

Name of Work:- Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj .

NIT No: EE/SHQ/PBT/2025-26/13 (3rd Call)

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Certified that this NIT contains 1 to 58 pages.

**Executive Engineer
SHQ, SSB, Pilibhit**

Name of Work:- Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.

This Bid document consists of :

Technical Cum Eligibility Bid / Price Bid

Technical Cum Eligibility Bid to be opened on 15/09/2025 at 1530 Hrs.

Sashastra Seema Bal (SSB)

Notice Inviting e-tender

The Executive Engineer, SHQ, SSB , Pilibhit on behalf of the President of India invites percentage rate e-tender in two bid system on behalf of President of India from approved and eligible contractors of CPWD, MES, Railways ,P&T and Uttarakhand PWD ((Building & roads)/Housing Board Departments, Development Authority and also eligible manufacturers of MNRE and those of appropriate list of UREDA, UPCL, UJVNL having valid electrical license or manufactures and their Authorized OEM of Solar Power Plant equipment's or approved vendors by MNRE/ UREDA/ Uttar Pradesh State Electricity Corporation Ltd for the following work(s):

NIT No.: **EE/SHQ/PBT/2025-26/13(2nd Call)**

Name of Work: -

Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.

Estimated Cost: Rs. 44,09,211/-

Earnest Money: Rs. 88,184/-

Period of completion: 180 Days /06 Months

Last date & time of submission of bid: 12/09/2025 at 1500 Hrs.

**The bid forms and other details can be obtained from the website
www.eprocure.gov.in**

INFORMATION AND INSTRUCTIONS FOR BIDDER FOR e-TENDERING

S. No.	NIT NO.	Name of work and location	Estimated cost put to bid	Earnest Money	Period of Completion	Date & Time online bid submission start	Last date & time of submission of online bid	Last date & time of submission of original EMD and Solvency certificate.	Time & date of opening of tender
1	2	3	4	5	6	7	8	8	8
1	EE/SHQ/PBT/2025-26/13(3 rd Call)	Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpuri, Narayan Nagar, Melaghat, Bangali basti and Boom under 57 th Bn SSB, Sitarganj.	Rs. 44,09,211/-	Rs. 88,184/-	180 Days	1500 Hrs. on 02/09/2025	Up to 1500 Hrs. on 12/09/2025	Up to 1500 Hrs. on 15/09/2025	At 1530 Hrs. on 15/09/2025

Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.

- (1) Should have satisfactorily completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids.

Three similar works each of value not less than Rs 17.64 lakh or two similar works each of value not less than Rs 26.46 lakh or one similar work of value not less than Rs 35.27 lakh.

- (2) The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- (3) Information and Instructions for bidders posted on website shall form part of bid document.
- (4) The bid document consisting of specifications, schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.eprocure.gov.in free of cost.

- (5) Earnest Money in the form of Treasury Challan or Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt or Fixed Deposit Receipt (drawn in favour of "**Deputy Inspector General, SHQ, SSB, Pilibhit**") shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD should be deposited in the office of Executive Engineer, Frontier Hqrs, SSB, Ranikhet within the period of bid submission.
- (6) The bid shall only be considered after depositing of original EMD and Solvency certificate to the **Executive Engineer, SHQ, SSB, Pilibhit** within the period of bid submission
- (7) Contractor can upload the documents in the form of **PDF format**.
- (8) The Column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue. Contractor must ensure to quote the amount on percentage above/below on the total amount.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "**0**"(ZERO. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "**0**" (ZERO)

However, if a contractor does not quote any percentage above/below on the total amount of the tender, the tender shall be treated as invalid and will not be considered as lowest tenderer. Contractor must ensure to quote rate of each item.

9. **List of Documents to be submitted** to the **Executive Engineer**, Office of Deputy Inspector General, SHQ, SSB, Pilibhit and to be scanned and uploaded with the tender documents within the period of bid submission.
 - (i) Demand Draft/Pay order or Banker's Cheque /Deposit at Call Receipt/FDR of any Scheduled **Bank in original against EMD**.
 - (ii) Certified copy of **Enlistment Order of the Contractor** in appropriate class.
 - (iii) Certificate of Registration for **GST & acknowledgment** of up to date filed return as per NIT Stipulation. If the bidder has not obtained GST registration in the state in which the work is to take-up." then in such a case the bidder shall upload following undertaking with the bid document "if work is awarded to me, I/we shall obtain GST registration certificate within one month from date of receipt of award letter or before payment of 1st RA bill.
 - (iv) **Pan Card of Firm/agency**.
 - (v) Certified copy of **experience certificates for Similar work** of having satisfactorily completion of works of the magnitude mentioned in CPWD-6. Experience certificate clearly mentioned date of award of work, Schedule date of completion, Actual date of completion and completion cost. If actual date of completion exceeds to the schedule date of completion, by more than six months then, a performance report of the Agencies/contractor for the said work must be obtain from Executive Engineer/equivalent rank and same be uploaded with tender documents, if performance report is not found satisfactory then tender will be rejected during technical evaluations. Similar Work means same nature of work (Installation/ repair of solar Power Plant)
 - (vi) **Contractors, including working contractors of SSB whose progress of works delayed more than the 50%** of the scheduled period of completion, their tender will not be considered during technical evaluation of bids. However, their tender may be considered after final completion of work without levies/compensation.
 - (vii) Firm should have **Solvency/Bank Guarantee of minimum of 50% of the estimated amount**. It should be uploaded with the papers and hard copy may also be submitted to this office on or before last date and time of opening of technical bid. The solvency certificate/ document submitted should be latest one, of current financial year. If a firm intend to participate in more than one tender, then the solvency amount, document submitted shall be the amount required for more than 01 tender otherwise the department will consider his bid in any on or applicable tender as per solvency amount document submitted by the firm. Firm must also submit list of awarded works including LOI received and ongoing works with progress, tender value and their status under them to assess their financial capabilities to qualify in the bid.
 - (viii) List of mandatory machinery, tools & plants to be deployed by the contractor at site as per clause 18.
 - (ix) Tender acceptance letter signed by the bidder.
 - (x) Tenderer have to submit educational certificate, work experience and undertaking of Civil Technical representative in accordance with Clause 36(i) at the time of agreement.

- (xi) Only uploaded documents on CPP portal except physical EMD, against the NIT will be considered for qualifying in Technical Bid. No claim by contractor will be entertained of the hard copies submitted by the contractor.
- (xii) Certificate of Profit & Loss Statement of last five years ending 31.03.2023 from CA.
- (xiii) **In case of re-tender, the bidders will have to upload all the documents as mentioned in the NIT including EMD. However, the Bidders whose EMD is available with SHQ Pilibhit shall have to**
- (xiv) **upload the copy of the EMD/receipt of depositing of EMD along with an application for considering the same for the re-tender.**

**Executive Engineer
SHQ, SSB, Pilibhit**

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

[Department User may ask for Tender Acceptance Letter instead of asking Signed Tender Document from the Bidders. This is a sample format; User may revise it as per their Tender Conditions]

To,

The Executive Engineer
O/O Deputy Inspector General
SHQ, SSB, Pilibhit (UP),

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No.: **EE/SHQ/PBT/2025-26/13(3rd Call)**

Name of Tender/Work:- **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.**

Dear Sir,

I/We have downloaded/obtained the tender document (s) for the above mentioned 'Tender/Work' from the web site (s) namely **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.**

As per your advertisement, given in the website **www.eprocure.gov.in** .

1. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/We shall abide hereby by the terms/conditions/clauses contained therein.
2. The corrigendum (s) issued from time to time by your department/organisation too have also been taken into consideration, while submitting this acceptance letter.
3. I/We hereby unconditionally accept the tender conditions of above mentioned tender documents (s)/corrigendum(s) in its totality/entirety.
4. I/We do hereby declare that our Firm has not been blacklisted/debarred by any Govt. Department/Public sector undertaking.
5. I/We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organisation shall without giving any notice or reason therefore of summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder with Official seal)

NIT No: EE/SHQ/PBT/2025-26/13(2nd Call)

FINANCIAL INFORMATION

(FORM „A“)

I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last five financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Financial Years	2020-21	2021-22	2022-23	2023-24	2024-25
Gross Annual Turn Over					
Profit/Loss					

II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal

Signature of Bidder (s)

NIT No: EE/SHQ/PBT/2025-26/13(3rd Call)

Form “B-1”

**FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED
ACCOUNTANT**

“It is to certify that as per the audited balance sheet and profit & loss account during the financial year....., the Net Worth of M/s
(Name & Registered Address of individual/firm/company), as on
(the
considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30 % in last three years ending on (the relevant date).”

Signature of Chartered Account

.....

Name of Chartered Accountant

.....

Membership No. of ICAI

Date and Seal

CPWD-6 FOR e-TENDERING

1. Percentage rate tenders are invited on behalf of President of India invites online Percentage rate tenders in Two bid system from the Specialized Agencies who meet eligibility criteria given below in NIT for the following work.

Name of Work:- Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj

~~The enlistment of the contractors should be valid on the last date of submission of tenders.~~

~~In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.~~

- 1.1 The work is estimated to cost **Rs. 44,09,211/-**. This estimate, however, is given merely as a rough guide.

- ~~1.1.1~~ The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.

For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.

- 1.2 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-

Criteria of eligibility for submission of bid documents Conditions

- ~~1.2.1 Conditions for Non-CPWD contractors only, if bids are also open to non-CPWD contractors. For works estimated cost up to Rs. 20 Crore (the figure of Rs. 20 Crore may be modified as per bidding limit of CPWD class I/Group A contractors of respective discipline such as Electrical, Horticulture and Furniture etc. as the case may be)~~

Note:-

~~For works costing above Rs. 5 Crore but up to Rs. 20 Crore, (the figure of Rs. 5 Crore and Rs. 20 Crore may be modified as per bidding limit of CPWD class II/ Group B and CPWD Class I / Group A contractors respectively of respective discipline such as Electrical, Horticulture and Furniture etc. as the case may be) when bids are open to non-CPWD contractors also, then class II contractors of CPWD shall also be eligible if they satisfy the eligibility criteria specified in 1.2.1~~

above **NOT APPLICABLE**

- ~~1.2.2~~ Criteria of eligibility for ~~CPWD as well as non-CPWD contractors~~ **Specialized Agencies.** (For specialized work).

~~For works estimated to cost above Rs. 20 Crore. (the figure of Rs. 20 Crore may be modified as per bidding limit of CPWD class I/ Group A contractors of respective discipline such as Electrical, Horticulture and Furniture etc. as the case may be)~~

A) Work experience

Three similar works each of value not less than **Rs 17.64 Lakhs** or two similar work each of value not less than **Rs. 26.46 Lakhs** or one similar work of value not less than **Rs. 35.27 Lakhs** in last 7 years ending previous day of last date of submission of bids. (Modified vide OM No. DG/MAN/293 dated 31.10.2013) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7 % per annum, calculated from the date of completion to the last date of submission of bid. This is applicable for 1.2.1 as well 1.2.2. (Modified vide OM DG/MAN/284 dt. 13.8.2013)

Similar work shall mean works of “ **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.** ”

At the time of submission of bid contractor shall upload the Annual financial statement for the last five year. (Form “A”)

B) An assurance on contractors letter head duly signed stating “In case of lowest, I shall submit an undertaking from the OEM of solar panel and invertor both along with PG i.e. within 15 days from the date of issue of letter of intent”

(i) Authorization Certificate

(ii) The OEM shall unconditionally support-technically throughout the execution of contract as well as for maintenance for the useful life of the system.

(iii) OEM shall provide all the spares required for healthy functioning of the equipment for coming seven years from the date of supply of equipment’s.

(a) Performance guarantee / warrantee against manufacturing defects of solar module to give minimum 90% of rated output for 10 years and to give minimum 80% of rated output for 25 (twenty five) years.

(b) Minimum Five years performance guarantee /warrantee to overload 150% for one minute against manufacturing defect of PCU.

Certificate of registration for GST in Uttar Pradesh or Undertaking that “if work is awarded to me, I/we shall obtain GST registration certificate within one month from date of receipt of award letter or before payment of 1st RA”

D) Should not have incurred any loss in more than two years during the last five years ending 31st March 2022.

E) Affidavit as per clause 1.2.3 of CPWD- 6.

1.2.3. To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under: -

I/We undertake and confirm that eligible similar works (s) has/ have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / We shall be debarred for bidding in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee. (**Scanned copy to be uploaded at the time of submission of bid**)

~~When bids are invited from non CPWD contractors and CPWD class II contractors as per provisions of clause 1.2.1 above, it will be mandatory for non CPWD contractors and CPWD class II contractors to upload the work experience certificate (s) and the affidavit as per the provisions of clause 1.2.2.~~

~~But for such bids, Class I contractors of CPWD are eligible to submit the bids without submission of work experience certificate and affidavit. Therefore, CPWD class I contractors shall upload two separate letters for experience certificate and affidavit that these documents are not required to be submitted by them. Uploading of these two letters is mandatory otherwise system will not clear mandatory fields.~~

- 1.3 The work is estimated to cost **Rs.44,09,211/-**. This estimate, however, is given merely as a rough guide.
2. Agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD – 7 (or other Standard Form as mentioned) which is available as a Govt. of India publication and also available on website www.cpwd.gov.in or <http://etender.cpwd.gov.in>. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **06 Months** from the date of start as defined in schedule „F“ or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
4. The site for the work is available.
5. The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site **www.eprocure.gov.in** free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.

9. ~~A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any scheduled bank having validity for six months or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.~~
- (i) Copy of all bid document and other documents as specified in the tender notice (Duly signed by the contractor) shall be scanned and uploaded to the e-Tendering website, within the period of bid submission.
Online bid documents submitted by intending bidders shall be opened of those bidders, **whose original EMD and solvency certificate deposited and other documents scanned are found in order.**
10. **The bid submitted shall become invalid if:**
- i) The bidders does not deposit original EMD and solvency in the office of tender opening authority .
- (i) If any discrepancy is noticed the documents as uploaded at the time of submission of bid
- (ii) **If a Tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above / below on the total amount of the tender or any section / sub head in percentage rate tender , the tender shall be treated as invalid and will not be considered as lowest tender.**
11. The contractor, whose tender is accepted, will be required to **furnish performance guarantee of 5% (Five Percent)** of the tendered amount in favour of **“Deputy Inspector General, SHQ, SSB, Pilibhit** within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker’s cheque of any scheduled bank/ Demand Draft of any scheduled bank/Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule „F“ including the extended period if any. **The contractor shall be suspended for one year and shall not be eligible to bid for SSB Tender from date of issue of suspension order.**
The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board and Program Chart (time and progress) within the period specified in Schedule . An undertaking shall be given if applicable.

12. Intending Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to tender for works in the SSB Frontier responsible. For award and execution of contracts, in which his near relative is posted as a Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the SSB or in the Ministry of Home Affairs. Any breach of this condition by the contractor would render him liable to tender for SSB works in future.
17. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as afore said before submission of the tender or engagement in the contractors service.
18. The tender for the works shall remain open for acceptance for a period of **Seventy five (75) days** from the date of opening of tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to suspended for one year and shall not be eligible to bid for SSB Tender from date of issue of Suspension order . Further the tenderer shall not be allowed to participate in the retendering process of the work.

19. This notice inviting Tender shall form a part of the contract document. The successful tenderer /contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of: -
- (a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - (b) Standard C.P.W.D. Form – 7 or other Standard C.P.W.D. Form as applicable.

**Executive Engineer
SHQ, SSB, Pilibhit**

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT
Percentage Rate Tender & Contract for Works**

Tender for the work of : Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.

- (i) To be uploaded by **1500:00** on **02/09/2025** to upload at **www.eprocure.gov.in**
- (ii) Price bid to be opened in presence of eligible tenderers who may be present at 1100 Hrs on **15/09/2025** in the office of EE ,SHQ, SSB Pilibhit.

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule „F“ viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for by, and in respect of accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for **Thirty (30) days** from the due date of its opening in case of single bid system **Seventy five (75) days** from the date of opening of technical bid in case tenders are invited on 2/3 bid system for specialized work and not to make any modification in its terms and conditions.

A sum of **Rs. 88,184/-** is hereby forwarded in cash/receipt treasury Challan / deposit at call receipt of a Scheduled bank / Fixed deposit Receipt of Scheduled Bank / Demand Draft of a Scheduled Bank/Bank Guarantee issued by a Scheduled Bank as Earnest Money.

A copy of earnest money in receipt treasury challan/deposit at call receipt of a scheduled bank /fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank is scanned and uploaded. If I/We, fail to furnish the prescribed Performance Guarantee within prescribed period, I/We agree that the said President of India or his successors in office shall without prejudice to any other right or remedy, be at liberty to suspend for one year and shall not be eligible to bid for CPWD Tender from date of issue at suspension. Further, If I/We fail to commence work as specified, I/We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to suspend for one year and shall not be eligible to bid for CPWD Tender from date of issue at suspension. Further, If I/We fail to commence work as specified, I/We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely.

The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause **12.2 and 12.3** of the tender form. Further, I/We agree that in case of forfeiture of Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / we shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated: -

Signature of Contractor

Witness: -

Address: -

Occupation: -

Postal Address: -

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of the President of India for a sum of Rs.....
(Rupees.....).
.....).

The letters referred to below shall form part of this contract agreement:-

- (a) Letter of Intent:
- (b) Award letter:
- (c) Instruction to bidders
- (d) Special conditions of contract
- (e) General conditions of contract (including amendments)
- (f) CPWD specification
- (g) Schedule of rate
- (h) Drawing.

For & on behalf of President of India

Signature

.....

Dated:

Designation: **Executive Engineer**
 SHQ,SSB, Pilibhit

CPWD – 7/8	SSB
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PROFORMA OF SCHEDULES

SCHEDULE „A“

Schedule of quantities (as per PWD-3) as per schedule of work attached.

SCHEDULE „D“

Extra schedule for specific requirements/document for the work, if any: -Additional Conditions & Specifications attached

SCHEDULE „E“

Reference to General Conditions of contract :- General conditions of contract for CPWD works-2020 with amendment issued up to Date of submission of tender.

Name of Work **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.**

- (i) Estimated cost of work
- (ii) Earnest Money : Rs. 44,09,211/-
- (iii) Performance Guarantee : Rs. 88,184/-
- (iv) Security Deposit : 5% of tendered value
- SCHEDULE “F” : 2.5% of tendered value.

(GENERAL RULES & DIRECTIONS) :

Officer inviting tender : Executive Engineer
: SHQ, SSB, Pilibhit

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with **Clauses 12.2 & 12.3.** : See below.

Definitions

2(v) Engineer -in- Charge : Executive Engineer
SHQ, SSB, Pilibhit

2 (viii) Accepting Authority

-18-

: **Superintending Engineer
FHQ, SSB, New Delhi**

2(x) Percentage on cost of materials and Labour to cover all overheads and profits : **15%**

2(xi) Standard Schedule of Rates : **MNRE Rate / CPWD DSR – 2023**

2(xii) Department : **Sashastra Seema Bal (SSB)**

9(ii) Standard CPWD Contract Form GCC 2019, CPWD Form 7/ 8 as modified & Corrected up to the date of submission of tender : **GCC 2020, CPWD Form 7 modified & Corrected up to date of submission of tender.**

Clause 1

(i) Time allowed for submission of Performance Guarantee, program chart (Time and progress) and applicable labour licences, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance : **7 days**

(ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above : **10 days (With late fee @ 0.1% per day of performance guarantee amount).**

Clause 2

Authority for fixing compensation under clause- 2

Clause 3A

:
: **Superintending Engineer, FHQ,SSB, New Delhi**

Whether Clause 3A shall be applicable

Clause 5

NO

Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given below:- : **10 days**

10 days

10 days

Clause 6

Whether clause 6A shall be applicable : **Applicable**

Sl. No.	Description of Milestone	Time Allowed in days (from date of start)	Amount to be with-held in case of non-achievement of milestone
	NOT APPLICABLE		

Time allowed for execution of work : **06 Months**

Authority to decide

- | | |
|--|--|
| (i) Extension of time | : Executive Engineer
SHQ,SSB, Pilibhit. |
| (ii) Rescheduling of mile stones | : Executive Engineer
SHQ,SSB,Pilibhit |
| (iii) Shifting of date of start in case of delay in handing over of site | : Executive Engineer
SHQ, SSB ,Pilibhit |

PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site

Part	Portion of site	Description	Time Period for handing over Reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance	Full	Same Day
Part B	Portions with encumbrances		
Part C	Portions dependent on work of other agencies		

CPWD – 7/8

SSB

Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment

: N/A

Clause 7 A

Whether clause 7A shall be applicable : **Yes**

Clause 10A

List of materials to be provided by the contractor at his own expense.

- : **1. Magger
2. Earth Tester
3. Wire Gauge**

Clause 10B (ii)

Whether **Clause 10 B (ii)** shall be applicable : **No**

Clause 10C

Component of labour expressed as percent of value of work : **15%**

Clause 10 CA : **No**

Clause 10 CC

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column : **Not Applicable**

Schedule of component of other
Materials,

Labour, POL etc. for price : Y NIL
escalation.

Component of civil (except
materials

covered under **clause 10CA)**

/Electrical : Z NIL

construction Materials expressed as
percentage of total value of work : X NIL

opponent of Labor

Expressed as percentage of total value of
work.

Component of P.O.L.

Expressed as percentage of total value of
work.

Clause 11

Specifications to be followed

for execution of work

:For Civil work:- CPWD Specifications 2009 Vol. 1 and Vol. 2 with correction slips up to the day previous to last date of submission of tender (Hereinafter called CPWD specifications also)

For Electrical work:- As per CPWD General Specifications for Electrical Works, Part-I Internal (2023), Part-II External (1994) and MNRE specifications.

Clause 12

Authority to decide deviation up to 1.5 times of tendered amount

12.2. & 12.3

Deviation Limit beyond which : **100% (Hundred Percent)**
clauses 12.2 & 12.3 shall apply for building work

12.5

i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items)

ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items

Clause 16

Competent Authority for deciding reduced rates : **Superintending Engineer
FHQ,SSB, New Delhi**

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:

- : **1. Earth Tester**
2. Tong Tester
3. Wire Gauge
4. Insulation Tester LT (Megger)
5. Vernier Calipers
6. Hand Gloves
7. Spanner Set
8. Multi meter
9. Hand blower / Vacuum cleaner
10. Drill Machine
11. Chase Cutting Machine :
12. Crimping tool kit
13. Screw driver/ Plier/ Tester wheel
14. Aluminum Self-supporting Ladder –
Suitable for internal and external electrical work
15. Chain wrench 2”, 4”, 6”
16. Pipe wrench up to 4”
17. Battery operated torch
18. Temperature Screening IR Thermometer

Clause 19 C Authority to decide penalty for each default :- Engineer-in-charge

Clause 19 D Authority to decide penalty for each default:- Engineer-in-charge

Clause 19 G Authority to decide penalty for each default:- Engineer-in-charge

Clause 19 K Authority to decide penalty for each default:- Engineer-in-charge

CPWD – 7/8

SSB

Clause 25	
Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC.
DRC shall constitute one Chairman and Two members	
Chairman	As appointed
Member	SE Works Cum TLQA PRK O/o ADG, Region- Kolkata
Member	SE(P) O/o ADG, Region- Kolkata
Presenting Officer	EE (E), in charge of the work, as a party to the dispute, before DRC
Place of Arbitration	ER-HQ-Kolkata

Clause 32

Requirement of Technical Representative(s) and recovery Rate

Sl. No.	Minimum Qualification of Technical Representative	Designation Technical Staff and Discipline	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of no fulfilling provision of clause 36(i)	
					Figures	Words
1	Graduate Engineer or Diploma Engineer	Project/site Engineer (Electrical/ Electronics Engineering)	2 Years or 5 Years respectively	1	Rs. 15,000/- per month	Rs. Fifteen thousand per month.

~~Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.~~

~~Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% requirement of degree engineers.~~

Executive Engineer
SHQ, SSB, Pilibhit

Terms and Conditions

Name of Work: - Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.

- 1.1 This specification covers designing, manufacturing, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, commissioning putting into operation of **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj.**
- 1.2. The work is to be executed at 14 Border Out Posts (BOPs) of SSB situated in District Pilibhit & Lakhimpur Khiri of Uttar Pradesh. The interested bidder may visit the sites at his own expenses to get familiarize with the site conditions before submitting the tender.
- 1.3. No T&P shall be issued by the Department and nothing extra shall be paid on account of this.
- 1.4. The work shall be executed as per CPWD General Specifications for Electrical Works Part-I Internal (2013), Part-II (External-1994), Part-IV Sub-Station 2013, as per relevant IE Rules, BIS/IEC /ISMNRE guidelines and certified as per IEC 61215 and qualify IEC 61730 and IEC 61701 amended up to date and as per NIT wherever applicable, as per relevant IS and as per directions of Engineer-in-Charge. All electrical works shall be carried out in accordance with the provisions of Indian Electricity Act, 2003 and Indian Electricity Rules, 1956 as amended up to date.

The technical specifications are to be read in conjunction with above and in case of variations technical specifications of tender document shall apply. Nothing extra shall be paid on account of additional features in the technical specifications as the same to be read along with schedule of quantities for the work. In case of discrepancy between the BOQ, List of Makes, Tech. Specifications, Drawings etc the following order of preference shall be observed,:-

1. BOQ
2. List of Makes
3. Technical Specifications
4. Drawings
5. CPWD General Specifications
6. IS/ IEC/International Codes

There will be no deviation regarding technical specifications of the equipments taken in the tender. However department may consider higher specifications if it meets our requirement.

- 1.4 The tenderer should, in its own interest, visit the site and get familiarized with the site Conditions before tendering

1.5 Payment Terms:

On account payments for part work (After stipulated and statutory deductions) as assessed by the Engineer-in-Charge for the applicable items in the contract shall be payable at part rate not exceeding the percentage indicated against the stages of work.

S.N.	Stage of work	Percentage of Rate
A	On initial inspection of material and delivery at site in good condition on pro-rate basis.	N/A
B	On Completion of testing and commissioning.	N/A
C	At the time of payment of final bill.	N/A

Only running bills shall be paid as per actual execution of work at site.

Additional Terms and Conditions and Technical Specifications

Scope of work:

Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj Contractor must conduct the site inspection before participating in the bid process.

Eligibility

1. Approved and eligible contractors of CPWD, MES, Railways ,P&T and UP PWD (Building & roads)/Housing Board Departments, Development Authority and also eligible manufacturers of MNRE and those of appropriate list of UREDA, UPCL, UJVNL having valid electrical license or manufactures and their Authorized OEM of Solar Power Plant equipment's or approved vendors by MNRE/ UREDA/ Uttar Pradesh State Electricity Corporation Ltd.
2. The scope of work covers study of site conditions and based on that designing, Engineering, manufacturing, material testing, inspection of site/plant, packing & transportation up to project site, loading & unloading, storage of material in safe custody, Erection, carrying out preliminary tests at site, commissioning, performance testing of solar photovoltaic power plant and connecting the plant with all available buildings at site with associated components and handing over to the SSB. The scope of work also covers 5 years maintenance & warranty of all the equipment's installed and plant from the date of handing over of the plant including additional warranty (by manufacture) as specified in conditions of contract.
3. It is the responsibility of the bidder to design, supply, install, commission and put in operation the equipment's and services required for the satisfactory performance of the solar PV power Plant.
4. **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj** shall consist the following components.

a) Solar PV modules

- i) To achieve total capacity of **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj** the minimum capacity of each panel should not be less than 335 watt. The panel should be made in India, Mono/poly crystalline silicon solar cells and as per latest Ministry of New and renewable energy (MNRE) specifications/relevant Bureau of Indian standard codes (BIS) specifications, latest edition of IEC Specification and make of the module should be as per MNRE approved vendors list (ALMM). Minimum cell efficiency shall be as per latest MNRE standard.

- ii) The PV modules must confirm to the latest edition of any of following IEC/equivalent BIS standards for PV module design qualification and type approval.

Crystalline silicon PV module: IEC 61215/ISI4286

In addition the modules must confirm to IEC 61730 Part-I: requirement for construction & part-2: requirement for testing, for safety qualification or equivalent IS (Under dev.)

- iii) If PV modules to be used in a highly corrosive atmosphere (coastal areas etc) it must qualify Salt mist corrosion testing as per IEC 61701/IS 61701
- iv) The amount of power produced by PV module is roughly proportional to the intensity and the angle of the light reaching them. They are therefore required to be positioned to maximum advantage of available sunlight within string constraints. Bidder will position the PV modules in such a manner that the maximum power is obtained with the sun's movements during the day. PV modules and associated accessories shall be suitable for continuous outdoor use and capable to withstand weather condition of the particular site location.
- v) Module deployed must use a RF identification tag as per latest MNRE specification. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- vi) PV module must be tested and approved by one of the IEC authorized test centre. Module frame shall be made of corrosion resistant materials preferably having anodized Aluminium.
- vii) The module vendor should have experience of installation of solar plant of at least 15 Kwp and above Capacity.

b) ~~Battery bank~~

~~LMLA (tall tubular solar battery 12 volt, battery type C 10) / VRLA tubular Gel/SMF type suitable for 15 KWP solar plant to provide minimum 6 hrs power backup shall be as per relevant Bureau of standard codes (BIS) specifications/latest Ministry of new and renewable energy (MNRE) specification confirming to latest edition of IEC and make of the battery should be as per MNRE approved vendors list along with appropriate cabinets for battery banks, provision of racks for batteries should also be done, battery room (control room) of adequate size as per drawing shall have to be constructed. The batteries shall be designed for operating in very low temperature (-15 degree) of the particular site. Battery bank connection to the PCU will be provided through proper protection for preventing damage to the batteries.~~

c) Module Mounting Structures (MMS)

MMS shall be as per site condition and shall be so designed to withstand the speed of the wind of the particular location (minimum design wind speed of 170 KM/ Hour) with clamps and accessories. Necessary civil works, as per relevant bureau of Indian standard codes (BIS) specifications/Ministry of new and renewable energy (MNRE) specifications will be executed. Each structure should have angle of inclination as per the site condition to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance. It must be ensured that the design has been certified by recognized lab/institute. In this regard wind loading sheet will be submitted to SSB. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed. The PV array structure design shall be appropriate with a factor of safety of min 1.5. The structure shall be designed to withstand operating environmental conditions for a period of minimum 25 years.

Civil work for module mounting structure in flood prone area and other locations shall be constructed as per site requirement & as per the instruction of Engineer- in- charge. Foundation shall be provided considering the flood prone area and structure should be designed to save guard against the flood, with providing the RCC footing like pilling/raft footing etc. and columns to be braced with beam at top column as per structural design/site requirement. Contractor shall be totally responsible against any damages occurs to the structure due to flood and natural climate like tornado etc. the height of the base of module shall be as per drawing.

The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m². Approved structural engineer should certify after the building inspection that the building on which PV plant is to be installed is able to take such loads. The total responsibility is with contractor to check and verify the same. Water proofing of roofs should not be tampered for installation of grid structure for solar PV mounting. In the event of any seepages/leakages, contractor has to rectify the same with standard water treatment mechanism to the satisfaction of SSB.

Array/module/panels support structure shall be fabricated using corrosion resistant hot dip galvanization with minimum thickness of coating not less than 80 micron on each side. The mounting structure steel shall be as per latest IS 2062 : 1992 and galvanization of mounting structure shall be in compliance of the latest IS: 4759,2629, 4736 as applicable.

Material of Structure shall be corrosion, resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.

The ground mounting structure design must follow the existing land profile. The proper clearance between lower edge of PV panel and ground level shall be maintained for allowing proper ventilation for cooling, also ease of cleaning and maintenance of panel. The PV panel structures shall be designed in such a way that cleaning of the panels shall be carried out safely.

Each PV panel structures shall incorporate one bird repellent spike at a level higher than the panel edge. The location of the spike should be selected for minimum shadow effect.

All fasteners should be primarily of stainless steel to resist corrosion. The support structure shall be free from corrosion when installed.

PV modules shall be secured to support structure using screw fasteners and/or metal clamps. Screw fasteners shall use existing mounting holes provided by modules manufacturer, adequately treated to resist corrosion.

The gird structure should be installed in manner to leave sufficient space for repair and maintenance aspect of the roof top, particularly for leakages.

d) Solar inverters/ power conditioning unit

~~The Solar inverter shall be Hybrid inverter (with provision to charge the battery from main source) having 240 V, D.C. input and 415 V, A.C. output (suitable for 15 KWP solar plant), programmable, smart inverter, hybrid as per relevant bureau of Indian standard (BIS) codes (IEC 61683/IS 61683 & IEC 60068 2 (1, 2, 14, 30). Specifications of inverter shall be as per Ministry of new and renewable energy (MNRE) specifications.~~

Power conditioning unit (PCU)

~~SPV array produces direct current (DC) and it is necessary to convert this to alternating current (AC) and adjust the voltage levels before powering the equipments designed for AC supply. Conversion shall be achieved by using an electronic inverter and the associated control and protection devices. All these components of the system are termed as power condition unit (PCU). In addition, the PCU shall also house MPPT (maximum power point tracker), to maximize solar PV array, controller and inverter. This shall be supplied as integrated unit or different units of charge controller and inverter depending on rating & size of the power plant.~~

Maximum power point tracker (MPPT) :

~~Maximum power point tracker (MPPT) shall be integrated into the PCU to maximize energy drawn from the SPV array. The MPPT should be Microprocessor/Microcontroller based to minimize power losses.~~

CHARGE CONTROLLER :

DC electricity from the array is used to feed inverter as well as charge the battery bank for use during night. The total energy received from the array is depending on the availability of sunlight during the day which in turn varies from season to season. There may be occasions when the power plant generates surplus energy. Similarly in monsoon season, prolonged overcast sky could drain out the battery bank beyond the maximum allowed depth of discharge (DOD). Therefore to guard against battery overcharge or deep discharge, the charge controller shall be incorporated by the contractor.

INVERTER:

~~Inverter shall be hybrid inverter/ based on PWM technology. It must have built-in meter and data logger to monitor plant performance through external computer. The DSP controller is used for controlling the whole unit in quick time. Rating of the inverter should be suitable for 15 KWP plant and should have suitable D.C./AC voltage rating, pure sine wave inverter with inbuilt MPPT charge controller with the output power of 15 KWP. The output voltage should have good quality sine wave. External battery charging facility through AC is also to be provided.~~

e) Junction boxes (JBs)

JBs shall be as per equivalent BIS standard, IP 65 (for outdoor use) and IP 54 (for indoor use). The junction boxes are to be provided in the PV array for termination of connection cable. The JB's shall be made of GRP/FRP/Powder coated Aluminium/ cast Aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cables lugs. The JB's shall be such a way that the input & output terminated can be made through suitable cable glands. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 hinged door with EPDM rubber gasket to prevent water entry. Single/double compression cable glands. Provision of earthing. It should be placed at feet height or above for ease of accessibility.

Each junction Box shall have high quality suitable capacity metal oxide varistors (MOVs)/SPDs, suitable reverse blocking diodes. The junction box shall have suitable arrangement monitoring and disconnection for each of the groups. 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.

f) AC/DC DISTRIBUTION BOARD : The board shall be as per equivalent BIS standard/latest MNRE specification. DC distribution panel shall receive the DC output from the array field. DC DPBs shall have sheet from enclosure of dust & MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

AC DISTRIBUTION PANEL BOARD :

AC Distribution panel board (DPB) shall control the AC power from PCU/inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT bus bar of exiting building through proper size cable. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/IS60947 part I, II and III. The changeover switches/panels, cabling work should be undertaken by the contractor as part of the project.

All the panel's shall be metal clad, totally enclosed, rigid, floor mounted, air-insulated, cubical type suitable for operation on three phase/single phase, 415 or 230 volts, 50Hz. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius 80 percent humidity and dusty weather. All indoor panels shall have the protection of IP54 or better. All outdoor panels shall have the protection of IP 65 or better. It should conform to Indian electricity act and rules (till last amendment).

All the 415 AC or 230 volts devise/equipment like bus support insulators, circuit breakers, SPDs, VTs etc. mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.

g) Cables:

Cables shall be as per relevant bureau of Indian standard codes (BIS) std. (IEC 60227/IS 694 & IEC 60502/IS 1554 (Pt. I &II)/ ministry of new renewable energy (MNRE) specifications.

All cables/wires shall be routed in a G.I. cable tray/raceway/conduit suitably tagged and marked with proper power cable of adequate rating shall be required for interconnection of :
Modules/panels within array.

- Array & DCDB
- DCDB / inverter/Battery bank
- Inverter & ACDB & interconnection of existing buildings with ACDB/SOLAR PV plant
- Any other cable as per site requirement

The cables shall be of 1100 volt grade, copper conductor, XLPE/PVC insulated, PVC sheathed, armoured and overall PVC sheathed, strictly as per IS: 7098 (Part I & II) – 1976 or IS 1554. Colour of the outer sheath shall be black. Power cables size for 1.1 KV systems shall be chosen taking into account the full load current & voltage drop. The allowable voltage drop at terminal of the connected equipment shall be max. 3% at full load. The de-rating factors viz group duration of temperature shall also be considered while choosing the conductor size. Control cables shall be RFLS type 1100 volts grade, copper conductor, PVC insulated, PVC sheathed, amoured and overall PVC sheathed, strictly as per IS: 1554 (Part I) and other relevant standards. The permissible voltage drop from the SPV generator to the charge controller shall not be more than 1% of peak power voltage of the SPV power source (generating system) in the light of this fact the cross-sectional area of the cable chosen in such that the voltage drop introduced by it shall be within 2% of the system voltage at peak power.

All connections should be properly terminated, soldered and/or sealed from outdoor and indoor elements. Relevant codes and operating manuals must be followed. Extensive wiring and terminations (connection points) for all PV components is needed along with electrical connection to lighting loads. The cable with suitable rating from PV module to inverter to battery bank, inverter to ACDB, ACDB to panel and panel to existing building etc. shall be provided by the bidder as per the site requirement. The rate shall be inclusive in the quoted amount in the bill of quantities. Nothing extra will be paid in this regard.

h) LIGHTING PROTECTION

The SPV power plants and control room shall be provided with lightning & overvoltage protection. The main aim of this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. the entire space occupying the SPV array and control room shall be suitably protected against lightning by deploying required number of lightning arrestors. Lightning protected against induced high-voltages shall be provided by the use of suitable numbers of early streamer emission air terminal (ESE) air terminal/conventional lightning protection and suitable maintenance free chemical earthing (minimum 4 nos.) such that induced transients find an alternate route to earth.

SURGE PROTECTION

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

i) EARTHING PROTECTION

Each array structure of the PV yard shall be grounded/earthed properly as per IS 3043-1987 in addition the lightning arrester/masts shall also be earthed inside the array field. Earth resistance shall be tested in presence of the representative of SSB as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB etc. shall also be earthed properly.

j) Fire extinguishers, Danger Boards, rubber mat and signages

~~Danger boards should be provided as and where necessary as per IE act/IE rules as amended up to date, three signage shall be provided one in each at battery cum control room solar array area and main entry from BOP. Text of the signage may be finalized in consultation with Engineer in charge. Firefighting system for the proposed power plant for fire protection shall consist the following:~~

~~a) Portable fire extinguishers in control room for fire caused by electrical short circuit.~~

~~b) Sand bucket in control room~~

~~The installation of fire extinguisher should conform to TAC REGULATIONS AND BIS standards. The fire extinguishers shall be provided in the control room housing, PCUs as well as on the roof or site where PV array have been installed.~~

k) Control room for solar plant:

~~Pre fabricated/Load bearing/RCC structure for Battery bank/control room of suitable size having plinth height minimum up to 0.6 meter from natural ground level as per drawing and direction of engineer in-charge shall be constructed. This must withstand the load of batteries and other equipments. Suitable gate must be installed in control room. Roof of control room must be so designed to prevent water logging etc. The specifications shall be as per CPWD/IS standards and as per drawing and direction of Engineer in charge. The control room should be completed with internal electrification (as per CPWD specifications) which include following- Copper wiring with PVC conduit.~~

~~Exhaust fan—2 Nos.~~

~~Ceiling fan—1 Nos.~~

~~LED tube light—2 Nos.~~

~~LED flood light (30-40 watt)—4 no. (for external illumination)~~

~~6/16 Amp. Switch socket—2 Nos. each~~

~~Shock proof rubber mat~~

~~Fire extinguishers~~

~~l) Contractor shall prepare the drawings for control room get it approved from SSB before execution.~~

~~m) Electrical load wiring/cabling for existing building :~~

~~Separate electrical load wiring with PVC conduit shall be in the scope of contractor in all the existing BOPs building at the project site for solar PV plant supply including conduiting, wiring, switch socket, MCB distribution boards, MCBs interconnection cables of existing building with solar PV plant complete in all respect. The wiring should be as per latest CPWD specifications. Contractor shall also repair/replace existing switch sockets, plate etc. as per site requirement. Suitable rating MCBs with distribution boards to be used for electrical protection with proper earthing. The contractor shall make arrangement for by pass system/changeover switch sockets, plate etc. as per site requirement. Suitable rating MCBs with distribution boards to be used for electrical protection with proper earthing. The contractor shall make arrangement for by pass system/changeover switches (manual/automatic type with interlocking arrangement, MCCBs panels, equipment's, switchgears and all other accessories as per actual requirement of site) so that power supply can be transferred easily without long duration/disruption. No extra cost will be paid to the contractor for the same.~~

~~Min. Size of wire for lighting circuit. — 1.5 sq mm FRLS copper wire~~

~~Min size of wire for power circuit. — 4 sq mm FRLS copper wire~~

~~Cable — XLPE armoured/un armoured as per requirement of suitable size.~~

~~Switch/socket — Modular/piano type with complete plate, box as per site requirement~~

~~Distribution boards with MCBs double door single phase/three phase.~~

~~n) Levelling, Internal roads and paths including storm water drains for SOLAR PV plant shall be in the scope of contractor. Work shall be done as per CPWD/MNRE specifications, site condition and directions of engineer in charge. No extra cost shall be paid for the same.~~

~~o) Any other equipments/activities which are not specifically mentioned in this documents but necessary for safe and efficient operation of the SPV plant shall be executed by the contractor and no extra cost shall be paid for the same. Before start of work contractor shall conduct survey of the site and finalize the plant location, control room location, layout, planning and prepare the detailed design & drawing for the complete solar PV plant. The contractor shall furnish the following drawings after award and obtain approval from SSB.~~

~~a) General arrangement drawings and schematic drawings indicating all the specifications of hardware shall be provided to SSB before starting the installation. The installations shall be only as per the approved drawing of SSB.~~

~~b) General arrangement and dimensioned layout schematic drawing showing the SPV panel and protection system including battery bank design and any logical control diagram as required.~~

~~c) Control room drawings.~~

~~d) Array/module mounting structure design calculation and drawing along with stand pro. It must be ensured that the design has been certified by recognized lab/institute in this regard and submit wind loading sheet to SSB.~~

~~e) Item wise bill of material for complete SPV plant covering major components and associated accessories~~

~~f) Overall layout showing SPV plant.~~

~~g) Electrical schematic drawings with details/specification of components of 15 KWP solar power plant with battery bank.~~

~~h) manufacture s test certificates/warranty certificates wherever applicable.~~

~~i) Format for reports and charts for analysis of various parameters.~~

~~j) All safety/fire protection items as per specifications. Danger boards warning boards, route marker etc also to be provided as per statutory regulations. Format for annual maintenance and preventive maintenance and the maintenance activities are required to be submitted.~~

3.4 Test Reports/Certificate

Contractor shall submit the test certificate/reports for items/components from any of the NABL/IEC accredited testing laboratories or MNRE approved test centres. The list of MNRE approved test centres will be reviewed and updated from time to time.

Type test certificates for all the tests specified for the factory built solar PV modules and the component parts shall be submitted by the contractor.

Contractor shall furnish copies of the test reports for approval before dispatch.

Two sets of copies of the complied and approved test certificates shall be submitted to the SSB

3.5 Maintenance and warranty

The standard comprehensive onsite maintenance & warranty will be valid for five years including battery bank. Mechanical structures, electrical works, inverters, PV module, charge controllers, maximum power point tracker units, distribution boards, digital meters, switch gear, and overall workmanship of SPV power plant system must be warranted against any manufacturing/design/installation defect.

Warranty period will start from the date of handing over of the site to SSB including testing and successfully commissioning of the work of solar PV plant in all respect.

Warranty will be free of cost and nothing will be paid for repair/replacement of defective parts/preventive maintenance or any other job on account of works required to execute during warranty period.

Contractor shall appoint a maintenance team and attend any defect within 72 hours. Original warranty certificate of equipment's (equipment's having more than 5 year warranty) shall be handed over to SSB after completion of project.

3.6 The scope for supply shall also include comprehensive insurance of the product against theft/damage/defects and human beings involved against accidents up to completion of work and handing over. Storage & transportation is also in the scope of the contractor.

3.7 All the electrical works shall be carried out as per the relevant codes and standards and as per the guidelines of prevailing electrical inspectorate. All liaison work required for electrical inspectorate approval shall be in the scope of the contractor and the rate quoted by the contractor shall be inclusive of the same. The contractor shall not claim any additional fee for liaison work and he shall prepare the all the necessary documents such as drawings as required for the approval & sanction order.

3.8 The civil works, if any, for the supports for SPV/ any chipping works and refinishing by plastering and painting for installation of complete system shall also be in scope of the contractor.

3.9 All the necessary co-ordination with regard to sub-contracted items shall be carried out by the bidder. The purchaser/engineer will communicate only with the bidder for all matter pertaining to this contract.

3.10 The contractor shall be responsible for obtaining necessary statutory approvals/prior approvals, from local bodies, electrical inspectorate, state pollution control board, etc. if any as applicable. All MNRE guidelines for the material and installation should be followed by the bidders. Nothing extra shall be paid to the contractor for the same.

3.11 The total quoted rates for this contract shall be all-inclusive and shall cover all items and service necessary for successful completion of the contract. All the fittings and accessories that might not have been mentioned specifically in the specification but are necessary for equipment's of the system, shall be deemed to be included in the specification and shall be supplied and furnished by the contractor without any extra charge.

3.12 The power from hybrid inverters shall be taken to a distribution panel with multifunction meters at outgoing (ammeter, voltmeter, PF, Energy consumption with a logger that has communication port of RS 232 shall be provided) necessary number of MCCB with suitable overload and short circuit rating shall be provided for incomer and outgoing.

3.13 The outgoing of the main SPV panel shall be taken through DC cable with proper protection (though GI raceways with suitable size) of suitable rating and shall be hooked up over existing panels/DBs. The rate for any modification of existing panel shall be inclusive of the rate quoted.

3.14 The contractor shall also furnish 2 sets of the approved manuals of instructions at the time of inspection and taking over of the equipment. These manuals shall be properly bound in book form and contains all information, description of equipment, diagramme etc. which is necessary to enable the customer to operate and maintain the whole system. In order to maintain the plant, spare parts for keeping minimum stock with measuring instruments are to be provided by the contractor.

4.0 CODES AND STANDARDS

All equipment and accessories shall comply to requirement of standards published by latest MNRE specifications/Bureau of Indian standards (BIS) in case no BIS codes exist the equipments shall meet the requirement of international standard including IEC/IEEE for design and installation of PV system. The list of standards adopted shall be indicated in the bid. Latest CPWD specifications to be followed for electrical works. In addition to the above standards the whole system must conform to the relevant national/international electrical safety standards.

5.0 TOOLS AND SPARES

After completion of installation & commissioning of the power plant, necessary tools & spares are to be provided free of cost by the contractor for maintenance purpose. A list of requisite spares, fuses, MCCBs etc along with spare set of PV modules to be indicated, shall be supplied along with the equipment.

6.0 ACCEPTANCE OF SYSTEMS AND PERFORMANCE EVALUATION

The installer must verify that the systems has been installed according to the manufacture and latest MNRE guidelines. A checkout procedure should be developed to ensure an efficient and complete installation.

7.0 SYSTEM DOCUMENTATION :

It is essential that owner have complete documentation on the system. System documentation should include an owner's manual, warranty certificates, test certificates, as build drawings and copies of relevant drawings for whatever system maintenance might be required in the future.

8.0 INSTALLATION

Installation shall be done by the qualified engineer who has adequate experience with installation of the PV system.

LIST OF APPROVED ITEMS

The contractor shall use any one of the makes for use in work as below after getting the approval from the Engineer-in-Charge.

All material should be as per MNRE/BIS approved manufacturer list amended up to date

Sl. No.	Item	Make of Materials/Equipment
1	Inverter/ Power Controller Unit	ENERTECH, LUMINOUS, PPS, SMA, CONSUL, NEOWATT or MNRE/BIS approved vendor
2	SPV PANEL	CEL, BEL, TATA or MNRE/BIS approved vendor
3	Distribution board	Legrand, ABB, Schneider, Siemens,
4	MCB, RCCB, Disconnectors	Legrand, ABB, Schneider, Siemens,
5	DC string cable- copper	Apar/ Siechemm/Lapp,
6	DC main cable	KEI/Polycab/Havells cables
7	DC surge protection device	ABB/CITEL/ISKRA
8	660/1100 volt grade stranded PVC unsheathed wire with copper conductor	Finolex/RR Kabel/Polycab/KEI/Havells
9	Modular type switches, Sockets, bell push, etc	Crabtree, Legrand Mosaic, Anchor, MK Blenze, North west make
10	1.1Kv Cu/Al Cable	Havells/ /Polycab/ KEI
11	Conduits PVC /MS	BEC/AKG/ Balco/Plaza/ Anchor
12	Battery	EXIDE, NED, HBL/Luminus or other MNRE approved vendor
13	Fan & Exhaust fan	Usha/ Havells / Orient /CG
14	LED Light	Philips/CG/Oshram/Wipro
15	Ordinary Portland Cement Grade 43/53	BIRLA, JK, ACC, ULTRATECH, JAYPEE, AMBUJA, SHREE
16	Reinforcement Steel	TATA , SAIL, RINL, JINDAL, JSW STEEL, SRMB
17	Wall Putty	JK/BIRLA
18	Paint/Polish/ Primer/ Water Proofing Paint	BERGER, ASIAN, DULUX
19	Powder Coating	AKZONOBEL, ASIAN
20	Epoxy Paint	FIBREX/BASF
21	Floor & Wall Tile(Vitrified & Ceramic)	KAJARIA, ORIENTBELL ,SOMANY
22	Construction/Waterproofing Chemical, Admixtures	ROFFE, FOSROC, SIKA, ULTRACON
23	Pre- coated sheet profile sheet	TATA/JSW

Note: - In case make of any equipment or material is not specified in the NIT, the decision of the Engineer-in Charge in this regard will be final.

**Executive Engineer
SHQ, SSB, Pilibhit**

ADDITIONAL TERMS & CONDITIONS

1. The work shall be carried out as per MNRE/CPWD specifications part-I (Internal) 2013 Part-II external 2005, amended up to date & as per additional specification & conditions for this work & as per CPWD sub-station specifications 2013 and electrical work specification internal (Part – I 2007, 2013-14 and external 1994) and sub-station amended up to date
2. The department reserves the right to send such materials to the manufactures authorized test laboratory to verify the genuineness & quality of the product.
3. The contractor is advised to visit the site before quoting for this tender to apprise himself about the site environments & other condition. The contractor should see the site and understand the work requirements, the condition is regard to accessibility of site and nature of ground, working condition including stacking of materials, installations of T & P etc. conditions affecting accommodation and movement of labour etc and in case of doubt, obtain required particulars, which may in any way influence his tender, from the SSB as no claim whatsoever will be entertained for any alleged ignorance thereof before submitting the tender, the contractor should visit the site and satisfy himself as to the conditions prevalent there.
4. Time is the essence of the contract any piece meal work may also require completing in odd hours in order to restore electrical supply as per requirement of department. If such work arises it will be sole responsibility of contractor to get done the work in given time. The rates shall be inclusive of all such eventualities as well as of all taxes, levies, packing, transportation handling etc. nothing extra shall be paid. The contractor shall be responsible for getting all approvals and clearance about labour passes etc as well as all the effort in this connection should be in the preview of contractor. No claim of the contractor shall entertained by the department for the idle labour.
5. The contractor shall be responsible for any damage done to the building of electrical installations during the execution of the work. Damage, if any shall have to be made good by the contractor at his won cost otherwise the same shall be got rectified/made good at the risk & cost the contractor.
6. The work shall be carried out engineering like manner & bad workmanship shall be rejected summarly. For redoing the job, no claim of the contractor shall be entertained on this account.
7. The site shall be cleared of rubbish, debris caused by working at site order book & comply with the remarks entered therein by the representative of the department.
8. The contractor or his authorized representative shall sign the site order book & comply with the remarks entered therein by the representative of the department.
9. The client is not concerned with any rise or fall in the prices of any materials. The rates quoted shall include all costs, allowances, taxes/levies/cess or any other charges including any enhanced labour rates etc. which may be enacted from time to time by the state and/or central.

10. The contractor will ensure that all the skilled persons deployed for executing the electrical work possesses the wireman license issued by approved authorities. Consequences arising due to the default of the contractor to comply with this condition would be contractor's responsibility only.
11. The contractor will make his own arrangement for storage of his material if issued to him departmentally, the material shall be issued to him from JE (E)'s store. The watch & ward of the materials & of the installations would be responsibility of contractor till the work is completed and handed over to the department nothing extra shall be paid to the contractor on this account.
12. The contractor shall make his own arrangement for carriage of materials, fittings cables etc required for execution of work/issued to him departmentally from the site of work at his own cost. Nothing extra shall be paid on this account.
13. All the DB'S switchgears shall have identification marking on them written in white paint nothing extra shall be paid on this account.
14. Earth point with studs are to be provided on each of the switch boards/DB
15. The drawings showing layout of the solar panel array, cable laying earthing put main board allied equipment shall be got approved by the contractor from the engineer-in-charge before fabrication & execution.
16. All hardware, fastening material viz, nuts, bolts, washers & screws etc to be used on work shall be of zinc and cadmium plated iron.
17. The contractor shall have to furnish the insulation test report, earth report along all required details of electrical load on the prescribed performa for the electric connection iron supply company as reqd.
18. The contractor shall submit the completion certificate & completion plan as per clause 2.30 (appendix f) of general specifications for electrical works part I internal 2013.
19. All concealed work & earthing shall have to be done in the presence of engineer-in-charge or his authorized representative.
20. A list of approved make for materials to be used in the work is appended as annexure-I the contractor should use only the approved makes of materials in the work specified in the annexure-I the make of MCB DB should be same as of MCB.
- 21. The quoted rates shall be inclusive of all taxes such as GST, WCT, E-Cess & Cess etc. & nothing extra shall be paid on this account.**

22. Wires and cables shall be got approved from engineer-in-charge before use.
23. Thimbles, lugs are to be provided whenever required by the contractor without any extra cost.
24. Loop earthing wire-in place of bare copper wire green/yellow insulated copper wire to be used as per CPWD specification part-I (internal) 2013.
25. Any balance items, which are not explicitly spelt out here, but are required for the competences of the work, shall also be included in bidder's scope without any extra payment.
26. The SSB shall not be responsible or accountable to the firm/contractor for the employees, agent, technicians and labor employed by the firm/contractor, who shall work on the project site and premises. Firm/contractor shall be exclusively responsible for all such personal engaged, on the work for such matters as payment of salary, wages, bonus, compensation and compensation in the event of death and accident.
27. As soon as the project is finally completed firm/contractor shall in turn inform SSB, who shall nominate a board of officers for checking/verification of completed work as per the scope of the work for final taking over the project.
28. Firm/contractor shall be responsible for the consequence effect arising out of the inspection of the project by the chief technical examiner cell, central vigilance commission during the progress or any timer after the construction of project and shall take appropriate action for rectification of the defective work at own risk and cost. Rectification of defective work/replacement of substandard as pointed out by chief technical cell, central vigilance commission /SSB or his authorized representative shall be carried out by the firm/contractor, at their own cost, SSB shall not pay any extra amount for such type of liabilities.
29. All deputed staff/manpower/engineers at different BOPs of SSB should process valid police verification document, valid IDs/Aadhar card as per requirement of SSB
30. Due to sensitivity of sites and security reasons of BOPs, work shall be executed in day time only (till 5 PM) manpower shall not be allowed to stay at BOPs labour huts/staff residence shall be arranged by contractor at his cost.
31. The contractor shall himself arrange the required water facility, electricity for construction/personal purposes at BOPs at his cost.

32. Suitable rating change over switches shall be provided for grid supply/DG set/Solar power at BOPs.
33. The standard comprehensive onsite maintenance and warranty will be valid for five years including battery bank from the date of taking over of installation or solar plant including repair and replacement of defective part including batteries. Warranty will be free of cost nothing will be paid for repair/maintenance or any other job account of works required to execute during maintenance and warranty period.
34. Contractor shall appoint a maintenance team and attend any defects within 72 hours. Details of the team shall be provided by the contractor.
35. Insurance of all the equipment installed at site shall be in the contractor's scope.
36. **Handing over of the project :** Contractor will hand over the project to SSB after successful completion of each component of the project in all respect and complete satisfaction of engineer-in-charge. The partial handing over of project components shall not be considered. Contractor shall also provide necessary completion certificate. The onsite maintenance and warranty period will be five years after such handing over.
37. The Contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. nothing extra shall be payable to the agency on this account.
38. Contractor shall arrange water electricity food and lodging at his own cost for workers employed at site.
39. The Contractor shall be solely responsible to follow the general clauses of the contract including labour regulations, registration of contractor, obtaining labour license from labour department, safety precautions, etc. and all other statutory provisions related to labour/works as per the prevailing general clauses of contract amended from time to time. The contractor shall stick to the schedule of all activities and carry out it with mutually agreed time frame.
40. Rates and amount quoted by contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation shall be applicable on this contract.
41. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all inclusive and shall apply to all heights lifts, lead and depths of the structure and nothing extra shall be payable on this account.
42. Some restrictions may be imposed by the SSB security staff on the working and for movement of labour/materials etc. the contractor shall be bound to follow all such restrictions/ instructions and nothing extra shall be payable on this amount.

43. (a) The project work will be carried out in the manner complying in all respects with the requirements of relevant bye laws of the local body under the jurisdiction of which the work is to be executed or as directed by the engineer in charge and nothing extra will be paid on this account.
- (b) The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charges which he may be liable.
44. The contractor shall give performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
45. The work shall be carried out in accordance with the drawings/layout plan etc as approved, by the engineer-in-charge/SSB senior authorities.
46. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials.
47. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the engineer in charge nothing extra shall be paid on this account.
48. No payment will be made to the contractor for damage caused by any accidents, rains, or other natural calamities during the execution of the work and no such claim on this account will be entertained.
49. The contractor shall take instruction from the site in charge/SSB authority for staking of materials at any place/BOPs.
50. The material shall conform to the quality and make as per tender documents. However for the items not appearing in the list preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of sample brought by the contractor shall be judged by the standard laid down in the relevant ISI specification/CPWD/MNRE specification. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but stand banned by CPWD/MNRE will not be used
51. It must be ensured that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should conform to CPWD specification/MNRE specifications and relevant BIS codes. In such case written approval of the engineer-in-charge may be obtained before use of such material in the work.

52. In case of non availability of material of brands specified in the list of approved materials an equivalent brand may be used after getting written approval of SSB giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

53. Removal of rejected/sub-standard materials.

The following procedure shall be followed for the removal of rejected/sub standard materials from the site of work.

- (i) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the site order book under the signature of the engineer-in-charge or his representative/site in charge giving the approximate quantity of such materials.
- (ii) As soon as the material is removed, a certificate to that effect shall be recorded by the engineer-in-charge/site in charge against the original entry, giving, the date of removal and mode of removal, i.e., whether by truck, carts, or by manual labour. If the removal is by truck, the registration number of the truck should be recorded.
- (iii) When it is not possible for the engineer-in-charge to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site, the required certificate should be recorded by the authorized representative of SSB and the engineer-in-charge should countersign the certificate recorded by the authorized representative.

54. The contractor has to take permission from the SSB & local authorities etc. if required for work during night hours. No claim/hindrance on this account shall be considered if work is not allowed during night time.

55. Once the project is completed and the contractor shall be responsible to attend defect pointed out by SSB and then hand over the project to the client.

56. Any item of work not specifically mentioned in the schedule but required for satisfactory installation/ operation of the plant shall be executed by the contractor without any extra payment.

For & on behalf of Tenderer

INSTRUCTIONS TO BIDDERS

1.0 BIDDING DOCUMENTS

The bidder is expected to examine the bidding documents, including all instructions, Pre- Qualification Criteria, Forms, Annexure, Terms and Conditions of Contract, Specifications, Drawings and other documents and to fully familiarize itself with the requirements of the bidding documents. Failure to furnish all the information required by the Bidding Documents or the submission of a bid not substantially responsive to the Bidding Documents in every respect may result in the rejection of the Bid. In case of any inconsistency, in the interpretation of meaning of any part of this Tender Documents, the BIDDER shall give his best endeavor to resolve the inconsistency by expressing his assumption through his proposal to department.

2.0 AMENDMENT OF BIDDING DOCUMENTS

Bidders shall examine the Bidding documents thoroughly and inform the department of any apparent conflict, discrepancy or error. At any time prior to the deadline for submission of bids as well as up to priced bid opening, the department may, for any reason whether at its own initiative or in response to a clarification or modification requested by any prospective Bidder(s), modify the Bidding documents, if required. Notice of issuance of any amendment to the bidding document shall not be advertised in press. The same shall be notified in the websites of SSB (ssb.nic.in). Bidders are therefore advised to visit the website regularly for downloading the details of amendment to bidding document. The Bidders will be required to acknowledge notification of any such amendment to the Bidding documents. Bidders shall confirm the inclusion of Addendum/Corrigendum in their bid and shall follow the instructions issued along with addendum/corrigendum. In order to afford Bidders reasonable time to take the amendment, issued prior to submission of Bids, into account in preparing their Bids, department may, at its discretion, extend the deadline for the submission of Bids.

3.0 LANGUAGE OF THE BID

The Bid prepared by the Bidders and all correspondence and documents relating to the Bid exchanged by the Bidder and the department shall be written either in Hindi or in the English language and all units shall be in Metric system. Any printed literature furnished by the Bidder may be written in another language, provided that such literature is accompanied by an English translation, in which case, for purpose of interpretation of the Bid, the English translation shall govern.

3.1 The basic consideration and essence of the Contract is the strict adherence to the time schedules for performing the specified works as stipulated in the Contract.

4.0 SIGNATURE ON BIDS

4.1 The Bid must contain the name, designation and place of business of the person or persons making the Bid and must be signed and sealed, on each page, by the Bidder with his usual signature. The names of all persons signing should also be typed or Printed below the signature. The Bidder shall submit authority letter / Power of Attorney / Board Resolution in favour of the authorized signatory(s) of the Bid. The Bidder's name stated on the proposal shall be the exact legal name of the Bidder.

4.2 Bids by bodies corporate/ limited Companies must be signed with the legal name of the Corporation/Limited Company by the President, Managing Director or by the Company Secretary or any other person or persons holding Power of Attorney for signing their Bid.

4.3 Power of Attorney issued by the Board of Directors / CEO / MD / Company Secretary of the Bidder/ all partners in case of Partnership Firm / Proprietor in favor of the authorized employee(s) of the Bidder, in respect of the particular tender for signing the Bid and all subsequent communications, agreements, documents etc. pertaining to the tender and to act and take any and all decision on behalf of the Bidder, is to be submitted. The authorized employee(s) of the Bidder shall be signing the Bid and any consequence resulting due to such signing shall be binding on the Bidder.

4.4 Bid shall contain no cuttings, erasures or overwriting except as necessary to correct errors made by the Bidder in which case each such corrections or other changes in the Bid documents shall carry the initials of the person(s) signing the Bid.

4.5 Bids not conforming to the above requirements of signing may be disqualified.

INTEGRITY PACT

To,

.....,
.....,
.....

Reference : NIT No. EE/SHQ/PBT/2025-26/13(2nd Call)

**Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs
Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th
Bn SSB, Sitarganj**

Dear Sir,

It is here by declared that Sashastra Seema Bal is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CPWD.

Yours faithfully

Executive Engineer

To,

Executive Engineer,
SHQ, SSB, Pilibhit.

Sub: Submission of Tender for the work of **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj**

Dear Sir,

I/We acknowledge that SSB is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by SSB. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, SSB shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of SSB.

INTEGRITY AGREEMENT

This Integrity Agreement is made at
.. on this day of20.....

BETWEEN

President of India represented through **Executive Engineer, SHQ, SSB, Pilibhit** (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

..... (Name and Address of the Individual/firm/Company) through (Hereinafter referred to as the (Details of duly authorized signatory) "**Bidder/Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.)
(hereinafter referred to as "**Tender/Bid**") and intends to award, under laid down organizational procedure, contract for **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj**

(Name of work) hereinafter referred to as the "**Contract**".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "**Integrity Pact**" or "**Pact**"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- a. No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the 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/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner 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/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits 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/Owner's employees involved in the Tender process or 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 Bidder(s) 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 cartelize 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 the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - a) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both.

Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - 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.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a will full misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/ determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**
- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal / Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises 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 or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement / Pact by any of its Subcontractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) **In case of e-tendering, integrity Pact shall be treated in the same manner as other components of the bid document. In e-tendering, the intending bidder is not required to sign any document physically and entire bid document is submitted through digital signature. Since IP is a part of bid document no separate physical submission is required with other documents to be submitted in the office of tender opening authority. In addition to other component of bid document, the integrity pact along shall also be signed between Executive Engineer and successful bidder after acceptance of bid.**

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Division** of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) 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.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this **Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.**

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....

(For and on behalf of Principal/Owner)

.....

(For and on behalf of Bidder/Contractor)

WITNESSES:

1.

(signature, name and address)

2.

(signature, name and address)

Place :

Dated :

9.0 TIME SCHEDULE

S.No.	Deliverables	Timelines
1.	Final design report, draft final detailed project report (DPR) includes detailed drawing for constructions as per NIT (soft and 2 hard copies)	30 days from the date of signing of agreement
2.	Final detailed project report (DPR) (DPR) includes detailed drawing for constructions as per NIT (soft and 3 hard copies)	15 days from the date of comments on draft DPR
3.	Supply of material at site	90 days from the date of signing of agreement
4.	Installation, testing and commissioning and handing over of the project	365 days from the date of signing of agreement
5.	Onsite comprehensive maintenance and warranty	5 years after handing over of the project to SSB

