



DEPARTMENT OF POSTS
O/o Executive Engineer (E)
POSTAL ELECTRICAL DIVISION
(13th floor, Yogayog Bhawan, P 36, C R Avenue , Kolkata 700012)

e-Tender Document for the Work of

“SITC of Roof Top Off Grid Type Solar Power System at Yogayog Bhawan, C R Avenue, Kolkata”

Name of the Tenderer :

With Address:

.....

.....

.....

**Executive Engineer (E), Postal Electrical Division ,
Kolkata**

List of Documents to be scanned and uploaded within
the period of tender submission:

Envelope 1 heading Complete eligibility Document

- a) Certificate of Work Experience **Or** Document related to MNRE approval **Or** manufacturer of PV module
- b) Attested copies of ITCC/Turnover certificates from Chartered Accountant for last 3 years.
- c) Certificate of Registration for (a). Sales Tax / VAT, (b) service tax and (c) PAN .

If any of the above registration is not required as per the provision of law then the undertaking that the registration is not required is to be uploaded giving reference of the turnover /other provisions.

Envelope 1 Heading Tender Cost and Undertaking for Tender Cost and EMD

A SCAN copy of tender cost

B An undertaking that "The Physical EMD shall be deposited by me/us with the EE calling he bid in case I/we become the lowest bidder within a week of the opening of financial bid otherwise department may reject the bid and also take action to withdraw my/our enlistment/debar me/us from tendering in Department."

C An undertaking that "The Physical Tender cost shall be deposited by me/us with the EE calling within a week of the opening of financial bid otherwise department may take action to withdraw my/our enlistment/debar me/us from tendering in Department."

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**Executive Engineer (E), Postal Electrical DIVISION ,
Kolkata**

O/o Executive Engineer (E)
POSTAL ELECTRICAL DIVISION
(13th floor, Yogayog Bhawan, P 36, C R Avenue , Kolkata 700012)
NOTICE INVITING E-TENDER-III

No. : **299/PED-KOL/2016-17/1999**

Date: 20.02.2017

The Executive Engineer (Electrical), Kolkata invites on behalf of President of India online two envelope bids for following works from the eligible firms who fulfils the following eligibility conditions:

Name of the Work: SITC of Roof Top Off Grid Type Solar Power System at Yogayog Bhawan, C R Avenue, Kolkata

Estimated Cost : Rs. **285000**

EMD : Rs. **5700**

Tender Cost : Rs. **500** (Non Refundable)

Time for completion of work : **1 months**

~~(Firm is required to do the work in parts as per the progress of civil work)~~

Last date of receipt of tender : **27.02.2017** upto 10.00 AM

Date of opening of technical bid : **28.02.2017** at 10:00 AM

Validity of the Tender : **90 days**

In case holiday is declared on the last date of receipt of application, the earlier working day will be treated as last date of receipt of application and in case holiday is declared on opening day, tenders will be opened on the next working day.

ELIGIBILITY CONDITIONS:

The contactor / Firm should fulfill following eligibility conditions:-

1. Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least 30% of the estimated cost.
2. An MNRE approved/listed firm of SPV or PV system electronics. OR The firm during the last 7 years ending last day of the month previous to the one in which the tenders are invited should have successfully completed required number of similar works (“**Solar power plant work**”) of requisite value as follows

Two similar completed works costing not less than the amount equal to 60% of the Estimated cost .

OR

One similar completed works costing not less than the amount equal to 80% of the Estimated cost .

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 tender.

Note: Work in which compensation is levied shall not be treated as satisfactory completion. Completion certificate shall clearly indicate the date of start of work, date of completion of work as

per agreement and actual date of completion with compensation levied or not.

3. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen online on www.eprocure.gov.in
4. If any information furnished by the applicant is found incorrect at the later stage he shall be liable to debar from tendering / taking up the work in DEPARTMENT OF POST. Department resumes the right to verify the particulars furnished by the applicant independently.
5. In case only the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.
6. **Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online tendering process as per details available on the website. The intending bidder must have valid class-III digital signature to submit the bid.**
7. **On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.**
8. **Contractor can upload documents in the form of JPG format and PDF format.**
9. List of Documents to be scanned and uploaded within the period of bid submission:
 - a) **Certificate of Work Experience. or Document related to MNRE approval or manufacturer of PV module.**
 - b) **Attested copies of ITCC/Turnover certificates from Chartered Accountant for last 3 years.**
 - c) **Certificate of Registration for (a). Sales Tax / VAT, (b) service tax and (c) PAN .**

If any of the above registration is not required as per the provision of law then the undertaking that the registration is not required is to be uploaded giving reference of the turnover /other provisions.
 - d) **Scan copy of tender cost**
 - e) **An undertaking that "The Physical EMD shall be deposited by me/us with the EE calling the bid in case I/we become the lowest bidder within a week of the opening of financial bid otherwise department may reject the bid and also take action to withdraw my/our**

enlistment/debar me/us from tendering in Department."

- f) **An undertaking that "The Physical Tender shall be deposited by me/us with the EE calling within a week of the opening of financial bid otherwise department may take action to withdraw my/our enlistment/debar me/us from tendering in Department."**

Note regarding method of depositing EMD/Tender cost after tender opening :-

- ❖ **EMD:- Treasury Challan/Demand Draft/Pay order or Banker`s Cheque /Deposit at Call Receipt against EMD**

A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs. 20 lakh, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee.

- ❖ **Tender Cost:- Demand Draft/Pay order or Banker`s Cheque of any Scheduled Bank**

❖

For further details please visit the site <http://www.eprocure.gov.in>

**Executive Engineer (E), Postal Electrical Division,
Kolkata**

Copy To:-

- 1.The CPMG, Kolkata ,Bhubaneswar ,Guwahati.
2. The EE(E) ,Lucknow, New Delhi-I ,New Delhi-II.
3. AE(E), PESD, Kolkata –I,II, Bhubaneswar, Guwahati ,Shillong .
- 4.AO/Cashier, PED, Kolkata
5. Notice board through Head Clerk
- 6.Draft NIT
- 7.Works File

DECLARATION

(TO BE GIVEN BY THE TENDERERS WHO HAVE DOWNLOADED THE TENDER DOCUMENT FROM THE WEB)

It is to certify that

1. I / We have submitted the tenders in the proforma as downloaded directly from the website & there is no change in formatting, number of pages etc.
2. I / We have submitted tender documents which are same / identical as available in the website.
3. I / We have not made any modification / corrections / additions etc in the tender documents downloaded from web by me / us. (CONTRACTOR)
4. I / We have checked that no page is missing and all pages as per the index are available & that all pages of tender document submitted by us are clear & legible.
5. I / We have signed (with stamp) all the pages of the tender document before submitting the same.
6. I / We have sealed the tender documents properly before submitting the same.
7. I / We have submitted the cost of tender along with the EMD.
8. I have read carefully & understood the important instructions to the all tenderers & to tenderers who have downloaded the tenders from the web.
9. In case at any stage later, it is found that there is difference in our downloaded tender documents from the original, the department shall have the absolute right to take any action as deemed fit without any prior intimation to me / us. However the rates quoted against each item shall be treated as the rate quoted against each item provided in the original tender form. In the event of any discrepancy between the original and the downloaded tender form, original tender form shall prevail.
10. In case at any stage later, it is found there is difference in our downloaded tender documents from the original, the tender / work will be liable to be cancelled and Earnest Money/ Security Deposit will be liable to be forfeited at any stage whenever it is so noticed. The department will not pay any damages to me / us on this account.
11. In case at any stage later, it is found there is difference in our downloaded tender documents from the original, I / We may also be debarred for further participation in the tender in the concerned CIRCLE & it would also render me / us liable to be removed from the approved list of contractors of the Department.

Dated

Contractor (Sign and seal)

UNDERTAKING FROM THE FIRM

(To be furnished by the firm before quoting)

1. I/ we have gone through the terms & condition/clauses of standard PWD-6 & PWD-8 forms containing general conditions of contract and amendments issued by CPWD in forms CPWD 6, 7/8 being adopted by the Department of Posts, Electrical Wing and agree to abide by the same.

2. I hereby agrees that PWD-6 & PWD-8 forms shall form part of the agreement in case the work is awarded to us

Date:

Signature of Contractor

Note:-

The CPWD form 7/8 – 2008 including amendments is a government of India publication, published by DG (W), Nirman Bhavan, Kolkata – 110 049 phone no :51648857,2624018, which can be purchased by the firm for reference.

(OR)

The CPWD for 7/8 -2008 including amendments can be seen by the firm at the office of the concerned Executive Engineer(E), Postal Electrical Division, between hours of 11.00 an and 04.00 pm on working days.

CERTIFICATE FROM THE FIRM

(To be signed by all contractors)

Sub: Participation of near relatives of the Postal employee in the Tender / Execution of works in Department of Posts.

Certified that I

S/o

r/o

herby certify that none of my relatives(s) as defined in the tender document is / are employed in Department of Post as per details given in tender document. In case at any stage, it is found that the information given by me is false/ incorrect, Department shall have absolute right to take any action as deemed fit / without any prior information to me.

Date :

SIGNATURE OF CONTRACTOR

CORRECTION SLIPS

ANNEXURE – I

PWD FORM – 6:

1. Wherever Form -7/ 8 is appearing in this form, figure 7 stands deleted.
2. Wherever percentage rate tender is appearing in this form, it stands deleted.
3. Para 1 of this form is substituted as Press Notification enclosed in the tender documents.

PWD FORM – 8:

1. Wherever Form-7/ 8 are appearing in this form, Figure 7 may be treated as deleted.
2. Wherever percentage rate tender is appearing in this form, it stands deleted.
3. All the Para's in this form related to Form CPWD-7 (for percentage rate tender) may be treated as deleted.
4. Clause 2A of this form related to incentives for early completion may be treated as deleted.

**Executive Engineer (E), Postal Electrical DIVISION ,
Kolkata**

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT
NOTICE INVITING TENDER (CPWD 6)**

Item rate tenders are invited on behalf of President of India from approved and eligible contractors for the work.

~~The enlistment of the contractor should be valid on the last date of sale of tender. In case only the last date of sale of tender is extended, the enlistment of contractor should be valid on the original date of sale of tender. In case both the last of receipt of application and sale of tender are extended, the enlistment of contractor should be valid on either two dates, i.e. original date of sale of tender or on the extended date of sale of tenders.~~

1. Agreement shall be drawn with the successful tenderer on prescribed form No.C.P.W.D.-7/ 8 which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

2. The time allowed for carrying out the work will be **1 months** from the Date of the 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 document.

3. The site for the work is available.

4.(a) Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents 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 website www.eprocure.gov.in free of cost.

4 (b)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 bid as notified. 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 bid as notified.

5. Earnest Money in the form of Treasury Challan or Demand Draft or Pay order or Banker`s Cheque or Deposit at Call Receipt (drawn in favour of Accounts Officer, PED, YOGAYOG BHAWAN, DEPARTMENT OF POST, Kolkata-110001) or Bank Guarantee of any Scheduled Bank shall be scanned and uploaded to the e-tendering website within the period of tender submission .

A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs. 20 lakh, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee.

The physical EMD of the scanned copy of EMD uploaded shall be deposited by the lowest bidder within a week after opening of financial bid failing which the bid shall be rejected and withdrawn

of the enlistment of the agency shall be recommended to the enlistment. The agency shall be debarred from tendering in Department of Post.

The following undertaking in this regard shall also be uploaded by the intending bidders:-

“The Physical EMD (~~or Direct credit/RTGS/NEFT to the Account no-32348385589 of State Bank Of India (IFS Code-SBIN0000004)~~) shall be deposited by me/us with the EE calling the bid in case I/we become the lowest bidder within a week of the opening of financial bid otherwise department may reject the bid and also take action to withdraw my/our enlistment/debar me/us from tendering in CPWD.”

Interested contractor who wish to participate in the tender has also to make following payments in the form of Demand Draft/Pay order or Banker`s Cheque of any Scheduled Bank (~~or /Direct credit/RTGS/NEFT to the Account no-32348385589 of State Bank Of India (IFS Code-SBIN0000004)~~) and to be scanned and uploaded to the e- tendering website within the period of tender submission:

- (i) Cost of Tender Document –(as above) drawn in favour of Accounts Officer , PED, YOGAYOG BHAWAN, DEPARTMENT OF POST, Kolkata-110001.

Treasury Challan or Demand Draft or Pay Order or Banker`s Cheque or Deposit at Call Receipt or Bank Guarantee against EMD, Cost of Tender Document and Cost of Tender Processing Fee shall be placed in single sealed envelope superscripted as “Earnest Money, Cost of Tender Document and Cost of Tender Processing Fee” with name of work and due date of opening of the bid also mentioned thereon. Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of tender submission and certified copy of each shall be deposited in a separate envelop marked as “Other Documents”.

Both the envelopes shall be placed in another envelope with due mention of Name of work, date & time of opening of tenders and to be submitted in the office of Executive Engineer during the period mentioned above.

Online tender documents submitted by intending bidders shall be opened only of those bidders, whose Earnest Money Deposit, Cost of Tender Document and e-Tender Processing Fee and other documents placed in the envelope are found in order.

6 Performance Guarantee:- The contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (five percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) 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 (in case guarantee amount is less than Rs. 1,00,000/-) or Govt. 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 Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

7. The description of work is as follows:

Name of Work: “As above”

Tenderer are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders, 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 charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his 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.

8. 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.

9 Canvassing whether directly or indirectly in connection with tenders is strictly prohibited and the tenders submitted by the contractors, who resort to canvassing will be liable to rejection.

10 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.

11 the contractor shall not be permitted to tender for works in the Postal Circle (responsible for award and execution of contracts) in which his near relative is posted as Divisional 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 Department of Post or Ministry of Communication & I.T. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

12 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 two years 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 aforesaid before submission of the tender or engagement in the contractor's service.

13 the tender for the works shall remain open for acceptance for a period Ninety days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, which-ever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department en the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.

14 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 7/8 or other Standard C.P.W.D. Form as mentioned

~~15 For Composite Tenders~~

~~15.1.1 The tenderer must associate with him self agencies of the appropriate class eligible to tender for the other components individually.~~

~~15.1.2 It will be obligatory on the part of the tenderer to sign the tender document for all the components. (The schedule of quantities, conditions and special conditions etc.)~~

~~15.1.3 After the work is awarded, the contractor will have to enter into separate agreements for each component with the Officer concerned.~~

~~15.2 The Executive Engineer In charge of the major component will call tenders for the composite work. The cost of tender document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender. Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works. The Earnest Money will become part of the security deposit of the major component of work.~~

~~15.3 — On acceptance of the composite tender by the competent authority, the letter of award will be issued by the Engineer In charge of the major component on behalf of president of India, making it clear in the letter of award the contractor will have to execute separate agreement for different components of work with the concerned officer of the respective discipline designation to be given)~~

**Executive Engineer (E), Postal Electrical Division, ,
Kolkata**

**GOVERNMENT OF INDIA
DEPARTMENT OF POSTS**

BRANCH : ELECTRICAL
ZONE : Delhi ZONE

CIRCLE : Delhi
DIVISION : Kolkata

~~Percentage Rate Tender/~~ Item Rate Tender & contract for Works

Tender for the work of: - SITC of Roof Top Off Grid Type Solar Power System at Yogayog Bhawan, C R Avenue, Kolkata

~~To be submitted by 15:00 hours on 28.02.2017 to the Executive Engineer (E), Postal Electrical Division, 13th floor, Yogayog Bhawan, Kolkata-110001~~

~~(ii) To be opened in presence of tenderers who may be present at 15:30 hours on 28.02.2017 in the office of Executive Engineer (E), 13th floor, Yogayog Bhawan, Kolkata-110001~~

Issued to: M/s _____

Signature of officer issuing the documents

Designation _____

~~Executive Engineer (E), Postal Electrical Division,~~

Kolkata

Date of issue: _____

TENDER

I/ We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F., Specification 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 respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of submission thereof and not to make any modifications in its terms and conditions.

A sum **Rs. 5700/-** has been deposited in cash /receipt treasury Challan/ deposit at call receipt of a schedule bank fixed deposit receipt of scheduled bank/demand draft of a scheduled bank as earnest

money. If I/we fail to furnish prescribed performance guarantee within the prescribed period, I /we agree that the said President of India or his successors shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further if we fail to commence the work as specified, I / we agree that the President of India or his successors in the office shall without prejudice to any other right or remedy available in law at ,be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/we agree that in case of forfeiture of Earnest Money and 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 or 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 DOP 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 Earnest Money Deposit / 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 to use the information in any manner prejudicial to the safety of the State.

Dated_____

Signature of contractor_____
Postal Address

Witness:

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and 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:-

i)

ii)

iii)

For & on behalf of the President of India

Signature_____
Designation_____

Dated_____

SCHEDULES

SCHEDULE 'A'

Schedule of quantities (Enclosed)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S.No.	Description of ite	Quantity	Rates in figures & words at which material will be charged to the contractor	Place of Issue
1	2	3	4	5
NIL				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue
1	2	3	4
NIL			

SCHEDULE 'D'

Extra schedule for specific requirements/ documents for the work, if any. - NA

SCHEDULE 'E'

Schedule of component of cement, steel, other materials, labour etc for price escalation - NA

SCHEDULE 'F'

Reference to General conditions of contract:

Name of work: - **SITC of Roof Top Off Grid Type Solar Power System at Yogayog Bhawan, C R Avenue, Kolkata**

Estimated cost of work : **Rs. 285000**

Earnest money : **Rs. 5700**

Performance Guarantee : 5% of tendered value

Security Deposit : Nil**
 10% Payment shall be released @ 2% at the end of each year for 5 years during warranty/comprehensive maintenance Period on satisfactory performance. No additional security deposit will be deducted.

General Rules & Direction:

Officer inviting tender: Executive Engineer (E), Postal Electrical Division, Kolkata

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 (E), Postal Electrical DIVISION, Kolkata 2(viii)
 Accepting Authority: **Executive Engineer (E), Postal Electrical Division, Kolkata**

2(x) Percentage on cost of materials and labour to cover all overheads and profits - 15%

2(xi) Standard schedule of Rates : **DSR' 2014 (Internal)/ DSR' 2014 (External)/ MR**

2(xii) Department : Department of Posts

9ii) Standard CPWD Contract Form 7/8 as modified and corrected upto dated

Clause 1

I) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance, in days : 5days

II) Maximum allowable extension beyond the period provided In I) above days : 5 days

Clause 2

Authority for fixing compensation under clause 2. : SE (E) Delhi

Clause 2 A

Whether clause 2A shall be applicable : No

Clause 5

Number of days from the date of issue of letter of acceptance For reckoning date of start : 7days

Time allowed for execution of work : **1 months**

Sl. No	Description of milestone (physical)	Time allowed in days	(Amount to be with-held in case of
--------	-------------------------------------	----------------------	------------------------------------

		date of start)	achievement of milestone)
1			
2			
3			
4			
5			
6			

Sr. No.	Financial Progress	Time Allowed (from dated of start)	Amount to be with held in case achievement of milestone.
1.	1/8 th of whole work	1/4 ^{(of} whole work)	In the event of not achievin necessary progress as assessed fr running payments .1 % of the te value of work will be withhe failure of each o milestone
2.	3/8 th of whole work	1/2 ^{2 of} whole work)	
3	3/4 th of whole work	3/4 ^{of} whole work)	
4	Full work	full)	

Authority to give fair and reasonable extension of time for completion of work.

: E.E. (E) Kolkata/ S.E. (E) Delhi

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 10 CC

~~Component of cement—expressed as percent of total value of work—XC—NA~~

~~Component of steel—expressed as percent of total value of work—Xs—NA~~

~~Component of civil (except cement & steel)/Electrical Construction—Xm—NA
Materials—expressed as percent of total value of work.~~

~~Component of labour—expressed as percent value of total value of work—Y—NA~~

~~Component of POL—expressed as percent of total value of work—:—Z—NA~~

Clause 10CC

Clause 10CC to be applicable in contracts with stipulated

Period of completion exceeding the period shown in next column:—N.A

Clause 11

Specifications to be followed for execution of work : **CPWD Specification (Internal & External) and as per enclosed terms and conditions and CPWD specification for AC work**

Clause 12

12.2 & 12.3 Deviation Limit beyond which clauses 12.2.
& 12.3 shall apply for building work : 30%

12.5 Deviation Limit beyond which clauses 12.2.
& 12.3 shall apply for foundation work : N.A.

Clause 16

Competent Authority for deciding reduced rates : S.E. (E)

Clause 36 (i)

Minimum qualifications & experience required
for Principal technical Representative :

a) For works with estimated cost put to tender Graduate or retired AE possessing
More than 5 lakhs at least recognized diploma

b) For works with estimated put to tender - recognized diploma holder
more than 1 lakh but less than 5 Lakhs

c) Discipline to which the principal - Elect./ Mech
Technical representative should belong

d) Minimum work experience -- 3 years

e) Recovery to be affected from the contactor Rs 4000 p.m for graduate
on the event of not fulfilling provision of clause Rs 2000 for diploma holders

36(i)

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

**Executive Engineer (E), Postal Electrical Division,
Kolkata**

IMPORTANT NOTE FOR CONTRACTORS

1. INSPECTION OF SITE AND CONTRACT DOCUMENTS

For purpose of inspection of site and relevant contract documents the firm is required to contact the Executive Engineer (E) concerned who shall give reasonable facilities for inspection of the same. The firm shall inspect and examine the site and shall satisfy himself before submission of the tender as to the form and nature of the work, their quantities materials necessary for completion of the work and in general shall himself obtain all necessary information as to risk contingencies and other circumstances which may influence or affect his tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

2. SUFFICIENCY OF TENDER

The firm shall be deemed to have satisfied himself before entering into the contract as to the correctness and sufficiency of his offer for the work and of the rates quoted in the schedule of works. These rates and amount shall, except as otherwise provided cover all his obligations under the contract and all matters and things necessary for proper completion and maintenance and guarantee of the work.

3. TAX AND DUTIES:

The firm shall quote rates for all items including all taxes and duties except Service Tax, so the rate offered by the firm shall not include Service Tax. Service Tax paid by the firm shall be reimbursed to the firm on production of documentary proof of payment of Service Tax to the Concerned Authority. Department of Post is a service provider department, so Department avails CENVAT credit on service tax as per CENVAT CREDIT Rules 2004.

Firm should furnish the correct Service tax details. If the credit for the Duties and Taxes under CENVAT credit Rules 2004 is found to be not admissible at any stage subsequently owing to wrong furnishing of Tariff, then the Firm will be liable to refund such non-admissible amount, if already paid along with penalty if charged by the concerned authority. Department of Post reserves its right to deduct such amount from any pending bills or deposit of the Firm.

Firm should clearly understand that sole purpose of separate payment of service Tax and not inclusion of it in the bill payment is to avail the CENVAT credit. If the firm make delay in the payment of service tax and due to which the Department is not in position to avail the CENVAT credit or concerned authority doesn't grant the CENVAT credit then the Service Tax will not be reimbursed to the firm or firm will be liable to refund such non-admissible amount. Department of Post reserves its right to deduct such amount from any pending bills or deposit of the Firm.

No other concession forms will be issued by the department.

4. WORKS CONTRACT TAX:

The rates offered by the firm shall be inclusive of the works contract tax as applicable in the state. The department shall deduct works contract tax from payments due to the firm if required as per the rules of the state government. Certificate for such deductions shall be issued to the firm by the Accounts Officer of the Division.

5. VARIATION IN EXCISE DUTY:

In case of statutory variation of excise duty within the stipulated date of completion individual agreement, the same shall be paid or recovered as per the actuals against documentary proof. However, beyond this period Department will take advantage of any duty reduction but will not pay any extra on account of duty increase.

6 The department reserves the right to accept the quantities in full or in parts.

7 STANDING ORDER NO. 286

- (i) Tender rates are inclusive of all taxes and levies payable under the respective states. However pursuant to the constitution (Forty Six Amendment) Act 1982, If any further tax or levy is imposed by a state, after the date of receipt of a tender and the contractor thereupon necessarily and properly pays such taxes/ levies the contractor shall be reimbursed that amount to be paid provided such payment if any is not in the opinion of superintending Engineer (E) (whose decision will be said binding) attributable to delay in execution of work within the control of the contractor.
- (ii) The Contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary of Government and further shall furnish such other information as the Engineer-in-charge may require.
- (iii) The Contractor shall within 30 days of imposition of any further tax or levy pursuant to the constitution (46th amendment) Act 1982 gives written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition together with all necessary information relating thereto.
- (iv) Class 10 CC is not applicable for this tender

8 Security Deposit: No security deposit. 10% Payment shall be released @ 2% at the end of each year for 5 years during warranty. No additional security deposit will be deducted

9 PERFORMANCE GUARANTEE The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement within 7days of issue of letter of acceptance. This guarantee shall be in the form of government securities or fixed deposit receipts or guarantee bonds of any scheduled bank or the State Bank of India in the specified format. The performance guarantee shall be valid upto the stipulated date of completion plus 60 days beyond that.

10. EMD: The EMD shall be adjusted against the security deposit in the bill.

11 Indemnity The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law & Regulations for any accident occurring due to any cause and the department shall not be responsible for any accident and damage incurred or claims arising there from during the period of Erection, construction & putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer due to the above.

**Executive Engineer (E),
Postal Electrical DIVISION ,
Kolkata**

GENERAL TECHNICAL SPECIFICATIONS of 1.5 kWp solar Power plant

Size of PV Plant required /Minimum size of Solar PV Array

Plant Capacity at each location	Location	Minimum Size of the PV array at each location
1.5 kWp Capacity	As per name of the work	PV array should not be less than 1500 Wp

1. PV MODULES:

(a) The PV modules must conform to the latest edition of any of the following / equivalent BIS Standards for PV module design qualification and type approval:

- Crystalline Silicon Terrestrial PV Modules IEC 61215 / IS14286

(c) In addition, the modules must conform to IEC 61730 Part 1- requirements for construction & Part 2 - requirements for testing, for safety qualification.

(d) IV Curve both soft copy & hard copy must be provided (Image / PDF).

2. BATTERY BANK:

(i) Batteries shall be tubular positive plate, low maintenance solar application type Lead acid (or maintenance free GEL VRLA) . Total capacity of batteries 200 AH (C10 rating) at 48 Volt(9600 wH capacity). Battery make Exide ,HBL, Amron, Luminous,Sukam,Okaya. Batteries should be of minimum 5 years guarantee

(ii) 60% of the rated capacity of the battery should be between fully charged & load cut off conditions.

(iii)The battery will have a minimum rating as per following.

S. No.	Plant Capacity	Locality	Minimum Size of Battery Bank
1.	1.5kWp	As per name of the work	Nominal system voltage = 400 AH at 24V (200 AH at 48V)

(iv) Batteries must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

Description	Standard number
General Requirements & Methods of Test	IEC 61427
Flooded Electrolyte Tubular plate Low maintenance	IS 1651/IS 13369
Valve Regulated Tubular Lead Acid (VRLA)	IS 15549

3. BALANCE OF SYSTEM (BoS) ITEMS/ COMPONENTS:

Details of Power Conditioning Units:

a. General:

Solar panel Rating	Nominal output rating	Nominal DC input voltage	AC Output voltage	Surge for 30 sec	Integrated Solar regulator
1.5KWpCapacity	2 KVA	24/48 Volt	230 V – 50 Hz	150%	1.5KW

The plant must have feature for transmitting the reading over internet through LAN network or any other method as or when required. The system (in addition to the normal current voltage measurement) should store the record for solar power generation and actual power supplied by the inverter in kWh at least for last 6 months.

The BoS items / components of the Solar PV Power Plants/ systems must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

BoS items/components	Applicable IEC/Equivalent BIS	
	Standard Description	Standard Number
Power Conditioners/ Inverters*	Efficiency Measurements Environmental Testing	IEC 61683 IEC 60068 2 (6,21,27,30,75,78)
Charge controller/ MPPT units*	Design Qualification Environmental Testing	IEC 62093 IEC 60068 2 (6,21,27,30,75,78)

Cables	General Test and Measuring Methods PVC insulated cables for working Voltages up to and including 1100 V-Do-, UV resistant for outdoor installation	IEC 60189 IS 694/ IS 1554 IS/IEC 69947
Switches/Circuit Breakers / Connectors	General Requirements Connectors- safety	IS/IEC 60947 part I,II,III EN 50521
Junction Boxes/ Enclosures	General Requirements	IP 65 IP 21 IEC 62208
SPV System Design	PV Stand-alone System design verification	IEC 62124
Installation Practices	Elect. installation of building requirements for SPV power supply systems	IEC 60364-7-712

** BoS Must additionally conform to the relevant national/international Electrical Safety Standards.

c. Charge Control Unit/Control Electronics

The Control system automatically manage the system operation which include

Integrated solar, grid & generator charge regulator,

- In case of availability of Solar Power, priority shall be given to solar power.
- With mains being available (Grid Connected System), controller shall decide whether grid is to be utilized depending on State of Charge of the Battery Bank and availability of Solar Power.
- The system shall intelligently do generator exercising at a pre decided interval to prevent seizing up.

4. MODULE MOUNTING STRUCTURE

- Modules shall be mounted on a non-corrosive support structures towards due south and at a suitable inclination to maximize annual energy output.

- Support structures shall be manufactured with steel angles & channels; spray galvanized to IS 1477 Part -1 with thickness of 70 microns as per IS 5905. Structure shall be designed for mounting of offered Solar Modules with angle adjustment facility from 5° to 45° with an interval of 5°. All fasteners shall be of Stainless steel - SS 304.
- The foundation for Module Mounting structures shall be 1:2:4 PCC Construction. There shall be minimum necessary clearance between ground level and bottom edge of SPV modules.

5. ORIENTATION AND TILT OF PV MODULE

Modules alignment should be due south and tilt angle shall be 26 - 30 degrees with horizontal.

6. DC DISTRIBUTION BOARD (DCDB)

A DCDB shall be provided in between PCU and Solar Array. It shall have MCCB of Suitable rating for connection and disconnection of array section. It shall have meters for measuring Array voltage and Array current. (or the measurement system should be inbuilt in PCU)

7. AC DISTRIBUTION LINE

The generated electricity from these Power Plants will be utilized for illumination of Streets/Indoor Lighting, fans, computers, Internet Modem, Printers, within allowable practice limit. Necessary electric cable/connection shall be supplied/made by the bidder for illumination of existing street lights/indoor lights DB on one floor below the roof.

8. OPERATION MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar PV Power Plant and detail of Wiring and Connection Diagrams will also be provided with the manual.

9. WARRANTEE/ GUARANTEE

(i) The complete Solar PV Power Plant must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years.

(ii) PV modules used in Solar PV Power Plant must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

(iii) The Warrantee/ Guarantee Card to be supplied with the Solar PV Power Plant must contain the details of the system supplied, as given in the Annexure- 1. The manufacturers can provide additional information about the system.

(iv) During the Warrantee/ Guarantee period, MNRE / DOP / users will have all the rights to cross check the performance of the Solar PV Power Plant. DOP may carry out the frequent inspections of the Solar PV Power Plant installed and randomly pick up its components to get them tested at Govt. / MNRE approved any test center. If during such tests any part is not found as per the specified technical parameters, DOP will take the necessary action. The decision of DOP in this regard will be final and binding on the tenderer.

10. TEST REPORTS

The test certificate of various components of the proposed SPV system should be in accordance with guidelines of MNRE for off grid Solar PV systems under Jawaharlal Nehru National Solar Mission (JNNSM) and related Addendums/ Minutes of meeting published on MNRE website (Enclosed with this tender document). Test certificates from MNRE approved test centers shall also be considered valid.

11. OTHER FEATURES

(i) The supplier must fulfil all the technical & other requirements as per provisions under JNNSM, MNRE, GOI.

(ii) A strip containing the following details should be laminated inside the module so as to be clearly visible from the front side:

- a) Name of the Manufacturer or distinctive Logo
- b) Model or Type No.
- c) Serial No.
- d) Year

SCOPE OF WORK for SPV System

The work shall include Design, Fabrication, Manufacturing, Supply, Installation, and Testing & Commissioning of Solar PV Power Plant on turnkey basis in accordance with the technical specifications at different sites.

Scope of works shall include,

A. All works required for proper installation of Solar PV Power Plant including necessary civil and welding works for mounting structures of solar module shall be done by the contractor. The entire work shall be performed on turnkey basis. All the works related to the proper installation and functioning of the system shall have to be carried out by the contractor in the prices offered by him.

B. Required wiring to energise the proposed load DB shall have to be done by the contractor. All the wiring shall have to be done in concealed conduits or through cable.

C. All necessary electrical wiring from electrical distribution box up to PCU of Solar PV Power Plant and back from PCU to distribution box shall have to be provided by the contractor.

D. Appropriate Cabinets for battery banks, with the provision of acid proof racks for batteries should be provided by the contractor.

E. The complete Solar PV Power Plant including indoor and outdoor fittings shall be warranted by the contractor against any manufacturing/ design/ installation defects for a minimum period of 5 years from the date of installation.

F. PV modules used in Solar PV Power Plant shall be warranted by the contractor for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

G. The mechanical structures, electrical components including battery and overall workmanship of the Solar Lighting Systems must be warranted for a minimum of **5 years from the date of commissioning** and handing over of the system.

H. The **Comprehensive Maintenance** (within warranty period) shall be executed by the firm themselves or through the authorized dealer/ service center of the firm in the concerned district.

I. It is mandatory for the contractor to open an authorized service centre in the concerned district before the supply/installation of the system.

J. Necessary maintenance spares for five years trouble free operation shall also be supplied with the system.

K. The supplier shall be responsible to replace free of cost (including transportation and insurance expenses) to the purchaser whole or any part of supply which under normal and proper use become dysfunctional within one month of issue of any such complaint by the purchaser.

L. The contractor will make all necessary arrangements for satisfactory operation, maintenance and performance of the Power Plant during 5 year's Warrantee/Guarantee period.

M. Rectification of all the defects developed in the Solar PV Power Plant during warranty period shall have to be done by the contractor promptly, at the most within 3 days from the date of receipt of compliant.

N. After completion of the proposed works, clearances of all temporary works/ materials shall be the sole responsibility of the contractor and this shall be removed immediate after the requirement of such temporary work is completed.

O. Supply and Installation of Permanent Display board showing all technical information of SPV plant for each Power Plant shall be done by contractor. The matter written on these boards shall be finalized with DOP.

P. All the non-functional parts/ materials/ items replaced during the warranty period shall be the property of the contractor.

Q. The contractor will conduct on-site training of the purchaser's/user's personnel regarding the assembly, start-up, operation, maintenance and repairs of the Solar PV Power Plant.

R. Necessary arrangements for storage of batteries of Solar PV Power Plant as per requirement shall be done by user agency.

S. During Warranty period, the contractor shall have to submit annual performance report from user agency regarding functionality of the system.

**Executive Engineer (E), Postal Electrical Division,
Kolkata**