



WBPDC

THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED

(A Government of West Bengal Enterprise)

NOTICE INVITING TENDER (NIT)

e-Procurement

NIT No: WBPDC/CORP/NIT/E1350/20-21 **Dtd:-**03/09/2020

National Competitive Bidding

For

Design & Engineering, Manufacture / Procurement, Supply, Erection, Testing and Commissioning of 10MW Phase-II Grid Connected Floating Solar Photovoltaic Power Plant on Raw Water Pond No.1, 2 & 4 in Sagardighi Thermal Power Project(SgTPP), Murshidabad, West Bengal including warrantee obligation with 05 (Five) years comprehensive Operation and Maintenance.

The West Bengal Power development Corporation Limited

(A Government of West Bengal Enterprise)

Bidyut Unnauan Bhaban, Plot No. 3/C LA-Block, Sector-III, Bidhannagar,
Kolkata-700 106

August-2020

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BID INFORMATION SHEET

| Sl | Aspect | : | Description of Aspect |
|------------|---|----------|--|
| 1. | Title of the NIT | : | Design & Engineering, Manufacture / Procurement, Supply, Installation, Testing and Commissioning of 10 MW Phase-II Grid connected Floating Solar Photovoltaic Power Plants on Raw Water Pond No.1, 2, & 4 in Sagardighi Thermal Power Project (SgTPP), Murshidabad, West Bengal, India in turnkey basis including warrantee obligation with 05 (Five) years comprehensive Operation and Maintenance. |
| 2. | NIT NO. & Date | : | WBPDC/CORP/NIT/E1350/20-21 Dtd:-03/09/2020 |
| 3. | Publishing Date | | 09.09.2020 at 10:00 a.m. |
| 4. | Document Download start date | | 09.09.2020 at 11:00 a.m. |
| 5. | Pre-bid queries submission end date | | Within 23.09.2020 up to 04:00 p.m. |
| 6. | Pre-Bid Meeting | | 30.09.2020 at 3:00 p.m. |
| 7. | Bid submission start date | | 07.10.2020 from 11:00 a.m |
| 8. | Bid submission end date | | 04.11.2020 till 03:00 p.m |
| 9. | Earnest Money (B.G) physical submission at Corporate office | | From 04.11.2020 to 06.11.2020 (between 11:00 a.m. to 3:00 p.m.) (except Saturday/ Sunday/ Holidays of GoWB) |
| 10. | Technical Bid opening date | | 06.11.2020 at 03:05 p.m |
| 11. | Uploading of Technical Bid Evaluation sheet | | To be notified through system generated message |
| 12. | Financial Bid opening date | | To be notified through system generated message |
| 13. | Uploading of Financial Bid evaluation sheet | | To be notified through system generated message |
| 14. | Scope of Work | : | Clause No.ITB1.3 |

| S1 | Aspect | : | Description of Aspect |
|-----------|--|----------|--|
| 15. | Estimated Cost | : | Rs.60.02Cr including GST (Rupees Sixty Crore and Two lakh only). |
| 16. | Cost of the Tender | : | Not applicable |
| 17. | Bid Security/ EMD | : | Rs. 120 Lakh (Rupees One Crore Twenty Lakh) as per clause ITB1.17 of Section-I. |
| 18. | Name, Designation, Address and other details | : | The General Manager(M&C) , The West Bengal Power Development Corp. Ltd. Bidyut Unnayan Bhaban, Plot No. 3/C LA-Block, Sector-III, Bidhannagar,Kolkata-700 106 |
| 19. | For any Bid quarry contact Person | : | Mr. S Sengupta, DGM(M&C), Telephone: 0091 – 033 2339 3498, Email: s.sengupta@wbpdcl.co.in |
| 20. | Date of Commencement | : | From the date of issuance of Letter Of Award (LOA). |
| 21. | Time for Completion | : | Clause No.3.21 |
| 22. | Possession of Site | : | Immediately on receipt of LOA from Purchaser (WBPDC). |
| 23. | Performance guarantee for execution of contract | : | i. 10% of the LOA values including GST in the form of bank guarantee valid for a period of Seventy Two (72) months with further claim period for ninety (90) days thereafter and as per clause from 3.14.2 & 4.2 of general instructions from nationalized bank as per WBPDC approved format. ii. Should be submitted within 15 days from the date of LOA.(BG Format Annexure-2) |
| 24. | Defects Liability Period | : | Sixty (60) calendar months from the date of issue of final completion certificate /Acceptance of work by WBPDC (ANNEXURE-6). |
| 25. | Security Deposit (SD) | : | 5% of the bill value shall be deducted from every bill. SD will be released with the final. |
| 26. | Minimum value of work for each RA Bill | : | Rs.10.00 Lakhs.(Rupees Ten lakhs only) |
| 27. | Performance Warranty | : | 10% of the Contract value including GST will be |

| S1 | Aspect | : | Description of Aspect |
|------------|---|----------|--|
| | | | retained by the Purchaser for the performance warranty and the same will be paid in 2% yearly after successful completion of the work i.e. up to defect liability period. |
| 28. | Integrated project performance of Net Minimum Guaranteed Generation (NMGG) | : | Integrated project performance of minimum solar energy generation at the rate of 1.52MU annually per MW with degradation of 1% for any reason, from second year onwards. |
| 29. | Liquidated damages for Delay (LD Clause) | : | <p>a. Time Delay: 0.5 % of Contract value for per week delay or part there of subject to a maximum of 10% of the contract value.</p> <p>b. Milestone Delay: Delay in attaining the milestones by the contractor shall lead to imposition of intermediary Liquidated damages @0.25% per week of delay upto the maximum extent of 5(Five) Percent of the Contract price.</p> |
| 30. | Performance Penalty | : | Integrated project performance of minimum solar energy at a rate of 1.52MU annually per MW with degradation of 1% for any reason. If generated units fall short, then Rs.6.50 per unit of short fall will be deducted from performance warranty every year up to 5 th year. |
| 31. | Statutory Taxes | : | All the prices are to be quoted exclusive of taxes and duties. All taxes and duties are to be separately disclosed as line items to arrive at the final cost. Tender evaluation will be made on the basis of final cost. Tax and duties will be paid at actual by Purchaser. |
| 32. | Operation and Maintenance Cost (Including all Consumables) | : | Operation and Maintenance Cost (Including all Consumables and spares for Routine and preventive maintenance, Break down maintenance, capital maintenance): 10% of the Project cost (excluding Taxes and Duties) for 5(five) years. Clause No. GCC 3.8.4 |
| 33. | Insurance | : | Insurance of work and workmen including third party |

BID INFORMATION SHEET

For 10MW Floating Solar PV Power Plant at SgTPP of WBPDC

| S1 | Aspect | : | Description of Aspect |
|-----------|---------------|----------|---|
| | | | insurance are applicable and to be borne by the Contractor until final handover of the project. |

SECTION-I

INSTRUCTION TO THE BIDDER (ITB)

A. SCOPE & QUALIFICATION

1.1 NAME OF THE WORK

Design & Engineering, Manufacture / Procurement, Supply, Installation, Testing and Commissioning of 10 MW Phase-II Grid connected Floating Solar Photovoltaic Power Plants on Raw Water Pond No.1, 2 & 4 in Sagardighi Thermal Power Project(SgTPP), Murshidabad, West Bengal, India in turnkey basis including warrantee obligation with 05 (Five) years comprehensive Operation and Maintenance.

1.2 SOURCE OF FUND

The West Bengal Power Development Corporation Ltd (hereinafter referred to as **WBDCL** or "**Purchaser**") intends to finance the Work covered under these Bidding Documents from the Source as mentioned in the Bid Data Sheet (BDS).

1.3 SCOPE OF WORK:

The brief scope of work covered under this Tender shall be included but not limited to the following:-

- 1.3.1. The scope of work shall be on the basis of single source responsibility, completely covering all the Equipment/Material specified under the **Technical Specifications**. The work is to be executed on turnkey basis. The Purchaser will not supply any material departmentally. It shall include the following:
 - a. Detailed Site Survey of the Power Plant Raw Water Pond area of WBDCL for Designing and Engineering.
 - b. Submission of Detailed Design Report indicating technical suitability of site for installation of the Power Plant with layout plan.
 - c. Detailed Design of the Equipment/ Materials and Submission of Billing Breakup (BBU) with matching the project cost.

- d. Obtaining approval of engineering drawing, technical data, operational manual etc and necessary inspection from the Purchaser.
- e. Complete manufacturing including shop testing.
- f. Procurement, Packing, forwarding, transportation and insurance of Equipment/ Material from the manufacturer's works to the Site.
- g. Material Supply, Receipt, storage, preservation, insurance and conservation of Equipment/ Material at the Site.
- h. Grading, clearing of vegetation of the Site such as bank of the Pond and Site of the Control Building.
- i. Design and assemble of floater & mounting structure and anchoring system for SPV panels.
- j. Providing power supply for construction purposes.
- k. Construction of RCC type Inverter room with Power conditioning unit and associated LT and HT switchgear.
- l. Construction of Equipments for switchgear room, SCADA room, store room, battery & Battery Charger room with all electrical fitting and Control room with Central Monitoring and Control Station, security cabin etc.
- m. Installation and commissioning of equipments as per technical design.
- n. All associated electrical and civil works required for interfacing with grid i.e. transformer(s), breakers, isolators, panels, protection system, cables. metering, earthing etc
- o. Power evacuation up to the terminal point at 33kV voltage level as specified in technical specifications.
- p. Water supply arrangement for Control Building.
- q. Construction of roads, walkways and drainage system of Control Building.
- r. SCADA system for remote monitoring and control of SPV panels with all hardware & software.
- s. Till the commissioning of the plant and handing over the same to the Purchaser, the necessary security arrangement of all the materials and equipments will be the sole responsibility of the Contractor.
- t. Final check-up of equipments, installation, and commissioning of power plant and putting the system into successful functional operation.
- u. Reliability tests, performance and guarantee tests, wherever applicable, on completion of commissioning.
- v. Insurance of all the Equipments/ Materials.

- w. Supply of Mandatory Spares.
 - a. Providing training to the purchaser operating personnel at Manufacturers works, Operating power stations and at site or abroad.
 - b. Providing training material to the end users during onsite training for end users.
 - c. Preparing commissioning certificate and documentation as per MNRE, GoI
 - d. Handing over of power plant.
 - e. Operation & maintenance of SPV Plant along with electrical equipments, consumables and spare parts for a period of five years from the date of successful completion of trial run.
 - f. Providing of routine and break down maintenance of grid connected floating solar PV power plants during comprehensive maintenance period.
 - g. Fulfilment of guarantee obligation.

1.3.2. SUPPLY:

The Supply scope includes the following but not limited to:

Manufacture / Procurement, Supply and delivery of all the materials like Floater, PV Module, Module Mounting Structure, Grid Connected Inverters, Transformer, String Monitoring Boxes, Inverter LT Panel, Grid Interfacing LT Panel, Web based monitoring systems, Weather Monitoring Systems, Cables, System protection and other accessories conforming to the Technical Specification as required for successful Installations commissioning of Floating Solar PV Power Plant at Sagardighi Thermal Power Project.

1.3.3. ERECTION AND OTHER SERVICES:-

The Erection and Commissioning scope includes the following but not limited to:

Installation, Testing and Commissioning of 10 MW Grid connected Floating Solar Photovoltaic Power Plants on Raw Water Pond No.1, 2 & 4 in Sagardighi Thermal Power Project(SgTPP), Murshidabad, West Bengal, India in turnkey basis including warranty obligation with 05 (Five) years comprehensive Operation and Maintenance.

1.3.4. OPERATION AND MAINTENANCE:

Five (5) years comprehensive Operation & Maintenance(O&M) of the Solar PV Plant including power evacuation along with electrical equipment, consumables and spare parts from the date of successful completion of trial run of the plant.

“**Reliability Run or “Trial Run”** shall mean the first continuous operation of the successful completed Plant & Equipment including all systems & sub-systems in the automatic mode of control system for fourteen (14) days and plant performance ratio (PR) to be shown as per the condition of contract.

1.4 QUALIFYING REQUIREMENT FOR BIDDERS:

The Bidder must have to meet the following minimum qualification for 10MW grid connected Floating Solar PV Power Plant:

1.4.1. GENERAL :

The Bidder, who intends to participate in the Bid, must have to meet the following criteria:

1.4.1.1 The Bidder shall be a Sole Proprietorship / Firm or Company incorporated in India under the Companies Act, 1956 or 2013 or Indian Partnership Act 1932 or LLP Act 2008.

1.4.1.2 Bidders shall have to submit:

- a) i) **For the Companies** : Audited Balance Sheet and Statement of Profit and Loss Account of Last three (3) consecutive financial years for which the audited accounts are available (FY2016-17, FY2017-18 & FY2018-19)
- ii) **Other than Companies:** Tax Audit Report containing details for Last three (3) consecutive financial years (FY2016-17, FY2017-18 & FY2018-19)
- b) Acknowledgement of Income Tax Return for the last three Assessment Years (Assessment Year , 2017-18 & 2018-19, 2019-20)

1.4.1.3 The bidder must have valid GST, PF Registration, Return cum Challan (latest available) for Provident fund, ESI registrations are to be submitted along with the bid.

1.4.1.4 If the Bidder is **Bidding Consortium** then-

Joint Venture Bidders shall comply with the following requirements

- i Number of members in a Joint Venture shall not exceed **3 (three)**;
- ii Subject to the provisions of clause (i) above the Bid should contain the detail information required for each member of the

Joint Venture, viz. Financial Capacity, Technical capacity etc. of each member;

- iii Members of the Joint Venture shall nominate one member as the lead member (the “Lead Member”). Lead Member shall meet at least 50% requirement of Financial Capacity and at least 30% of Technical Capacity. The nominated Lead member shall remain unchanged during the entire period of project execution including the Defects Liability Period. The nomination(s) shall be supported by a Power of Attorney, as per the format at **(Form- 12)** Signed by all the other Members of the Joint Venture. Each of the other Member(s) shall meet at least 30% of the required Technical Capacity and 20% of the required Financial Capacity
- iv The duties, responsibilities and powers of Lead Member shall be specifically included in the joint Bidding Agreement or memorandum of understanding. It is expected that the Lead Member would be authorized to incur liabilities and to receive instructions and payments for and on behalf of the Consortium. The Lead Member should have maximum responsibility pertaining to execution of Project;
- v All the Consortium Member should fulfill the criteria as per clause no.1.4.1.
- vi The Bid should include a brief description of the roles and responsibilities of individual members, particularly with reference to financial, technical and defect liability obligations.
- vii All the members of the bidding consortium after the award and signing of the EPC Contract Agreement shall be obliged to continue to discharge their responsibility as the “members” of the consortium for a period covering the entire project completion period including defect liability plus Five (5) years of the Operation & Maintenance period of the total project. This five (5) years period shall be deemed to be effective from the date of commencement of the O&M period this project.
- viii The Bid should include a brief description of the roles and responsibilities of individual members which will satisfy the sub-clause 1.4. 1.4(iii) above;

- ix **Conflict of interest**-An individual Bidder cannot at the same time be a member of a Consortium applying for the Project. Further, a member of a particular Bidder Consortium cannot be member of any other Bidder Consortium applying for the Project;
- x No Change in the composition of the Consortium will be permitted by the Client during the Selection Process and during the subsistence of the Contract (in case the successful Bidder is a consortium).
- xi Members of the Consortium shall enter into a binding JV Bidding Agreement (herein after called as “JV/Consortium Agreement”), for the purpose of submitting a Bid. The notarized JV/Consortium Agreement, to be submitted along with the Bid as per format **Form-11** of the NIT.
- xii The award of the contract will be conferred on the Lead Member only(refer **clause-3.2.3**)

1.4.2. TECHNICAL ELIGIBILITY CRITERIA.

The Bidder, who intends to participate in the Bid, must have to meet the following criteria:

- (i) The Bidder shall have experience of satisfactorily execution of contracts in Planning, Designing, Supply, Installation, Testing & Commissioning with comprehensive operation and maintenance of Grid connected Rooftop and/or Ground Mounted and/or Floating Solar PV Power plants at any organization /PSU/ Government Organization having capacity of at least one(01) number 8(Eight) MWp or two(02) number 5(five)MWp capacity or higher capacity project at a single location in each case during preceding 07 (Seven) years. This plant(s) should have been operating successfully for minimum 1 (one) year. The bidder shall furnish documentary evidences of satisfactory performances of the said solar power plants by way of submission of monthly generation data on annual basis along with performance certificates issued by the purchaser for minimum 1 (one) year.
- (ii) The bidder should submit a list of contracts of similar nature already executed and presently under execution giving details of client, completion time, scope and value of work.

- (iii) The Bidder should have minimum 1(one) number 8(Eight) MWp or 2(two) number 5(five) MWp Rooftop or Ground Mounted or Floating Solar PV Power Plant Operation and Maintenance (O&M) experience which is in operational in India or abroad from last 1 years ending from last date of Bid Submission / Bid Due Date. The Bidder shall submit a latest O&M certificate issued by Project Developer of such plant.
- (iv) If the Bidder is Bidding Consortium then the combined technical and financial capability of those Members in such consortium should satisfy the above conditions of eligibility.

1.4.3. FINANCIAL CAPABILITY:

The Bidder, who intends to participate in the Bid, must have to meet the following criteria:

- i.** Minimum Average Annual Turnover (MAAT) of the Bidder during the last 3 (three) financial years ending 31st March of the previous financial year shall be **Rs.18Cr.**
- ii.** Net worth as per the financial statement of the last financial year as referred in **clause no: 1.4.1. (a)** of this NIT should not be less than **100%** of the paid share capital of the bidder.
- iii.** If the Bidder is Bidding Consortium then combined Net Worth of the both partner should not be less than **100%** of the paid share capital of the bidder.
- iv.** If the Bidder is bidding Consortium then the combined MAAT of those Members in such consortium should satisfy the above conditions of eligibility.
- v.** **“Net worth”** means the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation;

1.4.4. OTHER QUALIFICATION REQUIREMENT

- 1.4.4.1 Bidder shall have adequate design, manufacturing and/or fabrication capability and capacity available to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities and present commitments (excluding those anticipated under these bidding documents). If the present commitments are such that the installed capacity results in an inadequacy of manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid, then the details of alternative arrangements to be organized by the bidder and/or his collaborator/associate for this purpose and which shall meet the Purchaser's approval, shall also be furnished.
- 1.4.4.2 Bidder shall have an adequate project management organization covering the areas related to engineering of Equipment/Materials, interface engineering, procurement of equipments and the necessary field services required for successful construction, testing and commissioning of all the Works covered in the scope of work for this package and as required by the bidding documents
- 1.4.4.3 Bidder shall have established quality assurance systems and organization designed to achieve high levels of system reliability, both during his manufacturing and/or fabrication and field installation activities
- 1.4.4.4 Notwithstanding anything stated herein, WBPDCCL reserves the right to inquire and review the bidder's capability and capacity to perform the work at the time of evaluation.

1.5 RESPONSIBILITY OF BIDDERS

- 1.5.1 The WBPDCCL will not assume any responsibility regarding information gathered, interpretations or conclusions made by the bidder or regarding information, interpretations or deductions the bidder may derive from the data furnished by the WBPDCCL. Verbal agreement or conversation with any employee of the WBPDCCL either before or after the submission of bid shall not affect or modify any of the terms or obligations contained herein.
- 1.5.2 It shall be the sole responsibility of bidders to determine and to satisfy themselves by such means as they consider necessary or desirable as to all matters pertaining to this bidding process including in particular all factors that may affect the cost, duration and execution of the work.

1.5.3 It must be understood and agreed by the bidders that factors which may affect the cost, duration and execution of the Works have properly been investigated and considered while submitting the bid. Claims whatsoever including those for financial adjustment in the price of the Contract awarded in accordance with these bidding documents will not be entertained by the Purchaser. Neither any change in time schedule of Contract nor any financial adjustments arising thereof shall be permitted by the Purchaser, which are based on the lack of investigation or its effect on the cost of the Contract to the bidder.

1.5.4 If the Bidder did not execute any Electrical Sub-station job of 33 kV or above voltage level then the Bidder have to engage WBPDCCL/WBSEDCL/WBSETCL approved vendor for 33kV Substation work.

1.6 COST OF BIDDING

The bidder shall bear all costs associated with the preparation and submission of his bid and WBPDCCL in no case shall be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. THE BIDDING DOCUMENTS

1.7 CONTENTS OF BIDDING DOCUMENTS

The scope of work, bidding procedures, Contract terms and conditions and technical specifications are prescribed in the bidding documents. The set of bidding documents uploaded for the purpose of bidding includes the sections stated below together with any addendum/amendment to be issued in accordance with Clause No.**ITB. 1.11**.

| | | |
|-------------|---|---|
| | : | Notice Inviting Tender (NIT) |
| Section I | : | Instructions To Bidders (ITB) |
| Section II | : | Bid Data Sheet (BDS) |
| Section III | : | General Conditions of Contract (GCC) |
| Section IV | : | Special Conditions of Contract (SCC) |
| Section V | | Technical specification |
| Section VI | : | Form |
| | 1 | Check List |
| | 2 | Forwarding Letter for submission of Bid Security and Tender Fee |
| | 3 | Bid Form/Undertaking |