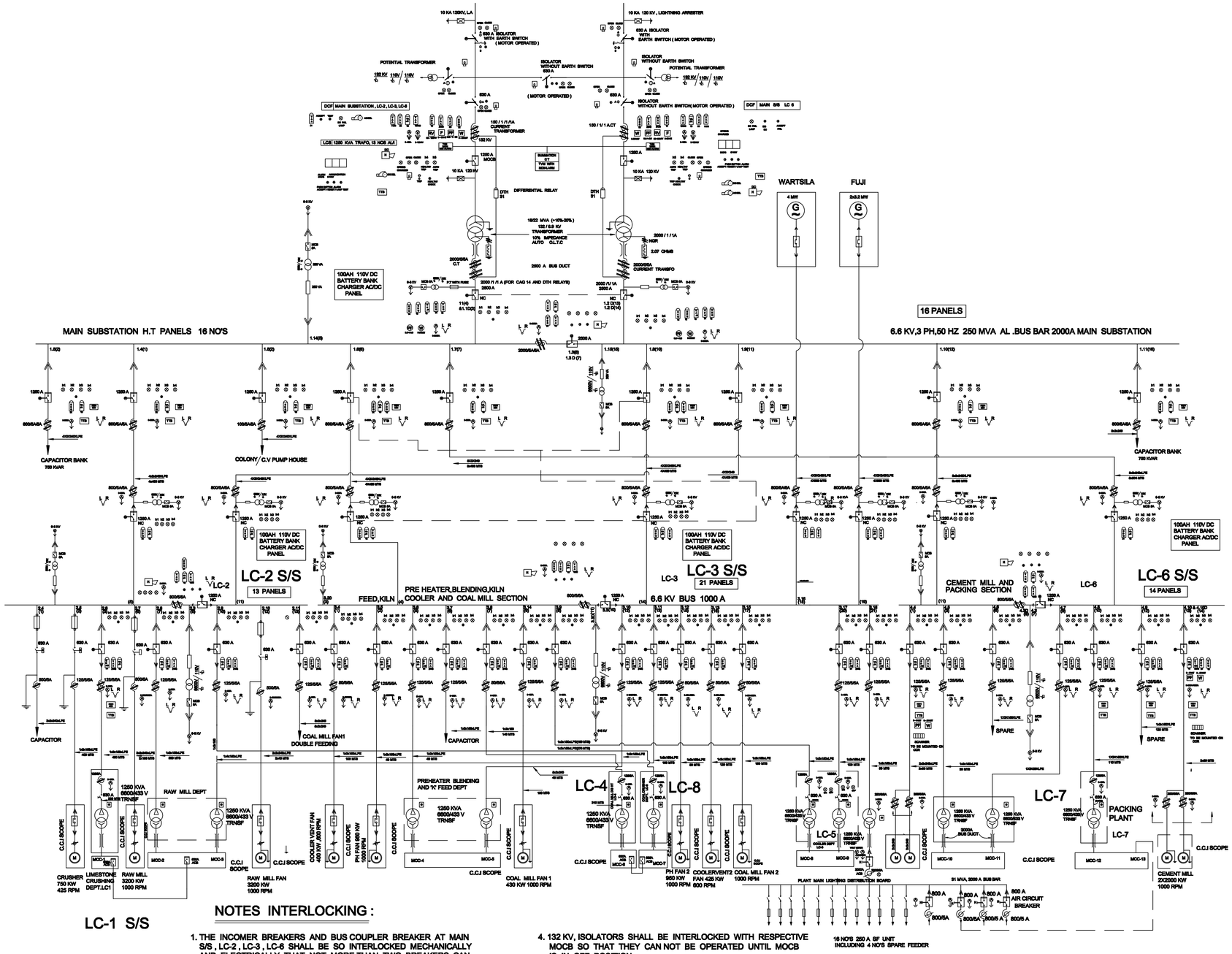
A-For those items proposed vendor is acceptable to Customer.

For the items not appearing in the pre-award list and falls in the scope of supply of the bidder, bidder and Customer will mutually discuss during execution.

INDICATIVE LIST

12

132 K.V INCOMING SUPPLY FROM A.P.S.E.B



LEGEND :-

- HAND OPERATED LOAD BREAK SWITCH (AL ISOLATOR)
- MOTOR OPERATED ISOLATOR WITH EARTH SWITCH
- MINIATURE CIRCUIT BREAKER
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- TRI VECTOR METER
- LIGHTNING ARRESTER
- MOTOR OPERATED MINIMUM OIL CIRCUIT BREAKER
- AUXILIARY RELAY-FLASHER / BELL RELAY
- RESTRICTED EARTH FAULT RELAY FOR NGR
- OVER CURRENT RELAY FOR NGR
- OVER CURRENT AND EARTH FAULT RELAY
- OVER CURRENT RELAY
- HIGH SPEED TRIPPING RELAY
- DIFFERENTIAL RELAY
- SEMAPHORE INDICATOR FOR ISOLATOR
- SEMAPHORE INDICATOR FOR EARTH SWITCH
- SEMAPHORE INDICATOR FOR ISOLATOR
- INDICATION LAMP - ON
- INDICATION LAMP - OFF
- INDICATION LAMP - DISCREPANCY FOR AUTO TRIP
- INDICATION LAMP - TRIP CIRCUIT HEALTHY
- EE TYPE ODS , 3 POSITION CIRCUIT BREAKER/ ISOLATOR CONTROL SWITCH
- OVER CURRENT RELAY
- 2X3 WAY TEMPERATURE SCANNER
- OVER CURRENT RELAY 15-20%
- TEST TERMINAL BLOCK
- VOLT METER WITH SELECTOR SWITCH
- AMMETER WITH SELECTOR SWITCH
- PUSH BUTTON
- LOCAL REMOTE SWITCH
- TRIP CIRCUIT HEALTHY CHECK (PUSH BUTTON)
- ACCEPT,TEST AND TRIP CIRCUIT HEALTHY CHECK (PUSH BUTTON)
- ALARM ANNUNCIATION RELAY
- HOOTER FOR TRIP ALARM
- KILO WATT HOUR METER WITH MDI
- UNDER VOLTAGE RELAY
- RECORDING VOLT METER - ADEPT MAKE (CHART SCALE 60 - 160 KV)
- FREQUENCY METER DIGITAL TYPE
- AUXILIARY RELAY
- POWER FACTOR METER
- MOTOR PROTECTION RELAY
- WATT METER
- LOAD BREAK ISOLATOR WITH FUSE AND EARTH SWITCH (FIXED TYPE)
- MANUALLY OPERATED A/R CIRCUIT BREAKER
- NEUTRAL GROUNDING RESISTOR
- OFF PUSH BUTTON STATION WITH KEY ACTUATOR
- UNDER VOLTAGE RELAY

NOTES INTERLOCKING :

1. THE INCOMER BREAKERS AND BUS COUPLER BREAKER AT MAIN S/S , LC-2 , LC-3 , LC-6 SHALL BE SO INTERLOCKED MECHANICALLY AND ELECTRICALLY THAT NOT MORE THAN TWO BREAKERS CAN BE MADE ON, AT THE SAME TIME.
2. THE GENERATOR CIRCUIT BREAKER 3.23 IN LC-3 SHALL BE SO INTERLOCKED WITH BREAKER NO 1.6 , 1.8 , IN MAIN SUB STATION, AND 3.1 , 3.2 , AT LC-3 SUB STATION, THAT IT CAN BE MADE ON ONLY IF BREAKER NO'S 1.6, 1.8, 3.1 & 3.2 ARE OFF, DUE TO SUPPLY FAILURE. THE INTERLOCKING SHALL BE ACHIEVED THROUGH THE AUXILIARY CONTACTS OF RESPECTIVE BREAKERS.
3. SEPERATE CORES SHALL BE USED FOR PROTECTION AND METERING IN CURRENT TRANSFORMERS.
4. 132 KV, ISOLATORS SHALL BE INTERLOCKED WITH RESPECTIVE MOCB SO THAT THEY CAN NOT BE OPERATED UNTIL MOCB IS IN OFF POSITION
5. —— ALL HT CABLES ARE IN CCI SCOPE OF SUPPLY
6. ALL BREAKERS AND LOAD BREAK SWITCH OF SAME RATINGS SHALL BE INTER CHANGEABLE.
7. MAIN AND DISTRIBUTION TRANSFORMERS SHALL BE PROVIDED WITH GAS PRESSURE TRIP AND ALARM PROTECTION , WINDING TEMPERATURE, TRIP AND ALARM, OIL TEMPERATURE TRIP AND ALARM.
8. 3.18 21 —— DENOTES 3.18 —— FDR. NO; (21) — PANE NO:

⊗ 2000 A ACB, PROVIDED WITH MAGNETOTHERMAL RELEASE, EARTH FAULT RELEASE AND UNDER VOLTAGE RELEASE. R,Y,B PHASE INDICATING LAMPS

RANGE OF Ⓐ - 0 - 2000 A
Ⓥ - 0 - 500 V

	CEMENT CORPORATION OF INDIA LTD.	
CCI TANDUR	CCI-TANDUR 501158 A.P. INDIA	
DRN.BY	Harianath reddy	TITLE: 132/6.6 KV. SINGLE LINE DRAWING.
CHD.BY	-	
APD. BY	-	
DATE	-	
DRG. NO.	SP13/B 10107 001 R5	Rev.No.

Measure
Click points on the map to measure distances and area
Perimeter
2,009.42 m
Area
40.2 ac
Save to project
Layers
3D

BIDDING DOCUMENTS

FOR

DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI - TANDUR

SECTION – VII

BOOK 1 OF 2

BIDDING DOCUMENT NO.: NVVN/C&M/RE-384/2025-26

(This document is meant for the exclusive purpose of bidding against this Bid Document No. / Specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued).

TABLE OF FORMS AND PROCEDURES

Sl.No. **Description**

Section-VII (Part 1 of 2)

1a. Techno-Commercial Bid (Envelope-1)
(Bid Form for Envelope-I and Envelope-II along with Attachments for Envelope-I)

1b. Price Bid (Envelope-2)
(Attachments for Envelope-II and Price Schedules)

BIDDER MAY TAKE NOTE OF THE FOLLOWING POINTS WHILE SUBMITTING ITS BID

- **IN CASE OF EXTENSION OF TECHNO-COMMERCIAL BID OPENING DATE, BIDDER TO FURNISH AUDITED ANNUAL REPORTS ALONG WITH ITS BID AS PER EXTENDED DATE OF TECHNO-COMMERCIAL BID OPENING TO MEET THE STIPULATED FINANCIAL QR CRITERIA.**

- **POWER OF ATTORNEY DULY AUTHORISED BY A NOTARY PUBLIC INDICATING THAT THE PERSON(S) SIGNING THE BID HAS/HAVE THE AUTHORITY TO SIGN THE BID AND THE BID IS BINDING UPON THE BIDDER DURING THE FULL PERIOD OF ITS VALIDITY BACKED BY A COPY OF BOARD RESOLUTION/ OTHER RELEVANT DOCUMENTS TO DEMONSTRATE THE AUTHORITY OF THE PERSON ISSUING THE POWER OF ATTORNEY TO BE FURNISHED ALONG WITH THE BID.**

- **POWER OF ATTORNEY TO THE AUTHORISED SIGNATORY OF THE BIDDER FOR SIGNING OF BID AND DJU/JV AGREEMENT ETC., WHEREVER APPLICABLE, TO BE SUBMITTED ALONG WITH BID AND SHOULD BE DATED NOT LATER THAN THE DATE OF SIGNING THE BID.**

- **BIDDER TO ENSURE THAT BID SECURITY / DJU/ JV AGREEMENT (AS APPLICABLE) TO BE SUBMITTED IN ORIGINAL STRICTLY AS PER SPECIFIED FORMATS DULY SIGNED IN ORIGINAL BY AUTHORIZED SIGNATORY AND STAMPED ON EACH PAGE. SCANNED/ PHOTOCOPY OF THESE DOCUMENTS WITHOUT SIGNATURE IN ORIGINAL SHALL NOT BE ACCEPTABLE AND SHALL BE SUMMARILY REJECTED.**

- **DATE OF PURCHASE OF STAMP PAPER OF INSTRUMENTS LIKE BID SECURITY, DEED OF JOINT UNDERTAKING ETC SHOULD BE ON OR BEFORE THE DATE OF EXECUTION OF SUCH INSTRUMENTS.**

1a. BID FORM

ENVELOPE-1 (TECHNO-COMMERCIAL) & ENVELOPE-2 (PRICE)

BID FORM

BID FORM (ENVELOPE-1 (TECHNO-COMMERCIAL) & ENVELOPE-2 (PRICE))

Date:

Bid Document No. : NVVN/C&M/RE-384/2025-26

Name of Package : DEVELOPMENT OF 2 X 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI - TANDUR

To

SR.MGR(C&M)
NTPC VIDYUT VYAPAR NIGAM LIMITED
2nd Floor, Core 5, Scope Complex,
Institutional Area, Lodi Road,
New Delhi – 110003, India

Gentlemen and/or Ladies,

1.0 Having examined the Bidding Documents including subsequent Amendment(s)/ Clarification(s)/ Addenda/ Errata (if any), the receipt of which is hereby acknowledged, we, the undersigned, offer to design, manufacture, test, deliver, install and commission (including carrying out Performance Guarantee Test) the facilities under the above-named Package in full conformity with the said Bidding Documents for the sum as mentioned in the Bill of Quantity (BOQ in excel sheet) of Bid Invitation at e-Tender Portal in accordance with the terms and conditions of the Contract.

1.1 We further understand that discount letter, if any, separately uploaded online or submitted in physical form shall not be considered for the purpose of evaluation.

2.0 COMPLIANCE TO THE PROVISIONS OF THE BIDDING DOCUMENTS

2.1 We have read all the provisions of the Bidding Documents and confirm that notwithstanding anything stated elsewhere in our bid to the contrary, the provisions of the Bidding Documents, are acceptable to us and we further confirm that we have not taken any deviation to the provisions of the Bidding Documents anywhere in our bid.

Any deviation, variation or additional condition etc. or any mention, contrary to the provisions of Bidding Documents and its subsequent Amendment(s)/ Clarification(s)/Addenda/Errata (if any) found anywhere in our bid proposal, implicit or explicit shall stand unconditionally withdrawn, without any cost implication whatsoever to the Employer, failing which our bid shall be rejected and our Bid Security shall be forfeited.

2.2 We further declare that additional conditions, variations, deviations, if any, found anywhere in the proposal, shall not be given effect to.

3.1 We are aware that the BOQ/Price Schedules do not generally give a full description of the work to be performed under each item and we shall be deemed to have read the Technical Specifications, Drawings and other Sections of the Bidding Documents to ascertain the full scope of work included in each item while filling in the rates and prices. We agree that the entered rates and prices shall be deemed to include the full scope as aforesaid, including overheads and profit.

3.2 We declare that prices left blank in the BOQ/Price Schedule (excel sheet) will be deemed to have been included in the prices of other items. The TOTAL for each Schedule/item and the Grand TOTAL as mentioned in BOQ/Price Schedule (excel sheet) shall be deemed to be the total price for executing the Facilities in complete accordance with the Contract, whether or not each individual item has been priced.

4.0 We undertake, if our bid is accepted, to commence work on the Facilities immediately upon your Notification of Award to us and to achieve Completion of Facilities and conduct Guarantee Test (as applicable) within the time specified in the Bidding Documents.

5.0 If our bid is accepted, we undertake to provide Advance Payment Security, Contract Performance Securities and securities for Deed(s) of Joint Undertaking (as applicable) in the form and amounts and within the times specified in the Bidding Documents.

6.0 Until a formal Contract is prepared and executed between us, this bid, together with your written acceptance thereof in the form of your Notification of Award shall constitute the formation of the contract between us.

7.0 We understand that you are not bound to accept our bid or any other bid you may receive.

8.0 We, hereby, declare that only the persons or firms interested in this proposal as principals are named here and that no other persons or firms other than those mentioned herein have any interest in this proposal or in the Contract to be entered into, if the award is made on us, that this proposal is made without any connection with any other person, firm or party likewise submitting a proposal, is in all respects for and in good faith, without collusion or fraud.

9.0 We have read the ITB clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on subcontracting to contractors from such countries. We certify that we/our Collaborator/JV Partner/Consortium member/Assignee are/is not from such a country or, if from such a country, have/has been registered with the Competent Authority and we will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

*Further, we certify that we do not have any TOT arrangement requiring registration with the competent authority.

Or

*Further, we certify that we have valid registration in respect of TOT arrangement with the competent authority to participate in this procurement.

We hereby certify that we fulfill all requirements in this regard and are eligible to be considered.

***We further confirm that evidence of valid registration by the Competent Authority for us/our Collaborator/JV Partner/Consortium member/Assignee, as applicable, is enclosed as Annexure…**....**

**** Bidder to strike-off, whichever is not applicable.***
***** Bidder to mention the Annexure no.***

10.0

(i) *We confirm that we fulfill the requirements of Local content for Class-I local supplier.*

The details of the location(s) at which the local value addition are as under:

Sl. No.	Description of Goods & Services	Details of the location(s) at which the local value addition is made

(ii) We confirm that we fulfill the requirements of Local content for Class-I local supplier for Item(s) mentioned at $[clause no. 41 of GTR in Technical Specifications], as applicable. We further confirm that in case such item(s) are bought-out for us, we shall source the same from Class-I local supplier only.

#We undertake that a certificate from the statutory auditor or cost auditor (in the case the bidder is a company) or from a practicing cost accountant or practicing chartered accountant (in respect of bidders other than companies) certifying the percentage of local content shall be submitted by us prior to submission of our last bill for payment.

##We further confirm that we are presently not debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make in India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department for Promotion of Industry and Internal trade (DPIIT)."

#[Applicable in packages with estimated value (excluding taxes & duties) exceeding INR 10 Crores.]

##In case a Bidder has been banned/debarred by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP- MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP), the same may be declared by Bidder by striking off para above and declaring the details of banning using additional sheets.

Bidder may also enclose additional sheets in similar format (if required), for providing details pertaining to local value addition.

***(i)** *We confirm that we fulfill the requirements of Local content for Class-I local supplier.*

OR

***(i)** *We confirm that we fulfill the requirements of Local content for Class-II local supplier.*

The details of the location(s) at which the local value addition is made are as under:

Sl.No.	Description of Goods & Services	Details of the location(s) at which the local value addition is made

(ii) *We confirm that we fulfill the requirements of Local content for Class -I local supplier for Item(s) mentioned at $[clause no. 41 of GTR in Technical Specifications], as applicable. We further confirm that in case such item(s) are bought-out for us, we shall source the same from Class-I local supplier only.*

#We undertake that a certificate from the statutory auditor or cost auditor (in the case the bidder is a company) or from a practicing cost accountant or practicing chartered accountant (in respect of bidders other than companies) certifying the percentage of local content shall be submitted by us prior to submission of our last bill for payment.

##We further confirm that we are presently not debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make in India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP)."

Bidder to strike-off whichever is not applicable

#[Applicable in packages with estimated value (excluding taxes & duties) exceeding INR 10 Crores.]

##In case a Bidder has been banned/debarred by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP- MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP), the same may be declared by Bidder by striking off para above and declaring the details of banning using additional sheets.

Bidder may also enclose additional sheets in similar format (if required), for providing details pertaining to local value addition.

Dated this.....day of. 20.....

Thanking you, we remain,

Yours faithfully,

Business Address:

Country of Incorporation (Province also to be indicated):

Phone No. :

Email:

ATTACHMENTS FOR
ENVELOPE-1 (TECHNO-COMMERCIAL)

ATTACHMENT - 1

BID SECURITY

BIDDER TO FURNISH BID SECURITY IN LINE WITH ITB CLAUSE 12

BIDDER TO FURNISH BID SECURITY IN LINE WITH ITB CLAUSE 12 AND AS PER FORMAT GIVEN AT SL. NO. 2 OF SECTION VII PART 2 OF 2. (FORMS & PROCEDURES)

ATTACHMENT – 1A

NOT APPLICABLE

POWER OF ATTORNEY

BIDDER TO ATTACH THE POWER OF ATTORNEY AND COPY OF BOARD RESOLUTION/ OTHER RELEVANT DOCUMENTS TO DEMONSTRATE THE AUTHORITY OF THE PERSON ISSUING THE POWER OF ATTORNEY IN ACCORDANCE WITH CLAUSE 8.1.1 (b) OF ITB

(NOTE: Bidders may note that no prescribed proforma has been enclosed for Power of Attorney)

Sample Format for Power of Attorney for signing of Bid (Sample Format)

Know all men by these presents, We, ... (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. / Ms ……(Name), son/daughter/wife of .....and presently residing at ……., who is presently employed with us and holding the position of....., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for the (Name of the Project **********) invited by NVVN including but not limited to signing and submission of all applications, Bids and other documents and writings, participate in Bidders' and other conferences and providing information / responses to NVVN, representing us in all matters before NVVN, signing and execution of all contracts including the Contract Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with NVVN in all matters in connection with or relating to or arising out of our Bid for the said Project and/or upon award thereof to us and/or till the entering into of the contract agreement with NVVN.

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

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

For ……..
(Signature, name, designation and address)
of person authorized by Board Resolution
(in case of Firms/Company)/Partner in case of Partnership Firms

WITNESS:
1.
2

(Qualification Data)

Dear Sirs,

We seek qualification under Clause 8.1.2(a) of Section ITB and Item No. 4.0 of Bid Data Sheet and our qualification data in support thereof is enclosed in the following Attachments:

1.	**Attachment 3A-1**	**:**	**Details Pertaining to Technical Qualification**
2.	**Attachment 3A-2**	**:**	**Details Pertaining to Financial Qualification**
3.	Attachment 3B	:	Details of Financial Capacity Status
4.	Attachment 3C	:	Details of Design, Engineering, manufacturing, Construction, Quality and testing Capabilities
5.	Attachment 3D	:	Details of manufacturing capacities & Plant Loading
6.	Attachment 3E	:	Present order book position
7.	Attachment 3F	:	Past Performance Data
8.	Attachment 3G	:	Data regarding Key Construction Personnel
9.	Attachment 3H	:	Manpower Loading Data
10.	Attachment 3I	:	Original Deed(s) of Joint Undertaking (if applicable)
11.	Attachment 3J	:	Brief write up regarding Project Management Organisation
12.	Attachment 3K	:	Provenness Criteria (if applicable)
13.	Attachment 3L	:	JV agreement (if applicable)

We further understand and agree that any misleading or false information furnished by us may result in summary rejection of our bid.

Note: The Bidder shall enclose relevant documents like copies of authentic purchase order, completion certificates, agreements etc. supporting the details/data provided in Attachments-3A to 3L.

ATTACHMENT - 3J

(PROJECT MANAGEMENT ORGANISATION)

Dear Sirs,

1.0 In line with Clause No. 8.1.2 (a) (v) of ITB, we furnish below the brief write-up***** in support of our established project management organization.

***** Bidder to use their own format for above details.

~~JV AGREEMENT~~

(NOT APPLICABLE)

ATTACHMENT – 3M

Deleted

(Conformity of Facilities)

BIDDDER TO ATTACH DOCUMENTARY EVIDENCE ESTABLISHING THAT THE FACILITIES OFFERED CONFORM TO THE BIDDING DOCUMENTS.

(Note: Bidders may note that no prescribed proforma has been enclosed for documentary evidence establishing that the facilities offered conform to bidding documents.)

(List of Special Maintenance Tools & Tackles)

Dear Sir,

We are furnishing below the list of special maintenance tools & tackles for various equipment under the subject package. The prices for these tools & tackles are already included in the lumpsum bid price. We further confirm that the list of Special Maintenance tools & tackles includes all the items specifically mentioned in scope of supply & services covered in Section-VI, Technical Specification of Bidding Document.

Notwithstanding what is stated above we further confirm that any additional special maintenance tools and tackles required for the equipment supplied under this package shall be furnished by us at no extra cost to the Employer.

Sl. No.	Description of Equipment	Description of Tools & Tackles	Unit	Qty

Note : Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

(Schedule of Erection Tools & Plant and Safety Equipments & Safety Personal Protective Equipments)

I. ERECTION TOOLS & EQUIPMENTS

We indicate herein below the erection tools & plant we have in our possession and the equipment we propose to bring to the Site, in case the contract is awarded to us.

Sl. No.	Type and Description of the Equipment	Number the Bidder has in Possession	Number the Bidder proposes to bring to the site
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

We hereby confirm that the quantity and type of Certain tools and equipment, we will employ for construction/erection, will not be less than those listed above and agree to bring more equipment, if so warranted, in the opinion of the Project Manager. Our proposed construction/erection equipment utilization plan indicating utilization dates and time duration of all major erection and construction equipment placed on site is enclosed at Annexure .....to this attachment.

Note : Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

II. Safety Equipments & Safety Personal Protective Equipments

The list of minimum suggestive **Safety Equipments & Safety Personal Protective Equipments** we propose to bring to the Site, in case the contract is awarded to us is indicated below:

Sl. No.	Minimum Suggested List of Safety Equipments and Safety Personal Protective Equipments	Minimum Quantity

We hereby confirm that the quantity and type of equipments, we will employ for construction/erection, will not be less than those listed above and agree to bring more equipment, if so warranted, in the opinion of the Project Manager.

Note: Continuation sheets of like size and format may be used as per Bidder's requirements and shall be annexed to this Attachment.

Date :
Place :

(Signature) .....
(Printed Name) .....
(Designation) .....
(Common Seal) .....

(List of Commissioning / Start-up Spares)

Dear Sir,

We indicate herein below the list of Commissioning/ Start-up Spares required for the subject package:

Sl. No.	Item Description	Unit	Quantity

We note that the above list is subject to your approval and we shall ensure the availability of the required quantity of Commissioning spares as approved by you without any additional cost to you before start-up/initial operation.

Note : Continuation sheets of like size and format to be furnished and shall be annexed to this Attachment.

(Information regarding Quality Assurance Program)

Dear Sirs,

We hereby provide the necessary information on Quality Assurance Program containing the overall Quality Management and procedures, which we propose to follow during various phases of execution of the Contract.

Note : Continuation sheets of like size and format, may be used as per Bidder's requirement and shall be annexed to this Attachment.

[Additional Information]

Dear Sirs,

We wish to provide the following additional information in our Bid. We confirm that no price component has been included in the additional information.

Sl. No.	Description of Information	Reference to Bidding Documents	Reference to bid Proposal

Note : Continuation sheets of like size and format may be used as per Bidder's requirements and annexed to this Attachment.

[Demonstration Parameter/ Guarantee Declaration]

As per Technical Specification Section VI of Bidding document

[Functional Guarantee]

As per Technical Specification Section VI of Bidding document

Appendix-I

..... PACKAGE FOR

BIDDING DOCUMENT NO. .....

INTEGRITY PACT

Between

NTPC Vidyut Vyapar Nigam Ltd (NVVN) (hereinafter referred to as "The PMC ")

and

. .....(hereinafter referred to

as "The Bidder/Contractor ")

and

…..... (hereinafter referred to as "JV Partner/ Consortium Members" (if applicable)

Preamble

The PMC invites the bids from all eligible bidders and intends to enter into Contract for with the successful bidder(s), as per organizational systems and procedures. The Employer values full compliance with all relevant laws and regulations, and the principles of economical use of resources, and of fairness and transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the PMC will appoint Independent External Monitor(s) (IEM), who will monitor the bidding process and the execution of the Contract for compliance with the principles mentioned above.

Section 1 Commitments of the Employer

1. The PMC Commits itself to take all measures necessary to prevent corruption and to observe the following principles in this regard:-

   a) No employee of the PMC , either in person or through family members including relatives, will in connection with the bidding for or the execution of a Contract, demand or accept a promise for or accept for him/herself or for a third person, any material or immaterial benefit to which he/she is not legally entitled to.

   b) The PMC shall, during the bidding process treat all Bidders with equity and reason. The PMC will, in particular, before and during the bidding process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the bidding process or the Contract execution.

   c) The PMC will exclude from the process all known prejudiced persons.

2. If the PMC obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act or if there be a substantive suspicion in this regard, the PMC will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 Commitments and Undertakings by the Bidder/Contractor

1. The Bidder/Contractor commits and undertakes to take all measures necessary to prevent malpractices & corruption. He commits himself to observe the following principles during his participation in the bidding process and during the execution of the contract:

   a) The Bidder/ Contractor undertakes not to, directly or through any other person or firm offer, promise or give or influence to any employee of the ~~Employer~~ PMC associated with the bidding process or the execution of the contract or to any third person on their behalf any material or immaterial benefit which he/she is not legally entitled, in order to obtain in exchange any advantage of any kind whatsoever during the bidding process or during the execution of the contract.

   b) The Bidder/ Contractor undertake not to enter into any undisclosed agreement or understanding, whether formal or informal with other Bidders. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other action to restrict competitiveness or to introduce cartelization in the bidding process.

   c) The Bidder/Contractor undertakes not to commit any offence under the relevant Anti-corruption Laws of India; further the Bidder/Contractor will not use improperly, any information or document provided by the ~~Employer~~ PMC as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically for purposes of competition or personal gain and will not pass the information so acquired on to others.

   d) The Bidder/ Contractor, when presenting his bid, undertakes to disclose any and all payments made, or is committed to or intends to make to agents, brokers or any other intermediaries in connection with the bidding process and / or award of the contract.

   e) The Foreign Bidder/ Contractor, when presenting his bid, undertakes to disclose the name and address of agents and representative in India. Further, Indian Bidder/ Contractor when presenting his bid, undertakes to disclose the name and address of its foreign principals or associates.

2. The Bidder/ Contractor will not instigate and allure third persons/parties to commit offences outlined above or be an accessory to such offences.

Section 3 Disqualification from Bidding Process and Exclusion from Future Contracts

1. If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of any provisions of Section 2 so as to put his reliability or credibility as Bidder into question, the PMC shall be entitled to disqualify the Bidder(s)/ Contractor(s) from the bidding process or to terminate the contract, if signed on that ground.

2. If the Bidder/ Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the PMC shall be entitled to exclude including blacklist and put on holiday the Bidder/ Contractor for any future tenders/contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the PMC taking into consideration the full facts and circumstances of each case particularly taking into account the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a period not exceeding two (02) years.

3. A transgression is considered to have occurred if the PMC after due consideration of the available evidence concludes that no reasonable doubt is possible.

4. The Bidder with its free consent and without any influence agrees and undertakes to respect and uphold the PMC's absolute rights to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

5. Subject to full satisfaction of the PMC , the exclusion of Bidder/ Contractor could be revoked by the PMC if the Bidder/ Contractor can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system in his organization.

Section 4 Compensation for Damages including Forfeiture of Earnest Money Deposit/ Security Deposit/ Performance & Advance Bank Guarantees

1. If the PMC has disqualified the Bidder/ Contractor from the bidding process or has terminated the contract pursuant to Section 3, the PMC shall forfeit the Earnest Money Deposit/Bid Security, encash Contract Performance Bank Guarantees in addition to excluding the bidder from the future award process and terminating the contract.

2. In addition to 1 above, the PMC shall be entitled to take recourse to the relevant provisions of the contract related to Termination of Contract due to Contractor's Default.

Section 5 Previous Transgressions

1. The Bidder swears on oath that no previous transgression impinging on anti-corruption principles / any malpractice as mentioned in Section-2 has occurred in the last three years immediately before signing of this Integrity Pact, with any other company / any Public Sector Enterprise/ Undertaking in India / any Government Department in India.

2. If the Bidder makes incorrect statement on previous transgression as mentioned above in para 1, Bidder can be disqualified from the bidding process or the contract, if already awarded, can be terminated on this ground

Section 6 Company Code of Conduct

Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.

Section 7 Independent External Monitors (IEM)

1. The PMC will appoint competent and credible Independent External Monitor for this Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The IEMs are not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He shall report to CEO of the PMC or a person authorized by him.

3. The Bidder/Contractor accepts that the IEMs have the right to access without restriction to all Project documentations of the PMC including that provided by the Contractor. The Contractor will also grant the IEMs, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his Project Documentations. The same is applicable to Subcontractors. The IEMs are under contractual obligation to treat the information and documents of the Bidder / Contractor / Sub-Contractors/ JV partners/Consortium member with confidentiality.

4. The PMC will provide to the IEMs sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Employer and the Contractor. The parties offer to the IEMs the option to participate in such meetings.

5. As soon as the IEMs notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Employer (CEO of the PMC or a person authorized by him) and request to discontinue or to take corrective action, or to take other relevant action. The IEMs can in this regard submit non-binding recommendations. Beyond this, the IEMs has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, Independent External Monitor shall give an opportunity to the bidder/contractor to present its case before making its recommendations to the PMC .

6. The IEMs will submit a written report to CEO of the PMC or a person authorized by him within 30 days from the date of reference or intimation to him by the Employer and, should the occasion arise, submit proposals for correcting problematic situations.

7. The Bidder / Contractor accepts that they shall not approach courts while the matter / complaint / dispute has been referred to the IEM in terms of this pact and they shall await IEM's decision before approaching any Court.

8. If the IEMs have reported to CEO of the PMC or a person authorized by him a substantiated suspicion of an offence under relevant IPC/ PC Act, and he has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

9. The word " IEM" will include Singular or Plural.

Section 8 Pact Duration

This Pact comes into force from the date of signing by all the parties. It shall expire for the Contractor 12 months after the last payment under the respective Contract, and for all other unsuccessful bidders 6 months after the Contract has been awarded.

Section 9 Miscellaneous Provisions

1.0 This Pact is subject to Indian Law. The place of performance and jurisdiction shall be New Delhi.Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

2. The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

3. If the Contractor is a JV partnership / Consortium, this agreement must be signed by all the partners of JV / Consortium Partners as the case may be.

The Parties hereby sign this Integrity Pact at .....on this ..... day of..... 20

Employer	Bidder/ Contractor	Joint Venture Partner(s)/ Consortium member(s) (As Applicable)
Witness	Witness	Witness
1. _____	1.	1.
2. _____	2.	2.

INTEGRITY PACT

Between

Cement Corporation of India Limited (CCI) hereinafter referred to as "The Principal", and ---------- ---------- hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for ---------- The Principal value full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s). In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above. Section 1 - Commitments of the Principal

1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b) The Principal will, during the tender process treat all Bidder(s) with equity and reason, The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

c) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ contractor(s) :

(1) The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly; for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any, Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers' shall be disclosed by the bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in 'Indian Rupees only.

e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract

f) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

g) Bidder(s)/Contractor(s) signing IP shall not approach the court while Representing the matters to IEMs and he/she will await their decision in the matter.

h) In case of a joint venture, all the partners of the joint ventures to signed the IP

i) Any violation of Integrity Pact would entail disqualification of the Bidders and exclusion from future business dealings, as per the existing Provision of GFR, 2017, PC act, 1988 and other Financial Rules/Guidelines etc. as may be applicable to the origination concerned.

j) In the event of any dispute between the management and the contractor Relating to those contracts where integrity pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required the Organizations may adopt any mediation rule for this purpose. In case, the dispute remains unresolved even after mediation by the panel Of IEMs, the organizations may take further action as per the terms & Conditions of the contract.

Section 3-Disqualification from tender process and exclusion from future contracts :

(1) If the Bidders(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed for such reason.

(2) If the Bidder/Contractor has committed a serious transgression through a violation of sector-2 such as to put his reliability or credibility into question, the principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors with the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

(4) A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 - Compensation for Damages :

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2 If the Principal has terminated the contract according to Section 3, or if the Principal MM entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 - Previous transgression :

(I) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the anti corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

Section 6- Equal treatment of all Bidders/Contractors/Sub-contractors :

(1) The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors the commitment consistent with this Integrity Pact, and to submit it to the Principal before contract signing.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section-7- Criminal charges against violating bidder(s)/Contactor(s)/Subcontractors:

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 -Independent External Monitor/Monitors :

(1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman, CCI.
(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all tender documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
(4) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non- binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the independent External Monitor shall give an opportunity to the Bidder/Contractor to present its case before making its recommendations to the Principal.
(5) The Monitor will submit a written report to the Chairman, CCI within 5 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
(6) Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on the CCI Board.
(7) If the Monitor has reported to the Chairman CCI, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman, CCI has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
(8) The word 'Monitor/ would include both singular and plural.
(9) Independent External Monitor shall be required to maintain confidentially of the information acquired and gathered during their tenure/role as independent Monitor. Any breach in this regard would be subject to the legal judicial system of India.
(10) Independent External Monitor(s) shall be required to furnish an Undertaking and disclose before taking any assignment that he/she has no interest in the matter or connected with the party (Bidder/Contractor) in any manner.

Section 9 — Pact duration :
This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract and for all other bidders 6 months after the contract has been awarded. If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairman of CCI. **Section 10 — Other provisions :**
(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
((3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
(For and on behalf of the Principal) (For and on behalf of Bidder/Contractor)
(Office Seal) (Office Seal)
Place _____
Date _____
Witness 1 : Witness 2 :
(Name & Address) _____ (Name & Address) _____
_____ _____ _____ _____

ATTACHMENT-10

(Details of Foreign Principals of Indian Bidders)

Bidder's Name and Address: To

Dear Sirs,

We here by declare the details of our foreign principals as below:

Sl. No.	*Name*	*Detailed Address*	*Relationship with Bidder*
1.			
2.			
3.			
4.			
5.			

ATTACHMENT-12

(Technical Data Sheet)

AS PER TECHNICAL SPECIFICATION

ATTACHMENT-13

NAME OF CONTRACT: DEVELOPMENT OF 2 X 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI -TANDUR.

BIDDING DOCUMENT NO.: NVVN/C&M/RE-384/2025-26

(Declaration on Local Content for granting of purchase preference)

(To be submitted online with Techno-Commercial Bid**)**

***(i)** *We confirm that we fulfill the requirements of Local content for Class-I local supplier.*

The details of the location(s) at which the local value addition is made are as under

Sl. No.	Description of Goods & Services	Details of the location(s) at which the local value addition is made

OR

*__(i)__ *We confirm that we fulfill the requirements of Local content for Class-II local supplier.*

The details of the location(s) at which the local value addition is made are as under:

Sl. No.	Description of Goods & Services	Details of the location(s) at which the local value addition is made

We confirm that we fulfill the requirements of Local content for Class-I local supplier for Item(s) mentioned in Technical Specifications, as applicable. We further confirm that in case such item(s) are bought-out for us, we shall source the same from Class-I local supplier only.

#*We undertake that a certificate from the statutory auditor or cost auditor (in the case the bidder is a company) or from a practicing cost accountant or practicing chartered accountant (in respect of bidders other than companies) certifying the percentage of local content shall be submitted by us prior to submission of our last bill for payment.*

##*We further confirm that we are presently not debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make in India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP)."*

Bidder to strike-off whichever is not applicable

[#]*[Applicable in packages with estimated value (excluding taxes & duties) exceeding INR 10 Crores.]*

[##]*In case a Bidder has been banned/debarred by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP- MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP), the same may be declared by Bidder by striking off para above and declaring the details of banning using additional sheets.*

Bidder may also enclose additional sheets in similar format (if required), for providing details pertaining to local value addition.

(CHECKLIST FOR TECHNO-COMMERCIAL BID)

Bidder's Name and Address :

To
Contract Services
NTPC Ltd.,
Noida - 201301

Dear Sirs,

Check List of documents to be submitted for Envelop-I (Techno-Commercial) Bid.

Sl.	Details of Checks	Enclosed : Yes / No
1.	BID FORM (TECHNO-COMMERCIAL BID)	.....
2.	ATTACHMENT-1	
3.	ATTACHMENT-2	
4.	ATTACHMENT-3 (INCLUDING QR DETAILS & DEED OF JOINT UNDERTAKING, IF APPLICABLE)	.....
5.	ATTACHMENT-4 AND ATTACHMENT-4A	.....
6.	ATTACHMENT-5	.....
7.	ATTACHMENT-6	.....
8.	ATTACHMENT-7	.....
9.	ATTACHMENT-8/8A	.....
10.	ATTACHMENT-9	.....
11.	ATTACHMENT-10	.....
12.	ATTACHMENT-11 (NA)	.....
13.	ATTACHMENT-12	.....
14.*	ATTACHMENT-13	.....

Date :

Place :

(Signature).....

(Printed Name).....

(Designation).....

ATTACHMENTS FOR
ENVELOPE-2 (PRICE)

Attachment-1P

(Declaration regarding Import Content in Ex-works price of Schedule-2)

Dear Sirs,

Declaration regarding Import Content included in Schedule-2 of our bid price

The details of Import Content included in Schedule-2 of our bid price are as follows:

Sl.No.	Description of Items	Quantity	*Value (included in our Bid Price)

These details are furnished for the purpose of issuance of the Required Certificate as per ITB Clause 10.6. We further confirm that we shall be solely responsible for availing benefits (If Available).

*** Please state the currency and fill in the amount in figures and words.**

Date :

Place :

(Signature).....

(Printed Name).....

(Designation).....

(Common Seal).....

ATTACHMENT-2P

(Declaration regarding Customs Duty Benefits for Import of Construction Equipment)

Dear Sir,

1. We confirm that we are solely responsible for obtaining the Customs Duty Benefits for import of Construction Equipment which we have considered in our bid and in case of failure to receive such benefits, Employer will not compensate us in any manner whatsoever.

2. We further confirm that we will not claim for adjustment in Contract Price on account of variation in or withdrawal of Custom Duty Benefits for Import of Construction Equipment.

3. We are furnishing below the information required by the Employer for issue of relevant Certificates in terms of the Customs Act & Notification of the Govt. of India:

(A) *CIF Value of Construction Equipment to be imported by the Bidder including sub-contractor(s) of the Bidder.

.....

.....

.....

We further confirm that aforesaid CIF value has not been included in Attachment-1P.

*** Please state the currency and fill in the amount in figures and words.**

B. Description and quantities of the Construction Equipment to be imported by the Bidder / sub-contractor(s) for deployment to site under the p a c k a g e .

Sl.	Description of item to be imported	Quantity (No.)

C. **We confirm that the Construction Equipment being imported as per 'B' above shall be deployed at the Project Site for the purpose of execution of Package as per bidding document No. ……..**

Note : **Continuation sheets of like size and format may be used as per Bidders requirements and shall be annexed to this Attachment.**

ATTACHMENT – 3P

[FUNCTIONAL GUARANTEES]

Dear Sirs

We declare that the ratings, capacities and performance figures of the equipment furnished by us under the package are guaranteed. We further declare that in the event of any deficiencies in meeting the guaranteed figures indicated below as established after conducting the guarantee tests, you may at your discretion accept the equipment/system after assessing the liquidated damages as specified in Section-VI (Technical Specifications) of the Bidding Documents, or reject the equipment/system and recover payments already made.

S.No.	Guaranteed Parameters	Guaranteed Figures

[As per Technical Specification]

ATTACHMENT-4P

(Price Adjustment Data)

(NOT APPLICABLE)

(CHECKLIST FOR PRICE BID)

Bidder's Name and Address :

To
Contract Services
NVVN Ltd.,
Noida - 201301

Dear Sirs,

Check List of documents to be submitted for Envelop-II (Price) Bid.

Sl.	Details of Checks	Enclosed : Yes / No	No.
1.	ATTACHMENT-1P		
3.	ATTACHMENT-2P		
4.	ATTACHMENT-3P		
5.	ATTACHMENT-4P		
6.*	……		

Date :

Place :

(Signature).....

(Printed Name).....

(Designation).....

***C&M coordinator to add Other Attachment (s), if any, specified in BDS.**

BIDDING DOCUMENTS

FOR

DEVELOPMENT OF 2 x 3 MW GROUND MOUNTED SOLAR POWER PROJECT FOR CCI LIMITED AT CCI - TANDUR

SECTION – VII

BOOK 2 OF 2

BIDDING DOCUMENT NO.: NVVN/C&M/RE-384/2025-26

(This document is meant for the exclusive purpose of bidding against this Bid Document No. / Specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued).

TABLE OF FORMS AND PROCEDURES

Sl.No.	Description
	Section-VII (Part 1 of 2)
1a.	Techno-Commercial Bid (Envelope-1) (Bid Form along with Attachments)
1b.	Price Bid (Envelope-2) (Attachments for Envelope-II and Price Schedules)
	Section-VII (Part 2 of 2)
2.	Bid Security Form - Bank Guarantee
2a.	Form of Insurance Surety Bond towards Bid Security
2b.	Bid Security Form - Bank Guarantee - **NOT APPLICABLE**
	in case of Bid from Joint Venture
2b.	Bid Security Form - Letter of Credit - **NOT APPLICABLE**
3	(a) Form of Notification by the Employer to the Bidder - **NOT APPLICABLE**
	(b) Form of Sight Draft - **NOT APPLICABLE**
4.	Forms of Notification of Award
5.	Form of Contract Agreement
6.	Performance Security Form
6a.	Performance Security Form in case of Contract awarded to Joint Venture
7(i).	Bank Guarantee Form for Advance Payment (Supply Ex-Works)
7(ii).	Bank Guarantee Form for Advance Payment (Installation Services)
7(iii).	Bank Guarantee Form for Advance Payment (in case of Contract awarded to Joint Venture)

Sl. No.	Description
8.	Form of Completion Certificate
9.	Form of Operational Acceptance Certificate
10.	Form of Trust Receipt
11.	Forms of Indemnity-cum-Undertaking Agreements (2 Nos.)
12.	Form of Authorization Letter
13.	Form of Deed of Joint Undertaking
14.	Form of Bank Guarantee/Insurance Surety Bond by Associate/ Collaborator
15.	Form of Joint Venture Agreement
16.	Form of Bank Guarantee/Insurance Surety Bond Verification Check List
17.	Form of Extension of Bank Guarantee/Insurance Surety Bond
18.	Form of Indemnity-cum-Undertaking Agreement (for Removal of Surplus Material and scraps)
19.	Form of Contract Closing Certificates
20.	Declaration of absence of Conflict of Interest with Conciliation Committees of Independent Experts (CCIE)
21.	Declaration of Absence of Conflict of Interest with Independent Engineer (IE)
22.	Electronic Fund Transfer form
23.	BG forwarding letter from Bank to Unified Treasury in Bank’s letterhead

2. BID SECURITY FORM

Bank Guarantee

**(To be stamped in accordance with Stamp Act,
if any, of the Country/ state of the issuing Bank)**

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

To :

NVVN Ltd.
[PMC's Name and Address]

Dear Sirs,
In accordance with Invitation for Bids under your Bid Document No ....., M/s .....(***) ..... having its Registered/Head Office at ….....hereafter called the 'Bidder') wish to participate in the said bid for *[Name ofPackage]*.....

As an irrevocable bank guarantee against Bid Security for an amount of .....(*).....valid for ..... days from.....(**) ..... required to be submitted by the Bidder as a condition precedent for participation in the said bid which amount is liable to be forfeited on the happening of any contingencies mentioned in the Bidding Documents.

We, the .....*[Name & address of the Bank]*….....having our Head Office at….....(#).....guarantee and undertake to pay immediately on demand by.....*[Name of the PMC]* (hereinafter called the 'PMC').....the amount of .....(*)..... without any reservation, protest, demand and recourse. Any such demand made by the 'PMC' shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

This Guarantee shall be irrevocable and shall remain valid up to .....(@)..... If any further extension of this guarantee is required, the same shall be extended to such required period (not exceeding one year) on receiving instructions from M/s.....(***) ..... *[Bidder's Name]*..... on whose behalf this guarantee is issued.

In witness whereof the Bank, through its authorised officer, has set its hand and stamp on this.....day of.....20.....at.....

.....
(Signature)

.....
(Name)

.....
(Designation with Bank Stamp)

Authorised Vide

Power of AttorneyNo.....

Date.....

NOTE : 1. (*) The amount shall be as specified in the bidding documents.

(**) This shall be the date of opening of bids.

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

(@) This date shall be forty five (45) days beyond the validity of bid.

2. The Bank Guarantee (BG) shall be from a Bank as per provisions of the bidding documents.

3. The BG should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG is executed, whichever is higher. The Stamp Paper/e-Stamp paper shall be purchased in the name of Bidder/Bank issuing the guarantee.

4. While getting the Bank Guarantee issued, Bidders are required to ensure compliance to the points mentioned in Bank Guarantee Verification Check List in the bidding documents. Bidders are required to fill up this Check List and enclose the same along with the Bank Guarantee.

5. In case, Bank Guarantee is getting issued from State Bank of India, Bidder to take note of NTPC letter ref. NTPC/FC/CS/BG/01 dated 03.09.2014 and SBI letter ref. CAG-I/AMT-1/2014-15/370 dated 04.09.2014 (attached with Section-III of Bidding Documents.

2a. Form of Insurance Surety Bond towards Bid Security

(To be stamped in accordance with Stamp Act of India)

Insurance Surety Bond No. ….....

Date.....

To
[PMC's Name and Address]

Dear Sirs,

In accordance with Invitation for Bids under your Bid Document No. ....., M/s.....[*Bidder's Name*]..... having its Registered/Head Office at ..... (hereinafter called the 'Bidder') wish to participate in the said bid for *[Name of Package]* ..... As an irrevocable Insurance Surety Bond against Bid Security for an amount of.....(*) ..... valid for..... days from .....(**).....required to be submitted by the Bidder as a condition precedent for participation in the said bid which amount is liable to be forfeited on the happening of any contingencies as mentioned under the Bidding Documents.

We, the ..... *[Name & address of the Insurer]* .....having our Head Office at.....(#) ..... guarantee and undertake to pay immediately on demand by NTPC Vidyut Vyapar Nigam Limited *(hereinafter called the 'PMC')* the amount of .....(*).....without any reservation, protest, demand and recourse. Any such demand made by the 'Employer' shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder and/or any right/remedy available to the bidder in terms thereof.

This Insurance Surety Bond shall be unconditional as well as irrevocable and shall remain valid upto .....(@)..... If any further extension of this Insurance Surety Bond is required, the same shall be extended to such required period (not exceeding one year) on receiving instructions from M/s ....*[Bidder's Name] .....*on whose behalf this Insurance Surety Bond is issued.

In witness where of the Insurer, through its authorised officer, has set its hand and stamp on this.....day of.....20.....at..... .....

(Signature)
.....
(Name)
.....
(Designation with Insurer Stamp)
Authorised Vide
Power of Attorney No.....
Date.....

NOTE : 1. (*) The amount shall be as specified in the Bid Data Sheets.

(**) This shall be the date of opening of Techno-Commercial bids.

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

(@) This date shall be forty five (45) days after the last date for which the bid is valid.

2. The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI) as amended from time to time.

3. The Employer shall be the Creditor, the Bidder shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

4. The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

5. While getting the Insurance Surety Bond issued, Bidders are required to ensure compliance to the points mentioned in Form of Bank Guarantee/Insurance Surety Bond Verification Check List enclosed in this Section of Bidding Documents. Further, Bidders are required to fill up this Form and enclose the same with the Insurance Surety Bond.

2b. Bid Security Form

(IN CASE OF BID FROM JOINT VENTURE) – NOT APPLICABLE

FORM No. 2 (b)

BID SECURITY - LETTER OF CREDIT

- NOT APPLICABLE -

3. (a) FORM OF NOTIFICATION BY THE EMPLOYER TO BIDDER

(b) FORM OF SIGHT DRAFT

3a. FORM OF NOTIFICATION BY THE EMPLOYER TO THE BIDDER

- NOT APPLICABLE -

3b. FORM OF SIGHT DRAFT

- NOT APPLICABLE -

4. FORM OF NOTIFICATION OF AWARD

4a. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT' FOR SUPPLY OF PLANT AND EQUIPMENT

NOTE: ***INSTRUCTIONS INDICATED IN ITALICS IN THIS NOTIFICATION OF AWARD ARE TO BE TAKEN CARE OF BY THE ISSUING AUTHORITY.***

Ref. No. : Date:
..... (Contractor's Name & Address) .....
.....
.....
..... Attn: Mr. .....

Sub: Notification of Award of Contract for Supply of.....*(Package Name)* ..... as per Bidding Document No.....

Dear Sir,

1.0 This has reference to the following:

(i) Our Invitation for Bids (IFB) No. .....dated.....

(ii) Bidding Documents for the subject package issued to you vide our letter no. ..... dated..... comprising the following :

.....(List out all the Sections/Volumes of the Bidding Documents along with Tender Drawings etc. as issued to the bidder).....

Errata/Amendment No..... to..... ***(Name of Section/Volume of the Bidding Documents to which Errata/Amendment pertains). .....*** issued to you vide our letter no. ..... dated .....

(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)

(iii) Clarifications furnished to you on the Bidding Documents vide our letter no..... dated ..... based on the query raised by **you/one of the prospective bidders.** ***(Use as applicable)***

(Applicable only if any clarification to the Bidding Documents has been issued subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER

CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO THE DATE OF BID OPENING)

(iv) Your Proposal for the subject package submitted vide your letter No. ..... dated..... **and its modification vide letter no. ..... dated ..... *(Delete if not applicable).***

(v) Our Fax message/letter No. ..... dated..... regarding extension of validity of bid and that of the Bank Guarantee towards Bid Security (If Applicable)

(vi) Our Fax message/letter No. ..... dated..... inviting you for post bid discussions.

(vii) Post bid discussions and meetings we had with you from ..... to ..... resulting into the following Minutes of Meeting enclosed herein with this Notification of Award :

(a) Minutes of Meeting regarding Commercial issues (APPENDIX)
(b) Minutes of Meeting on Technical issues (APPENDIX.....) (c) Minutes of Meeting regarding Work Schedule (APPENDIX .....)
(d) Minutes of Meeting regarding Quality Assurance Aspects (APPENDIX- .....)

2.0 We confirm having accepted your proposal submitted vide letter no. ..... dated ..... **and its modification vide letter no. ..... dated *(Delete if not applicable)*** read in conjunction with all the specifications, terms & conditions of the Bidding Documents, **Your subsequent letters *(Use if relevant)*** and agreed Minutes of Meeting referred to in para 1.0 above and award on you the Contract for the work of .....***(Indicate brief Scope of Work) .....*** of..... ***(Name of Package)*** .....for ***(Name of project).***..... as per Specification No. :..... (hereinafter referred to as the 'First Contract').

3.0 We have also notified you vide our Notification of Award No..... dated ..... for award of Second Contract on you for the work of ..... ***(Indicate brief scope of workof the Second Contract)*** ..... complete ..... ***(Name of Package) .....*** for ..... ***(Name of Project) .....***as per Bidding Document No..... (hereinafter referred to as the 'Second Contract').

3.1 We have also notified you vide our Notification of Award No. ..... dated ..... for award of Third Contract on you for the work of ..... ***(Indicate brief scope of work of the Third Contract)*** ..... complete ..... ***(Name of Package).....*** for ..... ***(Name of Project) .....*** as per Bidding Document No..... (hereinafter referred to as the 'Third Contract').

3.2 You shall also be fully responsible for the works to be executed under the 'Second Contract' and/or "Third Contract" and it is expressly understood and agreed by you that any breach under the 'Second Contract'" shall automatically be deemed as a breach of this 'First Contract' and vice- versa and any such breach or occurrence or default giving us a right to terminate the 'Second Contract' and/or 'Third Contract' recover damages thereunder, shall give us an absolute right to terminate this Contract and/or recover damages under this 'First Contract' as well and vice-versa. However, such breach or default or occurrence in the 'Second Contract' shall not automatically relieve you of any of your responsibilities/obligations under this 'First Contract'. It is also expressly understood and agreed by you that the equipment/materials to be supplied by you under this Contract when installed and commissioned under the 'Second Contract' and operated and maintained by you under 'Third Contract' shall give satisfactory performance in accordance with the provisions of the Contract

4.0 The total Contract Price for the entire scope of work under the Contract shall be ***.....(Specify the amount and currency).....*** as per the following break up :

(i)	**Ex-manufacturing works/place of despatch price (both in India)** for Main Equipment	**.....**
(ii)	**Ex-manufacturing works/place of despatch price (both in India)** for Mandatory spares	**.....**
(iii)	~~Type test~~ charges ***(Delete if not applicable)***	**.....**
	TOTAL (i + ii + iii)	.....

(..... ***(Specify the total amount in words).....***)

5.0 You shall prepare and finalize the Contract Documents for signing of the formal Contract Agreement and shall enter into the Contract Agreement with us, as per the proforma enclosed with the Bidding Documents, on non-judicial stamp paper of appropriate value within..... ***(Specify)*** days from the date of this Notification of Award.

6.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including all the enclosed Appendices, by the authorised signatory of your company as a proof of your acknowledgement and confirmation.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,

for and on behalf of
.....***(Name of the Employer).....***

(Authorised Signatory)

Encl.: As above.

3b. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT' FOR INSTALLATION OF PLANT AND EQUIPMENT, CIVIL AND ALLIED WORKS ETC.

NOTE : ***INSTRUCTIONS INDICATED IN ITALICS IN THIS NOTIFICATION OF AWARD ARE TO BE TAKEN CARE OF BY THE ISSUING AUTHORITY.***

Ref. No. : Date:

..... ***(Contractor's Name & Address)***.....
.....
.....
..... Attn: Mr.....

Sub: Notification of Award of Contract for Inland Transportation, Insurance, Installation, Civil and Allied Works etc., Testing & Commissioning and Guarantee Tests of ..... *(Package Name)* ..... as per Bidding Document No.....

Dear Sir,

1.0 This has reference to the following:

(i) Our Invitation for Bids (IFB) .....dated.....

(ii) Bidding Documents for the subject package issued to you vide our letter no. ..... dated..... comprising the following :

.....(List out all the Sections/Volumes of the Bidding Documents along with Tender Drawings etc. as issued to the bidder).....

Errata/Amendment No..... to..... ***(Name of Section/Volume of the Bidding Documents to which Errata/Amendment pertains) .....*** issued to you vide our letter no. .....dated.....

(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)

(iii) Clarifications furnished to you on the Bidding Documents vide our letter no..... dated ..... based on the query raised by **you/one of the prospective bidders.** ***(Use as applicable)***

(Applicable only if any clarification to the Bidding Documents has been issued subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF

BIDDING DOCUMENTS UP TO THE DATE OF BID OPENING)

(iv) Your Proposal for the subject package submitted vide your letter No. ..... dated ..... **and its modification vide letter no. ..... dated .....** ***(Delete if not applicable).***

(v) Our Fax message/letter No. ..... dated..... regarding extension of validity of bid and that of the Bank Guarantee towards Bid Security (If Applicable).

(vi) Our Fax message/letter No. ..... dated..... inviting you for post bid discussions.

(vii) Post bid discussions and meetings we had with you from..... to ..... resulting into the following Minutes of Meeting enclosed herein with this Notification of Award :

(a) Minutes of Meeting regarding Commercial issues (APPENDIX.....) (b) Minutes of Meeting on Technical issues (APPENDIX.....)

(b) Minutes of Meeting regarding Work Schedule (APPENDIX - .....) (d) Minutes of Meeting regarding Quality Assurance Aspects (APPENDIX-.)

2.0 We confirm having accepted your proposal submitted vide letter no..... dated ..... **and its modification vide letter no.....dated ..... *(Delete if not applicable)*** read in conjunction with all the specifications, terms & conditions of the Bidding Documents, **Your subsequent letters *(Use if relevant)*** and agreed Minutes of Meeting referred to in para 1.0 above and award on you the Contract for the work of .....***(Indicate brief Scope of Work) ..... of ..... (Name of Package)*** ..... for ***(Name of project)***..... as per Bid Document No. : ..... (hereinafter referred to as the 'Second Contract').

3.0 We have also notified you vide our Notification of Award No. ..... dated ..... for award of 'First Contract' on you for the work of.....***(Indicate brief scope of work of the First Contract)*** ..... complete ..... ***(Name of Package) .....*** for ..... ***(Name of Project) .....*** as per Bidding Document No..... (hereinafter referred to as the 'First Contract').

3.1 We have also notified you vide our Notification of Award No..... dated ..... for award of 'Third Contract' on you for the work of ..... (Indicate brief scope of work of the Third Contract) ..... complete .....(Name of Package) ..... for ..... (Name of Project) ..... as per Bidding Document No..... (hereinafter referred to as the 'Third Contract').

3.2 You shall also be fully responsible for the works to be executed under the 'First Contract' and it is expressly understood and agreed by you that any breach under the 'First Contract' shall automatically be deemed as a breach of this 'Second Contract' and vice-versa and any such breach or occurrence or default giving us a right to terminate the 'First Contract' and/or recover damages thereunder, shall give us an absolute right to terminate this Contract and/or recover damages under this 'Second Contract' as well and vice-versa. However, such breach or default or occurrence in the 'First Contract' shall not automatically relieve you of any of your responsibilities/obligations under this 'Second Contract'. It is also expressly understood and agreed by you that the equipment / materials to be supplied by you under the 'First Contract' when installed and commissioned under this 'Second Contract' shall give satisfactory performance in accordance with the provisions of the Contract.

4.0 The total Contract Price for the entire scope of work under the Contract shall be ***..... (Specify the amount and currency) .....*** as per the following break up :

(i)	Inland transportation and inland transit insurance charges for Main Equipment	.....
(ii)	Inland transportation and inland transit insurance charges for Mandatory spares	.....
(iii)	Unloading and handling at site, storage, erection, insurance covers other than inland transit insurance, testing, commissioning and conducting Guarantee Tests Charges	.....
(iv)	Civil and Allied Works etc.	.....
(v)	Payment related to safety aspect	
	TOTAL (i + ii + iii + iv+ v)	.....

(.....***(Specify the total amount in words) .....***)

5.0 You shall prepare and finalise the Contract Documents for signing of the formal Contract Agreement and shall enter into the Contract Agreement with us, as per the proforma enclosed with the Bidding Documents, on non-judicial stamp paper of appropriate value within.....***(Specify).*** days from the date of this Notification of Award.

6.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including all the enclosed Appendices, by the authorised signatory of your company as a proof of your acknowledgement and confirmation.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,
for and on behalf of
.....***(Name of the*** Employer***).....***

(Authorised Signatory)

Encl.: As above.

3c. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT FOR OPERATION & MAINTENANCE WITH AMC OF COMPLETE SOLAR PV PLANT

NOTE: INSTRUCTIONS INDICATED IN ITALICS IN THIS NOTIFICATION OF AWARD ARE TO BE TAKEN CARE OF BY THE ISSUING AUTHORITY.

Ref. No. : Date:
..... (Contractor's Name & Address).....
.....
.....
..... Attn: Mr. .....

Sub: Notification of Award of Contract for Operation & Maintenance with AMC of complete Solar PV plant for a period of _____ years from the date of successful completion of commissioning of..... (Package Name) ..... as per Bidding Document No.....

Dear Sir,

1.0 This has reference to the following:

(i) Our Invitation for Bids (IFB) No. .....dated.....

(ii) Bidding Documents for the subject package issued to you vide our letter no. ..... dated..... comprising the following :

.....(List out all the Sections/Volumes of the Bidding Documents along with Tender Drawings etc. as issued to the bidder).....

Errata/Amendment No..... to..... **(Name of Section/Volume of the Bidding Documents to which Errata/Amendment pertains). .....** issued to you vide our letter no. ..... dated .....

(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)

(iii) Clarifications furnished to you on the Bidding Documents vide our letter no..... dated ..... based on the query raised by **you/one of the prospective bidders. (Use as applicable)**

(Applicable only if any clarification to the Bidding Documents has been issued subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO THE DATE OF BID OPENING)

(iv) Your Proposal for the subject package submitted vide your letter No. .....

dated..... **and its modification vide letter no. ..... dated .....(Delete if not applicable).**

(v) Our Fax message/letter No. ..... dated ..... regarding extension of validity of bid and that of the Bank Guarantee towards Bid Security.

(Applicable only if any extension has been sought subsequently)

(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY THER CORRESPONDENCE MADE TO OR BY THE BIDDER AFTER BID OPENING)

(vi) Our Fax message/letter No..... dated..... inviting you for post bid discussions.

(vii) Post bid discussions and meetings we had with you from..... to ..... resulting into the following Minutes of Meeting enclosed herein with this Notification of Award :

(a) Minutes of Meeting regarding Commercial issues (APPENDIX.....)
(b) Minutes of Meeting on Technical issues (APPENDIX - .....) (c) Minutes of Meeting regarding Work Schedule (APPENDIX.....)
(d) Minutes of Meeting regarding Quality Assurance Aspects (APPENDIX.....)

2.0 We confirm having accepted your proposal submitted vide letter no..... dated ..... **and its modification vide letter no. ..... dated (Delete if not applicable)** read in conjunction with all the specifications, terms & conditions of the Bidding Documents, **Your subsequent letters (Use if relevant)** and agreed Minutes of Meeting referred to in para 1.0 above and award on you the Contract for the work of **.....(Indicate brief Scope of Work) ..... of..... (Name of Package) .....for (Name of project).**..... as per Specification No. : ..... **(hereinafter referred to as the 'Third Contract').**

3.0 We have also notified you vide our Notification of Award No. ..... dated .....for award of First Contract on you for the work of ..... **(Indicate brief scope of workof the First Contract) .....** complete ..... **(Name of Package)** ..... for ..... (Name of Project) ..... as per Bidding Document No. ..... (hereinafter referred to as the **'First Contract'**).

3.1 We have also notified you vide our Notification of Award No. ..... dated .....for award of 'Second Contract' on you for the work of **..... (Indicate brief scope of workof the Second Contract) .....** complete ..... **(Name of Package) ..... for ..... (Name of Project) .....**..... **as per Bidding Document No ..... (hereinafter referred to as the 'Second Contract').**

4.0 The total Contract Price for the entire scope of work under the Contract shall be ..... (Specify the amount and currency) ..... as per the following break up :

(i) Operation & maintenance of complete Solar PV plant for a period of _____years from the date of successful completion of commissioning.....

TOTAL (i) .....
(..... (Specify the total amount in words) .....)

5.0 You shall prepare and finalize the Contract Documents for signing of the formal Contract Agreement and shall enter into the Contract Agreement with us, as per the proforma enclosed with the Bidding Documents, on non-judicial stamp paper of appropriate value within..... (Specify) days from the date of this Notification of Award.

6.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including all the enclosed Appendices, by the authorised signatory of your company as a proof of your acknowledgement and confirmation.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,

for and on behalf of
.....(Name of the Employer).....

Encl.: As above.
(Authorized Signatory)

5. FORM OF CONTRACT AGREEMENT

5. Form of Contract Agreement

THIS CONTRACT AGREEMENT is made the _____day of_____, 20____..

BETWEEN
(1) *[Name of Employer]*, a corporation incorporated under the laws of *[country of Employer]* and having its principal place of business at *[address of Employer]* (hereinafter called "the Employer"), and (2) *[name of Contractor]*, a corporation incorporated under the laws of *[country of Contractor]* and having its principal place of business at *[address of Contractor]* (hereinafter called "the Contractor")

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, complete and commission certain Facilities, viz. *[list of facilities]* ("the Facilities") and the Contractor have agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1. Contract Documents

1.1 Contract Documents (Reference GCC Clause 2)
The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

(a) This Contract Agreement and the Appendices hereto
(b) Notification of Award read in conjunction with Amendments/ Erratas, if any
(c) Special Conditions of Contract read in conjunction with Amendments/ Erratas, if any
(d) General Conditions of Contract read in conjunction with Amendments/ Erratas, if any
(e) Technical Specifications and Drawings read in conjunction with Amendments/ Erratas, if any
(f) The Bid and Price Schedules submitted by the Contractor
(g) Form and Procedures (as listed) read in conjunction with Amendments/ Erratas, if any
(h) Integrity Pact

1.2 **Order of Precedence** (Reference GCC Clause 2)
In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 **Definitions** (Reference GCC Clause 1)
Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract.

Article 2. Contract Price and Terms of

2.1 **Contract Price** (Reference GCC Clause 11)
The Employer hereby agrees to pay to the Contractor the

Payment

Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of: *[amount of local currency in words], [amount in figures],* or such other sums as may be determined in accordance with the terms and conditions of the Contract.

2.2 **Terms of Payment** (Reference GCC Clause 12)
The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in Appendix 1 (Terms and Procedures of Payment) hereto.

Article 3. Effective Date for Determining Time for Completion

3.1 **Effective Date** (Reference GCC Clause 1)
The Time of Completion of the Facilities shall be determined from the date of Notification of Award provided all of the following conditions have been fulfilled within a period of two (2) months from the date of said Notification of Award:

(a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor;

(b) The Contractor has submitted to the Employer the performance security, security towards faithful performance of the Deed(s) of Joint Undertaking (if applicable) and the advance payment security;

(c) The Employer has paid the Contractor the Advance Payment.

Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

3.2 If the conditions listed under 3.1 are not fulfilled within two (2) months from the date of Notification of Award because of reasons attributable to the Employer, the Contract would become effective only from the date of fulfillment of all the above mentioned conditions and, the parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Completion and/or other relevant conditions of the Contract.

3.3 However, if any of the conditions listed under 3.1 above are not fulfilled within two (2) months from the date of Notification of Award because of reasons attributable to the Contractor, the Contract will be effective from the date of Notification of Award. In this case, Contract price and/or time for completion shall not be adjusted.

Article 4.

It is expressly understood and agreed by and between the Contractor and the Employer that the Employer is entering into this Agreement solely on its own behalf and not on behalf of any other person or entity. In particular it is expressly understood and agreed that the Government of India is not a party to this Agreement and

has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that the Employer is an Independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and the general principles of Contract Law. The Contractor expressly agrees, acknowledges and understands that the Employer is not an Agent, Representative or Delegate of the Govt. of India. It is Further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the Contract. Accordingly, the Contractor expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this Contract and covenants not to sue the Government of India as to any manner, claim, cause of action or thing whatsoever arising of or under this Agreement.

Article 5. Appendices The Appendices listed in the attached list of Appendices shall be deemed to form an integral part of this Contract Agreement.

Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and on behalf of the Employer

_____

[*Signature*]

_____

[*Title*]

in the presence of _____

Signed by for and on behalf of the Contractor

_____

[Signature]

_____

[Title]

in the presence of _____

CONTRACT AGREEMENT

dated the_____day of_____, 20_____

BETWEEN

_____

["the Employer"]

and

_____

["the Contractor"]

APPENDICES

Appendix 1	Terms and Procedures of Payment
Appendix 2	Price Adjustment
Appendix 3	Insurance Requirements
Appendix 4	Time Schedule
Appendix 5	List of Approved Subcontractors
Appendix 6	Scope of Works and Supply by the Employer
Appendix 7	List of Documents for Approval or Review
Appendix 8	Functional Guarantees

TERMS AND PROCEDURES OF PAYMENT

In accordance with the provisions of GCC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, based on the Price Break down given in the Section on Price Schedules. Application for payment in respect of part deliveries may be made by the Contractor as work proceeds.

TERMS OF PAYMENT

A. Schedule No.1: Plant and Equipment (excluding Mandatory spares and Type tests)

In respect of plant and equipment supplied the following payments shall be made:

For Ex-works Price component of plant and Equipment (excluding Mandatory spares and Type tests)

(I) **Five Percent (5 %)** of the total Ex-Works price component as Initial Advance Payment on:

(a) Acceptance of Notification of Award and Signing of the Contract Agreement.

(b) Submission of an unconditional Bank Guarantee covering the advance amount plus GST as applicable on the advance payment to be paid to the contractor, which shall be initially kept valid upto (ninety) 90 days beyond the schedule date for Completion of the last facility covered under the Package. However, in case of delay in completion of the facilities covered under the package, the validity of this Bank Guarantee shall be extended by the period of such delay. Proforma of Bank Guarantee is enclosed in Section-VII - Bank Guarantee Form for Advance Payment.

(c) Submission of unconditional Bank Guarantees towards Contract Performance Securities in respect of all Contracts, initially valid upto ninety (90) days after one year from the Completion of Facilities of Entire Project. The proforma of Bank Guarantee is enclosed in Section-VII - Form of Performance Security.

(d) Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to the Form of Contract Agreement and its approval by the Employer.

(e) Receipt of clearance/approval from the concerned authority (DISCOM/TRANSCO/any other State Government body as applicable) for setting up the project behind the meter.

(II) **Seventy Percent (70%)** of Ex-works price component of the Contract price for each identified equipment on receipt of equipment at site on prorate basis and physical verification and certification by the Project Manager for the equipment received and stored at site, after obtaining clearance/approval from the concerned authority (DISCOM/TRANSCO/any other State Government body as applicable) for setting up the project behind the meter.

(III) **Five Percent (5%)** of Ex-works price Component of the contract price on successful Commissioning of the premise (along with Behind the meter connection) on certification by the Project Manager.

(iii) **Twenty Percent (20%)** of Ex-works price component of the Contract price on Completion of Facilities of Entire Project and issuance of Completion Certificate by the project manager.

Note:

(i) The prorata payment will be based on the detailed price break-up furnished by the Contractor and approved by the Employer. The Billing Break Up shall be generally on item rate basis.

(ii) In case Installation Price including Civil/Structural works price is less than **20%** of the Ex-works Price of Main Equipment, the amount by which it is lower shall be retained proportionately from the Ex-Works component of Main Equipment (Sch-1A) and mandatory spares (Sch-1B) Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon completion of installation of the respective equipment and its certification by the Project Manager.

(iii) In case the Contractor decides not to take advance payment mentioned at (I) above, advance amount shall be paid progressively on pro- rata basis along with the receipt payment, as specified in para (II) above.

(iv) In case the Transportation (including Inland Transit Insurance) is more than 1% of Schedule 1, the amount by which it is higher shall be retained while releasing progressive payments due on transportation, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid along with payment due on Commissioning of the Premise.

B. Schedule 1 and 5: Mandatory spares and Recommended Spares (When ordered) quoted on Ex-works (India) basis

The Ex- works (India) price of spares to be supplied from within the Employer's country shall be paid as under:

(i) **Eighty percent (80%)** of CIF/Ex-works price component of the spares to be paid on pro-rata basis on receipt and storage at site and on physical verification and certification by the Project Manager for the spares received and stored at site, subject to receipt of clearance/approval from the concerned authority (DISCOM/TRANSCO/any other State Government body as applicable) for setting up the project behind the meter.

(ii) **Twenty percent (20%)** of CIF/Ex-works price component of the spares to be paid on pro-rata basis on Completion of Facilities of Entire Project and issuance of Completion Certificate by the project manager.

C. Schedule No. 2: Local Transportation

a) All Plant and Equipment

Eighty Percent (80%) of Local Transportation charges (including port clearance, port handling and port charges etc., if applicable, and inland transit insurance charges) for the

plant and equipment including mandatory spares and also recommended spares (if ordered) shall be paid to the Contractor pro-rata to the value of the equipment/spares received at site and on production of invoices by the Contractor. The aggregate of all such pro-rata payments shall, however, not exceed the total amount identified in the Contract for Local Transportation. However, where item wise local transportation charges (including port clearance, port handling and port charges etc., if applicable, and inland transit insurance charges) have been identified in the Contract, the payment for the same shall be made after receipt of the equipment/spares at site, based on the charges so identified in the Contract.

Twenty Percent (20%) shall be paid to the Contractor on pro-rata basis upon Completion of Facilities of Entire Project and issuance of Completion Certificate by the project manager.

Note: In case the Transportation including the Transit Insurance is above 1% of the Ex-works Price of Main Equipment and mandatory spares (Sch-1A & Sch-1B). The amount by which it is higher shall be retained proportionately from the Ex-Works component of Main Equipment (Sch-1A) and mandatory spares (Sch-1B) Contract price while releasing payments due on transportation, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro-rata basis upon Commissioning of the project.

D. Schedule No. 3: Installation Services excluding operation and maintenance.

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

(I) **Ten Percent (10%)** of the Installation Services Component of the Contract Price will be paid to the Contractor, bearing interest at the rate of **"[SBI 1-year MCLR as on 01st April of applicable year + 150 bps] per annum** as advance payment on:

(i) Acceptance of Notification of Award and Signing of Contract Agreement.

(ii) Establishing their office at site or resources at site in preparatory to commencement of installation.

(iii) Submission of an unconditional Bank Guarantee **for an amount equivalent to one hundred ten percent (110%) of the advance amount** plus GST as applicable on the advance payment to be paid to the contractor, which shall be initially kept valid upto ninety (90) days beyond the schedule date for successful 'Completion of the Facilities' under the Package. However, in case of delay in completion of the facilities covered under the package, the validity of this advance Bank Guarantee shall be extended by the period of such delay. The proforma of the Bank Guarantee is enclosed in Section-VII - Bank Guarantee Form for Advance Payment.

(iv) Submission of unconditional Bank Guarantees towards Contract Performance Securities in respect of all Contracts, initially valid upto ninety (90) days after one year from the Completion of Facilities of Entire Project. The proforma of Bank Guarantee is enclosed in Section-VII - Form of Performance Security.

(v) In case of Joint Deed of Undertaking (if applicable) by the contractor along with his Collaborator/ Associate forms part of the contract then submission of an unconditional Bank Guarantee from such Collaborator(s)/Associate(s) towards faithful performance of the Joint Deed of Undertaking for an amount specified in the deed and valid upto ninety (90) days after the end of defect liability period of all equipment covered under the contract. The proforma of Bank Guarantee is enclosed in Section-VII- Form of Performance Security. -- If Applicable –

(vi) Submission of a detailed PERT Network based on the work schedule stipulated

(vi) in Appendix - 4 to the Form of Contract Agreement and its approval by the Employer.T&P mobilization as identified along with PERT network for start of Erection and Certification thereof by the Engineer-in-Charge.

(vii) Advance Payment for Installation services/ works price components shall be released after certification of Engineer-in-Charge that the Contractor has brought to site the Safety equipments & Safety Personal Protective Equipments as per minimum quantity specified in the Bidding Documents.

In case the Contractor decides not to take advance payment, the first progressive payment for Installation services price component shall be released after certification of Engineer-In-Charge that the contractor has brought to site the Safety equipments & Safety Personal Protective Equipments as per minimum quantity specified in the Bidding Documents.

II. **Seventy Percent (70%)** of the installation Services component of contract price shall be paid on pro-rata basis on completion of installation of equipments on certification by the Project Manager for the quantum of work completed and by the certification of Project Manager field quality surveillance representative for the successful completion of quality check points involved in the quantum of work billed.

III. **Twenty Percent (20%)** of Ex-works price component of the Contract price on Completion of Facilities of Entire Project and issuance of Completion Certificate by the project manager.

IV. Recovery of the interest component on the advance amount shall be made from the progressive payments released to the Contractor as per D(II) above. The amount of interest to be recovered from a particular bill shall be calculated @ **"[SBI 1-year MCLR as on 01st April of applicable year + 150 bps] per annum"** on the value of advance corresponding to the %age of total progressive payment being released. The period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment or the expiry of the stipulated time frame for release of such progressive payment under the contract, whichever is earlier. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums

Deductible therefrom, the balance outstanding shall be recovered from the next payments immediately falling due.

Notes: 1. The bidder shall furnish a detailed break-up for the Erection Price Component of the package which shall be mutually discussed and finalized with the Owner. Progressive payment for Erection will be made against monthly bills based on certification by the Project Manager the work completed.

2. In case, the Contractor decides not to take interest bearing advance payment as on D (I), the advance payment shall be proportionately adjusted in the balance payments excluding final payments.

3. The release of first progressive payment for Installation Services shall also be subject to

submission of documentary evidence by the Contractor towards having taken the insurance policy(ies) in terms of relevant provisions of GCC Clause 34 (Insurance) and acceptance of same by the Project Manager.

4. In case the Installation Price (including Civil/Structural works price) is less than **20%** of the Ex-works Price of Main Equipment, the amount by which it is lower shall be retained proportionately from the Ex-Works component of Main Equipment (Sch-1A) and mandatory spares (Sch-1B) Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid along with payment due on completion of Trial Operation / Completion of Facilities

E. Schedule No. 3: Civil Works and Allied Works etc.

The Civil Works Price Component of the Contract Price shall be paid as under

(I) **Ten Percent (10 %)** of the total Civil works Price component of the Contract Price will be paid to the Contractor, bearing interest at the rate of **"[SBI 1-year MCLR as on 01st April of applicable year + 150 bps] per annum"** as advance payment on:

(i) Acceptance of Notification of Award and Signing of Contract Agreement.

(ii) Submission of an unconditional Bank Guarantee(s) towards Performance Security(s) in respect of all Contracts initially valid upto (ninety) 90 days after the end of Defects Liability Period of the last equipment covered under the contracts.

The proforma of Bank Guarantee is enclosed in Section-VII, Form of Performance Security.

(iii) Submission of a detailed PERT Network based on the work schedule stipulated in Appendix-4 to Form of the Contract Agreement and its approval by the Employer.

(iv) T&P mobilisation as identified along with PERT network for start of Civil Works and Certification thereof by the Engineer-in-Charge.

(v) Submission of an unconditional Bank guarantee for an **for an amount equivalent to one hundred ten percent (110%) of the advance amount** plus GST as applicable on the advance payment to be paid to the contractor, which shall be initially kept valid upto ninety (90) days beyond the schedule date for successful 'Completion of all Facilities under the Package. However, in case of delay in completion of the facilities covered under the package, the validity of this advance Bank Guarantee shall be extended by the period of such delay. The proforma of the Bank Guarantee is enclosed in Section-VII - Bank Guarantee Form for Advance Payment.

Advance Payment for Civil works price components shall be released after certification of Engineer-in-Charge that the Contractor has brought to site the Safety equipments & Safety Personal Protective Equipments as per minimum quantity specified in the Bidding Documents.

In case the Contractor decides not to take advance payment, the first progressive payment for Installation services price component shall be released after certification of Engineer-in-Charge that the Contractor has brought to site the Safety equipments & Safety Personal Protective Equipments as per minimum quantity specified in the Bidding Documents.

(II) **Seventy Percent (70 %)** of the total Civil Works Price Component of Contract Price shall be paid progressively on certification by the Project Manager for the quantum of work completed/Milestones achieved and by Project Manager's field quality surveillance representative for the successful completion of quality check points involved in the quantum of work / Milestones billed.

The release of first progressive payment for Civil Works shall also be subject to submission of documentary evidence by the Contractor towards having taken the insurance policy(ies) in terms of relevant provisions of the contract and acceptance of same by the Project Manager.

(III) **Twenty Percent (20%)** of Ex-works price component of the Contract price on Completion of Facilities of Entire Project and issuance of Completion Certificate by the project manager.

(IV) Recovery of the interest component on the advance amount shall be made from the progressive payments released to the Contractor as per E (II) above. The amount of interest to be recovered from a particular bill shall be calculated "[SBI 1-year MCLR as on 01st April of applicable year + 150 bps] per annum" on the value of advance corresponding to the %age of total progressive payment being released. The period for which the interest is to be calculated shall be reckoned from the date of release of the advance payment to the actual date of release of the said progressive payment or the expiry of the stipulated time frame for release of such progressive payment under the contract, whichever is earlier. The interest on the advance payment shall stand fully recovered on release of all the progressive payments. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for interest on the advance payment and other sums deductible there from, the balance outstanding shall be recovered from the next payments immediately falling due.

Note: Further break-up of the above percentages for making payments for the billing period shall be furnished by contractor and will be discussed and agreed to by the Employer in the Billing Break-up.

In case, the Contractor decides not to take interest bearing advance payment, the advance payment shall be proportionately adjusted in the balance payments excluding final payments.

F. Operation and Maintenance Charges and AMC

-After completion of trial run as defined in bid documents, operation and maintenance charges including all consumable, spares and equipments included in operation and maintenance charges shall be paid on pro-rata basis every three months on the certification of completion of work by Project Manager.

Bidders shall quote their O&M charges for first year and O&M charges from 2nd year till nth year shall be auto calculated based on O&M charges for 1st year and annual escalation factor @ 5.25%.

Note : In case total O&M Cost for 10 years is less than 19.09 % of EPC price (Supply of Main Equipment Sch-1A and mandatory spare Sch-1B , Transportation Sch-2A & Sch-2B, Installation services including Civil & Safety Main Equipment Sch-3A, Sch-3B & Sch-3D), the amount by which it is lower shall be retained from the Ex-Works component of Main Equipment Sch-1A and mandatory spare Sch-1B Contract price while releasing payments due on receipt of equipment, and no interest shall be payable on the retained amount. The aforesaid retained amount shall be paid on pro- rata basis every year upon completion of O&M Period and its certification by the project manager.

- Payment for AMC shall be made on annual basis proportionately.

G. Payment terms for Price Adjustment Amount
NOT APPLICABLE

H. Schedule - 4: Payment Terms for Taxes & Duties

100% of applicable Taxes and Duties which are payable by the Employer under the Contract shall be paid/reimbursed to the Contractor upon receipt of equipment/spare/services and on production of satisfactory documentary evidence by the Contractor. However, GST as applicable in Advance payment shall be paid to the Contractor along with the Advance sanctioned. The GST paid along with the advance shall be adjusted prorata against the tax due upon supply of goods/services, based on the value of the respective goods/services.

I. Additional Advance Payment:

An Additional Advance upto 5% of the Ex works/Installation Services (including Civil Works) price component, apart from the Advance already provided for in the specified Terms of Payment, may be paid to the Contractor which shall be interest bearing and against Bank Guarantee of 110% of the advance requested and covering the interest charges. The advance amount shall be provided during various phases of Contract execution to meet the requirement of payment by the Contractor to the contractor's sub-vendors/sub-contractors but in aggregate shall not exceed 5% of the Ex-works/Installation Service (including Civil Works) Price Component. The advance amount shall be released in Indian Rupees only and Tax implication, if any, shall be to the account of the Contractor.

While applying for advance under this provision, the contractor shall provide a statement of past payment utilization evidencing the need for cash flow support and also plan for utilization of the amount requested as per above. The advance shall be provided in exceptional circumstances to enable work to be carried out.

The advance amount shall be interest bearing and rate of interest to be notified by NVVN from time to time. This advance shall not be lumpsum advance, but shall be provided in phase to tide over the financial constraints being faced by the contractor, along with the progress of work. The requirement of this advance shall be with the approval of the NVVN Head of Project.

The recovery of the interest component on the advance amount shall be made from subsequent progressive payment to be released to the contractor.

The period for which the interest to be calculated, shall be reckoned from the date of release of the Additional Advance(s) to the actual date of release of subsequent progressive payments as per the Plan to be agreed with the Contractor.

The advance amount shall be recovered from the milestone payment to be agreed between Employer and the Contractor.

J. Schedule – 3: Amount linked to Safety Aspects / Compliance to Safety Rules

The amount linked to Safety Aspects/ compliance to Safety Rules shall be paid in two parts, viz,

10% amount (calculated as 0.1 Y of the service portion amount of RA bill) shall be linked to Fatal/Major Accidents, and

90% amount (calculated as 0.9 Y of the service portion amount of RA bill) shall be linked to various Safety Aspects specified in Safety Rules of NTPC/NVVN.

NOTE:

$$Y = \frac{\text{(Amount linked to Safety Aspects/ Compliance to Safety Rules specified in Price Schedule)}}{\text{(Total amount for Service Portion of the Contract, i.e. Civil + Installation/ Erection + Structural Works)}} \times 100$$

While raising each RA Bill, Contractor shall claim Amount linked to Safety Aspects/ Compliance to Safety Rules in such a manner that amount claimed is equal to Y% of the service portion (Civil + Installation/ Erection + Structural Works) of RA Bill.

The amount linked to safety shall be paid to the contractor upon complying the following conditions:

Amount of RA Bill linked to Fatal/ Major Accidents (0.1Y as elaborated above at para J.1.A) Aforesaid amount shall be payable to Contractor only in case, there is
No fatal injury or accident causing death in the claim period and
No Major injury or accident causing 25% or more permanent disablement to workmen or employees in the claim period. Permanent disablement shall have the same meaning as indicated in The Workmen's Compensation Act' 1923.

In case of any fatal injury or accident as elaborated above occurs during the claim period, the stipulated amount (0.1Y) subject to minimum of Rs 10 Lakh per fatality shall be forfeited and shall not be payable to the Contractor under the contract. In case, the amount to be deducted/forfeited exceeds the amount linked to Fatal/ Major Accidents, the same shall be recovered from remaining Amount (0.9Y) linked to Compliance of Safety Rules and/or any other payments immediately due to the Contractor under the Contract.

In case of any Major injury or accident causing 25% or more permanent disablement to workmen or employees occurs during that three month period, Rs 5 lakh per Major injury shall be deducted from the amount (0.1Y) linked to Fatal/ Major Accidents and shall not be payable to the Contractor under the contract. In case, the amount to be deducted/forfeited exceeds the amount linked to Fatal/ Major Accidents, the same shall be recovered from remaining Amount (0.9Y) linked to Compliance of Safety Rules and/or any other payments immediately due to the Contractor under the Contract.

Further, in case, Contractor doesn’ t raise RA Bills in any three month period/quarter and if any fatal injury and/or major accident takes place in that period, Project Manager shall deduct the amount [Rs 10 Lakh per fatality and Rs 5 lakh per Major injury] pertaining to this particular quarter from his next RA bill/due payment. In case, the amount to be deducted/forfeited exceeds the amount linked to Safety, the same shall be recovered from any other payments immediately due to the Contractor under the Contract.

The amount deducted/forfeited as mentioned above shall be in addition to the compensation payable to the workmen / employees under the relevant provisions of the Workmen's Compensation Act' 1923 and rules framed there under or any other applicable laws as applicable from time to time.

Amount of RA Bill linked to Compliance of Safety Rules (0.9Y i.e. 90% of amount as elaborated above at para K.1.B)
Aforesaid amount (on quarterly basis) shall be payable to Contractor in five equal parts under five heads as under:
Amount payable on deployment of required Safety Personnel

One fifth of the amount specified at J.2.b (calculated as 0.18Y of Service portion amount of RA Bill), on quarterly basis, shall be paid upon certification by Project Manager that required number of Safety personnel have been deployed.

In case, actual no. of Safety personnel deployed is more than requisite number (i.e. a/b is more than 1), the amount to be paid shall be restricted to 0.09Y.

In case aforesaid requisite no. of Safety personnel are not deployed by Contractor, amount not to be paid as calculated above for that particular quarter/three month period shall be forfeited and shall not be payable to the Contractor under the contract.

Amount payable on providing requisite Personal Protective Equipment & Safety Equipment

One fifth of the amount specified at J.2.b (calculated as 0.18Y of Service portion amount of RA Bill), on quarterly basis, shall be paid upon certification by Project Manager that Contractor has adhered to the requirements of Clause 4 (Personal Protective Equipment) of NTPC/NVVN Safety Rules for Construction and Erection of Power Plants’ and the provisions of the Bidding Documents with regards to number of Safety Equipment/PPEs to be provided by the Contractor.

In case of non-compliance by Contractor, warning letter/Non-compliance shall be issued by Project Manager of NVVN as per clause 22.3.3 (ii) of GCC. Further, if more than two such warning letters/Non Compliance Memos are issued in a quarter/three monthly period, above mentioned amount for that particular quarter/three month period shall be forfeited and shall not be payable to the Contractor under the contract.

Amount payable on providing requisite Safety Induction and Training

One fifth of the amount specified at J.2.b (calculated as 0.18Y of Service portion amount of RA Bill), on quarterly basis, shall be paid upon certification by Project Manager that

Contractor has adhered to the requirements of imparting Safety training as per Clause 8.0 (Safety Induction and Training) of NTPC/NVVN Safety Rules for Construction and Erection of Power Plants to at least 90% of its employees/workmen (who have not been previously provided with requisite training) in a quarter/ three months period.

In case Contractor fails in meeting the aforesaid requirement, above mentioned amount for that particular quarter/three month period shall be forfeited and shall not be payable to the Contractor under the contract.

Amount payable on providing requisite Medical and First Aid Amenities

One fifth of the amount specified at J.2.b (calculated as 0.18Y of Service portion amount of RA Bill), on quarterly basis, shall be paid upon certification by Project Manager that Contractor has adhered to the requirements of Clause 13 (Medical and First Aid Amenities) of NTPC/NVVN Safety Rules for Construction and Erection of Power Plants' .

In case Contractor fails to provide Medical and first aid amenities as per requirement of aforesaid Clause 13 even on one incidence in any quarter/three month period, above mentioned amount for that particular quarter/three month period shall be forfeited and shall not be payable to the Contractor under the contract.

Amount payable on compliance to Work Permit System

One fifth of the amount specified at J.2.b (calculated as 0.18Y of Service portion amount of RA Bill), on quarterly basis, shall be paid upon certification by Project Manager in consultation with Safety dept. that Contractor has adhered to the requirements of Clause 17 (Work Permit System) of NTPC/NVVN Safety Rules for Construction and Erection of Power Plants.

In case of non-compliance by Contractor, warning letters/Non Compliance Memos shall be issued by Project Manager of NTPC/NVVN as per clause 22.3.3 (v) of GCC.

In case of issuance of more than two such warning letters/Non Compliance Memos in a quarter/three monthly period, above mentioned amount for that particular quarter/three month period shall be forfeited and shall not be payable to the Contractor under the contract

In case ' Amount linked to Safety Aspects / compliance to Safety Rules' is less than 3 % of the cumulative total of Service Portion of the Contract, i.e. Civil + Installation/ Erection + Structural Works, the amount by which it is lower shall be retained proportionately from the other components of Schedule-3 of the Contract price while releasing payments of each RA bill. No interest shall be payable on the amounts linked to Safety Aspects / Compliance to Safety Rules including aforesaid retained amount. The amounts linked to Safety Aspects / Compliance to Safety Rules including aforesaid retained amount shall be payable in part or full based on safety compliance duly certified by Project Manager on quarterly basis.

PAYMENT PROCEDURES

The Procedures to be followed in making application for, certifying and making payments shall be as follows:

1. **Payment Schedule/Price Break-up for Payments**

1.1 The Contractor shall prepare and submit to the Project Manager for approval, a break-up of the Contract Price. The Contract Price break-up shall be interlinked with the agreed detailed PERT network of the Contractor setting forth his starting and completion dates for the various key phases of works prepared as per condition in Clause 18 of GCC, Section- IV. Any payment under the Contract shall be made only after the Contractor's price break-up is approved by the Project Manager. The aggregate sum of the Contractor's price break-up shall be equal to the lump sum Contract Price.

1.2 The Billing Breakup for Mandatory spares shall be submitted to the Employer for approval as per the format enclosed as **Annexure-1 to Appendix-1** indicating therein the details such as Make, Model number, Drawing/ Datasheet number and Part number of all spare items. The relevant drawings/ documents shall be submitted along with the Billing Break up.

1.3 The Contractor shall, by the 15th April of every year, furnish the BBU value of supplies sourced from Micro and Small Enterprises (MSEs) along with the total BBU value of supplies dispatched by it during the preceding financial year as per the format enclosed as **Annexure-2 to this Appendix-1**.

2. **Currency of Payment**

2.1 The Contract Price shall be paid in Indian currency only.

3. **Application for Payment**

3.1 The Contractor shall submit application for the payment in the proforma enclosed.

3.2 Every interim payment certificate shall certify the Contract Value of the Facilities executed up to the date mentioned in the application for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the Facilities that according to the decision of the Project Manager, does not comply with the Contract, or has been performed, at the date of certificate prematurely.

3.3***** The Employer has established a Vendor Payment portal where Vendor/Contractor shall submit their digital bill/invoice and may track its status. The Application for Payment along with all the supporting documents (for direct payment cases as mentioned in Para 5.2 below) shall be submitted by the Vendor/Contractor in digital form i.e. digitally signed with Class-2/3 digital Signature and must be uploaded in the Employer’s Vendor Payment Portal. No hard/physical copy of such documents will be accepted by the Employer unless otherwise asked for in the PO or instructed by Employer.

3.4 FAQ (Frequently asked questions with answers) regarding Invoice submission in digital mode is available at https://pradip.ntpc.co.in/VendorFinal/FAQ_VPP.pdf .

4. **Due Dates for Payment**

4.1 The advance payment amount shall be payable after fulfillment of all the conditions laid down in the Terms of Payment (Appendix 1 to the Contract Agreement) and receipt of the Contractor's invoice along with all necessary supporting documents for such advance payment. Employer will make progressive payment as and when the payment is due as per the Terms of Payment set forth in Appendix 1 to the Contract Agreement. Progressive payment other than that under the letter of credit will become due and payable by the Project Manager within thirty (30) days from the date of receipt of Contractor's bill/invoice/debit note by the Employer, provided the documents submitted are complete in all respects.

4.2 In cases of any discrepancy observed by the Employer in Contractor's bill, clarifications shall be sought in writing by the Employer within ten (10) days from the date of receipt of Contractor's bill/invoice/debit note by the Employer. The Contractor shall be required to submit the requisite clarifications within ten (10) days from the date of issuance of queries by the Employer. In case, no mutual agreement is reached between the Employer and the Contractor on any part of the bill/invoice, within ten (10) days of submission of clarification by the Contractor, the Contractor shall issue a revised bill/invoice to avoid mismatch in GST returns of the Employer and the Contractor. Payment against agreed and admissible part shall be processed as per payment procedure within ten (10) days after receipt of the revised bill/invoice. The bill/invoice for the balance amount under question may be separately submitted for consideration of the Employer after resolution of issues of payment by the Employer. In case of non-submission of satisfactory clarification by the Contractor within the stipulated period, NVVN shall not be liable for the delay in making payment. If the bill submitted by Contractor is incorrect and has gross discrepancies, the bill shall be summarily rejected and returned to the Contractor. In the event of dispute, the same shall be settled as per GCC Clause (Settlement of Disputes).

4.3 Vendor/Contractor can track the status of their digitally submitted Bill/Invoice in the NTPC Vendor Payment Portal.

5. **Mode of Payment**

5.1 . Deleted.

5.2 The payment of the advance amount, ~~Type test~~, price adjustment amounts, all other supply payments, taxes and duties (wherever admissible) inland transportation insurance, Installation Portion of the Facilities and Civil, structural and allied works (if any) shall be made direct to the Contractor by the Employer and no L/C shall be established by the Employer for such payments. Wherever technically feasible, such payments shall be made electronically only as per details of Bank Account indicated in the contract. In case of any changes to the bank account indicated in the contract, the contractor shall immediately inform the employer. The Contractor shall hold the employer harmless and employer shall not be liable for any direct, indirect or consequential loss or damage sustained by the bidder on account of any error in the information or change in

Bank details provided to the employer in the prescribed form without information to employer duly acknowledged.

5.3 **Alternate Mode of Payment for Micro Small & Medium Enterprises (MSMEs):**

Trade Receivables e-Discounting System (TReDS) is a regulatory framework put in place by the Reserve Bank of India under the Payment and Settlement Systems Act 2007 (PSS Act) to facilitate the financing of trade receivables (invoices) of MSMEs through invoice financing by multiple financiers.

The Reserve Bank of India has granted approval to (i) Mynd Solutions Pvt Limited, (ii) A.TReDS Ltd. and (iii) Receivables Exchange of India Ltd to set up and operate TReDS platform. The name of respective TReDS platform of the above-mentioned entities are M1xchange, Invoicemart and RXIL.

Presently, NTPC Limited is transacting with M1xchange and RXIL TReDS platforms. MSME Vendors may choose from the aforesaid TReDS platforms as an alternate payment mechanism.

For queries/ details, the vendor may directly contact M1xchange or RXIL at:-

(i) M1XCHANGE:- URL: https:\\m1xchange.com Toll free No.: 1400-103-7261

(ii) RXIL:- URL: https:\\www.rxil.in/Home/Index Phone: 022-40771424, 40771426 Toll free No.: 1400 1038 311

The aforesaid provision at 5.3 above shall not be applicable for payments envisaged through "Letter of Credit (LC)" or "Escrow Account" or "A separate account with a Scheduled Bank at Site"

FORM OF APPLICATION FOR PAYMENTS

Project	:		
Equipment Package	:	Date	:
Name of Contractor	:	Contract No.	:
Contract Value	:	Contract Name	:
Unit Reference	:	Applicable Serial Number	:

To.

.....*

(Name of Employer)

Dear Sir

APPLICATION FOR PAYMENT

1. Pursuant to the above referred Contract Agreement dated..... the undersigned hereby applies for payment of the sum of ....(Specify amount and currency in which claim is made).

2. The above amount is on account of : (check whichever applicable)

   Advance payment (Schedule **)

   Interim payment as advance (Schedule **)

   Progressive payment against receipt of equipment (Schedule **)

   Progressive payment against Installation (Schedule **)

   Inland transportation (Schedule **)
   Inland insurance

   Price adjustment

   Extra work not specified in contract
   (Ref. Contract change order No.....)

   Others (specify)

   Final payment (Schedule **)

   as detailed in the attached schedule(s) which form an integral part of this application.

3. The payment claimed is as per item(s) No.(s)..... of the payment schedule annexed to the above mentioned Contract.

4. The application consists of this page, a summary of claim statement (Schedule **), and the following signed schedules

   1 .....

   2 .....

   3 .....

   The following documents are also enclosed :

1 .....

2 .....

3 .....

Signature of Contractor/
Authorised Signatory

* Application for payment will be made to 'Project Manager' as to be designated for this purpose at the time of Notification of Award.

** Proforma for the Schedules will be mutually discussed and agreed to during the finalization of the Contract Agreement.

Annexure-1 to Appendix-1

PROJECT :	**……**	**CLIENT :**	**……**
			……
PACKAGE :	**……**		
TITLE :	**BILLING BREAK UP FOR MANDATORY SPARES**	**CONTRACTOR :**	**……**
			……
			.
NOA REF :	**CS……**		
BILLING BREAKUP (BBU) NO. :	**……**		

Sl.No.	Description	Quantity	Unit	Unit Price	Total Price	Equipment Make	Equipment Model	Drawing / Documents/Data Sht no.	Part No.	Remarks

Annexure-2 to APPENDIX-1

Proforma for details to be furnished by the Contractor by 15th April of every financial year of supplies sourced from MSEs dispatched during the preceding financial year.

Package Name:
Project Name:
Name of the Contractor:
COA No.:

Details of BBU value of supplies dispatched during the preceding financial year …… are furnished here below:

BBU value of total supplies dispatched **(A)** (in eqvt INR)	Out of the total supplies dispatched, BBU value of supplies sourced from MSEs **(B)** (in eqvt INR)	Percentage of supplies sourced from MSEs wrt total supplies dispatched **(C = B*100/A)** (%)
……..	……	…….

In case of no supplies sourced from MSEs, mention 'NIL'.

I, on behalf of M/s ……. (*Contractor*) hereby declare that the information furnished above is correct.

Signature……
Name……..
Designation and Seal…….

INSURANCE REQUIREMENTS

(I) Insurance to be taken by the Contractor :

In accordance with the provisions of GCC Clause 34, the Contractor shall at his 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 in the sums and with the deductibles and other conditions specified herein. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

Insurance	Amount insured	Deductible	Conditions
A. Marine Cargo	(i) 110% of Ex-works value in case of plant & equipment and Type Tests Charges including all spare parts manufactured within the Employer's Country.	Not applicable	(i) Employer to be named as coinsured (ii) Open policy (iii) All risk institute cargo clause 'A' (iv) War, SRCC, terrorism. (v) Institute replacement clause, special replacement clause (Air duty) and deferred unpacking clause (vi) Insurers right of subrogation against all parties (excluding carrier) waived. (vii) Warehouse to warehouse basis.
	(ii) Applicable taxes and duties		
	(iii) Escalation 5% on (i) & (ii)		
B. Installation all risk	(i) 110% of Ex-works value of plant & equipment including Type test Charges	Minimum as per insurance policy	(i) Installation risk, RSMTD, including Earthquake cover (ii) Air freight cover. (iii) Extra charge cover. (iv) Maintenance cover (v) Contractor's plant & machinery - Rs. 100 lakhs. (vi) Cross liability. (vii) Additional custom duty for imported machine (if any) for adequate value. (viii) Employer & Contractor's Sub-Contractor to be named as co-insured.
	(ii) Applicable taxes and duties		
	(iii) Cost of indigenous procurement and free issue materials		
	(iv) Cost of erection works		
	(iv) Cost of Civil, Structural & Allied works		
	(iv) 10% escalation on (i) (ii), (iii), (iv) & (v)		
C. Third Party liability (Extension of MCE/EAR Policy)	For any one occurrence Rs. 50.00 lakhs	Nil	(i) Contractors, sub-contractors to be named as co-insured.

Insurance	Amount insured	Deductible	Conditions
D. Automobile liability			
(i) M.V. policy for motor vehicles, private cars & commercial vehicles		----------	As per local M.V. Act.
(ii) CPM policy for heavy construction equipment	Anything above Rs.100 lakhs covered under erection all risk policy		
E. Workmen's Compensation	As per statute		
F. Employer's liability	As per statute		Cumulative to workmen's compensation to cover liability not covered thereby.
G. Group personal insurance, for contractor's & sub-contractor's employees			

Note :

1. The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC 34.1 except for Third Party Liability, Workman's Compensation and Employer's Liability Insurances and the Contractor's Sub-Contractors shall be named as co-insured under all insurances policies taken out by the Contractor pursuant to GCC 34.1, except for the Cargo insurance during transport, Workman's Compensation and Employer's Liability Insurances. All insurers rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

2. Notwithstanding the insurance requirements mentioned above, it would be the Contractor's responsibility to take adequate insurance cover as may be pertinent to protect his interest and interest of the Employer. If at any point of time during execution of the Contract, the insurance policies are found to be inadequate, the Contractor shall take fresh insurance policies meeting aforesaid requirements. The Employer reserves the right to make suitable recovery from the Contractor, if any.

3. Any loss or damage to the plant and equipment during handling, transportation, storage, installation, commissioning, and all activities to be performed till the "Completion of Facilities" shall be to the account of the contractor. The contractor shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement of plant and equipment damaged or lost. Notwithstanding the extent of insurances cover and the amount of claim available from the underwriter, the contractor shall be liable to make good the full replacement/rectification of all the equipment/materials and to ensure their availability as per project requirement without additional financial liability to the Employer.

   The insurance should be in the Indian currency and insurance policy to be taken should be on replacement value basis and/or incorporating appropriate insurance clause.

   The Contractor shall follow local acts and laws as may be prevalent for insurance.

4. Upon grant of extension of time for completion by Employer, the Contractor shall promptly furnish documentary evidence to Project Manager towards extension of insurance policies for the period of time extension.

II) Insurances to be taken by the Employer.

The Employer shall take the insurance for its own employees, its stores and its machinery.

APPENDIX - 4

TIME SCHEDULE

1.0 It is clearly understood and agreed that time is the essence of this Contract and shall be strictly adhered to by the Contractor. The program of furnishing, erecting, testing, commissioning and completion of facilities identifying the key phases in various areas of work like design, procurement, manufacture, field activities shall be as per detailed PERT Network/L2 Schedule enclosed as Annexure-I. As per this detailed PERT Network, the key milestones for completion of facilities are as under

		Start (weeks from date of NOA)	Finish (weeks from date of NOA)
Site Enabling Works & Engineering			
1.	Site Mobilization, Site office opening & Preparatory works, submission of Master list of drawings	0	2
2.	Topographical Survey, Geo-Technical investigation, Concrete mix design	0	2
3.	Approval/Clearance from State Utilities for connectivity	0	4
4.	Arrangement of Construction water and power at site	2	3
5.	Plant boundary Fencing	3	6
6.	Basic Engineering and approval from NVVN • Solar plant Layout • MMS design • SLD • Data sheet - Modules, Inverters and Transformers • Safety plan	0	4
7.	Detailed Engineering and Approval from NVVN	2	6
Solar Plant Works –DC Side			
8.	Supply of Module Mounting Structures	4	8
9.	Foundations & Installation of Module Mounting Structures	6	10
10.	Supply of SPV Modules	6	8
11.	Installation of SPV Modules	7	12
12.	Supply of DC Cables	6	10
13.	Laying of DC Cables	7	12
Solar Plant Works –AC Side			
14.	Supply of inverters	6	10
15.	Installation of inverters	12	18
16.	Supply of AC cables	6	12
17.	Installation of AC cables	12	14
18.	Supply of transformer & other electrical equipments	5	14
19.	Installation of transformer & other electrical equipments	14	18
Miscellaneous works			
20.	Foundations and structural works of CMCS room, Inverter rooms, etc	5	14
21.	Finishing works of CMCS room, Inverter rooms, etc.	10	16
22.	Supply of miscellaneous items viz. Lightning arrestor, Earthing system, Remote monitoring system, Module washing system, SCADA, CCTV, etc.	6	10
23.	Erection of miscellaneous items	10	18
24.	Testing of Equipment and Readiness of System	18	20
Commissioning and Completion of Facilities			

25.	Connectivity approval & Commissioning of the system	20	24
26.	Trial Run, PG test and Completion of Facilities	24	28

2.0 After the Notification of Award, the contractor shall plan the sequence of work of manufacture and erection to meet the above stated dates of successful completion of facilities and shall ensure all work, manufacture, shop testing, inspection and shipment of the equipment in accordance with the required construction/erection sequence.

3.0 Within one month of the Notification of Award, the Contractor shall submit to the Employer for his review and approval two copies (one reproducible and one print) of detailed PERT Network/L2 Schedule with master network activities further exploded based on the Master Network mutually agreed by the employer and contractor, showing the logic and duration of the activities covered in both the First and Second Contracts in the following areas:

Engineering, procurement, manufacturing and supply, detailed engineering, procurement (including brought out items), manufacturing, despatch, shipment, receipt at site and activities related to civil works, erection, commissioning and completion of facilities.

4.0 **Detailed Manufacturing Program**

Detailed Manufacturing PERT Network for all the manufacturing activities and Contractor/sub-Contractors works shall also be furnished within 60 days of Notification of award. The manufacturing network shall be supported by detailed procurement program for critical bought out item/raw materials.

5.0 **Pre-Erection Activity Program**

The erection network will be supported by detailed Pre-erection activity program covering the following:

A) Manpower Deployment
B) T&P Mobilization
C) Detailed Site Mobilization Plant

Any Tools & Plants (T&P) required for satisfactory execution of the Contract and to meet the time schedule specified in this Appendix-4 shall be mobilised by the Contractor as per direction of the Project Manager without any extra cost to the Employer. (The list of such essential Tools & Plants (T&P) to be deployed by the Contractor, if any finalised before Notification of Award, shall be enclosed as Appendix-II to this Appendix-4).

6.0 Within one week of approval of the network schedule, the Contractor shall forward to the Project Manager, copies of the Computer Initial run-Data. The type of outputs and number of copies of each type to be supplied by the Contractor shall be determined by the Project Manager.

7.0 All the networks shall be updated every month or at a frequency mutually agreed upon. Within seven days following the Monthly Review, a progress meeting shall be held, whenever possible at the works, wherein the major items of the plant or equipment are being produced. The meeting will be attended by the Project Manager and responsible representative of Contractor that the Project Manager consider necessary for the meeting.

8.0 Access to the Contractor's and Sub-Contractor's work shall be granted to the Project Manager at all reasonable times for the purpose of ascertaining the progress.

ANNEXURE - I TO APPENDIX - 4

MASTER NETWORK

The Master Network as per para 1.0 of Appendix-4
shall be enclosed as Annexure-I to Appendix-4

ANNEXURE - II TO APPENDIX - 4

LIST OF TOOLS & PLANT TO BE DEPLOYED BY THE CONTRACTOR

Sl. No.	Description of T&P	Qty. to be deployed (nos.)

LIST OF SAFETY PLANT AND EQUIPMENT AND PPE TO BE DEPLOYED BY THE CONTRACTOR

Sl. No.	Suggested List of Safety Equipment and Safety Personal Protective Equipment	Quantity*
1.	**Safety Net (Conforming IS 11057:1984)** Safety Net (Net Size: 10m x 5m, Mesh Size: 25 mm, Mesh Rope: 2mm double cord, Border/Tie Cord: 12mm diameter polypropylene rope (tested as per IS: 5175).Two metres length shall be provided at all four corners.	
2.	**Fall Arrester 'Rope grab fall arrester' & anchorage line.** Anchorage Line: 14mm- 16 mm diameter, three strand twisted Polyamide rope. Rope Grab fall arrester: Openable & Guided type Fall Arrestor (on flexible line) conforming EN 353-2 & works on 14-16 mm diameter polyamide rope. material: Nickel Chrome plated Steel Connector: Karbiner conforming to EN 362 (Minimum Strength 22 KN), material: Steel	
3.	**Horizontal life line** Stainless Steel Wire rope of 8mm diameter. Minimum six nos. of steel U-bolt clips are required for clamping each wire rope to a rigid support (03 nos. of U-bolt clips at each end).	
4.	**Ladders on column** The minimum design live load on metallic ladder shall be a single concentrated load of 100 kilo grams. All rungs shall have a minimum diameter of 1.90 centimeters, and minimum clear length of rungs shall be 40.6 centimeters. The distance between rungs shall not exceed 30.5 centimeters. Each ladder shall have maximum height of 9.0 metre. The ladder shall have proper fastenings for attaching it to a column using positive means such as bolt, weld or other type of fasteners.	
5.	Safety PPEs (Industrial Safety helmet & Industrial Safety Shoes) Industrial Safety Helmet (IS:2925-1984 marked).	

Sl. No.	Suggested List of Safety Equipment and Safety Personal Protective Equipment	Quantity*
	Industrial Safety/Electrical Shoes (IS:15298-2002 marked). Full body Safety Harness (conforming IS:3521)	

LIST OF SUB-CONTRACTORS

PART 1. **Nominated Sub-Contractors**

In the event that the employer wishes to nominate any particular Sub-Contractors for the undertaking of any part or parts of the Works, these shall be identified and named by the Employer in the following schedule prior to the issue of the Bidding Documents.

Full details shall be given of the part of the Works to be executed, and the names and addresses of the Sub-Contractors to whom the part of the Works is to be sub-contracted by the Bidder. Where more than one name is given for any part of the Work, the Bidder shall be free to select any of the named Sub-Contractors for that part.

Item of Work	Nominated Sub-Contractor
NIL	

PART 2 **Approved Sub-Contractors**

(Prior to award of Contract the following details shall be completed indicating those Sub-contractors proposed by the Bidder by Attachment to his Bid which are approved by the Employer for engagement by the Contractor during the performance of the Works).

The following Sub-Contractors are approved for carrying out the item of work indicated. Where more than one Sub-contractor is listed, the Contractor is free to choose between them but he must notify the Employer of his choice in good time prior to appointing any selected Sub-Contractor. In accordance with Clause GCC 19.1, the Contractor is free to submit proposals for additional Sub-Contractors from time to time. No Sub-Contracts shall be placed with any such additional Sub-Contractors until they have been approved in writing by the Employer and their names added to this list of Approved Sub-Contractors.

Sl.No.	Item of Work	Approved Sub-Contractors	Nationality

SCOPE OF WORKS AND SUPPLY BY THE EMPLOYER

The facilities, works, supplies and personnel to be provided/supplied by the Employer shall be as per Technical Specifications and the provisions of GCC Clauses 10, 21 and 24 shall apply as appropriate.

All facilities, works, supplies and personnel to be provided by the Employer shall be as described in Technical Specifications and the same will be provided by the Employer in good time so as not to delay the performance of the Contractor, in accordance with the approved Time Schedule and Program of Performance pursuant to GCC Sub-Clause 18.2.

LIST OF DOCUMENTS FOR REVIEW AND APPROVAL

A. Approval

1.

2.

3.

B. Review

1.

2.

3.

FUNCTIONAL GUARANTEES

The functional guarantees shall be as per Section-VI (Technical Specifications).

6. PERFORMANCE SECURITY FORM

PROFORMA OF BANK GUARANTEE AGAINST PERFORMANCE
OF THE CONTRACT & WARRANTY OF THE MATERIAL SUPPLIED

This Deed of Guarantee executed on the _____day of_____by the _____Bank Ltd., herein-after called "THE BANK" which expression, unless repugnant to the context there of shall include its successors, assigns etc. on the one part in favor of Cement Corporation of India Limited., 59, Shakuntla apartment, 2nd floor, Nehru place, New Dehi hereinafter called "THE PURCHASER' which expression unless repugnant to the context thereof, shall include its successors and assigns on the other part.

Whereas the Purchaser has placed an order No._____on M/s._____hereinafter called "The Supplier", which expression unless repugnant to the context hereof, shall include its successors and assigns for supply of _____(hereinafter called "The Contract" which expression shall include all amendments, modifications and/or Variation thereto, as mutually agreed upon between the Purchaser and Supplier).

The Purchaser agreed to make _____% payment of each consignment against despatch documents through a Bank, provided the supplier furnishes a Bank Guarantee to the Purchaser for _____% of the value of the Purchase Order towards satisfactory performance of the Contract. The Bank hereby guarantees to the Purchaser that the supplier shall replace or repair free of cost any equipment or part thereof supplied by them if it is found to be defective under proper use due to faulty design material or workmanship within _____months from the date of _____. The Bank Guarantees to the Purchaser that if the supplier fails to carryout the above mentioned obligations within a reasonable time from the date of receipt of notice for rectification/repair/replacement, the Bank undertakes to indemnify and keep the Purchaser indemnified and pay on first demand, without demur, to the extent of Rs._____against any loss, damage or expenses incurred for removing the defects in the work by the Purchaser including the supply of the material, required for the removal of defects, or by reason of any breach of any of the terms and conditions of the said contract on the part of the supplier.

The Bank further agree that the Purchaser shall be the sole judge whether the supplier have committed any breach or breaches of any of the terms and conditions of the said contract and the extent of the loss, damage, cost charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof regards the amount due and payable by the Bank under the guarantee . The Bank waive in favor of the purchaser all the rights and defence please to which the Bank as Guarantor and/or M/s._____may be entitled to. To give effect to this guarantee the Purchaser may act as through the Bank were the principal debtors.

The Bank further agrees that the guarantee herein contained shall remain in force and shall continue to have full effect during the period that would be taken for the performance of the Contract and the Purchaser certificates in writing that the terms and conditions of the contract have been fully and satisfactorily carried out by the said suppliers. Unless a demand or claim under this

guarantee is made on us in writing on or before _____(date) the bank shall be discharged from all liabilities under this guarantee.

The Bank further agrees with the purchaser that the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the supplier and to forebear or encorce any of the terms and conditions relating to said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the supplier or for any forebearance, act or omission on the part of the supplier or any indulgence by the Purchaser to the supplier or any such matter or thing whatsoever which under the law relating to Security would but for this provision have effect of so relieving us.

(

Contd…….2….pg… .....)

Notwithstanding any thing hereinbefore contained our liability under this guarantee is restricted to Rs._____(Rupees _____only). Our Guarantee shall remain ion force until the _____(date).

Unless an action to enforce a claim under the guarantee is filed against us within six months from the date i.e, on or before _____all rights under the said Guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder. The Bank lastly undertake not to revoke the Guarantee the Guarantee during its currency except with the prior consent of the Purchaser in writing.

In witness thereof, the Bank has executed these presents on the date and place above written.

PLACE:

WITNESS:

1)

2)

6a. Performance Security Form - NOT APPLICABLE

Form 6b. Insurance Surety Bond towards Performance Security

(To be stamped in accordance with Stamp Act of India)

Insurance Surety Bond No. .....
Date.....

To,

[Employer's Name & Address]

Dear Sirs,

In consideration of the ..... *[Employer's Name]* ..... (Hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) having awarded to M/s..... *[Contractor's Name]* ..... with its Registered /Head Office at ..... (Hereinafter referred to as the 'Contractor', which expression shall unless repugnant to the context or meaning thereof, include its successors administrators, executors and assigns), a Contract by issue of Employer's Notification of Award No. ..... dated..... and the same having been unequivocally accepted by the contractor, resulting into a Contract bearing No. ..... dated ....., valued at ..... for ..... and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to .....(*).....%(percent) of the said value of the Contract to the Employer.

We .....*[Name & Address of the Insurer]*.....having its Head Office at .....(hereinafter referred to as the 'Insurer', 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 amount payable by the Contractor to the extent of .....(*)..... as aforesaid at any time up to .....(@)..... *[days/month/year]* without any condition, demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Insurer 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 Insurer undertakes not to revoke this Insurance Surety Bond during its currency and or any period extended under the contract, without prior consent of the Employer and further agrees that the guarantee herein contained shall be enforceable till ninety (90) days after expiry of its validity.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Insurer under this Insurance Surety Bond, from time to time to extend the performance of the Contract by the Contractor for the purpose of which, the Insurer shall be liable to extend the validity of the present Insurance Surety Bond without any demur, condition, protest and the Insurer shall at no point in time have an option of revoking the same, The Employer shall have the fullest liberty, without affecting this Insurance Surety Bond, 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 covenants, 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 Insurer shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the 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 Insurer.

The Insurer also agrees and undertakes that the Employer at its option shall be entitled to enforce this Insurance Surety Bond against the Insurer as a Surety, 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 Insurance Surety Bond is restricted to .....(*)..... and it shall remain in force upto and including .....(@)..... and shall be extended from time to time for such period (not exceeding one

year), as may be desired by M/s .....*[Contractor's Name}.....* on whose behalf this Insurance Surety Bond has been given.

Dated this ..... day of ..... 20..... at.....

WITNESS :

1. .....
(Signature)
.....
(Name)
.....
(Official Address)

.....
(Signature)
.....
(Name)
.....
(Designation with Insurer Stamp)

Authorised Vide Power of
Attorney No.....
Date.....

2. .....
(Signature)
.....
(Name)
.....
(Official Address)

Notes : 1. (*) This sum shall be ten percent (10%) of the Contract Price.

(@) This date will be ninety (90) days beyond the Defect liability period as specified in the Contract.

2. The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

3. The Employer shall be the Creditor, the Contractor shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

4. The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

5. While getting the Insurance Surety Bond issued, the Contractor is required to ensure compliance to the points mentioned in Form of Bank Guarantee/ Insurance Surety Bond Verification Check List. Further, the Contractor is required to fill up this Form and enclose the same with the Insurance Surety Bond.

Form: 6C Insurance Surety Bond towards Performance Security

(To be stamped in accordance with Stamp Act of India)

(In case of Contract awarded to Joint Venture)

Insurance Surety Bond No. .....

Date.....

To,

[Employer's Name & Address]

Dear Sirs,

In consideration of the ..... *[Employer's Name]* .....(hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) having awarded to a Joint Venture consisting of M/s..... *[1st Partner's Name]*..... with its Registered /Head Office at ..... and M/s .....*[2nd Partner's Name]*..... with its Registered /Head Office at .....(hereinafter referred to as the 'Contractor', which expression shall unless repugnant to the context or meaning thereof, include its successors administrators, executors and assigns), a Contract by issue of Employer's Notification of Award No. ..... dated..... and the same having been unequivocally accepted by the contractor, resulting into a Contract bearing No..... dated ..... valued at ..... for ..... and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to .....(*).....% (..... percent) of the said value of the Contract to the Employer.

We .....*[Name & Address of the Insurer]*.....having its Head Office at .....(hereinafter referred to as the 'Insurer', 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 amount payable by the Contractor to the extent of .....(*)..... as aforesaid at any time upto .....(@)..... *[days/month/year]* without any condition, demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Insurer 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 Insurer undertakes not to revoke this Insurance Surety Bond during its currency and or any period extended under the contract, without prior consent of the Employer and further agrees that the guarantee herein contained shall be enforceable till ninety (90) days after expiry of its validity.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Insurer under this Insurance Surety Bond, from time to time to extend the time for performance of the Contract by the Contractor for the purpose of which, the Insurer shall be liable to extend the validity of the present Insurance Surety Bond without any demur, condition, protest and the Insurer shall at no point in time have an option of revoking the same. The Employer shall have the fullest liberty, without affecting this Insurance Surety Bond, 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 covenants, 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 Insurer 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 Insurer.

The Insurer also agrees that the Employer at its option shall be entitled to enforce this Insurance Surety Bond against the Insurer as a Surety, 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 Insurance Surety Bond is restricted to .....(*)..... and it shall remain in force upto and including .....(@)..... and shall be extended from time to time for such period (not exceeding one year), as may be desired by Joint Venture consisting of M/s..... *[1st Partner's*

Name]..... and M/s……. *[2nd Partner's Name]*..... with its Registered /Head Office at ..... on whose behalf this Insurance Surety Bond has been given.

Dated this ..... day of ..... 20..... at.....

WITNESS :

1. .....
(Signature)
.....
(Name)
.....
(Official Address)

.....
(Signature)
.....
(Name)
.....
(Designation with Insurer Stamp)

Authorised Vide Power of Attorney No.....
Date.....

2. .....
(Signature)
.....
(Name)
.....
(Official Address)

Notes : 1. (*) This sum shall be ten percent (10%) of the Contract Price.

(@) This date will be ninety (90) days beyond the Defect liability period as specified in the Contract.

2. The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

3. The Employer shall be the Creditor, the Contractor shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

4. The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

5. While getting the Insurance Surety Bond issued, the Contractor is required to ensure compliance to the points mentioned in the Form of Bank Guarantee/ Insurance Surety Bond Verification Check List. Further, the Contractor is required to fill up this Form … and enclose the same with the Insurance Surety Bond.

6D. Performance Security Form for O&M Contract

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

Bank Guarantee No……
Date……..

To,

[Employer's Name & Address]

Dear Sirs,

This Deed of Guarantee executed on the _____day of_____ _____by the _____Bank Ltd., herein-after called "THE BANK" which expression, unless repugnant to the context there of shall include its successors, assigns etc. on the one part in favor of Cement Corporation of India Limited., 59, Shakuntla apartment, 2nd floor, Nehru place, New Dehi hereinafter called "THE PURCHASER' which expression unless repugnant to the context thereof, shall include its successors and assigns on the other part.

Whereas the Purchaser has placed an order No._____on M/s._____hereinafter called "The Supplier", which expression unless repugnant to the context hereof, shall include its successors and assigns for supply of _____(hereinafter called "The Contract" which expression shall include all amendments, modifications and/or Variation thereto, as mutually agreed upon between the Purchaser and Supplier).

The Purchaser agreed to make _____% payment of each consignment against despatch documents through a Bank, provided the supplier furnishes a Bank Guarantee to the Purchaser for _____% of the value of the Purchase Order towards satisfactory performance of the Contract. The Bank hereby guarantees to the Purchaser that the supplier shall replace or repair free of cost any equipment or part thereof supplied by them if it is found to be defective under proper use due to faulty design material or workmanship within _____months from the date of _____. The Bank Guarantees to the Purchaser that if the supplier fails to carryout the above mentioned obligations within a reasonable time from the date of receipt of notice for rectification/repair/replacement, the Bank undertakes to indemnify and keep the Purchaser indemnified and pay on first demand, without demur, to the extent of Rs._____against any loss, damage or expenses incurred for removing the defects in the work by the Purchaser including the supply of the material, required for the removal of defects, or by reason of any breach of any of the terms and conditions of the said contract on the part of the supplier.

The Bank further agree that the Purchaser shall be the sole judge whether the supplier have committed any breach or breaches of any of the terms and conditions of the said contract and the extent of the loss, damage, cost charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof regards the amount due and payable by the Bank

under the guarantee . The Bank waive in favor of the purchaser all the rights and defence please to which the Bank as Guarantor and/or M/s._____may be entitled to. To give effect to this guarantee the Purchaser may act as through the Bank were the principal debtors.

The Bank further agrees that the guarantee herein contained shall remain in force and shall continue to have full effect during the period that would be taken for the performance of the Contract and the Purchaser certificates in writing that the terms and conditions of the contract have been fully and satisfactorily carried out by the said suppliers. Unless a demand or claim under this guarantee is made on us in writing on or before _____(date) the bank shall be discharged from all liabilities under this guarantee.

The Bank further agrees with the purchaser that the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the supplier and to forebear or encorce any of the terms and conditions relating to said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the supplier or for any forebearance, act or omission on the part of the supplier or any indulgence by the Purchaser to the supplier or any such matter or thing whatsoever which under the law relating to Security would but for this provision have effect of so relieving us.

(

Contd…….2….pg… .....)

Notwithstanding any thing hereinbefore contained our liability under this guarantee is restricted to Rs._____(Rupees _____only). Our Guarantee shall remain ion force until the _____(date).

Unless an action to enforce a claim under the guarantee is filed against us within six months from the date i.e, on or before _____all rights under the said Guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder. The Bank lastly undertake not to revoke the Guarantee the Guarantee during its currency except with the prior consent of the Purchaser in writing.

In witness thereof, the Bank has executed these presents on the date and place above written.

PLACE:

WITNESS:

1)

2)

7. BANK GUARANTEE FORM FOR ADVANCE PAYMENT (SUPPLY EX-WORKS)

7(i). Bank Guarantee Form for Advance Payment
(Supply Ex-Works)

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

To,
[Employer's Name & Address]

(B.G. FORMAT FOR ADVANCE PAYMENTS)

In consideration of M/s.Cement Corporation of India Limited.,Tandur Cement Factory, P.O. Karankote, Dist. Vikarabad (TS) (Hereinafter called the Purchaser) having placed an order on_____(herein after called the Contractor`) vide letter No. _____dated_____(hereinafter called the `Contractor` and having agreed to pay advance, the sum of Rs:_____(Rupees_____only) being % of contracterd value of the order, on production of Bank Guarantee of equal amount we,_____(Name of the Banker do hereby agree to pay without any demur to the Purchasers on first demand an amount not exceeding Rs._____(Rupees _____only.against any loss or damage caused to or suffered or would be caused to or suffered by the Purchaser by reasons of any breach of any of the terms and conditions of the said contract on the part of the contractor.

We_____(Name of the Bank), further agree that the purchaser shall be the sole judge whether the said, contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extend of loss, damage, cost charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof we waive in favour of the purchaser all the rights and defence please too which we as guarantor and/or_____(Name of the party), may be entitled to. To give effect to this guarantee the Purchase may act as though we were the principal debtors.

We,_____(Name of the Bank), further agree that the guarantee herein contained shall remain in force and continue to have full effect during the period that would be taken for performance of the contract and the purchaser certifies in writing that the terms and conditions of the said contract have been fully and satisfactorily carried out by the said contractor. Unless a demand or claim under this guarantee is made on us writing on or before _____,we shall be discharged from all liabilities under this guarantee and this bond shall have no effect whatsoever.

We, _____(Name of the bank),further agree with the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the said contractor from time to time or to postpone for any time or from against the said contractor and to forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability b y reasons of any such variation or extension being granted to the said contract or for any forbearance act or omission on the part of the purchaser or any indulgency by the purchaser to the said contractor of by any such matter or things whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

Not withstanding anything herein before contained, our liabilities under this guarantee is restricted to Rs._____(Rupees_____only) and our guarantee shall remain in force until the _____. Unless an action to enforce a claim under the guarantee is

filed against us within six months from the date of expiry i.e. on or before the _____all rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We,_____(Name of the bank), lastly undertake not to revoke the guarantee during its currency except with the previous consent of the Purchaser in writing.

PLACE_____

DATE_____

7(ii). Bank Guarantee Form for Advance Payment
(Installation/Civil/Site Fabricated Structural works)

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

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

To,
[Employer's Name & Address]

(B.G. FORMAT FOR ADVANCE PAYMENTS)

In consideration of M/s.Cement Corporation of India Limited.,Tandur Cement Factory, P.O. Karankote, Dist. Vikarabad (TS) (Hereinafter called the Purchaser) having placed an order on_____(herein after called the Contractor`) vide letter No. _____dated_____(hereinafter called the `Contractor` and having agreed to pay advance, the sum of Rs:_____(Rupees_____only) being % of contracterd value of the order, on production of Bank Guarantee of equal amount we,_____(Name of the Banker do hereby agree to pay without any demur to the Purchasers on first demand an amount not exceeding Rs._____(Rupees _____only.against any loss or damage caused to or suffered or would be caused to or suffered by the Purchaser by reasons of any breach of any of the terms and conditions of the said contract on the part of the contractor.

We_____(Name of the Bank), further agree that the purchaser shall be the sole judge whether the said, contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extend of loss, damage, cost charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof we waive in favour of the purchaser all the rights and defence please too which we as guarantor and/or_____(Name of the party), may be entitled to. To give effect to this guarantee the Purchase may act as though we were the principal debtors.

We,_____(Name of the Bank), further agree that the guarantee herein contained shall remain in force and continue to have full effect during the period that would be taken for performance of the contract and the purchaser certifies in writing that the terms and conditions of the said contract have been fully and satisfactorily carried out by the said contractor. Unless a demand or claim under this guarantee is made on us writing on or before _____,we shall be discharged from all liabilities under this guarantee and this bond shall have no effect whatsoever.

We, _____(Name of the bank),further agree with the Purchaser shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the said contractor from time to time or to postpone for any time or from against the said contractor and to forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability b y reasons of any such variation or extension being granted to the said contract or for any forbearance act or omission on the part of the purchaser or any indulgency by the purchaser to the said contractor of by any such matter or things whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

Not withstanding anything herein before contained, our liabilities under this guarantee is restricted to Rs._____(Rupees_____only) and our guarantee shall remain in force until the _____. Unless an action to enforce a claim under the guarantee is filed against us within six months from the date of expiry i.e. on or before the _____all rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We,_____(Name of the bank), lastly undertake not to revoke the guarantee during its currency except with the previous consent of the Purchaser in writing.

PLACE_____

DATE_____

7(iii). ~~Bank Guarantee Form for Advance Payment~~

~~(In case of Contract awarded to Joint Venture)~~

~~Names of all JV Partners shall appear in the Bank Guarantee~~

8. FORM OF COMPLETION CERTIFICATE

8. Form of Completion Certificate

Date : _____

IFB No : _____

[*Name of Contract]*

To: *[Name and address of Contractor]*

Dear Sirs,

Pursuant to GCC Clause 24 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[date]*, relating to the *[brief description of the facilities],* we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the Facilities or part thereof: *[description]*

2. Date of Completion: *[date]*

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities including Guarantee Test(s) in accordance with the Contract nor of your obligations during the Defects Liability Period.

Very truly yours,

_____

Title
(Project Manager)

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

9. FORM OF OPERATIONAL ACCEPTANCE CERTIFICATE

9. Form of Operational Acceptance Certificate

Date: _____

IFB No: _____

[Name of Contract]

To: *[Name and address of Contractor]*

Dear Sirs,

Pursuant to GCC Sub-Clause 25.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[date]*, relating to the *[brief description of the facilities],* we hereby notify you that the Functional Guarantees of the following part(s) of the Facilities were satisfactorily attained on the date specified below.

1. Description of the Facilities or part thereof: *[description]*

2. Date of Operational Acceptance: *[date]*

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.

Very truly yours,

_____

Title
(Project Manager)

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

10. FORM OF TRUST RECEIPT

10. FORM OF TRUST RECEIPT FOR PLANT, EQUIPMENT AND MATERIALS RECEIVED

We M/s *(Contractor's Name)*..... having our Principal place of business at .....having been awarded a Contract No..... dated ..... for *(Contract Name)*..... by *(Name of Employer)* .....

We do hereby acknowledge the receipt of the Plant, Equipment and Materials as are fully described and mentioned under Documents of Title/RR/LR etc. and in the schedule annexed hereto, which shall form an integral part of this receipt as "Trustee" of .....*(Name of Employer)*. The aforesaid materials etc. so received by us shall be exclusively used in the successful performance of the aforesaid Contract and for no other purpose whatsoever. We undertake not to create any charge, lien or encumbrance over the aforesaid materials etc, in favour of any other person/institution(s)/Banks.

For M/s .....
(Contractor's Name)

Dated : ..... (AUTHORISED SIGNATORY)

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

11. FORM OF INDEMNITY-CUM-UNDERTAKING AGREEMENT

11a. FORM OF INDEMNITY-CUM-UNDERTAKING AGREEMENT FOR THE EQUIPMENTS HANDED OVER BY THE EMPLOYER FOR PERFORMANCE OF CONTRACT (Entire Equipment Consignment in one lot)

(On Non-Judicial Stamp Paper of appropriate value)

INDEMNITY-CUM-UNDERTAKING AGREEMENT

THIS INDEMNITY-CUM-UNDERTAKING AGREEMENT is made this ..... day of ..... 20 ..... between .....*(Contractor's Name)* a Company /Partnership Firm / Proprietary Concern incorporated under the laws of ……. having its Registered Office at ..... (hereinafter called as 'Contractor' which expression shall include its successors and permitted assigns) and..... *(Name of Employer)*, a Company incorporated under the Indian Companies Act having its Registered Office at ..... and its project at ..... (hereinafter called "....." / *"Employer*" which expression shall include its successors and assigns):

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

And WHEREAS by virtue of Clause No..... of the said Contract, the 'Contractor' and the 'Employer' are required to execute an Indemnity-cum-Undertaking Agreement for the Equipments handed over to the 'Contractor' by .....@..... for the purpose of performance of the Contract/Erection Portion of the Contract (hereinafter called the "Equipments")

AND THEREFORE, This Indemnity-cum-Undertaking Agreement witnesseth as follows:

1. That in consideration of various Equipments as mentioned in the Contract, a list where of is also annexed to this Indemnity-cum-Undertaking Agreement at Schedule-A, valued at *(Currency and amount in Figures)*..... *(Currency and amount in words)* ..... handed over to the 'Contractor' for the purpose of performance of the Contract, the 'Contractor' hereby undertakes to indemnify and shall keep the 'Employer' indemnified, for the full value of the Equipments. The Contractor hereby acknowledges actual receipt of the Equipments, etc. as per despatch title documents handed over to the 'Contractor' as detailed in the Schedule appended hereto. The 'Contractor' shall hold such Equipments, etc. in trust as a "Trustee" for and on behalf of the 'Employer'
   @ Fill in abbreviated name of Employer.

2. That the 'Contractor' is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipments at .....@ project site against all risks whatsoever till the Equipments are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract is taken over by the 'Employer' The 'Contractor' undertakes to keep the 'Employer' harmless against any loss or damage that may be caused to the Equipments.

3. The 'Contractor' undertakes that the Equipments shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the Equipments shall be utilised for any other work or

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

4. That the 'Employer' is and shall remain the exclusive owner of the Equipments free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by the 'Employer' in this regard. Further the 'Employer' shall always be free at all times to take possession of the Equipments in whatever form the Equipments may be, if in its opinion, the Equipments are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the 'Contractor' or any other person or on account of any reason whatsoever and the 'Contractor' binds himself and undertakes to comply with the directions of demand of the 'Employer' to return the Equipments without any demur or reservation.

5. That this Indemnity-cum-Undertaking Agreement is irrevocable. If at any time any loss or damage occurs to the Equipments or the same or any part thereof is mis-utilised in any manner whatsoever, then the 'Contractor' hereby agrees that the decision of the Project Manager of the 'Employer' as to assessment of loss or damage to the Equipments shall be final and binding on the 'Contractor'. The 'Contractor' binds itself and undertakes to replace the lost and/or damaged Equipments at its own cost and/or shall pay the amount of loss to the 'Employer' without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to the 'Employer' against the 'Contractor' under the Contract and under this Indemnity-cum-Undertaking Agreement.

6. NOW THE CONDITION of this Indemnity-cum-Undertaking Agreement is that if the 'Contractor' shall duly and punctually comply with the terms and conditions of this Indemnity-cum-Undertaking Agreement to the satisfaction of the 'Employer', THEN, the above Indemnity-cum-Undertaking Agreement shall become void after the due performance of the Contract, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer.

IN WITNESS WHEREOF, the 'Contractor' and the 'Employer' have hereunto set their hand through their authorised representative, the day, month and year first above mentioned.

For and on behalf of	**For and on behalf of**
.....	**…….**
(Contractor's Name)	***(Employer's name)***
Signature	Signature .....
Name	Name .....
Designation of	Designation of .....
Authorised representative *	Authorised representative *

WITNESS :

1. Signature .....

2. Name .....

3. Address .....

WITNESS :

1. Signature .....

2. Name .....

3. Address .....

---

* Indemnity-cum-Undertaking Agreement are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the Power of Attorney issued under common seal of the company with authority to execute Indemnity-cum-Undertaking Agreement , (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity-cum-Undertaking Agreement . In case of Employer, by the authorized representative of the Employer.

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

SCHEDULE - A

Particulars of the Equipments handed over	Quantity	Particulars of Despatch Title Documents		Value of the Equip-ments	Signature of Attorney in token of receipt
		RR/GR/Bill of Lading No & Date	Carrier		

11b. FORM OF INDEMNITY-CUM-UNDERTAKING AGREEMENT FOR THE EQUIPMENTS HANDED OVER IN INSTALMENTS BY THE EMPLOYER FOR PERFORMANCE OF CONTRACT

(On Non-Judicial Stamp Paper of appropriate value)

INDEMNITY-CUM-UNDERTAKING AGREEMENT

THIS INDEMNITY-CUM-UNDERTAKING AGREEMENT is made this .....day of..... 20 ..... between .....*(Contractor's Name)* a Company /Partnership Firm / Proprietary Concern incorporated under the laws of …….. having its Registered Office at ..... (hereinafter called as 'Contractor' which expression shall include its successors and permitted assigns) and ..... *(Name of Employer),* a Company incorporated under the Indian Companies Act having its Registered Office at ..... and its project at ..... (hereinafter called "....." / *'Employer'* which expression shall include its successors and assigns):

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

And WHEREAS by virtue of Clause No. ..... of the said Contract, the 'Contractor' and the 'Employer' are required to execute an Indemnity-cum-Undertaking Agreement for the Equipments handed over to the 'Contractor' by .....@.....for the purpose of performance of the Contract/Erection Portion of the Contract (hereinafter called the "Equipments")

NOW THEREFORE, This Indemnity-cum-Undertaking Agreement witnesseth as follows:

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

@ Fill in abbreviated name of Employer.

2. That the 'Contractor' is obliged and shall remain absolutely responsible for the safe transit/protection and custdoy of the Equipments at .....@..... project site against all risks whatsoever till the Equipments are duly used/erected in accordance with the terms of the Contract and the plant/package duly erected and commissioned in accordance with the terms of the Contract, is taken over by the 'Employer'. The

'Contractor' undertakes to keep the 'Employer' harmless against any loss or damage that may be caused to the Equipments.

3. The 'Contractor' undertakes that the Equipments shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the Equipments shall be utilised for any other work or purpose whatsoever. It is clearly understood by the 'Contractor' that non-observance of the obligations under this Indemnity-cum-Undertaking Agreement by the 'Contractor' shall inter-alia constitute a criminal breach of trust on the part of the 'Contractor' for all intents and purpose including legal/penal consequences.

4. That the 'Employer' is and shall remain the exclusive owner of the Equipments free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by the Project Manager or other employees/agents authorised by the 'Employer' in this regard. Further, the 'Employer' shall always be free at all times to take possession of the Equipments in whatever form the Equipments may be, if in its opinion, the Equipments are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the 'Contractor' or any other person or on account of any reason whatsoever and the 'Contractor' binds himself and undertakes to comply with the directions of demand of the 'Employer' to return the Equipments without any demur or reservation.

5. That this Indemnity-cum-Undertaking Agreement is irrevocable. If at any time any loss or damage occurs to the Equipments or the same or any part thereof is mis-utilised in any manner whatsoever, then the 'Contractor' hereby agrees that the decision of the Project Manager of the 'Employer' as to assessment of loss or damage to the Equipments shall be final and binding on the 'Contractor'. The 'Contractor' binds itself and undertakes to replace the lost and/or damaged Equipments at its own cost and/or shall pay the amount of loss to the 'Employer' without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to the 'Employer' against the 'Contractor' under the Contract and under this Indemnity-cum-Undertaking Agreement.

6. NOW THE CONDITION of this Indemnity-cum-Undertaking Agreement is that if the 'Contractor' shall duly and punctually comply with the terms and conditions of this Indemnity-cum-Undertaking Agreement to the satisfaction of the 'Employer', THEN, the above Indemnity-cum-Undertaking Agreement shall become void after the due performance of the Contract, but otherwise, it shall remain in full force and virtue.

@ Fill in abbreviated name of Employer.

IN WITNESS WHEREOF, the 'Contractor' and the 'Employer' have hereunto set their hand through their authorised representative, the day, month and year first above mentioned.

For and on behalf of	**For and on behalf of**
.....	**…….**
(Contractor's Name)	***(Employer's name)***
Signature	Signature .....
Name	Name .....
Designation of	Designation of .....
Authorised representative *	Authorised representative *

WITNESS :	**WITNESS :**
1. Signature	1. Signature .....
2. Name	2. Name .....
3. Address	3. Address .....

---

* Indemnity-cum-Undertaking Agreement are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the Power of Attorney issued under common seal of the company with authority to execute Indemnity-cum-Undertaking Agreement , (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity-cum-Undertaking Agreement . In case of Employer, by the authorized representative of the Employer.

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

SCHEDULE No.1

Particulars of the Equipments handed over	Quantity	Particulars of Despatch Title Documents		Value of the Equip-ments	Signature of Attorney in token of receipt
		RR/GR/Bill of Lading No & Date	Carrier		

(Please number subsequent schedules)

12. FORM OF AUTHORISATION LETTER

12. FORM OF AUTHORISATION LETTER

(NAME OF EMPLOYER)

(PROJECT.....)

REF. NO. :

DATE :

To,

M/s *(Contractor's Name)*.....

Ref : Contract No..... Dated .....

for.....awarded by *(Name of Employer)*

Dear Sirs,

Kindly refer to Contract No..... Dated ..... for .....*(Contract Name)* You are hereby authorised on behalf of..... *(Name of Employer)* having its registered office at .....and its Project at.....to take physical delivery of materials/equipments covered under despatch Document/ Consignment Note no..... * .....dated ..... and as detailed in the enclosed Schedule for the sole purpose of successful performance of the aforesaid contract and for no other purposes, whatsoever.

(Signature of Project Manager)

(Designation : .....

Date .....

ENCL : as above

---

* Mention LR/RR No.

SCHEDULE OF MATERIAL/EQUIPMENT COVERED UNDER DESPATCH TITLE DOCUMENT (RR NO./ LR NO.……..)

Sl. No.	Contract Name	NOA No./ Contract Agreement No.	Description of Materials/ Equipments	Spec. No.	Qty.	Value	Remarks

(SIGNATURE OF THE PROJECT MANAGER)

(Designation).....

Date).....

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

13. DEED OF JOINT UNDERTAKING

FORM OF DEED OF JOINT UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

(NOT APPLICABLE)

14. FORM OF BANK GUARANTEE/INSURANCE SURETY BOND BY ALL EXECUTANTS OF DEED OF JOINT UNDERTAKING OTHER THEN CONTRACTOR

14.a PROFORMA FOR BANK GUARANTEE
TO BE FURNISHED BY THE EXECUTANT OF DEED OF
JOINT UNDERTAKING OTHER THAN CONTRACTOR

(To be suitably incorporated by concerned package coordinator)

(To be stamped in accordance with Stamp Act of India)

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

To,
[Employer's Name & Address]

Dear Sir,

In consideration of .....*[Employer's Name]*..... (hereinafter referred to as the 'Employer', which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to ..... with its Registered Head Office at .....(herein-after referred to as.....or ''Contractor'') a Contract for.....Package for its ..... (Name of Project) ..... vide Contract No. ..... dated..... and the same having been unequivocally accepted by the Contractor resulting in a ''Contract'', which award is on the strength of Deed of Joint Undertaking dated ..... (hereinafter referred to as ''Undertaking'') given by M/s..... (Contractor) and by M/s ..... (Associate / Collaborator)……. having its registered office at ..... (hereinafter called Associate / Collaborator), and the Contractor having further executed with M/s..... (Associate / Collaborator) a Sub-Contract dated ..... and the same having been unequivocally accepted by the Associate / Collaborator resulting in a Sub-Contract Agreement valued at ..... for ..... (hereinafter called ''Sub-Contract Agreement'') and Associate / Collaborator having agreed to provide a Bank Guarantee amounting to.....to the Employer on the terms and conditions specified in the ''Undertaking''.

We..... Bank, having its Head Office at..... (hereinafter referred to as the ''Bank'', which expression shall, unless repugnant to the context or meaning therof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay to the Employer on demand any and all monies to the extent of..... (Specify currency and amount in words and figures) only as aforesaid at any time upto.....@.....without any demur, reservation, context, recourse or protest and/or without any references to Associate / Collaborator or ''Contractor''.

Any such demand made by the Employer on the Bank shall be conclusive and binding, not withstanding any difference between the Employer and Contractor and/or between the Employer and Associate / Collaborator 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 till ninety (90) days after expiry of its validity.

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 or the Sub-Contract Agreement by the Associate / Collaborator.

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 Associate / Collaborator and to exercise the same at any time, in any manner, and either to enforce

or to forbear to enforce any covenants, contained or implied, in the Contract or Undertaking 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 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 from its obligations.

The Bank also agrees that the Employer at is option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against Contractor or Associate / Collaborator and notwithstanding any security or other guarantee that the Employer may have in relation to Contractor's or Associate / Collaborator 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 (not exceeding one year), as may be desired by M/s ..... (Associate / Collaborator) on whose behalf this guarantee has been given.

Date this.....day of.....20.....at.....

WITNESS

1. .....
(Signature)

.....
(Name)

.....
(Official Address)

.....
(Signature)

.....
(Name)

.....
(Designation with Bank Stamp)

Authorised Vide Power of Attorney No.....

Date.....

2. .....
(Signature)

.....
(Name)

.....
(Official Address)

Notes :

1. @ The date shall be as specified in the corresponding format for the Deed of Joint Undertaking enclosed in the Section 'Forms and Procedures'.
2. The Bank Guarantee shall be from a Bank as per provisions of Section-V (SCC) of the bidding documents.
3. The BG should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the BG is submitted or is to be acted upon or the rate prevailing in State where the BG is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Bank issuing the guarantee.

4. While getting the Bank Guarantee issued, Bidders are required to ensure compliance to the points mentioned in Form 16-Form of Bank Guarantee Verification Check List enclosed in Section-VII of bidding document. Further, Bidders are required to fill up this Form 16 and enclose the same with the Bank Guarantee.

5. The Bank Guarantee (BG) shall be accompanied with the BG forwarding letter in the format attached as (Form no. 23) in the bidding documents.

6. In case, Bank Guarantee is getting issued from State Bank of India, Bidder to take note of NTPC letter ref. NTPC/FC/CS/BG/01 dated 03.09.2014 and SBI letter ref. CAG-I/AMT-1/2014-15/370 dated 04.09.2014 (attached with Section-V of Bidding Documents).

14.b PROFORMA FOR INSURANCE SURETY BOND TO BE FURNISHED BY THE EXECUTANT OF DEED OF JOINT UNDERTAKING OTHER THAN CONTRACTOR

(To be suitably incorporated by concerned package coordinator)

(To be stamped in accordance with Stamp Act of India)

Insurance Surety Bond No. .....
Date.....

To,
[Employer's Name & Address]

Dear Sirs,

In consideration of .....*[Employer's Name]*..... (hereinafter referred to as the 'Employer', which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to ..... with its Registered Head Office at .....(herein-after referred to as.....or ''Contractor'') a Contract for.....Package for its ..... (Name of Project) ..... vide Contract No. ..... dated..... and the same having been unequivocally accepted by the Contractor resulting in a ''Contract'', which award is on the strength of Deed of Joint Undertaking dated ..... (hereinafter referred to as ''Undertaking'') given by M/s..... (Contractor) and by M/s. .....(Associate / Collaborator)……. having its registered office at ..... (hereinafter called Associate / Collaborator), and the Contractor having further executed with M/s..... (Associate / Collaborator) a Sub-Contract dated ..... and the same having been unequivocally accepted by the Associate / Collaborator resulting in a Sub-Contract Agreement valued at ..... for..... (hereinafter called ''Sub-Contract Agreement'') and Associate / Collaborator having agreed to provide an Insurance Surety Bond amounting to ..... to the Employer on the terms and conditions specified in the ''Undertaking''.

We .....*[Name & Address of the Insurer]*.....having its Head Office at..... (hereinafter referred to as the 'Insurer', 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 amount payable by the Contractor to the extent of ..... as aforesaid at any time upto .....(@).....*[days/month/y*
ear] without any condition, demur, reservation, contest, recourse or protest and/or without any references to Associate / Collaborator or ''Contractor''. Any such demand made by the Employer on the Insurer 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 Insurer undertakes not to revoke this Insurance Surety Bond during its currency and or any period extended under the contract, without prior consent of the Employer and further agrees that the guarantee herein contained shall be enforceable till ninety (90) days after expiry of its validity.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Insurer under this Insurance Surety Bond, from time to time to extend the time for performance of the Contract or the Sub-Contract Agreement by the Associate / Collaborator for the purpose of which, the Insurer shall be liable to extend the validity of the present Insurance Surety Bond without any demur, condition, protest and the Insurer shall at no point in time have an option of revoking the same, The Employer shall have the fullest liberty, without affecting this Insurance Surety Bond, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Associate / Collaborator and to exercise the same at any time, in any

manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract or Undertaking or any other course or remedy or security available to the Employer. The Insurer shall not be released of its obligations under these presents by any exercise 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 Insurer from its obligations.

The Insurer also agrees that the Employer at its option shall be entitled to enforce this Insurance Surety Bond against the Insurer as Surety, in the first instance without proceeding against Contractor or Associate /Collaborator and notwithstanding any security or other guarantee that the Employer may have in relation to Contractor's or Associate / Collaborator liabilities.

Notwithstanding anything contained hereinabove our liability under this Insurance Surety Bond is restricted to..... and, it shall remain in force upto and including..... @ . ..... and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s..... (Associate / Collaborator) on whose behalf this Insurance Surety Bond has been given.

Date this.....day of.....20.....at.....

WITNESS :

1. .....
(Signature)
.....
(Name)
.....
(Official Address)

.....
(Signature)
.....
(Name)
.....
(Designation with Insurer Stamp)

Authorised Vide Power of Attorney
No.....
Date.....

.

2. .....
(Signature)
.....
(Name)
.....
(Official Address)

Notes : 1. (@)The date shall be as specified in the corresponding format for the Deed of Joint Undertaking enclosed in the Section 'Forms and Procedures'.

2. The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

3. The Employer shall be the Creditor, the Associate / Collaborator shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

4. The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

5. While getting the Insurance Surety Bond issued, the Contractor is required to ensure compliance to the points mentioned in Form of Bank Guarantee/ Insurance Surety Bond Verification Check List. Further, the Contractor is required to fill up this Form and enclose the same with the Insurance Surety Bond .

15. FORM OF JOINT VENTURE AGREEMENT

FORM NO. 15.

(On Non-Judicial Stamp Paper of Appropriate Value)

(NOT APPLICABLE)

16. FORM OF BANK GUARANTEE/INSURANCE SURETY BOND VERIFICATION CHECK LIST

BANK GUARANTEE/ INSURANCE SURETY BOND VERFICATION CHECKLIST

1. Bank Guarantee/ Insurance Surety Bond No.
2. Issuing Bank/Insurer
3. Amount of BG/ Insurance Surety Bond
4. Nature of BG/ Insurance Surety Bond & No. of Pages
5. Validity of BG/ Insurance Surety Bond
6. Package Description
7. Party & Contracts Ref. — Name, Address, Tel, Fax, e-mail, Contract No. Package Name
8. Bank Reference — Name, Address, Tel. Fax, E-mail

Sl. No.	Details of checks	YES / NO
1	Is the BG/ Insurance Surety Bond on non-judicial stamp paper/e-stamp paper of appropriate value, as per Stamp Act?	
2	Whether date, purpose of purchase and name of the purchaser are indicated on the stamp paper? (The date of purchase of stamp paper should be of any date on or before the date of execution of BG/Insurance Surety Bond and the stamp paper should be purchased either in the name of the executing Bank/Insurer or the Party on whose behalf the BG/Insurance Surety Bond has been issued. The stamp paper (other than e-stamp paper) should be duly Signed by the Stamp Vendor)	
3	In case of BG/INSURANCE SURETY BONDs from Bank/Insurance Company abroad, has the G/INSURANCE SURETY BOND been executed on Letter Head of the Bank/Insurance Company?	
4	Has the executing Officer of BG/INSURANCE SURETY BOND indicated his name, designation and Power of Attorney No./ Signing Power no. etc., on the BG/INSURANCE SURETY BOND?	
5	Is each page of BG/ INSURANCE SURETY BOND duly signed /initialed by executant and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars under seal of Bank as required in the prescribed proforma?	

6	Does the Bank Guarantees/ INSURANCE SURETY BOND compare verbatim with the Proforma prescribed in the Bid Documents?	
7	Are the factual details such as Bidding Document No./Specification No., Amount of BG/ INSURANCE SURETY BOND and Validity of BG/ INSURANCE SURETY BOND correctly mentioned in the BG?	
8	Whether overwriting/cutting if any on the BG/ INSURANCE SURETY BOND have been properly authenticated under signature & seal of executant?	
9	Whether the BG/ INSURANCE SURETY BOND has been issued by a Bank/Insurance Company in line with the provisions of Bidding documents?	
10	In case BG/ INSURANCE SURETY BOND has been issued by a Bank other than those specified in Bidding Document, is the BG/ INSURANCE SURETY BOND confirmed by a Bank in India acceptable as per Bidding documents?	

Date :

Place :

Signature .....

Printed Name .....

(Designation) .....

(Common Seal) .....

Note: The Bidder is required to fill up this form and enclose along with the Bank Guarantee/Insurance Surety Bond.

Certified that the Bank Guarantee submitted has been verified and accepted in line with the prescribed procedure.

NOTE:

(i) The Executive from Concerned Execution Department shall verify the BG/ Scanned copy of BG in the system in line with the prescribed procedure and the same shall be digitally approved in the system. The BG shall not be approved at a level lower than the DGM.

(ii) Dealing Executive of Unified Treasury at the level of E5/E6 shall certify that BG has been verified from the issuing bank.

17. FORM OF VALIDITY EXTENSION OF BANK GUARANTEE/INSURANCE SURETY BOND

FORM OF EXTENSION OF BANK GUARANTEE/ INSURANCE SURETY BOND

Ref. No.: Date:
@.....

Dear Sirs,

Subject : Extension of Bank Guarantee/Insurance Surety Bond No. dated for…..[indicate value of Bank Guarantee/Insurance Surety Bond].....favouring yourselves expiring on on account of M/s…… (Name of Bidder)…….in respect of Contract for (Insert Package name) (Insert Project Name) project,Contract No. dated……..
(hereinafter called original Bank Guarantee/Insurance Surety Bond)

At the request of M/s ……we ……Bank branch office at…… and having its Head office at ……do hereby extend our liability under the above mentioned guarantee No. ……..dated…… for a further period of ……..year/months from ……to expire on ……..

Except as provided above, all other terms and conditions of original Bank Guarantee/Insurance Surety Bond No…… dated..... shall remain unaltered and binding.

Please treat this as an integral part of the original guarantee to which it would be deemed to have been attached.

…….
(Signature)
…….
(Name)
……..
(Designation with Bank Stamp)
Authorised vide
Power of Attorney No…..
Date……
Dated
SEAL OF BANK/INSURANCE COMPANY

Note:
1. @ The extension of the Bank Guarantee/Insurance Surety Bond should be forwarded to the Unit/ Project/Corporate Centre, from where the extension has been sought.

2. The extension of BG/Insurance Surety Bond should be on Non-Judicial stamp paper/estamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG/Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in the State where the BG is executed, whichever is higher. The Stamp Paper/e-Stamp paper shall be purchased in the name of Bidder/Bank issuing the guarantee.

18. FORM OF INDEMNITY-CUM-UNDERTAKING AGREEMENT [FOR REMOVAL / DISPOSAL OF SCRAP / SURPLUS MATERIAL]

18. FORM OF INDEMNITY-CUM-UNDERTAKING AGREEMENT WITH REGARD TO REMOVAL/DISPOSAL OF SCRAP/SURPLUS MATERIAL

(TO BE EXECUTED ON STAMP PAPER OF APPROPRIATE VALUE)

INDEMNITY-CUM-UNDERTAKING AGREEMENT

THIS INDEMNITY-CUM-UNDERTAKING AGREEMENT executed this..... day of..... 20 ..... between .....*(Name of Company)* . ..... a Company /Partnership Firm / Proprietary Concern incorporated under the laws of ……. having its Registered Office(s) at .....(Office Address) ..... hereinafter called the 'Contractor' (which expression shall, unless excluded by or repugnant to the context, be deemed to mean and include its successors, administrators, executors and permitted assigns)

AND

M/s. ..... having its registered office at ..... (hereinafter referred to as 'Employer').

1. 'Employer' has awarded the 'Contractor', contract for execution of work ("Scope of Work") as mentioned in the contract agreement no. ..... dated....., entered into between 'Employer' and 'Contractor', relating to ..... (Name & Address of Project/Station) ..... (hereinafter called 'the Project').

2. The 'Contractor' for the purpose of execution of its Scope of Work had from time to time procured and stored ..... (Details of Material) ..... at the Project Site.

3. After completion of the Scope of Work by 'Contractor', it has been identified that scrap ..... (Details of Scrap Material & its quantity)..... and/or surplus ..... (Details of Surplus Material & its Quantity).....belonging to 'Contractor' is lying at the said Project Site.

4. Now, the scrap ..... (Details of Scrap Material & its Quantity) ..... and/or surplus ..... (Details of Surplus Material & its Quantity) ..... belonging to the 'Contractor', requires to be removed by 'Contractor' from the Project Site.

NOW THEREFORE THIS INDEMNITY-CUM-UNDERTAKING AGREEMENT WITNESSETH AS UNDER:

1. That 'Contractor' by way of this Indemnity-cum-Undertaking Agreement requests 'Employer' to issue necessary exit gate pass(es) in favour of 'Contractor' for removal of scrap..... (Details of Scrap Material & its Quantity).....and/or surplus ..... (Details of Surplus Material & its Quantity) ..... belonging to 'Contractor', from the project.

2. That as per Employer's procedure, 'Contractor' shall ensure loading of trucks for clearing of its scrap ..... (Details of Scrap Material & its Quantity).....and/or surplus ..... (Details of Surplus Material & its Quantity).....by itself, as aforesaid, under the supervision of CISF personnel.

3. That 'Contractor' in consideration of the premises above, for itself and its respective, executors, administrators and assigns, jointly and severally agree and undertake from time to time and at all times hereafter to indemnify 'Employer' and keep 'Employer' indemnified from and against all claims, demands, actions, liabilities and expenses which may be made or taken against or incurred by 'Employer' by reason of the issue of necessary gate pass(es)

by ‘Employer’ and permitting ‘Contractor’ to remove scrap ..... (Details of Scrap Material & its Quantity) ..... and/or surplus ..... (Details of Surplus Material & its Quantity)..... belonging to ‘Contractor’, from the project.

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

IN WITNESS WHEREOF, the ‘Contractor’ and the ‘Employer’, through their authorized representative, have executed these presents on the Day, Month and Year first mentioned above at ..... (Name of the Place) .....

For and on behalf of	**For and on behalf of**
.....	**…….**
(Contractor's Name)	***(Employer’s name)***
Signature	Signature .....
Name	Name .....
Designation of	Designation of .....
Authorised representative *	Authorised representative *
WITNESS :	**WITNESS :**
1. Signature	1. Signature .....
2. Name	2. Name .....
3. Address	3. Address .....

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* Indemnity-cum-Undertaking Agreement are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the Power of Attorney issued under common seal of the company with authority to execute Indemnity-cum-Undertaking Agreement , (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity-cum-Undertaking Agreement. In case of Employer, by the authorized representative of the Employer.

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

19. FORM OF CONTRACT CLOSING CERTIFICATES

Form-19.5

PROFORM FOR SCOPE COMPLETION CERTIFICATE

(TO BE ISSUED BY SITE ERECTION)

Note: The contractor has to get this form reviewed by PMC for onward submission to Employer

CERTIFICATE NO. CCP- 05

NAME OF PACKAGE: **LETTER OF AWARD/ NOA/CONTRACT NO.**:

NAME OF CONTRACTOR: **DATED:**

Project :

1. This is to certify that the scope of the above Contract has been completed in line with the contract read in conjunction with the following documents:

1. Final Amendment No._____
2. Approved drawings including site run pipingschemes, if any.
3. Approved Bill of Materials
4. Measurement details
5. As Built Drawings
6. Any other documents (specify)

2. It is further certified that the following have been supplied, as per the details given in the Contract Documents and the same have been taken over by Employer.

1. Mandatory spares
2. ~~Recommended Spares~~
3. ~~Special Tools & Tackles~~

Signature .....

Date ... ...

Place... ... ...

Name... ... ...
... ...
Designation ... ...
... ...

Form-19.10

PROFORMA OF CERTIFICATE REGARDING LABOUR PAYMENTS AND STATUTORY REQUIREMENTS TO BE FURNISHED BY CONTRACTOR.

(TO BE ISSUED BY THE CONTRACTOR)

CERTIFICATE NO. CCP - 10

NAME OF PACKAGE:

LETTEROF AWARD/ NOA/ CONTRACT NO. :

NAME OF CONTRACTOR:

DATED:

PROJECT:

This is to certify that we have made all labour payments including PF Liabilities in respect of the above mentioned LOA/ Contract and no other payments in this regard is pending from us.

Further we confirm that all Statutory requirements have been complied with by us and in case any default is reported against us, we shall be solely responsible for the same.

Signature ... ...

Date ... ...
Place... ... ...

Name... ... ...
Designation ... ...

Form-19.11

PROFORMA OF "NO DEMAND CERTIFICATE" BY CONTRACTOR (TO BE ISSUED BY THE CONTRACTOR)

CERTIFICATE NO. CCP-11

NAME OF PACKAGE:

LETTER OF AWARD/ NOA/ CONTRACT NO. :

NAME OF CONTRACTOR:

DATED:

PROJECT:

We, M/s ... . (Contractor) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from NVVN Ltd. in respect of our aforesaid LOA/Contract No... .... dated... .....including amendments if any, issued by NVVN Ltd., to our entire satisfaction and we further confirm that we have no claim whatsoever pending with NVVN Ltd. under the said Contract.

Notwithstanding any protest recorded by us in any correspondence, document, measurement books, and/or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this "NO DEMAND CERTIFICATE" in favour of NVVN Ltd. with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Signature ... ...

Name... ... ...
Designation ... ...

Date ... ...
Place... ... ...

(Company Common Seal)

(This certificate shall be accompanied by the Power of attorney of the signatory)

Form-19.12

PROFORMA OF CERTIFICATE FOR COMPLETION OF WARRANTY PERIOD (TO BE ISSUED BY SITE ERECTION)

CERTIFICATE NO. CCP-12

NAME OF PACKAGE:

LETTER OF AWARD/ NOA/ CONTRACT NO.:

NAME OF CONTRACTOR:

DATED:

PROJECT:

This is to certify that the warranty period for the above mentioned LOA/Contract has been completed in line with the provisions of the contract.

Signature .....

Date .....
Place.....

Name... ... ...
Designation ... .

Form-19.13

PROFORMA OF "CERTIFICATE FOR RETURN OF BGs/ INDEMNITY BONDS ETC."

(TO BE ISSUED BY SITE ACCOUNTS)

CERTIFICATE NO. CCP-13

NAME OF PACKAGE:

LETTER OF AWARD/NOA/ CONTRACT NO. :

NAME OF CONTRACTOR:

DATED:

PROJECT:

This is to certify that all the *Bank Guarantee/ Indemnity bonds/ Insurance policies/ Collaborator's or Associate's Guarantee received for the above mentioned LOA/ Contract have been returned in original to the contractor.

Signature ... ...

Date ... ...
Place... ... ...

Name... ... ...
Designation ... ...

Delete whichever is not applicable.

~~DECLARATION OF ABSENCE OF CONFLICT OF INTEREST WITH INDEPENDENT ENGINEER (IE)~~

(NOT APPLICABLE)

Form 22. (ELECTRONIC FUND TRANSFER FORM)

Bidder's Name and Address:

To

.....

Dear Sirs,

We, hereby authorize the Employer to make all our payments through Electronic Fund Transfer System. The details for facilitating the payments are given below:

(TO BE FILLED IN CAPITAL LETTERS)

1. NAME OF THE BENEFICIARY

2. ADDRESS

PIN CODE

3. TELEPHONE NO. (WITH STD CODE)

4. BANKPARTICULARS

(A) BANK NAME

(B) BANK TELEPHONE NO. (WITH STD CODE)

(C) BRANCH ADDRESS

PIN CODE

(D) BANK FAX NO (WITH STD CODE)

(E) BRANCH CODE

(F) 9 DIGIT MICR CODE OF THE BANK BRANCH (ENCLOSE COPY OF A CANCELLED CHEQUE)

(G) IFSC CODE

(H) BANK ACCOUNT NUMBER

(I) BANK ACCOUNT TYPE (TICK ONE)

SAVING	CURRENT	LOAN	CASH CREDIT	OTHERS

IF OTHERS, SPECIFY

5. PERMANENT ACCOUNT NUMBER (PAN) (ENCLOSE COPY)

6. E-MAIL ADDRESS FOR INTIMATION REGARDING RELEASE OF PAYMENTS

I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or credit is not affected at all for reasons of incomplete or incorrect information, I/We would not hold the Employer responsible. We have enclosed document as mentioned at Sl. No. 4(F) and 5 above.

SIGNATURE

DATE

(AUTHORISED SIGNATORY)

Name:

OFFICIAL STAMP

BANK CERTIFICATION:

It is certified that above mentioned beneficiary holds a bank account no. .....

with our branch and the Bank particulars mentioned above are correct.

SIGNATURE

DATE

(AUTHORISED SIGNATORY)

Authorization No. :

Name:

OFFICIAL STAMP

BG forwarding letter from Bank to NVVN in Bank's letterhead

To :

Employer Address

Sub: Submission of Bank Guarantee No.

Bank Guarantee No.	
Date of Issue	dd.mm.yyyy
Guarantee Amount	Currency Amount
Date of Expiry of BG	dd.mm.yyyy
Last date of lodgement of claim	dd.mm.yyyy
Name, Address and IFSC code of BG issuing Bank	*Name:* *Address:* *IFSC code:*
Contract/Letter of Award/PO No.	
Name & Address of the Applicant / Contractor	*Name:* *Address:*

We confirm that SFMS has been sent to your beneficiary bank as below:

ICICI Bank Limited, Connaught Place Branch,
9A, Phelps Building, Inner Circle, New Delhi - 110001
IFSC Code: ICIC0000007

We also confirm the genuineness of the signatures appearing on the said guarantee/extension and further also confirm that the same has been signed by the competent authority of the bank.

Date : Signature.....

Place : Printed Name.....

(Designation) .....

(Common Seal) .....

TO WHOMSOEVER IT MAY CONCERN

This is to certify that we have issued/ extended/ amended Bank Guarantee (BG) Number…….. amounting to .....(in number and words in Contract Currency) in favour of NVVN Limited on behalf of M/S ..... (Contractor name) vide their request reference…….. dated…….. (DD/MM/YYYY) for the period (from)..... (to).....

We confirm that the bank commission (excluding Stamp paper, Out of Pocket Expenses (OPE) and GST on OPE) amounting to ..... (amount and currency) for issuance/ extension/ amendment of the aforesaid BG have been recovered from M/s .....(Contractor name).

We further confirm that the commission charged on issuance/ extension/ amendment of the aforesaid BG is as per the prescribed rates of the Bank. Further the commission charged by the Bank as per card rates / sanctioned rates is customer/ borrower specific and is uniform for all BGs issued at the request of said customer/ borrower irrespective of beneficiary.

Chief Manager/Branch Manager

SS No: -

ABC Bank Ltd

New Delhi.

(With Seal of Bank Official)

Form 25

Indicative Format for handing over of the solar PV plant after completion of O&M period

1. General Information

Field	Details
Site Name	2 X 3 MW Ground Mounted Solar Project
Location	CCI Tandur, Telangana
O&M Party	
Date of Handover	
Project Type	Ground Mounted Solar Project
Handing over To	CCI Tandur
Handing over Point of Contact (O&M)	[Insert O&M contact person]
Taking over Point of Contact (CCI)	[Insert CCI contact person]

2. List of Equipment

Sl. No.	Items	Model	Serial No.	Rating	Quantity	Date of Inspection	Condition	Remarks
1	Solar Modules							
2	Inverter							
3	Transformer							
4	Switchgear							
5	PLC & SCADA System							
6	Desktop PC with monitor							
7	Air Conditioning							
8	Condition of all earthing potential & lighting arrestors or protection							
9	Fencing condition across project							
10	CCTV System							
11	Electrical fittings like Fan, lighting etc.							
12	CMCS Building condition							

13	Condition of module cleaning system							

List of mandatory spares:

	Mandatory Spares		
1	Solar PV Module	1 % of total DC capacity	
2	String Inverter with A.C. Combiner box (as applicable)	2% of total population for highest capacity	
3	MCCB	2 nos. of each type and rating	
4	**6.6kV Circuit Breakers (For metal enclosed swgr)**		
4a	For ICOG switchgear	1 no. of breaker replaceable for all feeders	
5	6.6kV RMU, if offered for Project	1 complete set interchangeable for all types	
6	Electrical Bushing for 6.6kV RMU (if replaceable type)	1 no. of each type	
7	6.6 kV Current Transformer for metal enclosed HT switchgear	3 nos. of each type and rating	
8	6.6 kV Potential Transformer for metal enclosed HT switchgear	3 nos. of each type and rating	
9	6.6 kV Surge Arrestor for HT switchgear for metal enclosed HT switchgear	3 nos. of each type and rating	
10	Earthing Trolley	1 no. of each type and rating	
11	Numerical relay For ICOG switchgear (6.6 kV HT Switch Gear)	1 no. of each type	
12	6.6kV Switchgear-Voltage Detecting Insulator(VDI) and Voltage Presence Indicator(VPI)	10% of total population	
13	Electronic Cards for PCU	1 number for each rating	
14	IGBT Unit for PCU	5% of total population	
15	Semiconductor Fuse	5% of total population	
16	AC Fuse of rating more than 10 Amp	25 nos. of each rating	
17	String Combiner Box	0.5% of total population	
18	SCADA ethernet switch	5% of total population for each type	
19	SCADA firewall getway	1 nos. of each type	
20	Module Connector Set (Male & Female) with wire	set	300
21	DC Cable (SPV Module to SCB)	m	300
22	DC Cable (SCB to PCU) of highest size(if applicable)	m	100
23	Inverter station Auxiliary transformer (Highest size)	1 No	
24	**Spares related to UPS/Battery charger**		

24.1	UPS/Battery charger for inverter station/sub pooling system	5% of total population for each type and rating	
24.2	Electronic Cards for UPS/ battery charger (inverter station and CMCS)	5% of total population for each type and rating	
25	**Spares related to Inverter Transformer**		
26	Inverter Transformer (of higher size and replaceable for all ratings)	No.	1
27	Set of Valves for Inverter transformer	set	1
28	WTI with contacts of Inverter transformer	Nos.	1
29	OTI with contacts of Inverter transformer	Nos.	1
30	Buchholz relay complete of Inverter transformer	Nos.	1
31	Pressure Relief Device of Inverter Transformer	Nos.	1
32	Magnetic Oil Gauge (MOG) of Inverter Transformer	Nos.	1
33	HV and LV Bushing with metal parts and gaskets of Inverter Transformer (Each Type)	Nos.	1

3. Handover Documentation Checklist

Provide the following documents as part of the handover:

Document Type	Remarks
Operation and Maintenance Manual	[Yes/No]
Warranty Certificates	[Yes/No]
Equipment User Manuals	[Yes/No]
Testing & Commissioning Reports	[Yes/No]
Inspection Reports (Last 10 Years)	[Yes/No]
Performance Test Reports	[Yes/No]
Repair or Replacement Records	[Yes/No]
Mandatory Spares Inventory	[Yes/No]
Certificates of Compliance (if applicable)	[Yes/No]

Photos of Installed Equipment	[Yes/No]

4. Handover Confirmation

We hereby confirm that all the equipment listed above has been inspected and is being handed over to the Customer Care & Ins
healthy working condition. The necessary documentation has been provided for each item, and the site is ready for further inspe
acceptance.

Authorised signatory of Contractor	**Authorised signatory of CCI Limited**
[Name, Position]	**[Name, Position]**
[Signature]	**[Signature]**
[Date]	**[Date]**