



**OFFICE OF THE GENERAL MANAGER,
WATCO PROJECT DIVISION-II,
BHUBANESWAR, ODISHA, PIN-751007**
e-Mail:gm2projects.watcoodisha@gmail.com

**DETAILED TENDER CALL NOTICE (DTCN)
FOR
SUPPLY, INSTALLATION, TESTING AND
COMMISSIONING OF ON-GRID GROUND
MOUNTED / ROOFTOP, 110 KW SOLAR POWER
PLANTS WITH AUTOMATION (SCADA, PLC) AT
STP , MEHERPALLI, BHUBANESWAR.**

ESTIMATED COST: Rs.59.81 LAKHS

Bid Identification No.02- GM Project Division-II WATCO, Bhubaneswar / 2026-27 Dt.10.09.2026

**COST OF TENDER PAPER:10,000/- + GST @ 18%
(Rupees Ten Thousand plus eighteen percent GST)only**

SEPTEMBER -2026

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SECTION-I



**OFFICE OF THE GENERAL MANAGER,
WATCO PROJECT DIVISION-II,
BHUBANESWAR, ODISHA, PIN-751007
e-Mail:gm2projects.watcoodisha@gmail.com**

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NOTICE INVITING TENDER (NIT) FOR THE WORK
Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted /
Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP ,
Meherpalli, Bhubaneswar
NATIONAL COMPETITIVE BIDDING THROUGH e-Procurement

Bid Identification No. 02- GM Project Division-II WATCO, Bhubaneswar / 2026-27 Dt.10.09.2026

The **General Manager, project division-II, WATCO, Bhubaneswar** on behalf of Governor of Odisha invites **Percentage Bids** through **e-Procurement** in conformity with the terms and conditions of the Detailed Tender Call Notice (DTCN) in **Two Bid System** (Part-I: General & Technical Bid and Part-II: Price Bid) from **"MV Electrical" Contractors/solar pv OEM authorisation** registered with the Odisha State Government and Contractors of equivalent grade/class registered with Central Government/ any other State Government/ MES/ Railways having experience and expertise of Similar Type of Works and fulfilling minimum eligibility criteria as stated hereunder and other detailed qualifying requirements given in the DTCN to be eventually drawn up in the **Standard P1 Contract Form**. The bid should be submitted on-line in the website **www.tendersodisha.gov.in** by eligible class of contractors. The bidders should have the necessary Portal Enrolment (with his own Digital Signature Certificate). Contractors registered elsewhere but not registered with Government of Odisha can also participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Government before award of work / signing of the Agreement as per prevalent registration norms of the State.

Sl. No.	Name of the work	Value of Work (Rs. Lakh)	Bid Security (EMD) (In Rs.) (Online)	Class of Contractor	Period of Completion	Cost of Bid Document + GST @ 18% (in Rs.) (Online)
1	2	3	4	5	6	7
1.	SUPPLY , INSTALLATION, TESTING AND COMMISSIONING OF ON-GRID GROUND MOUNTED/ROOFTOP ,110 KW SOLAR POWER PLANTS WITH AUTOMATION(SCADA,PLC) AT STP, MEHERPALI BHUBANESWAR.	59.81	59810/-	"MV Electrical" Contractors/ PV OEM authorisation	03 (three) Months	11800/-

2. Mode of Submission of tender: Tender should be submitted online in **www.tendersodisha.gov.in.**
3. The bidders desirous to participate in bidding must possess compatible Digital Signature Certificate of Class-II or Class-III and should follow the changes/ modifications/ addendum to DTCN if any.
4. The original documents i.e., Affidavits, Undertakings & Certificates as per the Schedules and Annexure of DTCN that have been uploaded by the bidder in the e-tender website should be submitted for verification during evaluation. The Technical Bid will be opened on **Dt.05.10.2026 at 12.30 PM.**

5. **Critical Dates:-**

SN	Description	Critical Dates
(i)	Period of availability of tenders on-line	From 12.30 AM of Dt.21.09.2026 to 5.00 PM OF 03.10.2026
(ii)	Last date & time of seeking clarification	From 5 00 PM of Dt.01.10.2026
(iii)	Last date & time of bidding on-line	From 5 00PM of Dt.03.10.2026
(iv)	Date & time of opening of Technical Bid	From 12.30 PM of Dt.05.10.2026

6. **Minimum Eligibility Criteria :-**

- i) The Firms/ Companies/ Registered Contractors should have successfully Completed & Commissioned Works of similar type of work i.e Solar power sub-station work with solar power plant automation using scada, plc etc valuing not less than **Rs.17.94 Lakh (30% of the estimated cost)** in any one financial year during the last 5 (five) years. However, in case of single work the contractor should have achieve the amount of **Rs.17.94 lakhs (30% of the estimated cost)** in 1 years' time. The firm shall have to submit the performance certificate of the works constructed by them for satisfactory performance from appropriate authority i.e., not below the rank of General Manager /equivalent. Weightage @ 10% per year shall be given on the value of the completed work in the preceding years.
- ii) The Firms/Companies/Registered Contractors should have annual financial turnover of not less than **Rs.23.92 Lakh (40% of the estimated cost)** in any one year in **Solar power sub-station work with solar power plant automation using scada, plc etc** during last 5 (five) years and the turn over need to be certified by Chartered Accountant. Weightage @ 10% per year shall be given on the annual turnover of the preceding years.

7. **Escalation Factor (On Compound basis):**

Following enhancement/compounding factors will be used for the costs of works executed and the financial figures to a common base value.

<u>Year before</u>	<u>Multiplying factor</u>
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

8. To arrive at the value of completed works, Value of multiple contracts executed in a financial year shall be considered. For this purpose, the Completion certificates given by the authorities for any one financial year shall be considered. In case value of works executed in any one financial year is not available in the Certificates, the same shall be calculated on a pro-rata basis, considering that the total completed value and the time schedule in days.
9. The Bidder should have not been black listed by any Govt./ Govt. Undertaking on the bid opening date. **Self-declaration certificate** by Bidder in the form of Affidavit is to be submitted.
10. The bid for the work shall remain valid for a period of **120 (One Hundred Twenty) days from the date of opening of Price Bid**. If any Bidder/ Tenderer withdraws his bid/ tender before the said period or makes any modifications in the terms and conditions of the bid, the said earnest money shall stand forfeited.
11. Bids from Consortium/ Unincorporated Joint Venture is not acceptable.
12. Other details can be seen in the bidding documents, which is available in website www.tendersorissa.gov.in.
13. All amendments, time extension, clarifications etc. will be uploaded in the website only. Bidders should regularly visit the above website to keep themselves updated.
14. Authority reserves the right to reject any or all the tenders without assigning any reasons thereof.

Sd/-
GENERAL MANAGER
WATCO, PROJECT DIVISION-II,
BHUBANESWAR.

CHECK LIST TO BE FILLED UP BY THE BIDDER

Name of the Work : Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar.

Sl. No	Particulars	Reference to Clause no.	Whether furnished		Reference to Page no.
			Yes	No	
01.	Cost of Bid Document + GST @ 18% = Rs.11,800/- (Online remittance)	As per NIT			
02.	Bid Security (EMD) for Rs.59810/- (Online remittance)	D.T.C.N Clause No.2(B)23.1			
03.	Copy of valid Registration Certificate	DTCN Clause No.2(A).a.v			
04.	Copy of valid GST Registration Certificate / GSTIN	DTCN Clause No.2(A).a.iii			
05.	Copy of PAN Card	DTCN Clause No.2(A).a.iv			
06.	No Relationship Certificate	DTCN Clause No.2(A).a.vii			
07.	Works Experience -	Schedule-D			
(a)	List of similar works executed during last 5 years	Schedule-D (Item-3)			
(b)	Works in hand-Approximate value of existing commitment and ongoing works.	Schedule-D (Item-4)			
(c)	Bid Capacity Calculation Sheet	Schedule-D (Item-5)			
08.	Information regarding current litigation, debarring / expelling of the tender or abandonment of the work by the tenderer	Schedule-E			
(a)					
(b)	Affidavit / Declaration	Schedule-F			
09.	Work schedule in the form of Bar Chart	DTCN Clause No.7.14			
10.	Sealed envelope containing additional performance security or declaration as the case may be	DTCN Clause No.23.4 of Section -2(B)			
11.	Self-declaration certificate by the bidder in the form of Affidavit- for not being blacklisted by any Govt./ Govt. Undertaking	As per NIT			
12.	Self-declaration certificate by the bidder in the form of Affidavit- declaring that in last 3 financial years they have not applied for/ are undergoing Corporate Debt Restructuring (CDR) /Strategic Debt Restructuring (SDR) or facing recovery proceedings from Financial Institutions or those are facing Sickness and under consideration of Board for Industrial and Financial Reconstruction (BIFR)	DTCN Section - 2(B) Clause No.8.4			

CONTRACT DATA

A. GENERAL INFORMATIONS

SN	Item	Details
1	Bid Identification No.	02- GM Project Division-II WATCO, Bhubaneswar / 2026-27 Dt.10.09.2026
2	Name of the Work	Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar.
3	Officer inviting tender	General Manager, WATCO Project Division-II, Bhubaneswar
4	Accepting Authority	General Manager, WATCO Project Division-II, Bhubaneswar
5	Estimated Cost	Rs.59.81 Lakh

B. BID INFORMATION

6	Intended completion period/Time period assigned for Completion	03 (Three) Calendar Months
7	Last Date & time of submission of Bid	5:00 PM of Dt.03.10.2026
8	Cost of Bid Document (To be Remitted Online)	Rs.10000.00 + 18% GST
9	Bid Security (EMD) (To be Remitted Online/ BG)	Rs.59,810/-
10	Additional Performance Security	In the shape as mentioned at Clause 23 of Section-2(B)

i)	Amount	Sl No.	Incremental Basic of Additional Performance Security.	Additional Performance Security to be deposited by the Successful bidder
		i	Below 0% but not below 10% of the Project Cost put to bid.	No Additional Performance guarantee/ Security percentage is required.
		ii	Below 10% but not below 20% of the Project Cost put to bid.	0.1% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the Additional Bid Performance Guarantee being 0.1% and the Additional Bid Performance Guarantee percentage shall be applied on the bid price.
		iii	Bid price is 20% or more below of the project cost put to bid.	0.2% for every percentage of bid price below 20% of the project cost put to bid in addition to 1% of the bid price and the Additional Bid Performance Guarantee percentage shall be applied on the bid price.
		As per Govt. of Odisha, Works Department OM No.173/W, Bhubaneswar Dt.03.01.2026 on Amendment of Codal & Contractual Provisions.		

ii)	Pledged in favour of	General Manager, WATCO Project Division-II, Bhubaneswar
iii)	Payable at	Bhubaneswar
iv)	Type of Instrument	As specified in the Bid document
11	The Financial years of last five years	2021-22 to 2025-26
12	Bid validity period	120 days from the date of opening of Price Bid
13	Currency of Contract	Indian Rupees
14	Language of Contract	English
C. Agreement Information		
15	Execution of agreement	The successful bidder is to execute the agreement with General Manager, WATCO Project Division-II, Bhubaneswar

SECTION- 2(A)
DETAILS OF THE DOCUMENTS TO BE FURNISHED
FOR ONLINE BIDDING

(a) Scanned copies of the following documents to be up-loaded in appropriate place in PDF format in the website **www.tendersodisha.gov.in**.

i. **Remittance of Cost of Bid Document (Online).**

ii. **Remittance of Bid Security (EMD) (Online).**

iii. **GST Registration Certificate / GSTIN.**

iv. PAN Card.

v. Registration Certificate.

vi. Affidavit regarding correctness of certificates.

vii. Affidavit regarding no relation certificate.

viii. Work experience certificate from the authority not below the rank of Executive Engineer.

ix. Annual Turnover Certificate from Chartered Accountant for last five financial years with break-up of **Civil Works & Total Works** for each financial year.

x. Any other relevant required document, if any.

(b) Scanned Copies of the Certificates/Formats showing details of information to be furnished as per the enclosed formats should be uploaded in appropriate place after converting the same to PDF.

Schedule A - Structure & Organisation.

Schedule B - Financial statement

Schedule C - List of tools, plant & equipment proposed to be deployed in the work.

Schedule D - Work experience

Schedule E - Information regarding current litigation/debarment etc.

Schedule F - Information on Electrical License/Collaboration

Schedule H - Solvency Certification from Bank

Schedule I - Any other information.

Schedule J - Format for Seeking Clarification

Schedule K - Form of Bank Guarantee

Schedule L - Project Completion

(The details of the Format is enclosed in the DTCN)

(c) Uploaded documents of valid successful bidders will be verified with the original before acceptance of offer.

(d) DTCN is not to be uploaded by the bidder. The bidder has to only agree / disagree on the conditions in the DTCN. The bidders, who disagree on the conditions of DTCN, can not participate in the tender.

(e) **Cost of Bid Document & Bid Security amount (EMD) will be paid on online mode** by the Bidder, failing which the bidder will be disqualified.

SECTION- 2(B)
INSTRUCTIONS TO BIDDERS
A. GENERAL

1. **Definitions:**

- (a) "Employer" means the **WATCO, BHUBANESWAR** a Government of Odisha owned company represented by the **General Manager, WATCO Project Division-II, Bhubaneswar** or his authorized representative with whom the selected Bidder signs the contract for the services.
- (b) "Contractor" / Bidder / Firm / Engineer Firm / Company carry the same meaning through out the DTCN and Contract.
- (c) "Contract" means the contract/ agreement signed by the parties along with all attached documents listed in the DTCN (Tender Document Part -I & II).
- (d) "Data Sheet" means such part of the Instructions to Contractor as are used to reflect assignment conditions and evaluation of the bid.
- (e) "Day" means a calendar day.
- (f) "Government" means the Government of Odisha.
- (g) "Instructions to Bidders (Section-2(B) of the Part-I of DTCN) means the document which provides all information needed to prepare their proposals.
- (h) "NIT" (Section-1 of the DTCN) means the Letter of Invitation being sent by the Employer.
- (i) "Personnel" means professionals and support staff provided by the Contractor and assigned to perform the services in full or in any part thereof.
- (j) "Proposal" means the Technical Proposal (Tender Document Part I – General & Technical Bid) and the Financial Proposal (Tender Document Part II – Price Bid).
- (k) "DTCN" means the Detailed Tender Call Notice prepared by the Employer for the selection of contractor which includes Part-I & II.
- (l) "Govt". means Govt. of Odisha or Govt. of India as the case may be.

2. **Introduction / Selection Procedure:**

The Employer named in the Data Sheet will select a contract firm to execute the work as described in the scope of work and in the Data sheet.

The Contractor shall bear all costs associated with the execution of the work on **Percentage Rate Bids**. The Employer is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to contract award without thereby incurring any liability to the Contractor.

3. **Location of the Project:**

The place of action is at **STP, MEHERPALI, Bhubaneswar** of **Khordha** District in the **State of Odisha**.

4. **Source of Funding:**

The work will be funded by **WATCO**.

5. **Eligibility:**

- 5.1. A Bidder shall be deemed to have the nationality of India.
- 5.2. A Bidder shall be **"MV Electrical" Contractors/SOLAR OEM Authorisation** Contractors registered with the Odisha State Government and Contractors of

equivalent grade/class registered with Central Government/ any other State Government/ MES/ Railways.

- 5.3. Registered Contractor of **"MV Electrical" Contractors or authorised pv panel manufacturer (OEM)** of Odisha State PWD or equivalent class of CPWD / Railway / MES / Central or other State Govt. **Proof of registration is to be furnished along with the tender and having experience on solar power plant installation with automation using SCADA, PLC.**

6. **History of Litigation and Criminal Record:**

If any criminal cases are pending against the Contractor (him/her/partners) at the time of submitting the tender, then the tender shall be summarily rejected.

7. The Contractor has to furnish a declaration that no near relatives are working in the cadre of an Assistant Manager/ Manager and above in the Organisation of Public Health Engineering Organisation (PHEO) of State of Odisha and WATCO.

8. **Other Requirements:**

- 8.1. Even if the Contractor meets other criteria, his tender shall be summarily rejected if he is found to have misled or made false representation in the form of any of the statements submitted in proof of the eligibility and qualification requirements.
- 8.2. The tender shall also be summarily rejected if he has a record of performance such as absconding from work, works not properly completed as per contract, inordinate delays in completion, financial failure.
- 8.3. In addition to the above, even while executing the work, if it is found that he produced false / fake, certificates in his tender, he will be blacklisted.
- 8.4. The bidders who have in last 3 financial years applied for / are undergoing Corporate Debt Restructuring (CDR)/Strategic Debt Restructuring (SDR) or facing recovery proceeding from Financial Institutions or those are facing Sickness and under consideration of Board for Industrial & Financial Reconstruction (BIFR) are not eligible for qualification. Self-declaration Certificate by the bidder in the form of affidavit is to be submitted.

9. **Original Certificates:**

Original documents/certificates shall be produced as and when required to verify the copies of statements and other information furnished along with tender. Failure to produce original documents in time will lead to disqualification.

10. **Cost of Tendering:**

The Contractor shall bear all expenses associated with the preparation and submission of his tender, **General Manager, WATCO Project Division-II, Bhubaneswar** shall in no case be responsible or liable for reimbursement of such expenses.

11. **Site Visit:**

The contractor is advised to visit and examine the site at **Bhubaneswar** in the district of **Khordha** and its surroundings and obtain for himself all information that may be necessary for preparing the tender and quoting rates at his cost and responsibility.

B. TENDER DOCUMENTS

12. **Tender Documents :**

- 12.1. A set of Tender Documents comprising of the General & Technical Bid and the Price Bid includes the following together with all Addenda there to, which may be issued in accordance with **Clause 2(B) 13 and Clause 2(B) 14.**

PART- I : GENERAL & TECHNICAL BID

Section	Description
DTCN Part – I: General & Technical- Bid	
Section-1	Notice Inviting Tender (NIT)
	Check List to be Filled up by the Bidder
	Contract Data
Section-2(A)	Details of the Documents to be Furnished for Online Bidding
Section-2(B)	Instructions to Bidders
Section-2(C)	Data Sheet
Section-2(D)	Letter for Submission of Tender
Section-2(E)	Tender Declaration
Section-2(F)	Letter of Acceptance of Tender
Section-2(G)	Memorandum
Section-3	Information regarding Tenderer
Section-4	Declaration by the Tenderer
Section-5	Form of Agreement
Section-6	Conditions of Contract
Section-7	Special Conditions of Contract
Section-8	Scope of Work
Section-9	Technical Specifications & Design Criteria
Section-10	Payment Schedule
Schedule-A to L	Formats for furnishing Information by the Bidder
Appendix - I	Executive Instruction regarding calling for and acceptance of tenders in e-Procurement in Govt. of Odisha
Appendix - II	Procedure for Electronic Receipt, Accounting and Reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids
DTCN Part – II: Price Bid/BoQ	

- 12.2. The Contractor is expected to examine carefully all instructions, terms of reference, tender conditions, forms, appendices to tender, addenda in the tender documents. Failure to comply with the requirements of tender submission will be at the contractor's own risk.

13. **Clarification of Tender Documents:**

The Contractor shall carefully examine the tender documents and be fully informed of all the conditions and matters, which may in any way affect the work or the cost thereof. Should a Contractor find any discrepancy in or omission from the specification or any other of the tender documents or should he be in doubt as to their meaning, he should immediately address a clarification online **as per format at Schedule-J**.

14. **Amendment of Tender Documents:**

14.1. At any time prior to the dead line for submission of tenders, **General Manager, WATCO Project Division-II, Bhubaneswar** may for any reason, whether at its own initiative or in response to the clarifications requested by the prospective Contractor, modify the tender documents by issuing an Addendum.

14.2. Such addenda will be notifying in the website and will be binding upon them.

14.3. In order to afford prospective Contractor reasonable time to take such addenda into account in preparing their tenders, **General Manager, WATCO Project Division-II, Bhubaneswar** at his discretion, may extend the dead line for the submission of tenders, if necessary.

C. PREPARATION OF TENDER DOCUMENT

15. **Language of the Documents:**

All documents relating to the Tender shall be in the English language.

16. **Documents Comprising the Tender:**

- (a) General & Technical Bid (Part-I of Tender Document)
- (b) Price Bid (Part-II of Tender Document)
- (c) All documents stipulated elsewhere in the DTCN.

17. **Sufficiency of Tender:**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the services to be provided and of the prices quoted in the financial bid, which shall cover all his obligations under the contract and all matters and things necessary for the successful accomplishment of the work.

18. **Preparation of Proposal:**

18.1. The Proposal (see Section-2(B) Clause 1(J)) as well as all related correspondence exchanged by the employer & the Contractor shall be written in the language specified in the Data Sheet.

18.2. In preparing the proposal, the Contractor is expected to examine in detail the documents comprising the DTCN. Material deficiencies in providing the information requested may result in rejection of a proposal.

18.3. Site Inspection by tenderer.

The tenderer shall inspect the site at his own cost and shall satisfy himself with regard to the nature and extent of the work involved the actual site conditions, existing facilities and shall collect any other information, which may be required before submitting the tender. Any further data required during execution of the work / scheme shall be ascertained by the contractor at his own cost.

19. Technical Proposal Format and Content:

The Contractor should have sufficient manpower to execute & complete the work within the time schedule. He should have sufficient financial background / work experience with specification in construction of water supply scheme / tools, plant, machinery and equipment required for execution of the work / free from litigation / have good working record of completion of the works in time. It may be noted that the contractor should satisfy the minimum eligible criteria for award of Contract. The Technical Proposal shall provide the information indicated in the following paragraphs (clause 2(B) 19.1 to 2(B) 19.12) using the attached Standard Forms. A page is considered to be one printed side of A4 or letter size paper.

- 19.1. The Contractor has to furnish the names of the professional staff to be deployed in the work with their qualification / experience in **Scheduled-'A'**.
- 19.2. A description of the approach, methodology and work plan for performing the assignment.
- 19.3. The list of the tools, plant, machinery & equipment to be deployed in the work as per **Scheduled-'C'**.
- 19.4. Work completion certificate from an Engineer not below the rank of General Manager/equivalent in support of the work executed as furnished in **Scheduled-'D'**.
- 19.5. Bio-data of the professional staff furnished need be signed by the staff themselves or by their authorized representatives.
- 19.6. Annual financial turn over of the last **5 (five)** years shall be Audited accounts of the firm/Contractor and certified by Chartered accountant and to be indicated in Schedule-B.
- 19.7. Solvency Certificate from a Scheduled Bank (**Scheduled-'H'**).
- 19.8. **GST Registration Certificate / GSTIN.**
- 19.9. Copy of PAN Card.
- 19.10. Copy of Contractor's Registration Certificate.
- 19.11. General Power of Attorney if required in favour of the authorised signatory.
- 19.12. Other information as required.
- 19.13 The Technical Bid shall not include any financial information related to the Price Bid. **Technical Bid containing financial information related to the Price Bid shall be declared non responsive.**

20. The Financial Proposal:

- 20.1. The Contractor shall quote his rates on prescribed form of the Bill of Quantities (BoQ) already supplied in the Tender.
- 20.2. The offer shall be inclusive of all costs associated with the assignment including cost of all materials to be utilized in the work, cost of T&P, consumables, infrastructure backup etc. The offer shall be exclusive of GST but include all other expenses incidental thereto for successful accomplishment of the assignment in conformity with the DTCN.

- 20.3. The contractor should make realistic assessment of the exhaustive nature of work and the extent of expert technical and managerial inputs and resources required to carry out the work diligently to complete the work within the stipulated time and quote their offer accordingly.
- 20.4. The rate quoted by the firm shall be firm.
21. **Tender Validity:**
- 21.1. The proposal must remain valid for **120 (One Hundred Twenty) days** from the date of opening of price bid.
- 21.2. A Contractor agreeing to the request of extending the validity period of the proposal will not be required or permitted to modify his tender, but will be required to extend the validity of his EMD.
22. **Authorisation, Corrections, Erasures etc. in Tender Papers:**
- 22.1. The tender document shall be digitally signed by a person duly authorized to do so. Proof of authorization shall be furnished in the form of a certified copy of Power of Attorney, which shall accompany the tender.
- 22.2. The completed tender shall be submitted without any alterations, inter-relations or erasures except those which accord with instructions given by the **General Manager, WATCO Project Division-II, Bhubaneswar**.
- 22.3. Only one tender shall be submitted by a contractor. Submission of bids through e-Procurement portal the system shall consider only the last bids submitted through portal.
23. **Earnest Money Deposit / ISD / SD / Additional Perform Security & GST Registration:**
- 23.1. **Earnest Money Deposit:**
The Earnest Money Deposit (EMD) of Rs.59810/- shall be remitted on online mode. Tenders without EMD or with Part EMD or EMD in any other form shall not be accepted and such tenders shall be out rightly rejected.
- 23.2. **Return of EMD:**
 The Bank will remit the **Earnest Money Deposit on submission/ cancellation of bids** to respective bidder's accounts as per direction received from TIA through e-procurement system. (as per the Appendix-II of DTCN).

 The earnest money given by other **one parties (L₂)** except one whose tender is accepted shall also be refunded within 15 (Fifteen) days of the acceptance of the tender (as per the Appendix-II of DTCN).

 EMD shall also be returned to the unsuccessful bidders of General & Technical Bid (Part-I of tender documents) after finalisation of its evaluation (as per the Appendix-II of DTCN).

23.3. Initial Security Deposit:

The successful Tenderers, after receipt of formal order shall have to furnish Initial Security Deposit (ISD) equal to **2% (two percent)** of the accepted value of the tender in shape of NSC/Postal Saving Pass Book /Post Office Time Deposit / Kishan Vikash Patra / Deposit Receipt in Schedule Bank duly pledged in favour of the **General Manager, WATCO Project Division-II, Bhubaneswar** payable at **Bhubaneswar** within 7(seven) days of receipt of intimation failing which their tender shall be cancelled with the forfeiture of EMD.

23.4. Additional Performance Security:

On intimation from the tender inviting authority, the Successful bidder shall submit the required amount of Additional Performance Security in shape of NSC/ Postal Saving Pass Book /Post Office Time Deposit /Kishan Vikash Patra /Deposit Receipt in Scheduled Bank duly pledged in favour of **General Manager, WATCO Project Division-II, Bhubaneswar** Payable at **Bhubaneswar** before issuance of Letter of Acceptance (LoA).

Government of Odisha vide **Works Department Office Memorandum No.173/W Dt. 03.01.2026** is pleased to fix the following rate of **Additional Performance Security**.

Sl No	Incremental Basic of Additional Performance Security.	Additional Performance Security to be deposited by the Successful bidder
i	Below 0% but not below 10% of the Project Cost put to bid.	No Additional Performance guarantee/ Security percentage is required.
ii	Below 10% but not below 20% of the Project Cost put to bid.	0.1% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the Additional Bid Performance Guarantee being 0.1% and the Additional Bid Performance Guarantee percentage shall be applied on the bid price.
iii	Bid price is 20% or more below of the project cost put to bid.	0.2% for every percentage of bid price below 20% of the project cost put to bid in addition to 1% of the bid price and the Additional Bid Performance Guarantee percentage shall be applied on the bid price.
iv	The additional performance guarantee percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price is 0.5% or more.	
v	The additional performance security shall be treated as part of the performance security.	
vi	Justification for abnormally low bids shall be scrutinized by the Departmental Technical Committee and recommended to the competent authority of the Administrative Department for the approval of the Additional Performance Security(APS). An abnormally low bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises	

	material concerns as to the capability of the Bidder to perform the contract at the offered price. Procuring Entity may, in such cases, seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bid document., If, after evaluating the price analyses, the procuring entity determines that the Bidder has substantially failed to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the Bid/Proposal. However, it would not be advisable to fix a normative percentage below the estimated cost, which would automatically be considered as an abnormally low bid.
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23.5. GST Registration Certificate / GSTIN:

Tenderers are required to submit attested copies of valid **GST Registration Certificate / GSTIN**.

23.6. Security Deposit

In addition to that **5% of gross value** will be deducted from bill(s) of the contractor toward **Security Deposit (SD)** which will be refunded after the defect liability period subject to payment of final bill.

23.7. The EMD shall be forfeited, if, (a) a contractor withdraws the tender during the validity period of tender or (b) if the firm fail to furnish ISD within due time or (c) the successful tenderer fails to sign the Agreement for whatever reason.

23.8. In consideration of the **General Manager, WATCO Project Division-II, Bhubaneswar** to investigate and to take into account each tender and in consideration of the work thereby involved, all earnest money deposited by the tenderer will be forfeited in the event of such tenderer either modifying or withdrawing his tender at his instance within the validity period.

24. Signing of Tenders / Bid

All tender documents will be signed digitally with Digital Signature Certificate (DSC). The online bidder shall digitally sign on all statements, documents, certificates, uploaded by him, owing responsibility for their correctness / authenticity as per IT Act 2000. If any of the information furnished by the bidder is found to be false / fabricated/ bogus, his EMD / Bid security shall stand forfeited and the bidder is liable to be blacklisted.

24.1. If the tender is made by an individual, it shall be signed with his own Digital Signature Certificate (DSC).

24.2. If the tender is made by a corporation / company, it shall be signed by a duly authorized officer who shall produce with his tender satisfactory evidence of his authorization. Such a corporation / company may be required before the contract is executed, to furnish evidence of its corporate existence.

The tender shall contain no alterations or additions, except those to comply with instructions issued by the Tender Inviting Officer, or as necessary to correct errors made by the Tenderer, in which case all such corrections shall be digitally signed.

24.3. No alteration made by the tenderer in the contract form, the conditions of the contract, statements / formats accompanying the tender shall be recognized and in case of any alterations made by the tenderer, the tender will be void.

24.3.1. All documents furnished by the contractor along with the tender are to be digitally signed by the bidder.

25. **Clarification on and Amendment to DTCN Document:**

25.1. Contractor may request a clarification to any clause of the DTCN documents up to the number of days indicated in the Data Sheet before the proposal submission date. Any request for clarification must be sent online in the portal. The Employer will respond to this online through the same portal. Should the Employer deem it necessary to amend the DTCN as a result of a clarification, it shall do so following the procedure under para. 2(B) 25.2.

25.2. At any time before the submission of Proposals, the Employer may amend the DTCN by issuing an addendum/corrigendum which shall be published in the portal. The addendum/corrigendum shall be binding for the bidders. To give the bidders a reasonable time to take into account the amendment into their proposals the Employer may, if the amendment is substantial, extend the deadline for the submission of proposals. The purpose of this is to clarify issues on any matter, a tenderer may raise concerning the tendering of the works.

D. SUBMISSION OF TENDERS

26 In view of adoption of e-procurement process pursuant to Government of Odisha in Works Department Office Memorandum No.FA-R-3/08-4657/W dated 12.03.08, 4666/W dated 12.03.2008, 1027/W Dt.24.01.2009 & 7885/W dated 23.07.2013 following changes/ modification/ addendum shall be effected.

26.1. **Bid Documents:**

Bid documents consisting of technical bid & price bid shall be provided in the portal. Submission of bids will be through the e-Procurement portal. The bidders shall prepare the documents & up load the scanned document to the portal in appropriate place in PDF format.

26.2. **Clarification of Bidding Documents:**

In case of submission of Bids through the e-Procurement Portal, the bidder can seek clarification within the period of seeking clarification as mentioned in tender call notice. The Employers response for the queries raised by the bidder will be posted in the portal.

26.3. **Documents Comprising the Bids:**

In case of submission of Bids through the e-Procurement Portal, the bidder can submit the scanned copy of the documents in the designated locations of Technical Bid and Financial Bid. Submission of document shall be effected by using Digital Signature Certificate (DSC) of appropriate class and thus shall be in encrypted form.

26.4. **Bid Price:**

In case of submission of Bids through the e-Procurement Portal, an intelligent Bill of Quantity in Microsoft Excel format shall be made available to the bidder. The bidder shall download that particular Excel sheet and fill in rates in figures at the appropriate location. The line item total in words and the total amount in case of item rate tenders shall be calculated automatically and shall be visible to the bidder. In case of percentage tender, the bidder will only fill in the designated cell and activate "less" or "excess" to indicate whether his price offer is how much excess or less than the estimated amount. The Bidder will write percentage excess or less up to **two decimal points only. The bidder is not supposed to change or modify the format of the excel sheet in any form.**

26.5. **Bid Security/EMD:**

- (i) The bidder shall deposit bid security for the amount shown in Col.4 of the table of Notice Inviting Tender (NIT) **on online mode.**
- (ii) The EMD will be forfeited in any of the following case.
 - a) If the Bidder withdraws the Bid after Bid opening during the period of Bid validity.
 - b) If the Bidder does not accept the correction of the Bid Price.
 - c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - i) Sign the Agreement / contract or
 - ii) Furnish the required ISD.

In case of submission of Bids through the e-Procurement Portal, if any of the statements, documents, and certificates uploaded by the bidder is **found to be false/fabricated/ bogus, the bidder will be blacklisted and their EMD/ Bid Security shall be forfeited.**

26.6. **Submission of Bid:**

In case of submission of bids through e-Procurement portal, the bidder shall upload the scanned copy/copies of documents as required as per DTCN. The online bidder shall have to produce the original documents in support of scanned copies & statements uploaded in the portal on demand by the employer prior to award of contract-failing which action as per DTCN will be initiated.

In case of submission of Bids through the e-Procurement Portal, the bidder shall only submit single copy of the document. He is required to check the documents uploaded with the requirement asked for in the bid. Only after satisfying that all the documents have been uploaded, he should activate submit button. His bids shall not be considered responsive and action as per relevant clause shall be taken if he does not provide the required documents or provided illegible document. Clarity of the document may be ensured by taking out a sample printing.

26.7. **Late Bids:**

In case of submission of Bids through the e-Procurement Portal, the system shall reject submission of any bid through portal after closure of the receipt time. For all purpose the portal time displayed in the system shall be the time to be followed by the bidder.

27. **Modification & Withdrawal of Bid:**

In case of submission of Bids through the e-Procurement Portal, it is allowed to modify the bid. The bidder shall have to log on to the system and resubmit the documents as asked for by the system including the price bid. In doing so, the bids already submitted by the bidder will be removed automatically from the system and the latest bid only will be admitted. But the bidder should avoid modification of bid at the last moment to avoid system failure or malfunction of internet or traffic jam. If the bidder fails to submit his modified bids with in the designated time of receipt, the bids already in the system shall be taken for evaluation.

In case of submission of Bids through the e-Procurement Portal, withdrawal of bid is allowed. The bidder has to click on the "withdraw" button and record the necessary justification for the same in the space provided. In addition to this, he has to write a letter addressed to the Officer inviting the bid and up load the scanned document to portal in respective bid. The system shall not allow any withdrawal after expiry of the closure time of the bid.

28. **Bid Opening:**

In case of submission of Bids through the e-Procurement Portal, the bidders who participated in the online bidding can witness opening of the bid from any system logging on to the portal away from opening place. The bids can only be opened by the pre-designated officials only at the opening time mentioned in the bid.

29. **Award of Work:**

In case of submission of Bids through the e-Procurement Portal, the system shall generate the Award of Contract letter and intimate the bidders in their e-mail.

E. TENDER OPENING AND EVALUATION

30. **Tender Opening:**

30.1 The **General Manager, WATCO Project Division-II, Bhubaneswar** will open the tenders electronically on the date & time mentioned in the **Notice Inviting Tender (NIT)**.

- 30.2 (i) A tender shall be rejected if;
- a) Price Bid is not enclosed.
 - b) Cost of tender document has not remitted online on submission of bid.
 - c) EMD as per Clause 2(B)23.1 has not remitted online on submission of bid.
- (ii) In case if the bidder has not submitted following document with the bid due to any reason, clarification may be sought and queries may be issued to the bidders for submission of the same with a stipulated period, failing which their offer shall be liable for rejection. Proof of eligibility and qualifications is not enclosed.
- a) Proof of eligibility and qualifications is not enclosed.

- b) There are any criminal cases pending.
 - c) PAN is not enclosed.
 - d) Affidavit is not enclosed.
 - e) Power of Attorney is not enclosed.
 - f) Record of litigation and arbitration is not enclosed.
 - g) Other documents as required not enclosed.
 - h) GST Registration Certificate / GSTIN.
- 30.3. Any such conditions shall be minuted and the price bid shall not be opened. The price bid shall be opened only for those bidders who qualify in the technical evaluation as described at **Clause – 2(B)33**. The date of opening of price bid shall be intimated by FAX/ E-mail/ Speed Post to the qualified bidder of technical evaluation.
- 30.4. The **General Manager, WATCO Project Division-II, Bhubaneswar** may prepare, for his own record, minutes of the tender opening, including the tender opening summary which shall be posted in the portal.
31. **Clarification on Tenders from Tenderers:**
To assist in the scrutiny, evaluation and comparison of the tenders, the **General Manager, WATCO Project Division-II, Bhubaneswar** may ask contractor individually for clarification on their tenders. The request for clarification and response shall be in writing or by mail. However, no change in the tender amount/ rate shall be sought, offered or permitted by the **General Manager, WATCO Project Division-II, Bhubaneswar** during the evaluation of the tenders.
32. **Determination of Responsiveness:**
- 32.1. Prior to the detailed evaluation of tenders, **General Manager, WATCO Project Division-II, Bhubaneswar** will determine whether each tender has been submitted in the proper form and whether it is substantially responsive to the requirements of the tender documents. Tenders, which have not been submitted in the proper form, will be rejected.
- 32.2. Any tender which is not substantially responsive to the requirements of the tender documents will be rejected by the **General Manager, WATCO Project Division-II, Bhubaneswar**. Such a tender shall not be allowed subsequently to be made responsive by the contractor by correcting or withdrawing the non-conforming deviation(s) or reservation(s).
- 32.3. Conditional Tender shall not be accepted.
- 32.4. **Bid Capacity:** These stipulations shall apply to all works **above Rs.3.00 Crores**. Applicants who meet the minimum qualification criteria will be qualified only if their available bid capacity at the expected time of bidding is more than the total estimated cost of the works. The available bid capacity will be calculated as under:

Assessed Available Bid Capacity = (A*N*2-B), where

A = Maximum value of works executed in any one year during the last five years (updated to the current price level) rate of inflation may be taken as 10 percent per year (escalation factor) which will take in to account the completed as well as works in progress.

('A' value corresponding to **Schedule-B**, shall be audited for five years by Regd. Chartered Accountant or competent financial organization/authority).

B = Value of current price level of the existing commitments and ongoing works to be completed during the next years (Period of completion of works for which bids are invited) and

N = Number of years prescribed for completion of the works for which the bids are invited.

Note:-

- (1) In case of a joint venture, the available bid capacity will be applied for each partner to extent of his proposed participation in the execution of the works.
- (2) The statement showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer-in-charge not below the rank of an General Manager.
- (3) **In case of non-disclosure/hiding of any existing commitment and ongoing works to mislead the tender inviting authority, if detected later, then the tender will be liable for rejection.**

Escalation Factor:

Following enhancement factors will be used for the costs of works executed and the financial figures to a common base value for works completed in India.

<u>Year before</u>	<u>Multiplying factor</u>
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

(Applicant should indicate actual figures of costs and amounts for the work executed by them without accounting for the above mentioned factors)

In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will not be applied. Instead, current market exchange rate (State Bank of India BC selling rate as on the last date of submission of the bid) will be applied for the purpose of conversion of amount in foreign currency into Indian rupees. (Works Deptt. OM No.FA-Codes-97/11-6300 Dt.16.06.2011.)

33. Proposal Evaluation:

33.1. From the time of the proposals are opened to the time, the contract is awarded, the contractor should not contact the client on any matter related to its Technical and/or Financial Proposal except any required in Clause-2(B)31.

33.2. Any effort by a bidder to influence the client in any form directly or indirectly during the examination, evaluation, ranking of proposals, and recommendation for award of the contract may result in the rejection of the contractor's proposal.

33.3. Evaluation of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.

33.4. Evaluation of Technical Proposals:

33.4.1. The Evaluation Committee shall evaluate the Technical Proposals on the basis of their responsiveness to the DTCN.

33.4.2. A Proposal shall be rejected at this stage if it does not respond to required aspects of the NIT / DTCN.

33.4.3. During technical evaluation, the tenderers may have to make a presentation on their technical proposal before the Evaluation Committee if felt necessary. The date of such presentation shall be intimated to them in writing or by mail.

33.5. Evaluation of Financial Proposals:

33.5.1. After the technical evaluation is completed, the Employer shall inform in writing or by mail to the contractors, who have qualified in the General and Technical bid (Part-I of DTCN), the date, time and location for opening the Financial Proposals (Price Bids).

33.5.2. Financial Proposals of the bidders who qualified in technical evaluation shall be opened.

33.5.3. Financial bids determined to be substantially responsive will be checked by the employer for any arithmetic error(s).

33.5.4. The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount or between words and figures, the amount in words will prevail.

33.5.5. If the bid price increases as a result of these corrections, the amount as stated in the bid will be the bid price and any increase will be treated as rebate. If the bid price decreases, the decreased amount will be treated as bid price.

- 33.6. **Selection of contractor on the basis of Price Bid:**
Other condition being equal, the contractor bidding the lowest price will be considered for acceptance by competent authority.

34. **Negotiations:**
Negotiations will be held if required with the lowest valid tenderer. In the event of the L₁ tenderer has furnished any condition which grossly affects the tender value / contains such conditions which make the value of the offer indefinite, he may be given an opportunity to withdraw such condition(s) to make the tender definite. Failure to withdraw such condition(s) may lead to rejection of the tender as inconsistent / non responsive. In such case the employer may explore the possibility of considering the next valid tender as L₁.

If L1 bidder does not turn up for agreement after finalisation of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to black list the contractor. In case, the L2 bidder, if fulfils, other required criteria would be called for drawing agreement for execution of work subject to condition that L2 bidder negotiates at par with the rate quoted by the L1 bidder otherwise the tender will be cancelled. **(As per the Government of Odisha, Works Department Office Memorandum No.12366 dated 08.11.2013 on amendment to Para No. 3.5.14, Note-I of OPWD Code Vol-I, by inclusion.)**

F. AWARD OF CONTRACT

35. **Award Criteria:**
- 35.1. After acceptance of price bid of the tender by competent authority selected contractor will be intimated about such acceptance.
- 35.2. The contractor is expected to commence the work on the date and at the location specified in the Data Sheet.
36. **Right to Accept or Reject any or all Tenders:**
Notwithstanding Clause 2(B)35, the **Managing Director, WATCO, Bhubaneswar** reserves the right to accept or reject any tender, annul the tendering process, reject all tenders at any time or any stage prior to the award of contract without thereby incurring any liability to the affected bidders.
37. **Process to be Confidential:**
- 37.1. After the opening of tenders as per Clause 2(B)30 & 2(B)33, information relating to examination, clarification, evaluation and comparison of tenders and recommendations, concerning to the award of contract shall not be disclosed to the contractor or any other persons, officially not concerned with the process, until the award of the contract to the successful contractor has been announced.

37.2. Any effort by any contractor to influence the Department officials in scrutiny, clarification, evaluation and comparison of tenders, and in any decisions concerning award of a contract, may result in the rejection of their Tender.

38. **Notification of Award & signing of Agreement:**

- a) The Employer/ Engineer-in-charge shall notify acceptance of the work prior to expiry of the validity period by cable, telex or facsimile or e-mail confirmed by registered letter. This Letter of acceptance will state the sum that the Engineer-in-charge will pay the contractor in consideration of the execution & completion of the works by the contractor as prescribed by the contract & the amount of performance security and additional performance security required to be furnished. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
- b) The contractor after furnishing the required acceptable performance security and additional performance security, "Letter to Proceed" or "Work Order" shall be issued by the Engineer-in-charge with copy thereof to the procurement Officer-Publisher. The Procurement Officer-Publisher shall up load the summary and declare the process as complete.
- c) In the e-Procurement Portal, the system shall generate the template of award letter and the Officer Inviting the Bid shall mention the amount of Performance Security and additional security required to be furnished in the letter and intimate the bidders in his e-mail ID. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
- d) The bidder shall within 15 days of issue of letter of acceptance, furnish the Performance security & additional Performance security (if any) in the prescribed form & the work programme & shall sign the agreement in prescribed format, failing which the Engineer-in-Charge shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Bid Security absolutely. The agreement will incorporate all agreements between the officer inviting the bid and the successful bidder.
- e) If **L₁ bidder does not turn up for agreement** after finalization of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L2 bidder, if fulfils, other required criteria would be called for drawing agreement for execution of work subject to the condition that L2 bidder negotiates at par with the rate quoted by the L1 bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely published and intimated to all departments of Government and also to Govt. of India agencies working in the state.

(Amendment to Para-3.5.14 Note-I of OPWD Code Vol.-I , OM No.12366/W dated 8.11.2013)

f) Following documents shall form part of the agreement

- i. The notice inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence & documents leading thereto & required amount of performance security including additional performance security as per sub clause 37.B.e. hereof.
- ii. Standard Bid Document P.W.D. Form **P1**.
- iii. The letter to proceed with the work shall be issued by Engineer-in-charge only after signing of the agreement. The notification of award will constitute the formation of the contract subject only to the furnishing of performance security and additional performance security in accordance with the provisions of the agreement.
- iv. On acceptance of the composite bids by the competent authority the letter of award will be issued by the Engineer-in-Charge of the major component of the work on behalf of the Governor of Odisha.

SECTION- 2(C)
DATA SHEET

Ref Cl. No	Description
	Name of the Work: " Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar ".
Section-8	Broad Scope of Works: "Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar
2(B)1.(a)	Name of the Employer: General Manager, WATCO Project Division-II, Bhubaneswar.
2(B)33.6	Method of selection: Qualifying in the Technical Bid and L₁ in the Price Bid.
2(B)26.	Two Bid System: Part-I: General & Technical Bid and Part-II: Price Bid to be submitted as detailed at Clause-2(B) 26.
2(B)15.	Proposals shall be submitted in the following language: English
2(B)21.	Offers must remain valid for 120 (One Hundred Twenty) days from the date of opening of Price Bid.
2(B)25.1	Seeking of Clarifications may be requested till 5.00 PM of Dt.01.10.2026.
2(B)30	The tender (Technical Bid) will be opened on following date and time: 12.30 PM of Dt.05.10.2026
2(B)33.5	The date of opening of Price Bid shall be intimated separately by writing or by mail after the technical evaluation is over.

SECTION –2 (D)
LETTER FOR SUBMISSION OF TENDER

[To be filled in by the Bidder]

Note:- (1) Additional conditions appended to the tender will make the tender liable for rejection.
(2) Non-submission of EMD in proper shape and other required documents as detailed hereinafter shall make the tender liable for rejection.

Ref. No. _____/Dated _____

To

**The General Manager,
WATCO Project Division-II, Bhubaneswar.**

Sub: Tender for the work "**Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar.**"

Ref: **Bid Identification No.02- GM Project Division-II WATCO, Bhubaneswar / 2026-27 Dt.10.09.2026 published in the website www.tendersodisha.gov.in.**

Dear Sir,

With reference to the above, we are to inform you that in response to your above referred NIT, we have downloaded the Detailed Tender Call Notice (DTCN) Part-I & II and that after having thoroughly examined the same, we hereby tender for the work to execute the work within the stipulated time and in conformity with the relevant clauses of the DTCN along with all related statutory rules and regulations for the amounts as quoted in the accompanying price bid.

2) I/We have studied, acquainted and satisfied ourselves with the site and its working conditions for the successful and timely completion of the work.

3) I/We are submitting herewith Bar Chart to complete the work in time.

4) **Our offer is unconditional and is in conformity with the requirements of the DTCN. We understand that any additional condition put by us in the tender shall make our tender liable for rejection.**

5) I/We understood that you are not bound to assign any reason in case of rejection of our tender.

6) I/We agree to keep our offer open for a minimum of **120 (One Hundred Twenty) days from the date of opening of the Price bid**. Further extension of validity will be our prerogative.

Should this tender be accepted, we hereby agree to abide by and fulfil all the terms and provisions of this Detailed Tender Call Notice (DTCN).

Thanking you.

Yours faithfully,

Name and Signature
of the authorised signatory
along with seal and address of the firm.

SECTION-2 (E)

TENDER DECLARATION

[To be filled in by the tenderer]

I/We hereby tender for the execution for the Governor of Odisha of the work specified in the enclosed memorandum at the rates given in the price bid and will complete the said work in all respects within the period as specified in the Detailed Tender Call Notice and in accordance with the specifications, designs and drawings and other documents referred to therein, which shall have to be approved by the **General Manager, WATCO Project Division-II, Bhubaneswar** and such other written instructions as may be given by the WATCO, Odisha from time to time for duly carrying out of the said works and with such materials as are provided for in accordance with the conditions and special conditions hereto attached. I/We have inspected the work site and studied its conditions, labour, materials and have understood the tender implications fully.

Should this tender be accepted I/We hereby agree to abide by and fulfil all the terms and provisions of the said conditions and special conditions of the contract annexed hereto or in default thereof to forfeit and pay to the Governor of Odisha the sums of money mentioned in the said conditions and in the event of such default the transaction effected by this tender shall cease and determine.

Signature of Tenderer /
Contractor
(Seal)

SECTION-2(F)

LETTER OF ACCEPTANCE OF TENDER

*(To be filled in by **General Manager, WATCO Project Division-II, Bhubaneswar**)*

The above tender is hereby accepted by me on behalf of the Governor of Odisha.

**General Manager,
WATCO Project Division-II, BBSR**
Signed on behalf of the
Governor of Odisha

SECTION-2(G)

MEMORANDUM

(To be filled in by the contractor during signing of Agreement)

1.	Name of the work		Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar.
2.	Approximate Cost	:	Rs.59.81 Lakhs
3.	Accepted tender Value	:	Rs.
4.	Security Deposit (Earnest Money Deposit) (Online remittance)	:	Rs.59810/-
5.	Initial Security Deposit (@ 2% of the accepted tender)	:	Rs. _____ Lakh
6.	Percentage to be deducted from each Bill as security deposit	:	@ 5 (five) %
7.	Additional Performance Security Deposit	:	Rs. _____ Lakh
8.	Time allotted for completion of the work (from the date of written order to commence)	:	03 (Three) Months
9.	Date of written order to commence.	:	
10.	Total number of items of work tendered for (as per schedule attached hereto).	:	

Signature of Tenderer / Contractor

SECTION –3

INFORMATION REGARDING TENDERER

(To be filled in by the Tenderer)

A. In case of individuals:

- i. Name of Tenderer :
- ii. Whether his business is registered :
- iii. Date of commencement of business :
- iv. Whether he pays income tax each year. :
If yes, furnish particulars.

B. In case of Partnership Firm/Limited Liability Partnership:

- i. Names of Partners :
- ii. Whether partnership is registered. :
- iii. Date of establishment of the firm. :
- iv. In case, income tax is paid by each Partner, the details to be furnished. :

C. In case of Company :

- i. Amount of paid up capital. :
- ii. Names of Directors. :
- iii. Date of registration of the Company. :
- iv. Copies of the last three year's balance sheets of the Company. :

Signature of the Tenderer

SECTION-4

DECLARATION BY THE TENDERER

1. I have visited the site and have fully been acquainted myself with the local situation regarding materials, labour and the factors pertaining to the work before submitting the tender.
2. I have carefully studied the conditions of the contract, specification and other documents of this work and I agree to execute the same accordingly.
3. I solemnly pledge that I shall be sincere in discharging my duties as responsible contractor and complete the work within the prescribed time limit. I shall submit detailed construction programme with target dates for various items and stages of work keeping in view the time limit and shall accordingly arrange for necessary labours, materials, and equipments etc., punctually. In case there are deviations from the construction programme, I shall abide by the decision of the Engineer-in-charge for revision of the programme and shall arrange for labour, materials, equipments etc
4. I shall follow all rules and regulations of the state in force with regard to engagement of labour for the work.
5. The documents furnished with the tender are correct to the best of my knowledge and belief and if any information found to be incorrect in future, the Department has the liberty to take any action as deemed fit.

Signature of the Tenderer

SECTION – 5

FORM OF AGREEMENT

This contract made theday of..... to
..... between the Governor of Odisha acting through (designation) Ministry
of Department ofGovernment of Odisha (address) (name and
address of employer) (hereinafter called "the employer" and
..... (name
and address of contractor) (hereinafter called "the Contractor") of the other party).

WHEREAS the Employer is desirous that the contractor executes.

.....
.....
..... (Name and identification number of contract) (hereinafter called "the Works") and the
employer has accepted the Bid by the contractor for the execution and completion of such
works and the remedying of any defects therein, at a contract price of
Rs.....

NOW, THEREFORE IT IS HEREBY AGREED BETWEEN THE PARTIES AS FOLLOWS:

1. In this contract, words and expressions shall assume the same meanings as are respectively assigned to them in the conditions of Contract hereinafter referred to and they shall be deemed to form and be read and construed as part of the Agreement.
2. In consideration of the payments to be made by the employer to the contractor as hereinafter mentioned, the contractor hereby covenants with the Employer to execute and complete the works and remedy the defects therein in conformity in all aspects with the provision of the contract.
3. The Employer hereby covenants to pay the contractor in consideration of the execution and completion of the works and in remedying the defects wherein the contract price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this contract, viz:
 - i) Letter of acceptance
 - ii) Notice to proceed with the works
 - iii) Contractor's bid
 - iv) Bidding data
 - v) General conditions of contract (including special conditions of contract)
 - vi) Specifications
 - vii) Drawings
 - viii) Bill of quantities

- ix) Any other documents listed in the contract data as forming part of the contract.
- x) Drawing and design of structure(s) or part thereof submitted by the tenderer and duly approved by the competent authority after this Agreement.

IN WITNESS WHEREOF the parties have caused this contract to be executed the day and year first before written.

Binding signature of employer signed by.....
(for and on behalf of the Governor of Odisha)

Binding signature of Contractor signed by.....(for and on
behalf ofduly authorised vide Resolution No.....
dated..... of the Board of Directors of)

In the presence of
(Witnesses)

1.

2.

Contractor

**General Manager,
WATCO Project Division-II,
Bhubaneswar.**

SECTION-6

CONDITIONS OF CONTRACT

6.1. Decision of Managing Director is Final & Binding:

The party whose tender is accepted hereinafter called the contractor is to provide everything of every sort and kind (with the exceptions noted in the schedule attached) which may be necessary and requisite for the due and proper execution of the several works included in the contract according to the true intent and meaning of the drawings and specification taken together, which are to be signed by the **General Manager, WATCO Project Division-II, Bhubaneswar** herein after called the General Manager and the contractor whether the same may or may not be particularly described in the specification or shown on the drawing provided that the same are reasonably and obviously to be inferred there from and in case of any discrepancy between the drawings and the specifications the General Manager is to decide which shall be followed.

6.2 Amendment of Errors during Progress of Work:

The contractor is to set out the whole of the works in conjunction with an officer to be deputed by the General Manager and during the progress of the works to amend on the requisition of the General Manager any errors which may arise therein and provide all the necessary labour and materials for doing. The contractor is to provide all plant labour and materials (with the exception noted in Schedule), which may be necessary and requisite for the works. All materials and workmanship are to be the best of their respective kinds. The contractor is to leave the works in all respects clean and perfect at the completion thereof.

6.3. Fair Wage Clause:

The contractor shall not employ for the purpose of this contract any person who is below the age of fourteen years, and shall pay to each labourer, for the work done by such labourer, fair wages. Fair wages means wages whether for time or piecework, prescribed by the State P.W.D. provided that where higher rates have been prescribed under the minimum wages Act, 1948, wages at such higher rates should constitute fair wages.

The General Manager shall have the right to enquire into and to decide any complaint alleging that the wages paid by the contractor to any labourer for the work done by such labourer is less than the wages paid for similar work in the neighbourhood.

The Officer-in-charge of the work shall have the right to decide whether any labourer employed by the contractor is below the age of fourteen years and to refuse to allow any labourer whom he decides to be below the age of fourteen years, to be employed by the contractor.

6.4. Approved Drawings & Specification of Site with Contractors Agent:

Complete copies of the drawing and specifications signed by the General Manager and the same or copies thereof are to be kept with the works in-charge of the contractor's agent which is to be constantly kept on the ground by the contractor and to whom instructions can be given by the General Manager.

6.5. **Work not to be Sublet:**

The work should not be sublet. During execution of work if it is found that the work/ part of the work is sublet, the General Manager may there upon by notice in writing, rescind the contract and the **security deposit of the contractor shall thereupon stand forfeited** and be absolutely at the disposal of Government. In addition, the contractors shall not be entitled to recover or be paid for any work thereafter actually performed under the contract.

6.6. **Deviation from Approved Drawing and Specifications:**

The contractor is not to vary or deviate from the drawings or specifications or execute any extra work of any kind whatsoever unless upon the authority of the General Manager to be sufficiently shown by any order in writing, by any plan or drawing expressly given and signed by him as an extra or variation or by any subsequent written approval signed by him. In case of daily labour all vouchers for the same are to be delivered to the General Manager or the Officer-in-Charge at least during the week following that in which the work may have been done and no day work shall be allowed unless authorised by the General Manager and no such authority shall be given if the work is capable of being measured and being paid for at an agreed rate.

6.7. **Rate for Extra Work.**

Any authority given by the General Manager, for any alterations or additions in or to the works, is not to vitiate contract. But all additions omissions or variations made to the approved design & drawing or to the item-wise indicative quantities of the work, reflected at **Section-08 (Scope of work) of the DTCN**, in carrying out the works are to be measured and valued and certified by the General Manager, and shall be added to or deducted from the amount of the contract, as the case may be at the rates, in accordance with the sanctioned schedule of rates, in force at the time, when the particular item of work was commenced. In those cases in which rates do not exist, the **Director (Projects), WATCO, Bhubaneswar** will fix the rates to be paid and his decision shall be final.

6.8. **Extension of Time:**

If the contractor shall desire an extension of time for completion of the work on the ground of his having been come across with unavoidable hindrance in its execution or any other grounds he shall apply in writing to General Manager within 30 days of the date of the hindrance on account of which he desires such extension as aforesaid and the authority shall if in his opinion (which shall be final) as reasonable ground be shown thereof authorized such extension of time if any, as may in his opinion, be necessary or proper. The authority shall at the same time inform the contractor whether the authority claims compensation for delay, in case there is any delay in execution due to non-availability of stock materials or land or rise in cost of materials and labour or any reason whatsoever beyond the control of authority, the contractor is bound to execute the work as per the terms and rates in the contract and no monetary claim on such account will be acceptable to the authority but extension of time, proportionate to the delay in execution may be granted by the authority considering the merit of the case. The competent authority reserves the right to take any expert advice of any Committee/ Secretary/ Legal Advisor while considering the

application of the contractor for extension of time and can impose any condition which shall be binding on the contractor.

6.9. Works & Materials at Site to be Property of Government of Odisha.

All works and materials brought and left at site by the contractor or by his orders for the purpose of forming part of the works are to be considered to be the property of the **Governor of Odisha** and the same are not to be removed or taken away by the contractor or any other person without the specific permission in writing of the General Manager but the Governor of Odisha will not be liable for any loss or damage which may happen to or in respect of any such work or materials either by the same being lost or stolen or injured by weather or otherwise.

6.10. Supply of Materials:

The contractor shall at his own expense provide all materials required for the work. The materials supplied by the contractor shall conform to relevant latest editions of the specification and codes of practices of the Bureau of Indian Standards or in their absence to other specifications as may be specified by the Engineer-in-charge. The contractor shall furnish necessary certificates in support of the quality of the materials as may be required by the Engineer-in-charge.

The Engineer-in-charge shall have absolute authority to test the quality of materials at any time through any reputed laboratory at the cost of contractor. The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The General Manager has full power for removal from the premises of all materials which, in his opinion, are not in accordance with the specification and in case of default, the General Manager is to be at liberty to sell such materials and to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The General Manager is also to have full power to require other proper materials to be substituted and in case of default, the General Manager may cause the same to be supplied and all costs which may attend such removal and substitution are to be borne by the contractor and may be recovered from the sale proceeds of such rejected materials when necessary, the balance, if any, being kept in deposit in the contractor's favour.

6.10.1 The successful bidder is to purchase materials necessary for execution of work contract from local SSI units & MS Enterprises having valid rate contract & ISI mark.

6.11. Execution with Defective Workmanship & Improper Materials.

If in the opinion of the General Manager any of the works have been executed with improper materials or defective workmanship, the contractor is then required by the General Manager forthwith to re-execute the same and to substitute proper materials and workmanship and in case of default of the contractor in so doing within a week, the General Manager is to have full power to employ other agency to re-execute the work and the cost thereof shall be borne by the contractor.

6.12. **Rectification of Defects within Guarantee Period:**

Any defects, shrinkage or other faults which may appear within 12 (twelve) months from the completion of the work arising out of defective or improper materials or workmanship are upon the direction of the General Manager to be amended and made good by the contractor at his own cost unless the General Manager for reasons to be recorded in writing shall decide that they ought to be paid for and in case of default, the Governor of Odisha may recover from the contractor the cost of making good the works.

6.13. **Responsibility of the Contractor during Execution of Work:**

From the commencement of the works to the completion of the same they are to be under the contractor's charge. The contractor is to be held responsible for and to make good all injuries, damages and repairs occasioned or rendered necessary to the same by fire or other causes and they are to hold the Governor of Odisha harmless from any claims for injuries to persons or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractor or of any one of his employees during the execution of the works.

6.14. **Execution of Works in the Site by Other Workmen:**

The General Manager is to have full powers to send workmen upon the premises to execute fittings and other works not included in the contract for whose operations the contractor is to afford every reasonable facility during ordinary working hours provided that such operations shall be carried on in such a manner as not to impede the progress of the work included in the contract but the contractor is not to be responsible for any damage which may happen to or be occasioned by any such fittings or other works.

6.15. **Time Control:**

(Vide Works Department Office Memorandum No.24716 dtd.24.12.2005 and No.8310 dtd.17.05.2006)

a) Progress of work and Re-scheduling programme.

- i) The General Manager / Engineer-in-Charge shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
- ii) Within 15 days of issue of the letter of acceptance, the contractor shall submit to the Engineer-in-Charge for approval a Programme showing the general methods, arrangements, and timing for all the activities in the Works along with monthly cash flow forecast.
- iii) To ensure good progress during the execution of the work the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, $\frac{1}{4}^{\text{th}}$ of the whole time allowed under the contract has elapsed, $\frac{1}{2}$ of the whole of the work before $\frac{1}{2}$ of the whole time allowed under the contract has elapsed, $\frac{3}{4}^{\text{th}}$ of the whole of the work before $\frac{3}{4}^{\text{th}}$ of the whole time allowed under the contract has elapsed.
- iv) If at any time it should appear to the Engineer-in-Charge that the actual process of the work does not conform to the programme to which consent has been given the Contractor shall produce, at the request of the Engineer-in-Charge, a revised programme showing the modifications to such programme necessary to

ensure completion of the works within the time for completion. If the contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

- v) An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- vi) The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

b) Extension of the Completion Date.

- i) The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15th day or such time period as mentioned in letter of Award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee / Security deposit absolutely.
- ii) The Contractor shall submit the Time & Progress Chart for each milestone Quarter wise indicating each month and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in contract data.
- iii) In case of delay occurred due to any of the reasons mentioned below, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.
 - (1) Force majeure, or
 - (2) Abnormally bad weather, or
 - (3) Serious loss or damage by fire, or
 - (4) Civil commotion, local commotion of workmen, strike or lockout affecting any of the trades employed on the work, or.
 - (5) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract.

- (6) In case a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost, or
- (7) Any other cause, which, in the absolute discretion of the authority mentioned, in Contract data is beyond the Contractors control.
- iv) Request for reschedule and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen (14) days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- v) In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

c) Compensation for Delay

If the contractor fails to maintain the required progress in terms of clause-2 of P-1 Contract or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the **General Manager, WATCO Project Division-II, Bhubaneswar** may decide on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below that specified in Clause-2 of P-1 Contract or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified. Compensation @ 1.5% per month of for delay of work, delay to be completed on per Day basis. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which a separate period of completion is originally given. The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor does not achieve a particular milestone mentioned in contract data, or the rescheduled milestone(s) in terms of Clause-2.5, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest whatsoever shall be payable on such withheld amount.

d) Bonus for early completion

For availing incentive clause in any project which is completed before the stipulated date of completion, subject to other stipulations it is mandatory on the part of the concerned General Manager to report the actual date of completion of the project as soon as possible through fax or e-mail so that the report is received within 7 days of such completion by the concerned Director, Managing Director & the Administrative Department. The incentive for timely, completion should be on a graduated scale of one percent to 05 percent of the contract value. Assessment of incentives may be worked out for earlier completion of work in all respect in the following scale.

Before 30 % of contract period = 5 % of Contract Value

Before 20 to 30 % of contract period = 4 % of Contract Value

Before 10 to 20 % of contract period = 3 % of Contract Value

Before 5 to 10 % of contract period = 2 % of Contract Value

Before 5% of contract period = 1 % of Contract Value

(Amendment to Para-3.5.5 (V) of Note-III of OPWD Code Vol.-I by inclusion vide O.M. No.5288 dt.04.05.2016)

e) Management Meetings

- i) Either the Engineer or the Contractor may require the other to attend a management meeting. The business of management meetings shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- ii) The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

f) Rescission of Contract:

To rescind the contract (of which rescission notice in writing to the contractor under the hand of the General Manager shall be conclusive evidence), 20% of the value of leftover work will be realized from the contractor as penalty.

(Amendment as per letter No.10639 dt.27.05.2005 of Works Department, Odisha)

6.16. Circumstances for Rescission of Contract:

If the contractor shall become bankrupt or compound with or make any assignment for the benefit of his creditors or shall suspend or delay the performance of his part of the contract (except on account of cause mentioned in **Clause 6.15** or in consequence of not having proper instructions for which the contractor shall have duly applied) the General Manager may give to the contractor or his assignee or trustee as the case may be notice requiring the works to be proceeded with and in case of default on the part of the contractor for a period of seven days, it shall be lawful for the General Manager to rescind the contract, if necessary, and to enter upon and take possession of the work and to employ any other person to carry on and complete the same and to authorise him or them to use the plant, materials and

property of the contractor upon the works and the costs and the charge incurred in any way in carrying on and completing the said works are to be paid to the General Manager by the contractor or may be set off by the General Manager against any money due or to become due to contractor. If the assignee or trustee of the Contractor proceeds with the work, the conditions of this contract shall be binding upon the said assignee or trustee.

6.17. **Payment Certificate.**

A Certificate of the General Manager or an award of the refer hereinafter referred to as the case may be showing the final balance due or payable to the contractor is to be conclusive evidence of the works having been duly completed and that the contractor is entitled to receive payment of the final balance, but without prejudice to the liability of the contractor under the provisions of **Clause-6.11.**

6.18. The General Manager shall make payment of work in full or part thereof those shall have been certified, subject to availability of Letter of Credit (LoC).

6.19 **Price Adjustment** (*vide Works Department Office Memorandum No.15847/W Dt.19.11.2019*)

1. Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in following Paras.

(a) The price adjustment shall apply for the work done from the start date given in the contract data up to end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.

(b) The price adjustment shall be determined during each month from the formula given in following Paras.

(c) Following expressions and meanings are assigned to the work done during each month:

R= Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed for extra items under variations.

2. To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs

The formula (e) for adjustment of prices are:

19(a) (i): Adjustment of Other Materials Component

Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen, pipe and POL procured by the contractor shall be paid in accordance with the following formula:

$$V_M = 0.85 \times P_m / 100 \times R \times (M_1 - M_0) / M_0$$

V_M = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.

M_o = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

M_1 = The all India wholesale price index (all commodities) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_m = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

19(a)(ii): Adjustment for Cement Component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_c = 0.85 \times P_c / 100 \times R \times (C_1 - C_0) / C_0$$

V_c = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for cement

C_0 = The all India wholesale price index for Ordinary Portland Cement (OPC) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

C_1 = The all India wholesale price index for Ordinary Portland Cement (OPC) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_c = Percentage of Cement Component of the Work.

19(a)(iii): Adjustment for Steel Component

Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R \times (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S_0 = The all India wholesale price index for steel (Mild Steel long products) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi

S_1 = The all India wholesale price index for steel (Mild Steel long products) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_s = Percentage of steel component of the work

Note: For the application of this clause, index of (Mild Steel long products) has been chosen to represent steel group.

19(a)(iv): Adjustment of Bitumen Component

Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \times P_b / 100 \times R \times (B_1 - B_0) / B_0$$

V_b = Increase or decrease in the cost of work during the month under consideration due to changes in the rate for bitumen.

B_0 = The official retail price of bulk bitumen at the IOCL/ BPCL depot at nearest center on the day 28 days prior to date of opening of Bids.

B_1 = The official retail price of bulk bitumen at IOCL/ BPCL depot at nearest center for the 15th day of the month under consideration.

P_b = Percentage of bitumen component of the work

19(a)(v): Adjustment towards differential cost of Pipes.

Price adjustment for increase or decrease in the cost of pipe shall be paid in accordance with the following formula:

$$V_{pi} = 0.85 \times P_{pi} / 100 \times R \times (P_{i1} - P_{i0}) / P_{i0}$$

V_{pi} = Differential cost of pipe i.e. amount of increase or decrease in rupees to be paid or recovered during the month under consideration.

P_{pi} = Percentage of pipe component of the work

P_{i1} = All India Whole sale price index of pipe for the period under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_{i0} = All India Whole sale price index of pipe on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

19(b): Adjustment of Labour Component

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_l / 100 \times R \times (L_1 - L_0) / L_0$$

V_L = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

L_0 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last stipulated date of receipt of tender including extension, if any.

L_1 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last date of the Month previous to the one under consideration.

P_l = Percentage of labour component of the work.

19(c) : Adjustment o f POL (fuel and lubricant) Component

Price adjustment for increase or decrease in cost POL (fuel and lubricant) shall be paid in accordance with the following formula:

$$V_f = 0.85 \times P_f / 100 \times R \times (F_1 - F_0) / F_0$$

V_f = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for fuel and lubricants.

F_0 = The official retail price of High-Speed Diesel (HSD) at the existing consumer pumps of IOCL/ BPCL/ HPCL at nearest center on the day 28 days prior to the date of opening of Bids.

F_1 = The official retail price of HSD at the existing consumer pumps of IOCL/ BPCL/ HPCL at nearest center for the 15th day of the month under consideration .

P_f = Percentage of fuel and lubricants component of the work

Note: For the application of this clause, the price of High-Speed Diesel oil has been chosen to represent fuel and lubricants group.

19(d): Adjustment for Plant and Machinery Spares Component

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

$$V_p = 0.85 \times P_p / 100 \times R \times (P_1 - P_0) / P_0$$

V_p = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for plant and machinery spares.

P_0 = The all India wholesale price index for manufacture of machinery for mining, quarrying and construction on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_1 = The all India wholesale price index for manufacture of machinery for mining, quarrying and construction for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_p = Percentage of plant and machinery spares component of the work.

Note: For the application of this clause, index of manufacturing of machinery for mining, quarrying and construction has been chosen to represent the Plant and machinery Spares group.

Regarding wholesale price Index (WPI) for appropriate commodity for payment of price adjustment, due to change of base year of WPI from 1993- 94 to 2004-05 & 2011-12, it is observed that, the commodity 'Bars and Rod', 'Cement', 'Heavy machinery and parts' included in the list of WPI 1993-94 series are not mentioned as such in the WPI 2004-05 & 2011-12 series. Therefore, the following

items in the WPI 2004-05 & 2011-12 series shall be considered corresponding to items in WPI 1993-94 series:

Sl. No.	Item in WPI 1993-94 series	Item in WPI 2004-05 series	Item in WPI 2011-12 series
1.	Cement	Grey Cement	Ordinary Port land cement
2.	Bars & rods	Rebars	Mild steel long products
3.	Heavy Machinery & parts	Construction Machinery	Manufacture of machinery for mining, quarrying & construction.

19(e): APPLICATION OF ESCALATION CLAUSE:

The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, POL and wages, keep such books of account and other documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further, shall at the request of the Engineer-in-Charge, furnish documents to be verified in such a manner as the Engineer-in-Charge may require any document and information kept The contractor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such material, wages of Labour and/or price of POL give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition along with information relating to there to which he may be in a position to supply.

Percentage Table

Sl. No.	Category of works		% Component (cost wise)		
			Labour (P _l)	P.O.L (P _f)	Steel (P _s) + Cement (P _c) + Bitumen (P _b) + Pipes (P _{pi}) + Plant & Machinery Spare & Component (P _p) + Other Materials*
1.	R&B works (% of component)	Road works	5	5	90
		Bridge works	5	5	90
		Building works	5	5	90
2.	Irrigation works (% of component)	Structural work	5	5	90
		Earth, Canal & Embankment work	5	5	90
3.	P.H. Work	Structural work	5	5	90
		Pipeline work	5	5	Pipe – 70% * Machinery + Other material -20%
		Sewer line	5	5	Pipe – 70% * Machinery + Other material -20%

Note: Further break up may be worked out considering the consumption of Cement. Steel, Bitumen, pipe and Plant & Machinery Spare Component in the concerned works and shall be provided in the bid document in shape of "Schedule of Adjustment Data**" as an "**Appendix to Bid**". (enclosed herewith).*

Appendix to Bid

Schedule of Adjustment Data

[For all works, adjustment factor for Labour and POL shall be considered at the rate of 5% each. Steel, Cement, Pipes, other Materials and Machinery shall contribute to 90% of Price Adjustment and shall be calculated for each work separately during preparation of estimate, shall be approved by the authority during technical sanction as a "Schedule of Adjustment Data" and shall form part of the Bid Document. The cases where the original technically sanctioned estimate gets revised, the technical sanction to the revised estimate will be obtained from the competent authority as provided under Para 3.11.2 (b) of OPWD Code, Volume-1 Based on the revised technically sanctioned estimate, the Labour & the POL component shall be given the weightage of 5% each as provided in OM No.15847/W dated 19.11.2019 of Works Department and the weightage of 90% on steel, cement, bitumen, pipes, other materials and plant and machinery spare component shall be given as per the technically sanctioned revised estimate excluding the extra items. The revised weightage of "Schedule of Adjustment Data" based on revised technically sanctioned estimate shall be included as an Addendum to the agreement. The technical sanctioning authority shall be the competent authority for this purpose.] (Works Deptt. OM No.1739/W Dt.03.02.2023)

Cl. No-31 of F2/P1 Contracts Sl. No.	Index description	Source of index	Base value*	Base Date*	Weightage of Item**
31 (a)(i)	Other Materials	All India Whole sale price index (all commodities) as published by the Office of the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			
31 (a)(ii)	Cement	All India Whole sale price index for Cement (Ordinary Portland Cement) as published by the Office of the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			
31 (a)(iii)	Steel	All India Whole sale price index for Steel (Mild Steel-Long Products) as published by the Office of the Economic Advisor to			

		the Govt. of India, Ministry of Commerce and Industry.			
31 (a)(iv)	Bitumen (VG-30)	Official retail price of bulk bitumen at the nearest IOC/HPCL Depot.			
31 (a)(v)	Pipes	All India Whole sale price index for the type of pipe under consideration, as published by the Office of the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			
31 (b)	Labour	Minimum Wage notified by the Labour and Employee's State Insurance Department of Government of Odisha, India.			5%
31 (c)	POL	Official retail price of HSD at nearest IOCL/ HPCL/ BPCL Consumer Pump Depot.			5%
31 (d)	Plant and Machinery	All India Whole sale price index for Manufacture of Machinery for Mining, Quarrying and Construction as published by the Office of the Economic Advisor to the Govt. of India, Ministry of Commerce and Industry.			
Total :					100%

* Values to be filled up at the time of drawl of contract.

** Values to be filled up in the bid document.

6.20. If at any time after the commencement of the work the Governor of Odisha shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out the Engineer-in-charge shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage, which he might have derived from execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations having been made in the original specification, drawings, designs and instruction which shall involve any curtailment or increase of the work as originally contemplated.

6.21. **Defects Liability Period:**

The defect liability is **12 months** from the date of formal taking over of the work by the Engineer-in-charge.

6.22. **Contractor Liable for Damage done & for Imperfection for 6 (six) months after Certificate:**

If the contractor or his work people or servants shall break, deface, injure or destroy any part of a building or structure in which they may be working or any building, road, fence, enclosure or grass land cultivated ground continue to the premises on which the work or any part of it is being executed or in any damage shall happen to the work while in progress from any cause whatsoever or any imperfection become apparent in it within six months from the date of the final certificate of its completion shall have been given by the Engineer-in-charge, as aforesaid, the contractor shall make the same good at his own expenses or in default the Engineer-in-charge may cause the same to be made good by other workman and deduct the expenses of which the certificate of the Engineer-in-charge shall be final from any sums that may be then or at any time thereafter may become due to the contractor or from his security or the proceeds of sale thereof or a sufficient portion thereof and the contractor shall be liable to pay of the expenses not so recovered by the Engineer-in-charge.

6.23. **Action where No Specification is mentioned:**

In the case of any class or items of works for which there is no such specification as mentioned in file, if such work shall be carried out in accordance with the detailed standard specification of Odisha, as followed by the State PWD and in the event of there being no specifications born in the said standard specification of Odisha for such items of work, then in such case the said item of work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-charge after obtaining approval from competent authority.

6.24. **Payment on Intermediate Certificate to be regarded as Advance and Bill to be submitted Monthly:**

A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-charge for all works executed in the previous month and the Engineer-in-charge and/or Assistant Engineer and/or Junior Engineer in immediate charge of the work shall take the requisite measurements for the purpose of having the same verified, and the claims for as admissible adjusted if possible before the expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge and/or his Engineering subordinates shall measure up the said work in the presence of the contractor, whose counter signature to the measurement list will be sufficient warrant, and the Engineer-in-charge and/or Assistant Engineer and/or his Engineering subordinates shall prepare a bill from such list which shall be binding on the contractor in all respects. Payment shall be made to the contractor in all respects.

The Engineer-in-charge will deduct @ 5% (five percent) of the value of each running bill prepared and submitted by the contractor, if any, on account of works done, and such sum or sums to be held in deposit as a further security for the due performance of the condition of the contract provided always that the General Manager may refuse to make such monthly payments if in his opinion, the progress of the work or the conduct of the contractor is not satisfactory or the contractor has in any other way done or neglect to do anything as to make it appear doubtful to the authority as to whether the works will be completed by the contractor in accordance with his contract, or has failed to comply with any instruction or order of Engineering personnel. All such interim payments from time to time shall be regarded as payments by way of advance against the final payment only and not as payments of work actually done and completed and shall not preclude the requirement of bad, unsound and imperfect or unskilful work to be removed and taken away and for reconstructed or re-erected, or be considered as an admission of the due performance of the contract, of any part thereof in any respect, or accrual of any claim not shall it conclude, determine or affect in any way the powers of Engineer-in-charge and/or Assistant Engineer and/or the Junior Engineer under these condition or any of them as to the final settlement of adjustment of the accounts or otherwise or in any other way vary or affect this contract. The contractor shall submit the final bill within one month of the date for completion of the work failing which the Engineer-in-charge or his authorized representatives in the presence of the contractor shall prepare the final bill. For recording final measurement of the work, the Engineer-in-charge or his authorized representative shall serve a notice upon the contractor stipulating therein the date fixed for recording such measurement. If the contractor fails to attend the recording of final measurement by the Engineer-in-charge or his authorized representative on the date as stipulated, the Engineer-in-charge may at his discretion get the measurements recorded ex-parte or fix up another date as per his own convenience. Such measurements and the total amount payable to the contractor as certified by the Engineer-in-charge shall be final and binding on all parties.

6.25. Black Listing:

A Contractor may be black listed as per amendment made to **Appendix XXXIV to OPWD Code Vol.-II on rules for black listing of Contractors vide letter No.3365 Dt.01.03.2007 of Works Department, Odisha**. As per said amendment the Contractor may be blacklisted.

- a) Misbehavior/threatening of Departmental & supervisory officers during execution of work/tendering process.
- b) Involvement in any sort of tender fixing.
- c) Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
- d) Persistent and intentional violation of important conditions of contract.
- e) Security consideration of the State i.e., any action that jeopardizes the security of the State.
- f) Submission of false/ fabricated / forged documents for consideration of a tender.

- 6.26.** If more than one bid is quoted (decimal up to two numbers will be taken for all practical purposes), either at the estimated cost put to tender or less than the estimated cost put to tender, the tender accepting Authority will finalize the tender through a transparent lottery system, where all the concerned bidders/their authorized representatives, the concerned SE/EE of the concerned Division and Divisional Accounts Officer (DAO) will remain present.

If the rate quoted by the SC and ST Category Contractors comes to the rate quoted by the L1 bidder (decimal up to two numbers will be taken for all practical purposes) after availing 10% price preference as per Para 2 of Works Department Resolution No. 27748 dated. 11.10.1977, the tender shall be finalized by the tender accepting authority through a transparent lottery system along with other categories of contractors.

(Works Department OM No.632/W Dtd.09.01.2026).

- 6.27** If L₁ bidder does not turn up for agreement after finalization of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L₂ bidder, if fulfils, other required criteria would be called for drawing agreement for execution of work subject to the condition that L₂ bidder negotiates at par with the rate quoted by the L₁ bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely published and intimated to all Departments of Government and also to Government of India agencies working in the State.

(As included in Para 3.5.14 Note-I of OPWD Code Vol.I vide Works Department letter No.12366/W dt.18.11.2013).

- 6.28.** Before acceptance of tender, the successful bidder will be required to submit a work programme and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damaged will be imposed.

(As included in Para 3.5.18 Note-VIII of OPWD Code Vol.I vide Works Department letter No.12366/W dt.18.11.2013).

6.29. Grant of Concession to Scheduled Caste & Scheduled Tribe Contractors:

If the tender of the individual registered contractors belonging to Scheduled Caste and Scheduled Tribe is within 10% of the rate quoted by the lowest tenderer for any work, the work may be considered for award to him/her at the lowest tendered rate in the relaxation of Rule 18 of the O.G.F.R. Vol.I and Para 3.5.14 of OPWD Code Vol.I.

(Resolution No.16/37 – 27748 Dated 11.10.1977 amended vide No.16262/W Dt.30.10.2018).

SECTION-7

SPECIAL CONDITIONS OF CONTRACT

7.1. Changes in Constitution of Firm:

In the case of tender by a partnership firm, any change in the constitution of the firm shall be forth with notified by the contractor to the **General Manager / Director/ Managing Director** for his information. In case of failure to notify the change in the constitution within 15 days, the **General Manager / Director/ Managing Director** may by notice in writing, rescind the contract and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of the Governor of Odisha and the same consequence shall ensure as if the contract had been rescinded thereof and in addition the contractor shall not be entitled to recover or be paid for any work there for actually performed under the contract.

7.2. Engineer's Access to Work:

The General Manager is to have at all times access to the works, which are to be entirely under his control. He may require the contractor to dismiss any person in the contractor's employee upon the works who may be incompetent or misconduct him-self and the contractor is forthwith to comply with such requirements. Other supervising officers shall have all time access to the works.

7.3. Workmen Compensation Act VIII of 1923:

The Governor of Odisha shall be entitled to recover in full from contractor any amount that the Governor of Odisha may be liable to pay under Workman's Compensation Act VIII of 1923 to any workman employed in course of execution of any part of the work covered by this contract.

7.4. Jurisdiction in the Event of Dispute:

That for the purpose of jurisdiction in the event of dispute if any, the contract should be deemed to have been entered into within the State of Odisha and it is agreed that neither party to this agreement will be competent to bring a suit in regard to the matters covered by this contract at any place outside Odisha.

7.5. Lighting & Sanitary Arrangement:

Lighting & Sanitary arrangement and supply of drinking water will be made by the Contractor at his own cost for his labour camp.

7.6. Payment of TAXES:

The Contractor shall bear **Taxes** such as, Income Tax, Royalties, Fair Weather Charges and Tollages where necessary & **Government of Odisha** shall not entertain any claim whatsoever in this respect. Statutory deduction of **Taxes** as applicable shall be done from each running bill.

7.7. The Building & Other Construction Workers Welfare Cess Act 1996.

In accordance with the provisions under the said Act 1% (One) of the approved agreement value will be deducted from the R/A Bill at the time of making payment to the contractor and such amount shall be remitted in favour of The Odisha Building & Other Construction Workers Welfare Board.

7.8. Site Clearance:

After the work is finished or completed, surplus materials and debris are to be removed by Contractor at his own cost and preliminary works such as vats, mixing platforms, level pillars, temporary sheds and go-downs etc. are to be dismantled and all such materials removed from site. The site involved in the construction activities should be cleared and dressed properly with outward slope away from the structure. After the work is completed in all respects as per the contract, the contractor shall vacate the site within three months from the date of completion & commissioning, by making good the damages if any.

7.9. Works to be Carried Out:

The work to be carried out under the contract shall include all materials, labour, tools and plants, equipment and transport which may be required in preparation of and for in the full and entire execution and completion of the works. The description given in the schedule of quantities/scope of work shall, unless otherwise stated, be held to include wastage on materials, carriage & cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

7.10. Sufficiency of Tender:

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of quantities (DTCN Part-II Price Bid), which rates and prices shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and commissioning of the works.

7.11. Rates:

The Tenderer shall quote their offer on '**Percentage Rate Bids**' in the Price Bid appended to the tender document for complete work in all respects. **The estimated cost is excluding GST. The rates of item basing on which estimated cost has been derived are excluding GST on different components to arrive at such rates.** The offer shall be inclusive of cost of all materials, labour, T&P including the building and other construction workers welfare cess with surcharge, tollages, royalties, packing and forwarding, transportation, insurance, loading & unloading, storage, watch and ward, delivery of the materials to the site etc. and all other expenses incidental thereto for successful completion, testing & commissioning of the work.

GST as applicable on works contract shall be paid over the bill amount at the time of Payment of Bill.

7.12. Transportation:

The contractor shall be responsible for the transportation of all materials, tools and plant, equipment and machinery to the work site as may be required at site.

7.13. Custody of the Materials:

The contractor shall be responsible for safe custody of the materials at site and the Governor of Odisha will not be responsible for any loss or damage of the property at site.

7.14. Construction Schedule:

The contractor shall submit a detailed work schedule in the form of **Bar Chart** along with his tender indicating the detailed break-up of the job. This will include all operations from submission of design & drawing, procurement of materials, construction to final testing & commissioning at site to be indicated in detail with reference to the time period for each.

The construction schedule as submitted by the contractor shall be revised by the General Manager and approved with necessary modification if any after acceptance of the tender. However the Engineer-in-Charge shall reserve the right to modify the sequence of execution of different items/components/sub-items of the project as and when found necessary & in such cases it will be obligatory on the part of the successful bidder to abide by such changes in construction schedule/bar chart as per direction of EIC. No claim and/or condition should either be put forth in any manner by the successful bidder or shall be acceptable to the EIC.

7.14(a) Progress reports – submission by the contractor

- (1) The contractor shall submit monthly progress report of the work in a computerised form. The progress report shall contain the following, apart from whatever else may be required as specified:
 - (i) Project information, giving the broad features of the contract.
 - (ii) Introduction, giving a brief scope of the work under the contract, and the broad structural or other details.
 - (iii) Construction schedule of the various components of the work through a bar chart for the next three quarters (or as may be specified), showing the milestones, targeted tasks and upto date progress.
 - (iv) Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative upto the month, with reasons for deviations, if any, in a tabular format.
 - (v) Plant and machinery statement, indicating those deployed in the work, and their working status.
 - (vi) Man-power statement, indicating individually the names of all the staff deployed in the work, along with their designations.
 - (vii) Financial statement, indicating the broad details of all the running account payments received upto date, such as gross value of work done, advances taken, recoveries affected, amounts withheld, net payments, details of cheque payments received, etc.
 - (viii) A statement showing the extra and substituted items submitted by the contractor, and the payments received against them, items pending for sanction /decision by the Department, broad details of the bank guarantees, indicating

- clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted.
- (ix) Progress photographs, in colour, of the various items/ components of the work done upto date, to indicate visually the actual progress of the work.
 - (x) Quality assurance and quality control tests conducted during the month, with the results thereof.
 - (xi) **Besides above contractor shall have to submit the information required as per the decision taken in the Kick-off meeting headed by the concerned Engineer-in-Charge.**
- (2) The progress report submitted by the contractor shall be checked and certified by the Asst. Manager and the Manager, and has to be reviewed by the General Manager and the Managing Director, over their dated signatures.
 - (3) Work of unique importance and character irrespective of the value of the work, should have videography undertaken at various stages of construction right from the day of start of work to date of completion / occupation, covering all major events, inspections, visits by dignitaries, etc.

7.15. **Initial Security Deposit:**

The tenderer whose tender is selected for acceptance shall have to deposit **2% (two percent)** of the accepted tender amount as **Initial Security Deposit (ISD)** within **7 (Seven) days** of receipt of Letter of Acceptance (LoA) and sign the agreement in the prescribed form within **10 (ten) days** of receipt of Letter of Acceptance after depositing the ISD. The ISD shall be deposited in shape of NSC / POTD / Post Office Savings Bank Account / KVP/ Deposit Receipt in Schedule Bank duly pledged in favour of the **General Manager, WATCO Project Division-II, Bhubaneswar** No tender shall be accepted unless required amount of security money is deposited.

In addition to the **ISD, 5%** of the bill amount shall be deducted from each bill towards the security deposit. The earnest money deposit, the initial security deposit before and after acceptance of tender together with the subsequent deduction from the contractor's bill shall form part of the security deposit equivalent to 7% of the contract value for the due fulfilment of the contract.

The security deposit of the contractor shall be refunded only 12 (twelve) months after the date of completion of the work provided the final bill has been paid and defects if any rectified.

If however there is inevitable delay in payment of final bill, the earnest money deposit and initial security deposit forming part of the security deposit may be refunded on orders of competent authority.

7.16. **Monitoring of the Project:**

Time is the essence of the contract. The execution of the project shall be closely monitored to ensure that quality; cost & time of the project are not compromised in any manner.

The contractor shall submit monthly progress reports in a format as may be prescribed by the Engineer-in-charge. The monthly progress report shall be evaluated by the

Executive Engineer vis-à-vis the approved **Bar chart & PERT Chart** and any deficiency observed thereto shall be communicated to the contractor. The contractor shall have to make up the deficiencies within the specific time period communicated to him by the Executive Engineer failing which the contractor shall be liable for action as per **Clause - 7.26**.

In addition, the contractor shall submit monthly day-wise work program one month in advance to General Manager for approval under intimation to the **General Manager, WATCO Project Division-II, Bhubaneswar** to ensure speedy implementation of the work and effective monitoring at all levels. Failing to do so shall also invite action under **Clause-7.26**.

7.17. Site Order Book:

A site Order Book shall be issued to the contractor by the Engineer-in-charge or his representative. The contractor shall keep this Book always at site and any special order or instruction to be issued to the contractor shall be recorded in this Book by the Engineer-in-charge or his representative. The contractor shall sign all orders and instructions as token of his knowledge about the same. The site Order Book shall be the property of the department but will remain during the period of the progress of the work with the contractor. The safe custody of the site Order Book during this period shall be the responsibility of the contractor. After completion of the work, the Book shall be returned back by the contractor to the Engineer-in-charge, which will be enclosed in the final bill.

7.18. Guarantee:

Defect liability period is **12 (twelve) months** from the date of final acceptance of the work conforming to provisions in scope of work. During this period, the contractor shall replace the defective materials if any or rectify the defects if any at his own cost as pointed out by the Engineer-in-charge to the satisfaction of the later.

7.19. Land:

The Department may provide land if available for construction of site office to the contractor on payment of usual rent.

7.20. Unilateral Stoppage of Work:

Unilateral stoppage of work by the contractor without prior written permission of the Engineer-in-charge shall be considered as breach of contract and the Governor of Odisha reserves the right to take such actions as it may be deemed fit.

7.21. Resident Engineer:

The contractor shall engage for this work competent, qualified and authorised resident Engineers and Assistants to the satisfaction of the Engineer-in-charge. The Resident Engineer shall represent the contractor in his absence in receiving directions from officers of the Department, which will be binding on the contractor.

7.22. Force Majeure:

Neither the contractor nor the General Manager shall be considered in default in delayed performance of its obligation if such performance is prevented or delayed because of work to hostilities, revolution, civil commotion, epidemic, accident, fire, cyclone, flood, earthquake or because of any law and order proclamation, regulations or ordinance of the Government thereof or because of any act of God or for any cause beyond reasonable control of the party affected. Should one or both the parties be prevented from fulfilling their contractual obligations a state of force majeure lasting continuously for a period of 6 months, the two parties shall consult each other regarding the future execution of the contract for mutual settlement.

7.23. Damages to Persons and Property:

The contractor shall take every precaution not to damage or injure adjoining or other property of any persons. He shall indemnify and keep indemnified the employee against all claims for injuries or damages to any person or any such property (including surface or land or crops in site) which may arise out of or in consequence of any negligence or default on the representatives and against all claim, demands proceedings damages, costs, charges and expenses whatsoever in respect of or in relation thereto. The Department does not take any responsibility on this account.

7.24. Attention to Urgent Works:

If any urgent work in the opinion of Engineer-in-charge becomes necessary to be executed and the contractor is unable and unwilling at once to carry out, the Engineer-in-charge may by his own or through other agency carry it out, as he may consider necessary. All expenses incurred on it shall be recoverable from the contractor or be adjusted against any sum payable to him.

7.25. Safety Devices:

- i) **Scaffolding:** Suitable scaffolding shall be provided for workmen for all works that can not be safely done from the ground or solid construction except such short period of work as can be done safely from the ladders. When a ladder is used an extra labour shall be engaged for holding the ladder and if the ladder is used in carrying the materials, suitable foot holds and handholds shall be provided on the ladder.
The Engineer-in-charge will have the right to inspect the scaffolding and centring etc. for the work and can reject partly or fully such structure if found defective in his opinion.
- ii) **Working Platforms:** Working platforms, gangways and stairways shall be constructed such that they do not sag unduly or unequally. If the height of the platforms or gangway or stairway is more than 3.25 meters above the ground or floor level, it shall be closely guarded, have adequate width and suitably fenced.
- iii) **Safe means of access:** Safe means of access shall be provided to all working platform and other working places.
- iv) **Precaution against Electrical Equipment:** Adequate precaution shall be taken to prevent danger from electrical equipment. Hand lamps shall be provided with Mesh guard, wherever required.
- v) **Preventing Public from Accident:** No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or public.

The contractor shall provide all necessary fencing and light to protect public from accident and shall be bound to bear expenses of defence or any suit action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precaution and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor, be paid to compromise any claim by any such person. The contractor not to come cause blockage of traffic /disruption of the traffic.

- vi) **Demolition:** Before any demolition work is commenced and also during process of work:
 - a) all roads and open areas adjacent to the work site shall either be closed or suitably protected,
 - b) no electric cable or apparatus which is liable to be a source of danger shall remain electrically charged,
 - c) all practical steps shall be taken to prevent danger to persons employed from the risk of fire, explosion or flooding,
 - d) no floor roof or other parts of the building shall be so over loaded with debris or materials as may render it unsafe.
- vii) **Personal safety equipment:** All personal safety equipment shall be made adequately available by the contractor for use of persons employed at the site of work and maintained in a condition suitable for immediate use. The contractor shall take adequate steps to ensure proper use of the equipment by persons concerned.
- viii) **Precaution against fire:** Suitable fire extinguishers, water and sand buckets shall be provided at the work site to tackle situations of fire.

7.26. **Rescission of Contract:**

Subject to other provisions contained in this clause the Manager of the Department may without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, recommend the accepting authority to rescind the contract in any of the following cases:

- i) If the **Contractor** having been given by the General Manager a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workmen like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution on the court shall make an order that the company shall be wound up or if a receiver or a **Manager** on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a Manager or which entitle to court to make a winding up order.
- iii) If the contractor has, without reasonable cause, suspended the progress of the work with due diligence so that in the opinion of the General Manager (which shall be final & binding) he will be unable to secure completion of the work by the date

of completion and continues to do so after a notice in writing of seven days from the General Manager.

- iv) If the contractor fails to comply with the provisions of **Clause-7.15** & other relevant clauses mentioned elsewhere in this DTCN.
- v) If the contractor fails to complete the work within the stipulated date or items of the work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the General Manager.

When the contractor has made himself liable for action under any of the cases aforesaid, the **accepting authority shall have the powers to rescind the contract** (of which rescission notice in writing to the contractor under the hand of Director shall be conclusive evidence), **20% of the value of the left over work** will be realized from the contractor as Penalty

- 7.26.1. In case of rescission of contract as per **Clause-7.26** the contractor shall have no claim to compensation for any loss sustained by him by regions of having purchased or procured any materials or entered any engagement on account of or with a view to execute the work / performance of the contractor.

7.27(a) **Conditions for Reimbursement of Levy/Taxes if Levied after Receipt of Tenders:**

- i) All tendered rates shall be inclusive of all taxes and levies payable under respect statutes. However, pursuant to the Constitution (46th Amendment) Act, 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the **Managing Director, WATCO, Bhubaneswar** (whose decision shall be final and binding on the contractor) 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 and shall allow inspection of the same by a duly authorised representative of the Department and/ or the Engineer-in-Charge and further shall furnish such other information/ document as the Engineer-in-Charge may require from time to time.
- iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act, 1982, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

7.27(b) **Other statutory Taxes such as I.T., GST, labour cess etc, will be deducted at sources at the prevailing tax rate from the bills of the contractor and deposited with concerned authority.**

- 7.27(c) Royalty at the prevailing rate on minerals will be deducted from the bills of the contractor and deposited with concerned authority.

7.28 **Fair Wages Clause:**

- (a) The contractor shall not employ for the purpose of this contract any person who is below the age of fourteen years and shall pay to each labourer for work done by such labourers fair wages.

Explanation – “**Fair Wage**” means wages, whether for time or piece work prescribed by the State Public Works Department provided that where higher rates have been prescribed under the minimum wages Act 1948 wages at such higher rates should constitute fair wages.

The Genral Manager shall have the right to enquire into and decide any compliant alleging that the wages paid by the contractor to any labourer for the work done by such labourer is less than the wages as per sub-paragraph-I above.

- (b) The contractor shall, notwithstanding the provisions of any contract to contrary, cause to be paid a fair wage to labourers indirectly engaged on the work including any labour engaged by his sub-contractors in connection with the said work, as if, the labourers had been immediately employed by him.
- (c) In respect of all labour directly or indirectly employed in the works for the performance of the contractor’s part of this agreement, the contractor shall comply with or cause to be complied with all regulations made by Government in regard to payment of wages, wage period deductions from wages, recovery of wages not paid and deductions unauthorisedly made, maintenance of wage register, wage cards, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of a like nature.
- (d) The General Manager or Manager concerned shall have the right to deduct, from the money due to the contractor, any such required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers non-payment of wages or of deduction made from his or their wages, which are not justified by their terms of the contract or non-observance of the regulations. Money so deducted should be transferred to the workers concerned.
- (e) Vis-à-vis, the Government of Odisha, the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractor.
- (f) The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be breach of this contract.

Odisha PWD / Electricity Department Contractor’s Labour Regulations

- 7.28.1. Short title – These regulations may be called “**The Odisha Public Works Department / Electricity Department Contractor’s Regulations**”.

7.28.2. Definitions – In these Regulations, unless otherwise expressed or indicated the following words and expressions shall have the meaning here by assigned to them respectively, that is to say -

- i) **"Labour"** means a worker employed by a contractor of the Odisha Public Works Department / Electricity Department directly or indirectly through a sub-contractor or other person, or by an agent on his behalf.
- ii) **"Fair Wages"** means wages whether for time or piece work prescribed by the State Public Works Department provided that where higher rates have been prescribed under the minimum wages Act, 1948 wages at such higher rates should constitute fair wages.
- iii) **"Contractor"** shall include every person whether a sub-contractor or headman or agent employing labour on the work taken on contract.
- iv) **"Wages"** shall have the same meaning as defined in the payment of Wages Act and include time and piece rate wages, if any.

7.28.3. **Display of Notices regarding Wages, etc.:**

The contractor shall:–

- (a) Before he commences his work on contract display and correctly maintain and continue to display and correctly maintain, in a clean and legible condition, in conspicuous places on the work, notices in English and in the local Indian language spoken by the majority of the workers, giving the rate of wage prescribed by the State Public Works Department / Electricity Department for the district in which the work is done.
- (b) Send a copy of such notices to the Engineer-in-charge of the work.

7.28.4. **Payment of wages:**

- (1) Wages due to every worker shall be paid to him direct.
- (2) All wages shall be paid in current coin or currency or in both

7.28.5. **Fixation of wage period:**

- (1) The contractor shall fix the wage period in respect of which the wages be payable.
- (2) No wage period shall exceed one month.
- (3) Wages of every workman employed on the contract shall be paid before the expiry of ten days, after the last day of the wage period in respect of which the wages are payable.
- (4) When the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which his employment is terminated.
- (5) All payments of wages shall be made on a working day.

7.28.6. **Wage book and wages cards, etc.:**

- (1) The contractor shall maintain a wage book of each worker in such form as may be convenient, but the same shall include the following particulars-
 - (a) Rate of daily or monthly wages.

- (b) Nature of work on which employed
 - (c) Total number of days worked during each wage period
 - (d) Total amount payable for the work during each wage period.
 - (e) All deductions made from the wages with an indication in each case of the ground for which the deduction is made.
 - (f) Wage actually paid for each wage period.
- (2) The contractor shall also maintain a wage card for each worker employed on the work.
 - (3) The General Manager may grant an exemption from the maintenance of wage bond, wage cards to a contractor who, in his opinion – may not directly or indirectly employ more than 100 persons on the work.

7.28.7. Fines and deduction which may be made from wages:

- (i) The wages of a worker shall be paid to him without and deduction of any kind except the following -
 - (a) Fines
 - (b) Deductions for absence from duty, i.e., from the place of places whereby the terms of his employment he is required to work. The amount of deductions shall be in proportion to the period for which he was absence.
 - (c) Deductions for damage to or loss of good expressly entrusted to the employed person for custody or for loss of money for which he is required to account where such damage or loss is directly attributable to his neglect or default.
 - (d) Any other deductions which the Odisha Government may from time to time allow.
- (ii) No fines shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deduction.
- (iii) The total amount of fines which may be imposed in any one wage period on a works shall not exceed an amount equal to five paise in a rupee of the wages payable to him in respect of that wage period.
- (i) No fine imposed on any worker shall be recovered from him by instalments, or after the expiry of 60 days from the date on which it was imposed.

7.28.8. Register of fines, etc.:

- (i) The contractor shall maintain a register of fines and of all deduction for damage or loss. Such register shall mention the reason for which fine was imposed or deduction for damage or loss was made.
- (ii) The contractor shall maintain a list in English and in the local Indian language, clearly defining acts and omissions for which penalty of fine can be imposed. It shall display such list and maintain it in a clean and legible condition in conspicuous places on the work.

7.28.9. Preservation of register:

The wage register, the wage cards and the register of fines, deduction required to be maintained under the regulations shall be **preserved for 12 (twelve) months** after day of the last entry made in them.

- 7.28.10. **Powers of Labour Welfare Officers to make investigation or enquiry:**
The Labour Welfare Officers or any other persons authorized by the Government of Odisha on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and the provisions of these regulations. He shall investigate into any complaint regarding default made by the contractor, sub-contractor in regard to such provisions.
- 7.28.11. **Report of Labour Welfare Officers:**
The Labour Welfare Officer or others authorized as aforesaid shall submit a report of the results of his investigation or enquiry to the General Manager concerned, indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor bill be made and the wages and other dues be paid to the labourers concerned.
- 7.28.12. **Appeal against the decision of Labour Welfare Officer:**
Any persons aggrieved by the decision and recommendation of the Labour Welfare Officer or other person so authorized may appeal against such decision to the Labour Commissioner within 30 days from the date of decision forwarding simultaneously a copy of his appeal to the General Manager concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.
- 7.28.13. **Inspection of register:**
The contractor shall also allow inspection of the wage book and wage cards to any of his workers or to his agent at a convenient time and place after due notice is received, or to the Labour Commissioner or any other person authorized by the Government of Odisha on his behalf.
- 7.28.14. **Submission of return:**
The contractor shall submit periodical returns as may be specified from time to time.
- 7.28.15. **Amendments:**
The Government of Odisha may from time to time, add to or amend these regulations and on any question as to the application, interpretation of effect of these regulations, the decision of the Labour Commissioner or any other person authorized by the Government of Odisha in that behalf shall be final.
- 7.28.16. **Quality assurance plan:**
Work, supply of mechanical equipment, electrical panel, mandatory spares or services should offer by the contractor followed with quality assurance plan to the department before taking up the work. A quality assurance plan (**QAP**) has to be approved by the competent authority before taking of work, supply of equipment & services.

7.28.17 Procurement, Inspection & Testing of MS / DI pipes and fittings:

- 1) The successful bidder shall source all ISI Marked Ductile Iron Pipes & Fittings from;
 - a) The manufacturer who has not been blacklisted/ debarred/ disqualified/ disallowed to supply Ductile Iron pipes in case of EPC contracts/ Turnkey contracts/ supply Order Contracts/ Rate Contracts for the entire or any part thereof, by any of the Central/ State Government/ Board/ Corporation/ as procuring entity in India with respect to quality issues in last three years, from the date of the submission of the tender. The tenderer will submit affidavit thereof duly notarized (with seal) in respect to the above condition and
 - b) The manufacturer is having valid BIS License for marking ISI Mark on their products for at least 5 (five) years and
 - c) The manufacturer's DI Pipes and Fittings are in satisfactory performance in Indian Projects for at least three years.
 - The D.I. pipes are to be inspected by the quality assurance wing of CIPET/ PDIL / RITES Ltd., and the consignment are to be embossed with the CIPET/ PDIL / RITES Ltd., inspection mark.
 - The materials without CIPET/ PDIL/ RITES Ltd., inspection and without CIPET/ PDIL/ RITES Ltd., shall not be accepted. All the materials should also be ISI Marked.
 - The DI pipe should confirm IS:8329:2000& its subsequent amendments and DI Fittings should confirm IS:9523:2000 and its subsequent amendments, if any.

The terms and conditions of the agreement have been read by Me/Us and I/We certify that I/We clearly understand them and agree to abide by them.

Contractor

SECTION-8

SCOPE OF WORK

GENERAL

The intent of this Section is to specify the work items to be covered **on Percentage Rate Bids** in conformity with the technical specifications as enumerated in the subsequent clauses for the work "**Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar**".

8.1	Location	:	Bhubaneswar
	Town	:	Bhubaneswar
	District	:	KHORDHA
	State	:	Odisha
	STP ,MEHERPALI	:	Bhubaneswar

8.2 Scope of Work:
(As per Bill of Quantity)

- a. Excavation of all kinds of soil including rocks shoring & shuttering where ever required site dressing & levelling the surrounding ground to the final ground level i.e existing road level up to the desired limit of the contract for installation of solar modules.
- b. **SUPPLY,INSTALLATION,TESTING AND COMMISIONING OF ON-GRID GROUND MOUNTED/ROOFTOP ,110 KW SOLAR POWER PLANT WITH PLANT AUTOMATION (USING SCADA, PLC) AT STP, MEHERPALI, BBSR up to the limit of contract as per decision of General Manager, WATCO PROJECT DIVISION-II,BBSR.**
- c. Construction of required No & size of Specification & as per direction of Engineer-in-Charge.

8.3. Site Visit:

The tenderer before tendering shall inspect the site at his own cost in consultation with Executive Engineer in Charge of work and shall satisfy himself with regard to the nature and extent of the work involved, the actual site conditions, existing facilities & shall collect any other information which may be required before submitting the tender. Any claim afterwards by the tenderer shall not be entertained on account of the ignorance of the site conditions.

8.3 Format Language and Units:

The language of all documents shall be in English. Units of measurement in the documents, on the drawings, and the submissions shall be in S.I/ Metric Units.

8.4 Detailed Designs & Drawings of Works

Design Basis:

All designs shall be based on the best modern practices enumerated in the Standard Text Books/ Reference Books & Handbooks by authors of International & National repute. Reference books like the Manual on Water Supply & Treatment by CPHEEO/MNRE, Government of India, latest Indian Standards, Codes of Practices & Specifications, norms fixed by Pollution Control Boards of State/Central & Central Electricity Authority, European Union/ British/ **AWWA** Standards shall also be followed wherever required. In case of any contradiction, the decision of the Competent Authority of the Department shall be final.

8.5 Quality of Material and Workmanship:

All the materials supplied by the contractor shall be best of their respective kinds and shall comply with latest revisions of Indian Standards/ International Standards/ Water Supply & Public Health regulations stipulated by Govt. of India, AWWA, State Pollution Control & Prevention Board, Indian Electricity Rules and other statutory requirements of Govt. of India, MNRE and Govt. of Odisha.

The contractor shall be responsible for the design of the entire system and quality of materials and workmanship. The contractor shall guarantee the satisfactory functioning & performance.

8.6 Construction & Erection Facilities:

Water, power, accommodation and storage of materials for construction, erection and fabrication at site shall be arranged by the contractor at his own cost. The power supply & consumption during the construction stage shall be the responsibility of the contractor & no extra payment shall be made on account of this. Department will be responsible for supply of water for testing, trial running & commissioning of the pipe line. The power supply and consumption during testing and commissioning and trial running shall be the Department's responsibility.

8.7 Inspection & Testing:

For all materials, the contractor shall furnish Manufacturer's test certificate with each consignment. At site and at factory, Testing and inspection shall be carried out as per Indian standards/International Standards in presence of representative of Engineer-in-Charge, contractor and manufacturer. The contractor shall detail out the codes and standards in accordance with which the testing shall be carried out.

Inspection by the Engineer-in-charge of the Department shall not relieve the contractor of his liability for rectifying the defects which may subsequently appear or be detected during testing and commissioning or subsequent operation. After rectification of the defects or replacement, the equipment's shall be re-tested to the satisfaction of the Department.

All equipment's, labor, tools & tackles, instruments and other facilities for testing shall be provided by the contractor. He shall also maintain records of all the tests and furnish copies of the same to the Department.

Whenever untested materials are used, written permission from the Engineer-in-Charge shall be obtained. Manufacturer's test certificates shall be furnished by the contractor for such equipments and materials used.

The Department reserves the right to test any material at any of the reputed laboratories if necessity arises & the cost of such test(s) shall be borne by the contractor & rejected materials shall have to be replaced by the contractor by approved material at his cost.

8.8 Completion Schedule:

The time is the essence of this contract. The entire job is to be completed within a time frame of **90 days** from the date of issue of work order by the **General Manager, WATCO PROJECT DIVISION-II,BBSR**. The tenderer shall submit a Bar Chart indicating starting and completion dates of each activity such as site mobilization, procurement of materials and equipments, transportation, execution, assembly/ erection, testing, trial running and commissioning without which the tender shall be liable for rejection.

8.9 Tendering:

Ordinarily, modifications of technical specifications during execution of the work shall not be permitted excepting in cases where such a modification is warranted due to technical requirements.

8.10 Schedule of Tender for Submission:

The tenderer shall submit the following details in addition to other documents as indicated elsewhere in this DTCN along with the 'General & Techno-commercial Bid' of his tender document without which his 'tender' shall not be considered further for appraisal.

- i) Detailed specifications with codes/standards of all the materials/ Equipment/ construction work etc, with makes & their source of supply and testing codes including manufacturer's catalogue.
- ii) Battery Limits/ Exclusions, if any.
- iii) Delivery period with Bar Chart for the complete scheme.
- iv) Equipment, tools & tackles (with their capacities) proposed to be mobilized to the site.
- v) Personnel & staff proposed to be deployed at site.
- vi) Past experience of the Tenderer with respect to eligibility criteria. A list of similar jobs designed & executed by the tenderer with their capacity, year of commencement & installation, value of work and full addresses of their client.
- vii) Brief details of the tenderer, technical personnel/ executive Employed with the tenderer, their qualifications & experience, Organization chart.

SECTION – 9

TECHNICAL SPECIFICATIONS & DESIGN CRITERIA

9.1 Design Standards

As per Electrical Specification, MNRE STANDARD & CPHEEO manual on Water Supply and relevant I.S. Specification & Standards

6.2. General Conditions:

Cement shall not be less than O.P.C.-43 grade of reputed manufactures confirming to relevant IS.

1. The steel reinforcement shall be of SAIL/RINL/TATA/JINDAL STEEL/ SHYAM STEEL make of Fe-500 grade confirming to relevant IS specification.
2. As & when required, the steel/cement & other building materials will be tested by Department at the cost of contractor to ensure proper quality as per IS specification.
3. Testing of water tightness shall be conducted as per relevant IS Codes.
4. Machine mix shall be used in concrete work for all structure. Design mix of concrete will be preferred. Vibrator of appropriate type shall be used for compaction of concrete.
5. All the structures are to be designed as permanent type and shall have aesthetic elevation.
6. Form work shall be of steel plates and frame, sound seasoned timber or any approved materials as decided by Engineer-in-charge to be used for the centring and shuttering of the structures.
7. The surplus earth and debris should be lifted after completion of work and proper levelling of site as directed by Engineer-in-charge without any extra claim.
8. All the work including supply of materials to be executed as per relevant IS specification and direction of Engineer-in-charge.
9. Foundation of all structure including supply of materials shall be designed depending on Ground water table / subsoil condition. In no case the Depth of foundation below virgin soil shall be less than 1 mtr. at respective places.
10. All equipment's, accessories, auxiliaries, piping, electrics, instruments, installations, construction, buildings etc. including all mechanical, electrical & civil engineering works covered under the scope of work of contractor shall be subjected to inspection & testing by the Department for its material, quality, workmanship and the performance. The contractor shall arrange and carryout all such inspection, testing, trial run etc. and demonstrate in presence of the Engineer-in-charge of the Department.
11. The cost of such inspection, testing, trial run, demonstration etc. shall be borne by the contractor. All responsibility of such inspection, testing, trial run, demonstration etc. and any damage/loss that may cause directly or indirectly shall exclusively rest with the contractor.
12. Such inspection, testing, trial run, demonstration etc. shall, however, not relieve the contractor of their liability for replacing/rectifying any defects, which may subsequently appear or be detected during erection and guarantee period.
13. All equipment's, sub-assembly and components, auxiliaries and accessories shall be tested at manufacturer's workshop/site in accordance with relevant Indian Standards/International Standards. The contractor shall furnish all test certificates etc. related to the quality of all the materials to the Department along with the delivery of the materials at site without which no payment shall be released. However, such test certificates, quality assurance certificate shall not relieve the contractor of it's obligation to replace forth with any instrument/materials found defective during tests at works / trial running period/guarantee period.

14. Testing for performance of equipment's shall be carried out and be checked with the approved parameters and performance characteristic curves for the purpose of acceptance.
15. Reinforced cement concrete M-30 in all members in contact with water and members close to water like roof slab/dome etc.
16. Any other RCC members shall be of minimum of M-20 grade.

DETAILED TECHNICAL SPECIFICATIONS

Grid Tied Solar Rooftop Photovoltaic (SPV) Power Plant

1. GENERAL PROVISIONS

The proposed projects shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of subsidy in full or part as decided by WATCO. Competent Authority's decision will be final and binding on the MEDA empanelled project developers and open category project developers.

2. DEFINITION

A Grid Tied Solar Rooftop Photovoltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, Junction boxes, Distribution boxes and switches. PV Array is mounted on a suitable structure. Grid tied SPV system should be designed with necessary features to supplement the grid power during day time.

Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

2.1 System Components

Solar PV system shall consist of following equipment's/components:

- **Solar PV modules consisting of required number of Crystalline PV cells**
- **Grid interactive Power Conditioning Unit with Remote Monitoring System**
- **Mounting structures**
- **Junction Boxes**
- **Earthing and lightening protections**
- **IR/UV protected PVC Cables, pipes and accessories.**
- **AUTOMATION USING SCADA & PLC.**

3. SOLAR PHOTOVOLTAIC MODULES

3.1 Manufacturing Requirements

- The PV modules used should be made in India.
- The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286.
- In addition, the modules must conform to IEC 61730 Part-1 - requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.

3.2 Special Environment Requirements

a. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701.

3.3 Capacity and Specifications

b. The total solar PV array capacity should not be less than **allocated capacity 110 (kWp) and should comprise of solar crystalline modules of minimum 550 Wp and above wattage. Module capacity less than minimum 550 watts shall not be accepted.**

c. Adequate protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.

- d. PV modules must be tested and approved by one of the IEC authorized test centres.
- e. The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- f. The EoI holder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his EoI. owners shall allow only minor changes at the time of execution.

3.4 General Requirements

g. Other general requirement for the PV modules and subsystems shall be the Following:

- The rated output power of any supplied module shall have tolerance within +/-3%.
- The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
- I-V curves at STC should be provided by EoI holder.

4. SOLAR PV MODULES - RFID REQUIREMENTS

Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module. This should be inside the laminate only.

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

5. WARRANTIES

5.1 Material Warranty

a. Material Warranty is defined as: The project developer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Customer")

b. Defects and/or failures due to manufacturing

c. Defects and/or failures due to quality of materials

d. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the project developer will repair or replace the solar module(s), at the Owners sole option.

5.2 Performance Warranty

a. The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

6. ARRAY STRUCTURE

6.1 Material Specifications

- Hot dip galvanized MS mounting structures may be used for mounting the modules / panels / arrays. Minimum thickness of galvanization should be at least 120 microns.
- Each structure should have angle of inclination as per the site conditions to take maximum insolation. However, to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

6.2 Wind Load Requirements

- The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (wind speed of 200 km/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to WATCO Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.

6.3 Standards and Materials

- The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.
- Aluminium frames should be avoided for installations in coastal areas.

6.4 Design Requirements

- The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.
- Regarding civil structures the EoI holder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m².
- The minimum clearance of the structure from the roof level should be 300 mm.

7. JUNCTION BOXES (JBs)

7.1 Construction Specifications

- The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) 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 cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

7.2 Technical Requirements

- 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 earthings
- It should be placed at 5 feet height or above for ease of accessibility

7.3 Protection Devices

- Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes 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.
- All fuses shall have DIN rail mountable fuse holders and shall be housed in thermoplastic IP 65 enclosures with transparent covers.

8. DC DISTRIBUTION BOARD

- DC Distribution panel to receive the DC output from the array field.

- DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

9. AC DISTRIBUTION PANEL BOARD

9.1 General Specifications

- 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 while in grid tied mode.
- All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS 60947 part I, II and III.
- The changeover switches, cabling work should be undertaken by the EoI holder as part of the project.

9.2 Panel Construction

- 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, 50 Hz
- The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- Should conform to Indian Electricity Act and rules (till last amendment).

9.3 Operating Conditions

All the 415 AC volts devices / 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:

- Variation in supply voltage +/- 10 %
- Variation in supply frequency +/- 3 Hz

10. PCU / ARRAY SIZE RATIO

- The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

11. PCU / INVERTER

11.1 General Description

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. If necessary. Inverter output should be compatible with the grid frequency.

11.2 Technical Specifications

Parameter	Specification
Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and frequency	415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
Output frequency	50 Hz
Grid Frequency Synchronization range	+ 3 Hz or more
Ambient temperature considered	-20°C to 50°C

Parameter	Specification
Humidity	95 % Non-condensing
Protection of Enclosure	IP-20(Minimum) for indoor. IP-65(Minimum) for outdoor.
Grid Frequency Tolerance range	+ 3 or more
Grid Voltage tolerance	-0.20.15
No-load losses	Less than 1% of rated power
Inverter efficiency (minimum)	>93% (In case of 10 kW or above with in built galvanic isolation)
Inverter efficiency (minimum)	>97% (In case of 10 KW or above without in-built galvanic isolation)
Inverter efficiency (minimum)	> 90% (In case of less than 10 kW)
THD	< 3%
PF	> 0.9

11.3 Operational Requirements

- Three phase, 110KWP PCU/ inverter shall be used with each power plant system (10kW and/or above) but in case of less than 10kW single phase inverter can be used.
- PCU / inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- Anti-islanding (Protection against Islanding of grid): The PCU shall have anti islanding protection in conformity to IEEE 1547/UL 1741/ IEC 62116 or equivalent BIS standard.
- Channel Partner shall be responsible for galvanic isolation of solar roof top power plant (>100kW) with electrical grid or LT panel.
- In PCU/Inverter, there shall be a direct current isolation provided at the output by means of a suitable isolating transformer. If Isolation Transformer is not incorporated with PCU/Inverter, there shall be a separate Isolation Transformer of suitable rating provided at the output side of PCU/PCU units for capacity more than 100 kW.
- The PCU/ inverter generated harmonics, flicker, DC injection limits, Voltage Range, Frequency Range and Anti-Islanding measures at the point of connection to the utility services should follow the latest CEA (Technical Standards for Connectivity Distribution Generation Resources) Guidelines.
- The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2 (1,2,14,30)/ Equivalent BIS Std.
- The MPPT units environmental testing should qualify IEC 60068-2 (1, 2, 14, 30)/ Equivalent BIS std. The junction boxes/ enclosures should be IP 65 (for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- The PCU / inverters should be tested from the MNRE approved test centres / NABL / BIS / IEC accredited testing-calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

12. INTEGRATION OF PV POWER WITH GRID

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service, PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.

13. DATA ACQUISITION SYSTEM / PLANT MONITORING

13.1 General Requirements

- Data Acquisition System shall be provided for each of the solar PV plant above 110 kWp capacity.
- Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system.

13.2 Real-Time Parameters

The following parameters are accessible via the operating interface display in real time separately for solar power plant:

a. AC Voltage b. AC Output current c. Output Power d. Power factor e. DC Input Voltage f. DC Input Current g. Time Active h. Time disabled i. Time Idle j. Power produced k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage)

13.3 Data Logging and Monitoring

- All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.
- Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
- String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- Computerized AC energy monitoring shall be in addition to the digital AC energy meter.

13.4 Data Recording and Representation

- The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- All instantaneous data shall be shown on the computer screen.
- Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
- Provision for instantaneous Internet monitoring and download of historical data shall be also incorporated.

13.5 Remote Monitoring

- Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
- Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
- Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
- Remote Monitoring and data acquisition through Remote Monitoring System software at the owner / WATCO location with latest software/hardware configuration and service connectivity for online / real time data monitoring / control complete to be supplied and operation and maintenance / control to be ensured by the EoI holder.
- The EoI holders shall be obligated to push real-time plant monitoring data on a specified intervals (say 15 minute) through open protocol at receiver location (cloud server) in XML/JSON format, preferably. Suitable provision in this regard will be intimated to the EoI holders.

13.6 Automatic operation

- **Automatic PV Array rotating on time base respect to Sun shine direction using Scada and plc.**
- **Automatic PV Array cleaning on time base respect to weather and climate using Scada and plc.**

14. TRANSFORMER "IF REQUIRED" & METERING

- Dry/oil type relevant kVA, 11kV/415V, 50 Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- Net Metering electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.

- The EoI holder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network before commissioning of SPV plant.
- Reverse power relay shall be provided by EoI holder (if necessary), as per the local DISCOM requirement.

15. POWER CONSUMPTION

Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of WATCO or MNRE. Decisions of appropriate authority like DISCOM, state regulator may be followed.

16. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

16.1 LIGHTNING PROTECTION

- The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in 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 shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

16.2 SURGE PROTECTION

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

16.3 EARTHING PROTECTION

- Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department/MEDA as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.
- Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

16.4 GRID ISLANDING

- In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "Islands." Powered Islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- A manual disconnect 4-pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

17. CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

- Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- Temp. Range: -10°C to +80°C
- Voltage rating 660/1000V
- Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- Flexible
- Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum (2%)
- For the DC cabling, XLPE or, XLPO insulated and sheathed, UV stabilized single core multi-stranded flexible copper cables shall be used; Multi-core cables shall not be used.

- h. For the AC cabling, PVC or, XLPE insulated and PVC sheathed single or, multi-core multi-stranded flexible copper cables shall be used; Outdoor AC cables shall have a UV-stabilized outer sheath.
- i. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use. Outer sheath of cables shall be electron beam cross-linked XLPO type and black in colour.
- j. The DC cables from the SPV module array shall run through a UV stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- k. Cables and wires used for the interconnection of solar PV modules shall be provided with solar PV connectors (MC4) and couplers.
- l. All cables and conduit pipes shall be clamped to the rooftop, walls and ceilings with thermo-plastic clamps at intervals not exceeding 50 cm; the minimum DC cable size shall be 4.0 mm² copper; the minimum AC cable size shall be 4.0 mm² copper. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires.
- m. Cable Routing / Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified. In addition, cable drum no. / Batch no. to be embossed/ printed at every one meter.
- n. Cable Jacket should also be electron beam cross-linked XLPO, flame retardant, UV resistant and black in colour.
- o. All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, salt, burial and attack by moss and microbes for 25 years and voltages as per latest IEC standards. DC cables used from solar modules to array junction box shall be solar grade copper (Cu) with XLPO insulation and rated for 1.1kV as per relevant standards only.
- p. The ratings given are approximate. EoI holder to indicate size and length as per system design requirement. All the cables required for the plant shall be provided by the EoI holder. Any change in cabling sizes if desired by the EoI holder shall be approved after citing appropriate reasons. All cable schedules/ layout drawings shall be approved prior to installation.
- q. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- r. The total voltage drop on the cable segments from the solar PV modules to the solar grid inverter shall not exceed 2.0%.
- s. The total voltage drop on the cable segments from the solar grid inverter to the building distribution board shall not exceed 2.0%.

18. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
Up to 10 kW	240V-single phase or 415V-three phase at the option of the consumer
Above 10kW and up to 100 kW	415V – three phase
Above 100kW	At HT/EHT level (11kV/33kV/66kV) as per DISCOM rules

- a. The maximum permissible capacity for rooftop shall be 1 MW for a single net metering point.
- b. Utilities may have voltage levels other than above, DISCOMS may be consulted before finalization of the voltage level and specification be made accordingly.

19. TOOLS & TACKLES AND SPARES

- After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the EoI holder for maintenance purpose. List of tools and tackles to be supplied by the EoI holder for approval of specifications and make from MEDA/ owner.
- A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished.

20. DANGER BOARDS 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 each at battery –cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with MEDA/ owner.

21. FIRE EXTINGUISHERS

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- a. Portable fire extinguishers in the control room for fire caused by electrical short circuits.
- b. Sand buckets in the control room.
- c. The installation of Fire Extinguishers should confirm 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 the PV arrays have been installed.

22. DRAWINGS & MANUALS

- Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. EoI holders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their EoI along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- Approved ISI and reputed makes for equipment be used.
- For complete electro-mechanical works, EoI holders shall supply complete design, details and drawings for approval to owners before progressing with the installation work.

23. PLANNING AND DESIGNING

The EoI holder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labour. The EoI holder should submit the array layout drawings along with Shadow Analysis Report to owner for approval.

24. DRAWINGS TO BE FURNISHED BY CHANNEL PARTNER AFTER AWARD OF CONTRACT FROM BENEFICIARY

The Contractor shall furnish the following drawings Award/Intent and obtain approval:

- General arrangement and dimensioned layout
- Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- Structural drawing along with foundation details for the structure
- Itemized bill of material for complete SV plant covering all the components and associated accessories
- Layout of solar Power Array
- Shadow analysis of the roof

25. SOLAR PV SYSTEM ON THE ROOFTOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT

The Solar PV system on the rooftop of the selected buildings will be installed for meeting up to 90% of the annual energy requirements depending upon the area of rooftop available and the remaining energy requirement of the buildings will be met by drawing power from grid at commercial tariff of DISCOMs.

26. SAFETY MEASURES

The EoI holder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

27. DISPLAY BOARD

The EoI holder has to display a board at the project site (above 10 kWp) mentioning the following:

- a. Plant Name, Capacity, Location, Type of Renewable Energy plant (Like solar wind etc.), Date of commissioning, details of tie-up with transmission and distribution companies, Power generation and Export FY wise.
 - b. Financial Assistance details from MEDA/MNRE/Any other financial institution apart from loan. This information shall not be limited to project site but also be displayed at site offices/head quarter offices of the successful EoI holder.
 - c. The size and type of board and display shall be appropriate.
-

GUARANTEED TECHNICAL PARTICULARS (GTP)

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ON-GRID GROUND MOUNTED, 110KWSOLAR POWER PLANTS AT STP, MEHERPALI.BBSR. WITH AUTOMATION USING SCADA & PLC.

Sl. no.	Description of item
1	Supply, fitting, fixing of G.I structure frame using hot-dip galvanized iron (GI) for components like rails, legs, and purlins, typically with an 80-micron zinc coating, as well as Stainless Steel (SS) 304 for module fasteners over of channel poste of (100x50x6mm. Thk) 23 poles including cost of materials, transportation to site, all labour, T & P etc all complete.
2	Supply, fitting, fixing of Solar Panel Mounting 41x 41 x 2mm GI Structure designed specifically for 8 panels with a power range of 550-600W. This sturdy and durable structure is made from high-quality galvanized iron. It will support 600W and above 4 Panels consisting of 4 Purlin for extra protection from heavy wind. 4 Purlins will prevent panels from cracks. The mounting structure is designed to securely hold and position the solar panels, maximizing their exposure to sunlight for optimal energy generation & Its adjustable design allows for easy installation and customization according to your specific requirements with its robust construction and compatibility with a wide range of solar panels, our Solar Panel Mounting GI Structure offers a reliable and efficient solution for your solar power system. Invest in this reliable mounting structure to enhance the performance and longevity of your solar panels Hot Dip G.I End clamp & middle Clamp, SS Allen bolt. 10mm Fastners and heavy plain washers (comprising of set U Channels 40x40x40x2 mm Front Leg U Channel 29 Inch 4 No. Back Leg U Channel 45 Inch 4 No. Purlin (Support) 97 Inch 3 No. Rafter 58 Inch 2 No. Base Plate 4 No. Hot Dip Z (End) Clamp 35mm 6 No. Hot Dip U (Mid) Clamp 35mm 3 No. G.I. Degree Hanger 4 No. G.I. Spring Nut 9 No. SS Allen Bolt 40mm 9 No. G.I. Nut and Bolt 10x25 mm 24 No. G.I. Nut and Bolt 10x60 mm 6 No. G.I. Plain Washer 82 No. Fasteners 10mm 16 No. Approx. Weight 38 KG. over G.I slotted channel frame made out of channel (100x50x6mm. Thk) including cost of materials, transportation to site, all labour, T & P etc all complete.
3	Supply, fitting & fixing of Photo voltaic shell having 550W-600W with half cut Mono PERC Solar Module 218nos over GI structure. including cost of materials, transportation to site, all labour, T & P etc all complete.
	550 watt solar PV
4	Supply, fitting, fixing of three Phase String On Grid with Hybrid technology (MPPT) Solar Inverter Solar inverter of ABB/DEY or any other reputed make suitable to generate 120KW power for solar power station including cost of materials, transportation to site, all labour, T & P etc all complete.
5	Supply, fitting, fixing of Lighting arrestor with earthing pit over solar Pv structure area .including cost of materials, transportation to site, all labour, T & P etc all complete.
7	Supply, fitting & fixing of DC copper cable of 6 sqmm with PVC pipe including cost of materials, transportation to site, all labour, T & P etc all complete.
8	Supply, fitting & fixing of DC copper cable of 10 sqmm with suitable dia PVC pipe including cost of materials, transportation to site, all labour, T & P etc all complete.
9	Supply, fitting & fixing of armored copper cable from inverter to MCC panel of size 95 sqmm with necessary cable tray including cost of materials, transportation to site, all labour, T & P etc all complete.
10	Supply, fitting & fixing of net meter with copper cable from inverter to MCC pannel of required size including cost of materials, transportation to site, all labour, T & P etc all complete.
11	Supply fitting fixing of bimetallic cable socket of size 120sqmm including cost of materials, transportation to site, all labour, T & P etc all complete.
12	Supply fitting fixing of copper socket 10sqmm (370x2) including cost of materials, transportation to site, all labour, T & P etc all complete.
13	Supply fitting fixing of PVC Junction box with copper terminals including cost of materials, transportation to site, all labor & P etc all complete.

	Supply installation, testing & commissioning of PLC in door panel with Panel Air Conditioner Made out of 2MM C.R sheet of size (800mm*800mm*2100mm floor mounted) powered coated 7 tank process with following component i.e, CPU should have 1MB Program memory with extended memory slot, Redundant-24VDC, SMPS 10 AMP along with 24 v edc spd, io count as DI-20,DO-20,AI-20,AO-20 & MOSBYS-10. subsystems SHALL BE SAME SERIES AS cpu,12 inch panel Mounted HMI, Modem should have support MQTT Protocol by default, 24 volt DC Industrial Switch with minim 6 earth mate, 4SFP Port each AI shall be equipped with suitable signal isolator of 2 Nos & surge protection device 20 nos LIU I isolator, 230 Volt AC/23 volt Ac toroidal transformer, 1kVA 230V AC UPS should have capacity to charge 3 nos 12VDC 65 AH battery bank, DP MCB of Adequate current capacity, Led tube light 10 inch 5 watt door limit switch louver, 4 sqmm straight through terminal & fuse terminal 90 nos, earthing plate. The Approved Make:L (PLC -Siemen's, Phoenix, ABB, Mitsubishi, SMPS-Phoenix, Siemens, Schnider Isolater-Masibus, R5ishabh, Multispan, SPD-Phones, Mersen, Dehm, UPS-Vertive, Hitachi, High Ril, Avo, Earth mate switch - Siemens', Moxa, Phoneis) Including cost material with all taxes transportation to site/storage with insurance.
14	Supply, Installation, testing and commissioning of RACK Mounted Data logger with SSD 1TB storage including cost of labor, T&P etc all complete.
15	Supply, Installation, testing and commissioning of RACK Mounted 3G, 4G and 5G modem for remote data communication including cost of labour, T&P etc all complete.
16	Supply, Installation, testing and commissioning of Post Paid Data SIM with Static IP along with 5GB/month data annually subscription for remote data VPN communication modem including cost of labour, T&P etc all complete.
17	Supply, installation & commissioning of SCADA software (Schneider/Siemens/Phoenix Contact) with graphical processor, visualization, Advanced alarm management, historical and real time trending, Built-in reporting, Statistical process control, Multi threaded VBA programming language with 128 KB tage capacity, IKVA online 'UPS with 30Min battery backup-1Nos, CPU having preloaded with win-10, 15 latest gen processor; DDR4 8gb RAM, 500gb SSD (Make- HP/Dell/Lenovo), USB based keyboard-1 no, USB based Optical Mouse- 1no, 43" LED monitor- 1 No, A4 size Laser printer- 1No, Wooden computer table- 1 no, Preparation of P&I diagram, creation of multi visualisation screen for process control, alarm management, Historical & real-time process trend, daily reporting etc complete as per requirement & 'direction of engineer - in - charge.
18	Supplying all materials Laying ,labour, T&P, for laying of cable tray specification (Male-polycab/Lapp/Thermo) including cost of materials, transportation to site,all labour,T & P etc all complete.
	1.5 SQMM 6 crore armored cable
19	Supply, fitting & fixing of three phase multy function electronic energy meter with necessary wiring for 6 set of sewerage pump set of ABB/Square make including cost of materials, transportation to site, all labour,T & P etc all complete.
20	Supply, fitting & fixing of 2 core screened cable (Make LAP) from out let effluent channel to Control room for data transmission with necessary conduct pipe including cost of materials, transportation to site, all labour,T & P etc all complete.
21	Supply, fitting & fixing of 6 core screened cable (Make LAP) from pump house to Control room for data transmission with necessary conduct pipe including cost of materials, transportation to site, all labour,T & P etc all complete.
22	Supply, fitting & fixing of 12 core screened cable (Make LAP) from pump house to Control room for data transmission with necessary conduct pipe including cost of materials, transportation to site, all labour,T & P etc all complete.
23	Supply, fitting & fixing of 24 core screened cable (Make LAP) from pump house to Control room for data transmission with necessary conduct pipe including cost of materials, transportation to site, all labour,T & P etc all complete.
24	Supply, installation of chemical earthing with crystalline conducting materials for Back FILL COMPOUND & INSTALLATION OF Maintenance Free Earthing Electrode with ISI mark G.I. Pipe dia 50mm as Secondary electrode with wall thickness of 2.6mm and the primary earthing electrode will be 25mm*6mm hot dipped galvanized strip filled with a highly conductive & non-corrosive compound in between the primary earthing & the secondary earthing. A solid G.I. Base plate of 300*30 mm seals the unit at the bottom. Ground filling compound will be provided in 25kg per bag-2nos. Excavation of earth pit refilling, Precast RCC chamber with lid etc. All complete as per the site requirement.
25	Supply, installation & commissioning of 200 Amp,415 VAC three phase contactor with protection latch & necessary wiring in the existing panel including cost of materials, transportation to site, all labour,T & P etc all complete.
26	Supply, installation & commissioning of net metering with necessary wiring including cost of materials, transportation to site, all labour,T & P etc all complete.
A	Total
27	SPV formation, processing fee and other permission approvals from TPCODL. Transportation of all equipments & its testing at site, procurement of skilled & unskilled manpower, travel expenses, lodging and boarding of engineers, etc all complete.

28	RCC Foundations for GI post pillars with necessary excavation ,Shuttering, reinforcement, cement concrete of M-20 to the designed depth with 50MT/ bars, construction of foundation for PV structure contour (Area grading and clearing of jungle) and laying of water pipelines for cleaning including cost of materials, transportation to site, all labour,T & P etc all complete.
29	Erection & commissioning of PV solar panels, I structure ,Inverter including cost of materials, transportation to site, all labour,T & P etc all complete.
30	Supply, fitting , fixing & commissioning of water pipe line ,necessary nozzle for each panel with pressure pump & control valve for each row, strainer with electrical wiring including cost of materials, transportation to site, all labour,T & P etc all complete.
31	Furnishing of control room , installation of server, Solar panel inverter AC control desk necessary electrical wiring including cost of materials, transportation to site, all labour,T & P etc all complete.
30	Supply, fitting , fixing & commissioning of 2000 ltr PVC water tank ,for automatic cleaning PV panel with necessary piping including cost of materials, transportation to site, all labour,T & P etc all complete.

The bidder has to provide all drawings, GTP, of all equipments including Automation etc (**as per detailed technical specifications**) to the authority Engineer (GM WATCO) for approval prior to procurement

Witness

Contractor

SECTION – 10

PAYMENT SCHEDULE

Payment will be made as per actual execution & recommendation of Engineer-In-Charge of the work following the condition of agreement

SCHEDULE – A
STRUCTURE & ORGANISATION

1. General Information

a) Name of Applicant

b) Head Office Address

e-Mail Address:

Telephone No.

Fax :

Mobile Phone No.

c) Regional Office Address (if any)

e-Mail Address:

Telephone No.

Fax :

d) Local Office (if any)

e-Mail Address:

Telephone No.

Fax :

e) Class of contractor / firm and year of incorporation
(attach copy of certificate of registration)

f) Name and Address of Bankers

g) Main Lines of Business

2. STAFF PROPOSED FOR EXECUTION OF THE WORKS

a) Office

Name(s)	Educational qualification	Designation	Relevant Experience	Remarks

b) Key Engineering Personnel to be deployed at the site

Sl. No.	Name of Engineering Personnel to be deployed	Educational qualification	Experience	Remark
1.				
2.				
3.				
4.				
5.				

Note: BIO-DATA of each personnel shall be attached related with the proposed site.

A summary of the work experience of each key staff shall be attached.

SCHEDULE – B

FINANCIAL STATEMENT

[To be given separately for each constituent Firm]

Financial statement shall be audited for five years by Regd. Chartered Accountant or competent financial organization / authority. The audit certificate should be included with the document.

- 1) Name of Applicant:
- 2) Total annual turnover & Annual turnover in **Construction Works**, undertaken for each of the last five financial years.

(Rs. In lakh)

FINANCIAL YEAR	Home		Abroad		Total	
	Total Turnover	Turnover in Const. Works	Total Turnover	Turnover in Const. Works	Total Turnover	Turnover in Const. Works
2025-26						
2024-25						
2023-24						
2022-23						
2021-22						

3. Applicant's specific financial arrangements (mention amount in Indian Rupees)
 - a) Own Resources
 - b) Bank Credits
 - c) Others (specify)
4. Credit Facilities :
To be supported by certificate for the Bank in **Scheduled 'H'**.

SCHEDULE – C

LIST OF TOOLS, PLANT & EQUIPMENT

Proposed to be deployed by the Applicant for use on the work

Sl. No.	List of plants & equipments	Minimum Requirement	Owned	Leased / Hired	Remarks
			Nos. / qty	Nos. / qty	
1	2	3	4	5	6
1.	Concrete Hopper Mixer (tilting hopper type)	2 Nos.			
2.	Plate / Skid Vibrator	2 Nos.			
3.	Needle Vibrator	2 Nos.			
4.	Water Tank	2 Nos.			
5.	Levelling instrument	1 No			
6.	Dewatering Pump set from 5 to 20 HP capacity	1 No.			
7.	Steel shuttering plates (600 x 1200mm) with steel scaffoldings	100 Sqm.			
8.	Transportation trolley	2 Nos.			

SCHEDULE – D
WORK EXPERIENCE

1. Name of the firm :
2. Total number of years of experience in **Construction work** :
3. List of the similar works executed during last 5 years. (Rs. in lakh)

Sl. No.	Name of the work/ location Agmt. No. & Dt.	Name of the employer	Value of Contract price	Total Value of work executed	Financial year-wise Computed amount	Stipulated date of commencement	Stipulated date of completion	Actual date of completion	Reasons for delay	Remarks
1	2	3	4	5	6	7	8	9	10	11

NB: Certification of the employer not below the rank of Executive Engineer/equivalent is to be furnished in support of the above claim.

4. Approximate value of existing commitment and ongoing works:

(Rs. in lakh)

Description of work	Place	Name of employer	Contract No	Contract value	Stipulated period of completion (indicate date of commencement & completion)	Balance value of work to be executed	Remarks
1	2	3	4	5	6	7	8

NB: Certification by the engineer in charge not below the rank Executive Engineer/equivalent in support of the above claim should be furnished.

5. Bid Capacity Calculation (*Refer clause 32.3 of Section 2 (B) of DTCN*).

A = Maximum value of works executed in any one year during the

last five years (updated to the current price level)= Rs. _____ lakhs.

B= Value of current price level of the existing commitments

and ongoing works to be completed during the next years = Rs. _____lakhs

N= Number of years prescribed for completion of the works for which the bids are invited = **03 Months**

Assessed Available Bid Capacity = $(A \times N \times 2 - B) \geq \text{Rs.59.81 Lakhs}$

6. Works for which bid already submitted but not finalized.

(Rs. in lakh)

Description of work	Place of work	Name & address of employer	Estimated cost of work	Offer valued by the bidder	Stipulated period of completion	Date on which decision expected.	Remarks
1	2	3	4	5	6	7	8

Note: - a) Certificate from the employers not below the rank of Executive Engineer or equivalent may be attached
b) Non-disclosure of any information in the schedule will result in disqualification of the firm.

SCHEDULE –E

**INFORMATION REGARDING CURRENT LITIGATION,
DEBARRING / EXPELLING OF TENDER OF ABANDONMENT OF
WORK BY TENDER**

1.(a) Is the applicant currently involved in any litigation relating to any contract works -

Yes/No

(b) If yes, give details

2.(a) Has the applicant or any of its constituent partners have been debarred / expelled by any agency in India during the last 5 years - **Yes/No**

(b) If yes, give details

3 (a) Has the applicant or any of its constituent partners failed to perform/absconded/ rescinded on any contract work in India during the last 5 years - **Yes/No**

(b) If yes, give details

Note : If any information in this schedule is found to be incorrect or concealed pre-qualification application will be summarily rejected.

SCHEDULE – F

(Applicable where the proposed works covers Electrical Items of works only)

1. The contractor shall have appropriate class of electrical license for External & Internal Electrical Works.
2. If not, collaboration with contractor having Electrical license of equivalent capacity issued by licensing authority is to be furnished.

SCHEDULE – G

AFFIDAVITS / DECLARATION

1. I/We have read the instructions appended in the DTCN.
2. I/We agree that the decision of the Govt. of Odisha in selection of contractors will be final and binding upon me/us.
3. All the information furnished herewith are correct to the best of my/our knowledge and belief. In case of any information or documents furnished found to be false or incorrect, I / we have no objection if my / our tender is rejected.
4. I/We agree that I/We have no objection if inquiries are made about construction work and its related areas regarding all projects and works listed by us in the accompanying sheets or any other enquiry on information furnished herewith in the accompanying sheets.
5. I/We agreed that I/We have no objection if our past construction works are inspected by any authority of Govt. of Odisha to assess the quality of construction.

Date:

Place:

Signature
Name & Designation
Name of the organisation

SCHEDULE – H

(Refer: Schedule "B" Item – 4)

FORM OF SOLVENCY CERTIFICATE FROM A SCHEDULE BANK

This is to certify that to the best of our knowledge and information M/s./Sri having marginally noted address a customer of our bank and are/is respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees)

Signature

For the Bank

Note : In case of partnership firm, certify names of all partners as recorded with the Bank.

SCHEDULE – I

ANY OTHER INFORMATION, IF ANY

SCHEDULE – J

Format for Seeking Clarification
(to be furnished in both MS Word/Excel & PDF Format)

Name of the Firm with e-mail & Mobile No.: _____

Sl. No.	Reference to DTCN/ Clause/ Page	Existing Description & Subject	Clarification Sought	Remarks
1	2	3	4	5

SCHEDULE – K

FORM OF BANK GUARANTEE [Additional Performance Security]

To

**The General Manager,
WATCO Project Division-II, Bhubaneswar.**

WHEREAS:

(A) _____ [name and address of contractor]

(hereinafter called the "**Contractor**") has executed an agreement (hereinafter called the "Agreement") with the [**General Manager, WATCO Project Division-II, Bhubaneswar** representing General Manager, WATCO Project Division-II, Bhubaneswar], (hereinafter called the "**Authority**") for the construction of the work "**Supply, Installation, Testing and Commissioning of On-Grid Ground Mounted / Rooftop, 110 KW Solar Power Plants with Automation (SCADA, PLC) at STP , Meherpalli, Bhubaneswar**" subject to and in accordance with the provisions of the Agreement.

(B) The Agreement requires the Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Construction Period & Defects Liability Period} (as defined in the Agreement) in a sum of Rs. _____ Lakh (Rupees _____ Lakh) (the "**Guarantee Amount**").

(C) We, _____ through our branch at _____ (the "Bank") have agreed to furnish this bank guarantee (hereinafter called the "Guarantee") by way of Additional Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the {Construction Period & Defects Liability Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the

Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of [\[Director \(Operations\), WATCO, Bhubaneswar\]](#), that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the

liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Agreement or for the fulfilment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on ****\$. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a

\$ Insert date being 30 (Thirty) Months from the date of issuance of this Guarantee (in accordance with Clause 23.4 of the Section 2(B) & Clause 6.22 of Section 6).

certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

Signed and sealed this _____ day of _____, 20____ at _____.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.
- (iii) The stamp papers of appropriate value shall be purchased in the name of bank who issues the "Bank Guarantee".
- (iv) The bank guarantee shall be from a Nationalised/ Scheduled Indian Bank with **counter guaranteed** by its branch at **Bhubaneswar**.

SCHEDULE - L
(See Clause 6.15 of DTCN)

PROJECT COMPLETION SCHEDULE

[In order to closely monitor the execution of the project and to ensure quality, cost and time of the project are not compromised in any manner, the contractor shall provide bar chart & PERT Chart in such a realistic manner so that there will be balance between financial & physical progress with reference to cost & completion time.]

1 Project Completion Schedule

During Construction period, the Contractor shall comply with the requirements set forth in this **Schedule-L** for each of the Project Milestones and the **Scheduled Completion Date**. Within **90 (Ninety) days** of the date of each Project Milestone, the Contractor shall notify the Authority of such compliance along with necessary particulars thereof.

2 Project Milestone-I

- 2.1 Project Milestone-I shall occur on the date falling on the $\frac{1}{4}$ of the Whole Time allowed from the Commencement Date (the “**Project Milestone-I**”).
- 2.2 Prior to the occurrence of Project Milestone-I, the Contractor shall have commenced construction of the Water Supply Project and submitted to the Authority duly and validly prepared a Work done Statements for a value of work not less than **20%** (Twenty percent) of the Contract Price.

3 Project Milestone-II

- 3.1 Project Milestone-II shall occur on the date falling on the $\frac{1}{2}$ of the Whole Time allowed from the Commencement Date (the “**Project Milestone-II**”).
- 3.2 Prior to the occurrence of Project Milestone-II, the Contractor shall have continued with construction of the Water Supply Project and submitted to the Authority duly and validly prepared a cumulative Work done Statements for a value of work not less than **45%** (Forty-five percent) of the Contract Price.

4 Project Milestone-III

- 4.1 Project Milestone-III shall occur on the date falling on the $\frac{3}{4}$ of the Whole Time allowed from the Commencement Date (the “**Project Milestone-III**”).
- 4.2 Prior to the occurrence of Project Milestone-III, the Contractor shall have continued with construction of the Water Supply Project and submitted to the Authority duly and validly prepared a cumulative Work done Statements for a value of work not less than **75%** (Seventy-five percent) of the Contract Price.

5 Scheduled Completion Date

- 5.1 The Scheduled Completion Date shall occur on the Whole Time allowed **03 (Three) Months** from the Commencement Date.
- 5.2 On or before the Scheduled Completion Date, the Contractor shall have completed construction in accordance with this Agreement.

If the contractor fails to maintain the required progress in terms of each Project Milestone or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount as give in Clause No. 6.15 of the agreement.

Executive Instruction regarding calling for and acceptance of tenders in e-Procurement in Govt. of Odisha.

**Government of Odisha
Works Department**

Office Memorandum

File No.07556900042013 (Pt-II) – 7885/W Dated 23.07.2013

Sub: Codal Provision regarding e-Procurement

After introduction of e-procurement in Government of Odisha, necessary guidelines / procedures has been issued in Works Department Office Memorandum No.1027 dt.24.01.2009 which consists of the procedural requirement for e-procurement of tenders. After careful consideration Government have been pleased to make following modifications to codal provisions by way of addition as Appendix – IX(A) of OPWD Code Vol.II) as follows:

(Appendix-IX (A) of OPWD Code, Vol-II)

Executive instructions regarding calling for and acceptance of tenders in e-Procurement.

1. This office memorandum consists of the procedural requirement of e-procurement and shall be made part of the Detailed Tender Call Notice or Instruction to Bidder for all "works" tenders hoisted in the portal.
2. The e-procurement portal of Government of Odisha is "<https://tendersodisha.gov.in>".
3. Use of valid Digital Signature Certificate of appropriate class (Class II or class III) issued from registered certifying authorities (CA) as stipulated by Controller of Certifying Authorities (CCA), Government of India such as n-Code, Sify, TCS, MTNL, e-Mudhra is mandatory for all users.
4. The DSC issued to the Department users is valid for the period of two years only. All the Department users are responsible to revalidate their DSC prior to expiry.
5. For all purpose, the server time displayed in the e-Procurement portal shall be the time to be followed by all the users.
6. Government after careful consideration have decided to hoist all tenders costing 10 lakhs or above in the e-procurement portal. This will be applicable across all Engineering Departments such as Works Department, Department of Water Resources, Rural Development and Housing & Urban Development Department. Government of Odisha also welcomes hoisting of tenders by any other departments, authority, corporations, local bodies etc. of the State with prior approval from Works Department. Works

Department is the Nodal Department for the implementation of e-Procurement in the State.

7. The e-procurement shall be operated compliant to relevant provisions of OGFR/ OPWD code/ Accounts code/ Government statues including any amendments brought from time to time to suit to the requirement of the best national practice.
8. Registration in the e-procurement portal is without levy of any charges but Government reserves the right to levy any charges for such value added services in future.
9. Contractor not registered with Government of Odisha, can participate in the e-Procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Government before award of the work as per prevalent registration norms of the State.
10. For the role management "Department" is the Administrative Department, Organisation or wing is the Chief Engineer or highest tender accepting authority or equivalent officer, Division is the Executive Engineer or equivalent Officer and Subdivision is the Assistant Engineer or equivalent officer.
11. The e-Procurement software assigns roles for operation of the module for specific function. The terminologies used in the portal and their respective functions in the software are as follows.
 - 11.1 Application Administrator (NIC & State Procurement Cell)
 - i. Master Management
 - ii. Nodal Officer Creation
 - iii. Report Generation
 - iv. Transfer of Officer's login ID.
 - v. Blocking & unblocking of officer's and bidder's login ID.
 - 11.2 Nodal Officer (At organization level not below the Superintending Engineer or equivalent rank)
 - i. Creation of Users
 - ii. Role Assignment
 - iii. Report Generation
 - iv. Transfer of Officer's login ID.
 - v. Blocking & unblocking of officer's Login ID.
 - 11.3 Procurement Officer Publisher (Officer having tender inviting power at any level)
 - i. Publishing of Tender
 - ii. Publishing of Corrigendum / addendum / cancellation of Tender
 - iii. Bid Clarification
 - iv. Uploading of Pre-Bid minutes.
 - v. Report generation.
 - 11.4 Procurement Officer Administrator (Generally sub-ordinate officer to Officer Inviting Tender)
 - i. Creation of Tender

- ii. Creation of Corrigendum / addendum / cancellation of Tender
 - iii. Report generation.
- 11.5 Procurement Officer Opener (Generally sub-ordinate officer to Officer Inviting Tender)
- i. Opening of Bid
- 11.6 Procurement Officer Evaluator (Generally Sub-Ordinate Officer to Officer Inviting Tender)
- i. Evaluating Bid
- 11.7 Procurement Officer-Auditor (Procurement Officer Publisher and/or Accounts Officer / Finance Officer)
- i. To take up auditing

12. **NOTICE INVITING BID (NIB) or INVITATION FOR BID (IFB):**

- 12.1 The Notice Inviting Bids (NIB) and Bid documents etc., shall be in the Standard formats as applicable to conventional Bids and will be finalized / approved by the officers competent as in the case of conventional Bids.
- 12.2 The officers competent to publish NIB in case of conventional Bids will host the NIB in portal. Simultaneously, a notification should also be published in the newspapers, as per existing rules preferably, in the following format, to effect economy:-

Government of Odisha "e" procurement Notice	
Bid Identification No.-----	
1.	Name of the work:
2.	Estimated cost: Rs.
3.	Period of completion
4.	Date & Time of availability of bid document in the portal
5.	Last Date / Time for receipt of bids in the portal
6.	Name and address of the O.I.T.:.....
Further details can be seen from the e-procurement portal " https://tendersodisha.gov.in "	

- 12.3 The tender documents published by the Tender Inviting Officer (Procurement Officer Publisher) in the website <https://tendersodisha.gov.in> will appear in the "Latest Active Tender". The Bidders/ Guest Users can download the Bid documents only after the due date & time of sale. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Notice inviting Bid' after which the same will be removed from the list of "Latest Active tenders".

13. **ISSUE OF ADDENDA/ CORRIGENDA/ CANCELLATION NOTICE:**

- 13.1 The Procurement Officer Publisher (Officer Inviting Tender) shall publish any addendum/ corrigendum/ cancellation of tender in the website

<https://tendersodisha.gov.in>, notice board and through paper publication and such notice shall form part of the bidding documents.

- 13.2 The system generates a mail to those bidders who have already uploaded their tenders and those bidders if they wish can modify their tenders. The bidders are required to watch the website till last date and time of bid submission for any addendum/ corrigendum/ cancellation thereof. Tender Inviting Authority is not responsible for communication failure of system generated mail.

14. CREATION AND PUBLISHING OF BID:

- 14.1 All the volumes/documents shall be uploaded in the portal by the tender creating officer (Procurement Officer Administrator) and published by the Officer Inviting Tender (Procurement Officer Publisher) using their DSCs in appropriate format so that the document is not tampered with

- 14.2 The tender document comprise the notice inviting tender, bid document/ SBD, drawings in .pdf format and the schedule of quantities / BoQ in .xls format to be uploaded by the Officer Inviting Tender.

- 14.3 Procurement Officer Administrator creates tender by filling up the following forms:

- i. BASIC DETAILS
- ii. COVER CONTENT: The Procurement officer Administrator should briefly describe the name and type of documents to be uploaded by the bidder in the following format:

(a) For Single Cover/Packet:

Sl No	Cover Type	Document Description	Type
1	Fee/ Prequal/ Technical/ Finance	Tender Cost, EMD, VAT, PAN, Contractor RC	.pdf
		Affidavits, undertakings and any other document as per SBD/DTCN.	.pdf
		BoQ	.xls

(b) For Two Cover/Packet:

Sl No	Cover Type	Document Description	Type
1	Fee/ Prequal/ Technical	Tender Cost, EMD, VAT, PAN, Contractor RC	.pdf
		Affidavits, undertakings and any other document as per SBD/DTCN.	.pdf
2	Finance	BoQ	.xls
		Special condition if any specifically mentioned by Officer Inviting Tender	.pdf

- iii. TENDER DOCUMENT: The Procurement Officer Administrator should upload the NIT in .pdf format.
- iv. WORK ITEM DETAILS
- v. FEE DEATILS: The Procurement Officer Administrator should mention the cost of tender paper and EMD amount as laid down in DTCN/SBD.

- vi. **CRITICAL DATES:** The Procurement Officer Administrator should mention the critical dates of tender such as publishing date, document download start date & end date, seek clarification start date & end date (optional), bid submission start date & closing date, bid opening date as per DTCN/SBD.
- vii. **BID OPENER SELECTION:** The Procurement Officer creator can select two / three / four bid openers for a particular bid. If required the bid openers can also be selected within an organization from other procurement units (Circles /Divisions).
- viii. **WORK ITEM DOCUMENTS:** The Procurement Officer Administrator should upload the digitally signed tender document (SBD/DTCN) or any other addition document/drawings in .pdf format and Bill of Quantities in .xls format.
- ix. **PUBLISHING OF TENDER:** The Procurement Officer Publisher shall publish the tender using his/her DSC after detail scrutiny of the fields created and documents uploaded by the Procurement Officer Administrator. Procurement Officer Publisher can publish tenders for multiple procurement units using multiple DSCs procured for each post separately. After being relieved from the additional charges he has to surrender the additional DSCs to the Nodal Officer of the concerned organisation.

15. **PARTICIPATION IN BID:**

15.1 **PORTAL REGISTRATION:** The Contractor/Bidder intending to participate in the bid is required to register in the portal using his/her active personal/official e-mail ID as his/her Login ID and attach his/her valid Digital signature certificate (DSC) to his/her unique Login ID. He/She has to submit the relevant information as asked for about the firm/contractor. The portal registration of the bidder/firm is to be authenticated by the State Procurement Cell after verification of original valid certificates/documents such as (i) PAN and (ii) Registration Certificate (RC) / VAT Clearance Certificate (for procurement of goods) of the concerned bidder. The time period of validity in the portal is at par with validity of RC/ VAT Clearance. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participate in the online bidding process.

15.1.1 Bidders participating through Joint Venture shall declare the authorised signatory through Memorandum of Understanding duly registered and enrol in the portal in the name and style of the Joint venture Company. It is mandatory that the DSC issued in the name of the authorised signatory is used in the portal.

15.1.2 Any third party/company/person under a service contract for operation of e-Procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement process that are undertaken through the e-Procurement system irrespective of who operates the system.

15.2 **LOGGING TO THE PORTAL:** The Contractor/Bidder is required to type his/her *Login ID* and password. *The system will again ask to select the DSC and confirm it with*

the password of DSC as a second stage authentication. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique Login ID, password and DSC combination and authenticates the login process for use of portal.

15.3 DOWNLOADING OF BID: The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience before the closing date and time of submission.

15.4 CLARIFICATION ON BID: The bidder may ask question related to tender online in the e-procurement portal using his/her DSC; provided the questions are raised within the period of seeking clarification as mentioned in tender call notice/Bid. The Officer Inviting the Bid / Procurement Officer-Publisher will clarify queries related to the tender.

15.5 PREPARATION OF BID

15.5.1 The bids may consist of general arrangements drawings or typical or any other drawings relevant to the work for which bid has been invited. Bidder may download these drawings and takeout print for detail study and preparation of his bid. Any other drawings and documents pertaining to the works available with the Officer Inviting The bid will be open for inspection by the bidders.

15.5.2 The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including cost of Bid Document, Bid Security, Declaration form, price bid etc. and store in the system.

15.6 PAYMENT OF EMD/BID SECURITY AND COST OF BID DOCUMENTS:

15.6.1 The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under NIT/Contract Data. The bidder shall scan all the written/printed pages of the bid security and up load the same in portable document format (PDF) to the system in designated place of the technical BID. Furnishing scanned copy of such documents is mandatory otherwise his/her bid shall be declared as non-responsive and liable for rejection.

15.6.2 The EMD or Bid Security payable along with the bid is 1% of the estimated contract value (ECV) or as mentioned in the bid document. The validity period of the EMD or Bid Security shall be as mentioned in the bid document. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in the bid document shall be rejected as non-responsive. The bid security shall be retained till such time the successful bidder furnishes Initial Security Deposit (ISD) or Performance Security acceptable to the Officer Inviting the Bid. Failure of the successful Bidder to comply with the requirements shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security. The Bid security in the form of FD / BG shall be from a Nationalized Bank valid for a period of 45 days beyond the validity of the bid. Bid security in other form is acceptable if the bid

documents provides for it.

15.6.3 The Fixed Deposit / Bank Guarantee or any other form as mentioned in detailed tender call notice in respect of Earnest Money Deposit / Bid Security and the Bank Draft in respect of cost of Bid are to be scanned and up loaded in portable document format (PDF) along with the bid.

15.6.4 The tender accepting authority will verify the originals of all the scanned documents of the successful lowest bidder only within 5 days of opening of the tender. In the eventuality of failure on the part of the lowest successful bidder to produce the original documents, he will be debarred in future from participating in tender for 3 years and will be black listed by the competent authority. In such a situation, successful L-2 bidder will be required to produce his original documents for consideration of his tender at the negotiated rate equal to L1 bidder.

15.6.5 Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption

15.6.6 Government of Odisha has been actively considering integrating e-payment gateway in to the portal for payment of Cost of Bid and Bid Security/ Earnest Money Deposit. The process of using e-payment gateway shall be issued separately after it is established.

16. SUBMISSION OF BID:

16.1 The bidder shall carefully go through the tender and prepare the required documents. The bid shall have a Technical Bid & a Financial Bid. The Technical bid generally consist of cost of Bid documents, EMD/ Bid Security, VAT, PAN / TIN, Registration Certificate, Affidavits, Profit Loss statement, Joint venture agreement, List of similar nature of works, work in hand, list of machineries, and any other information required by OIT. The Financial Bid shall consist of the Bill of Quantities (BOQ) and any other price related information/undertaking including rebates.

16.2 Bidders are to submit only the original BoQ (in .xls format) uploaded by Procurement Officer Publisher (Officer Inviting Tender) after entering the relevant fields without any alteration/ deletion / modification. Multiple BoQ submission by bidder shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in their rates other than zero value in the specified cells without keeping it blank. In the percentage rate tender the bidder quoting zero percentage is valid and will be taken at par with the estimated rate of the work put to tender.

16.3 The bidder shall upload the scanned copy/copies of document in support of eligibility criteria and qualification information in prescribed format in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.

16.4 The bidder shall write his name in the space provided in the specified location in the Protected Bill of Quantities (BoQ) published by the Officer Inviting Tender. The bidder shall type rates in figure only in the rate column of respective item(s) without any blank cell in the rate column in case of item rate tender and type

percentage excess or less up to two decimal place only in case of percentage rate tender.

16.5 The bidder shall log on to the portal with his/her DSC and move to the desired tender for up loading the documents in appropriate place one by one simultaneously checking the documents.

16.5.1 Bids cannot be submitted after due date and time. The bids once submitted can not be viewed, retrieved or corrected. The Bidder should ensure correctness of the bid prior to uploading and take print out of the system generated summary of submission to confirm successful uploading of bid. The bids can not be opened even by the OIT or the Procurement Officer Publisher/ opener before the due date and time of opening.

16.5.2 Each process in the e-procurement is time stamped and the system can detect the time of log in of each user including the Bidder.

16.5.3 The Bidder should ensure clarity/legibility of the document uploaded by him to the portal.

16.5.4 The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.

16.5.5 The bidder should check the system generated confirmation statement on the status of the submission.

16.5.6 The Bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.

16.5.7 The Tender Inviting Officer is not responsible for any failure, malfunction or breakdown of the electronic system used during the e-procurement process.

16.5.8 The Bidder is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantity duly filled in. It is not necessary for the part of the Bidder to up-load the drawings and the other Bid documents (after signing) while uploading his bid. It is assumed that the bidder has referred all the drawings and documents uploaded by the Officer Inviting the Bid.

16.5.9 The Bidder will not be able to submit his bid after expiry of the date and time of submission of bid (server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer Inviting the Bid.

16.6 **SIGNING OF BID:** The 'online bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false / fabricated / bogus, his EMD/Bid Security shall stand forfeited & his registration in the portal shall be blocked and the bidder is liable to be blacklisted.

17. **SECURITY OF BID SUBMISSION:**

17.1 All bid uploaded by the Bidder to the portal will be encrypted.

17.2 The encrypted Bid can only be decrypted / opened by the authorised openers on or after the due date and time.

18. RESUBMISSION AND WITHDRAWAL OF BIDS:

- 18.1 Resubmission of bid by the bidders for any number of times before the final date and time of submission is allowed.
- 18.2 Resubmission of bid shall require uploading of all documents including price bid afresh.
- 18.3 If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.
- 18.4 The bidder should avoid submission of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure etc.
- 18.5 The Bidder can withdraw his bid before the closure date and time of receipt of the bid by uploading scanned copy of a letter addressing to the Procurement Officer Publisher (Officer Inviting Tender) citing reasons for withdrawal. The system shall not allow any withdrawal after expiry of the closure time of the bid.

19. OPENING OF THE BID:

- 19.1 Bid opening date and time is specified during tender creation or can be extended through corrigendum. Bids cannot be opened before the specified date & time.
- 19.2 All bid openers have to log-on to the portal to decrypt the bid submitted by the bidders.
- 19.3 The bidders & guest users can view the summary of opening of bids from any system. Contractors are not required to be present during the bid opening at the opening location if they so desire.
- 19.4 In the event of the specified date of bid opening being declared a holiday for the Officer Inviting the Bid, the bids will be opened at the appointed time on the next working day.
- 19.5 Combined bid security for more than one work is not acceptable.
- 19.6 The electronically submitted bids may be permitted to be opened by the predefined Bid opening officer from their new location if they are transferred after the issue of Notice Inviting Bid and before bid opening. Further, action on bid documents shall be taken by the new incumbent of the post.
- 19.7 In case of non-responsive tender the officer inviting tender should complete the e-Procurement process by uploading the official letter for cancelled / re-tender.

20. EVALUATION OF BIDS :

- 20.1 All the opened bids shall be downloaded and printed for taking up evaluation. The officer authorized to open the tender shall sign and number on each page of the documents downloaded and furnish a certificate that "the documents as available in the portal containing _____ nos. of pages".
- 20.2 The bidder may be asked in writing/ online (in their registered e-mail ids) to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents. The Officer Inviting Tender may ask for any other document of historical nature during Technical Evaluation of the

tender. Provided in all such cases, furnishing of any document in no way alters the Bidder's price bid. Non submission of legible documents may render the bid non-responsive. The authority inviting bid may reserve the right to accept any additional document.

- 20.3 The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit.
- 20.4 The Technical evaluation of all the bids shall be carried out as per information furnished by Bidders.
- 20.5 The Procurement Officer-Evaluators; will evaluate bid and finalize list of responsive bidders.
- 20.6 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The Procurement Officer-Openers shall log on to the system in sequence and open the financial bids.
 - 20.6.1 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorised representative who wish to be present.
 - 20.6.2 At the time of opening of "Financial Bid", bidders whose technical bids were found responsive will be opened.
 - 20.6.3 The responsive bidders' name, bid prices, item wise rates, total amount of each item in case of item rate tender and percentage above or less in case of percentage rate tenders will be announced.
 - 20.6.4 Procurement Officer-Openers shall sign on each page of the downloaded BoQ and the Comparative Statement and furnish a certificate to that respect.
 - 20.6.5 Bidder can witness the principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.
 - 20.6.6 System provides an option to Procurement Officer Publisher for reconsidering the rejected bid with the approval of concern Chief Engineer / Head of Department.

21. NEGOTIATION OF BIDS:

- 21.1 For examination, evaluation, and comparison of bids, the officer inviting the bid may, at his discretion, ask the lowest bidder for clarification of his rates including reduction of rate on negotiation and breakdown of unit rates.

22. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

- 22.1 The Employer/Engineer-in-Charge shall notify acceptance of the work prior to expiry of the validity period by cable, telex or facsimile or e-mail confirmed by registered letter. This Letter of Acceptance will state the sum that the Engineer-in-Charge will pay the contractor in consideration of execution & completion of the Works by the contractor as prescribed by the contract & the amount of Performance Security and Additional Performance Security required to be furnished. The issue of the letter of Acceptance shall be treated as closure of the Bid process and commencement of the contract.

- 22.2 The Contractor after furnishing the required acceptable Performance Security & Additional Performance Security, "Letter to Proceed" or "Work Order" shall be issued by the Engineer-in-Charge with copy thereof to the Procurement Officer – Publisher. The Procurement Officer-Publisher shall up load the summary and declare the process as complete.
- 22.3 If the L-1 bidder does not turn up for agreement after finalization of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. Besides the consortium / JV / firm where such an agency / firm already happens to be or is going to be a partner/member/proprietor, he/ they shall neither be allowed for participation in bidding for three years nor his/ their application will be considered for registration and action will be initiated to blacklist him / them. In that case, the L-2 bidder, if fulfils other required criteria, would be called for drawing agreement for execution of work subject to condition that the L-2 bidder negotiates at par with the rate quoted by the L-1 bidder, otherwise the tender will be cancelled.

23. BLOCKING OF PORTAL REGISTRATION:

- 23.1 If the Registration Certificate of the Contractor is cancelled /suspended by the registering authority/ blacklisted by the competent authority his portal registration shall be blocked automatically on receipt of information to that effect.
- 23.2 The portal registration blocked in the ground mentioned in the above Para-23.1 shall be unblocked automatically in receipt of revocation order of cancellation / suspension/ blacklisting from the concerned authority.
- 23.3 The Officer Inviting Tender shall make due inquiry and issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of issue of show cause notice. Thereafter the Officer Inviting Tender is required to issue an intimation to the defaulting bidder about his unsatisfactory reply and recommend to the Chief Manager (Tech.) for blocking of portal registration within 10 days of intimation to the defaulting bidder regarding his unsatisfactory reply with intimation to the Registering Authority and concerned Chief Engineer/ Heads of Office if any of the following provisions are violated.
- 23.3.1 Fails to furnish original Technical / Financial (Tender Paper Cost, EMD/Bid Security) instruments before the designated officer within the stipulated date and time.
- 23.3.2 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period.
- 23.3.3 Fails to execute the agreement within the stipulated date.
- 23.3.4 If any of the information furnished by the bidder is found to be false / fabricated / bogus.

Accordingly the Officer Inviting Tender shall recommend to the Chief Manager (Tech.), State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously action shall also be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix- XXXIV of OPWD Code, Volume-II.

24. GUIDELINES FOR UNBLOCKING OF PORTAL REGISTRATION:

24.1 UNBLOCKING OF PORTAL REGISTRATION:

Unblocking of portal registration of a contractor shall be done by a Committee consisting of the following members.

EIC (Civil)-cum-CPO,	-	Chairman
Engineer-in-Chief (WR)	-	Member
Concerned Chief Engineer	-	Member
Sr. Manager (Finance), SPC	-	Member
Officer Inviting Tender	-	Member
Chief Manager (Technical), SPC	-	Convener

24.2 The Chief Manager (Tech), State Procurement Cell will be the convener and he will maintain all records for this purpose. The Committee shall meet not less than once in a month if required & shall consider the recommendation of the officer inviting tender for unblocking of portal registration. The quorum of the meeting will be four.

24.3 The minimum period of blocking of Portal Registration shall in no case be less than 90 days. After blocking of Portal Registration, the Contractor whose Portal Registration has been blocked may file application to the concerned officer inviting tender showing sufficient ground for unblocking of his portal registration along with a Treasury Challan showing deposit of Rs. 10,000/- (Rupees ten thousand) only (non-refundable) under the head of accounts '0059 - Public Works' as processing fees. The officer inviting tender shall forward the application filed by the contractor to the Chief Manager (Tech), State Procurement Cell.

24.4 On receipt of recommendation from the concerned Chief Engineer along with the copy of challan as mentioned above, the Chief Manager (Tech) being the member Convener of the Committee shall place the case before the Committee for examination and taking a decision in this regard. After examination the Committee may recommend for unblocking of the portal registration of said contractor if the Committee is satisfied that the fault committed by the contractor is either unintentional or done for the first time.

24.5 After scrutiny by the State Procurement Cell if it is found that the portal registration of a contractor has been blocked for the 2nd time the Chief Manager (Tech), SPC may not consider his case to be placed before the Committee and may advice the concerned officer inviting tender to issue show cause notice to the contractor asking him to explain as to why his portal registration shall not remain blocked. On receipt of show cause reply from the contractor the officer inviting tender shall examine the same & if considered proper he may report to the Chief Manager (Tech), SPC along with his views furnishing the copy of the show cause reply for placement of the same before the Committee for taking a decision in respect of blocking/ unblocking. If the Committee found that the contractor is in habit of committing such fault again and again intentionally the committee may advice the concerned officer inviting tender to initiate proceeding for blacklisting as per the existing rule.

1. These amendments shall take effect from the date of issue of the order.
2. This amendment is an addition to the existing provision and will be placed below Appendix-IX to OPWD Col, Vol-II.
3. Accordingly Office Memorandum No.1027 dt.24.01.2009 stands modified.
4. This has been concurred in by the Finance Department vide their UOR No.3-WF-1 dt.04.01.2013.

Sd/19.07.2013
E.I.C-cum-Secretary to Govt.

**Online Receipt of Tender Paper Cost & Earnest Money Deposit
through e-Procurement Portal
as per Works Department Letter No.17276/W Dt.06.12.2017**

**Government of Odisha
Works Department**

Office Memorandum

File No.07556900012016–17254/W Dt.05.12.2017

Sub: Electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids.

1. The State Government have formulated rules and procedures for Electronic receipt, accounting and reporting of the receipt of Cost of Tender Paper and Earnest Money Deposit on submission of bids through the e-procurement portal of Government of Odisha i.e. "<https://tendersodisha.gov.in>".
2. Electronic receipt of cost of tender paper has been successfully tested through SBI payment gateway. Now it has been decided to introduce electronic receipt of **Cost of Tender Paper and Earnest Money Deposit on submission of bids** through payment gateway of designated banks such as **SBI/ICICI Bank/HDFC Bank** for all Government Departments, State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies etc. in phases (ANNEXURE-I). The process outline as well as accounting and reporting structure are indicated below :
 - a) It will be carried out through a single banking transaction by the bidder for multiple payments like **Cost of Tender Paper and Earnest Money Deposit on submission of bids**.
 - b) Various payment modes like **Internet banking/ NEFT/RTGS** of Designated Banks and their Aggregator Banks as well can be accessed by the intending bidders.
 - c) Reporting and accounting of the **e-receipts** will be made from a single source.
 - d) Credit of receipts into the Government accounts and to the designated Bank account of the participating entities indicated in Para 2 above would be faster.
3. Only those bidders who successfully remit their **Cost of Tender Paper and Earnest Money Deposit on submission of bids would be eligible to** participate in the tender/bid process. The bidders with pending or failure payment status shall not be able to submit their bid. Tender inviting authority, State Procurement Cell, NIC, the designated Banks shall not be held responsible for such pendency or failure.

4. Banking arrangement:

- a) Designated Banks (**SBI/ICICI Bank/HDFC Bank**) payment gateway are being integrated with e-Procurement portal of Government of Odisha (<https://tendersodisha.gov.in>)
- b) The Designated Banks participating in **Electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids** will nominate a **Focal Point Branch** called e-FPB, who is authorized to collect and collate all e-Receipts. Each such branch will act as the Receiving branch and Focal Point Branch notwithstanding the fact that the bidder might have debited his account in any of the bank's branches while making payment.

5. Procedures of bid submission using electronic payment of tender paper cost and EMD by bidder:

- a) **Log on to e-Procurement Portal:** The bidders have to log onto **the** Odisha e-Procurement portal (<https://tendersodisha.gov.in>) using his/her digital signature certificate and then search and then select the required active tender from the "Search Active Tender" option. Now, submit button can be clicked against the selected tender so that it comes to the "My Tenders" section.
- b) **Uploading of Prequalification/Technical/Financial bid:** The bidders have to upload the required Prequalification /Technical/Financial bid, as mentioned in the bidding document and in line with Works Department office memorandum no.7885, dt.23.07.2013.
- c) **Electronic payment of tender paper cost and EMD:** Then the bidders have to select and submit the bank name as available in the payment options
 - i. A bidder shall make electronic payment using his/her **internet banking** enabled account with designated Banks or their aggregator banks.
 - ii. A bidder having account in other Banks can make payment using **NEFT/RTGS** facility of designated Banks.
 - Online NEFT/RTGS payment using internet banking of the bank in which the bidder holds his account, by adding the account number as mentioned in the challan as an interbank beneficiary.
- d) **Bid submission:** Only after receipt of intimation at the e-Procurement portal regarding successful transaction by bidder the system will activate the 'Freeze Bid Submission' button to conclude the bid submission process.
- e) **System generated acknowledgement receipt for successful bid submission:** System will generate an acknowledgement receipt for successful bid submission. The bidder should make a note of '**Bid ID**' generated in the acknowledgement receipt for tracking their bid status.

6. Settlement of Cost of Tender Paper;

- a) **Cost of Tender Paper:** In respect of Government receipts on account of **Cost of Tender Paper**, the e-Procurement portal shall generate a MIS for the State

Procurement Cell (SPC). The MIS will contain an abstract of the cost of tender paper collected with reference to **Bid Identification Number**. The State Procurement Cell shall generate Bank-wise-head-wise challans separately for **Cost of Tender Paper** and instruct the designated Banks to remit the money to the State Government account under different heads. In respect of the cost of tender paper received through the e-procurement portal, the remittance to the Cyber Treasury account will be made to the Head of Account 0075-Misc, General Services-800-Other Receipts -0097-Misc. Receipts-02237-Cost of Tender Paper.

- b) For the time being, the State Procurement Cell (SPC) will use over the counter payment facility of the Odisha Treasury portal. Thereafter, remittance through NEFT & RTGS will be facilitated through the Odisha Treasury portal.
- c) Similarly, in case of State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies etc., **Cost of Tender Paper**, the e-Procurement portal shall generate a MIS for the State Procurement Cell (SPC). The MIS will contain an abstract of the cost of tender paper collected with reference to **Bid Identification Number**. The State Procurement Cell shall generate Bank-wise list of challans and instruct the designated Banks to remit the money through the Odisha Treasury portal. The cost of tender papers will be credited to the registered Bank account of the concerned State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies etc.
- d) Bank will refund (in case the Tender Inviting Authority (TIA) issues such instructions) the tender fee, EMD to the bidder, in case the tender is cancelled before opening of Bid as per direction received from TIA through e-procurement system.
- e) Back-end Transaction Matrix of Electronic receipt of Cost of Tender Paper and Earnest Money Deposit on submission of bids is enclosed in the Annexure.

7. Settlement of Earnest Money Deposit on submission of bids:

- a) The Bank will remit the **Earnest Money Deposit on submission/cancellation of bids** to respective bidders accounts as per direction received from TIA through e-procurement system.

8. Forfeiture of EMD :

Forfeiture of **Earnest Money Deposit on submission of bid** of defaulting bidder is occasioned for various reasons.

- a) In case the **Earnest Money Deposit on submission of bid** is forfeited, the e-Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority.
- b) The Tender inviting authorities of the Government Departments will deposit the forfeited **Earnest Money Deposit on submission of bid**, in the State Government Treasury under the appropriate head (8782-Cash Remittances and Adjustments between the officers rendering accounts to the same Accounts Officer-102-P.W.Remittances-1683-Remittances-91028-Remittances into Treasury) after taking the amount as a revenue receipt in their Cash Book under

the head 0075-Misc. General Services-00-101 -Unclaimed Deposits-0097-Misc, Receipts-02080-Misc. Deposits and submit the detail account to DAG (Puri) as a deposit of the Division.

- c) By clicking submit button, system will initiate the forfeiture of EMD. System will not allow the evaluator to edit the initiation after clicking the submit button. Forfeiture option can be carried out in phased manner like one bidder at a time.

9. Role of the Banks:

- a) Make necessary provision / customizations at their end to enable the provision for online payments / refunds as per this document.
- b) Provide necessary real-time message to bidders regarding successful or unsuccessful transactions during online payment processes and redirect them to e-Procurement website with necessary transaction reference details enabling them to submit their bids.
- c) The bank shall ensure transfer of funds from the pooling account to the Government Head/current account of PSUs/ULBs within the next bank working day as per the directions generated from e-Procurement portal.
- d) Bank should provide timely reports and reference details to NIC enabling them to carry out their role as stated below.
- e) Refund of amount to bidders as per the XML file provided by e-Procurement system on the next bank working day from the date of generation of the XML file and also provide a confirmation to NIC on the same.

10. Role of State Procurement Cell:

- a) Communicate requirements of Government departments/ State PSUs/ Autonomous Bodies/ ULBs online payment requirements to National Informatics Centre / the authorised Banks for mapping/ customization.
- b) In every working day, the State Procurement Cell shall generate MIS from the e-Procurement portal to ascertain the tender paper cost received in the e-Tendering process separately bank-wise for the Government Department and the PSUs/ULBs. The SPC shall generate bank-wise separate online challans from the Odisha Treasury portal and make the remittance through over the counter facility or NEFT/RTGS (as and when this functionality is available in Treasury portal) and issue instruction to the bank for remittance of the receipt to the State Government account.
- c) The State Procurement Cell shall be responsible for providing challan details and MIS in respect of the remittance towards tender paper cost to the Tender inviting authorities for their record.
- d) State Procurement Cell shall monitor the progress of e-Tendering by different Government departments / State PSUs/ Autonomous Bodies / ULBs through an MIS. State Procurement Cell shall monitor and send monthly progress reports to the Government.
- e) The e-Procurement system will generate a consolidated refund & settlement XML file as an end of the day activity.

- f) e-procurement system will provide a web service for payment gateway (PG) provider to pull the encrypted refund and settlement details in XML file against a day.
- g) Similarly, payment gateway (PG) provider will provide a web service to pull the refund and settlement status against a day
- h) e-procurement system will update the status accordingly for reconciliation report.

11. Role of National Informatics Centre :

- a) Customize e-Procurement software and web-pages of Government of Odisha (<https://tendersodisha.gov.in>) to enable the provision for electronic payment.
- b) The NIC, Odisha will modify / rectify the errors in electronic data relating to the Chart of Account.
- c) NIC will provide an interface to organisations to download the electronic receipt data.
- d) Enable automatic generation of daily XML files from e-Procurement system and ensure delivery of the same to the authorised Banks for enabling automatic refund/settlement of funds.
- e) NIC shall enable the e-Procurement portal to generate MIS as required for the State Procurement Cell in order to make remittance of the tender paper cost to the State Government account using the Odisha Treasury portal.

12. Role of Cyber Treasury :

- a) The cost of the tender paper deposited by the SPC using the Odisha Treasury Portal which will be accounted for by the Cyber Treasury and it shall submit the accounts to A.G (O) as per the established process.
- b) The Cyber Treasury will provide MIS as required to the SPC for the purpose of accounting and reconciliation of the electronic remittances made to the State Government account.

13. Redressal of Public grievances :

- a) The State Procurement Cell, Odisha, National Informatics Centre, Odisha and the e-FPB will have an effective procedure for dealing with, public complaint for e-Receipt related matters. In case, any mistake is detected by any of the stakeholders in reporting of receipt of tender paper cost and EMD, either suo moto or on being brought to its notice, the State Procurement Cell, Odisha, National Informatics Centre, Odisha unit, Cyber Treasury and the bank will promptly take steps for rectification. The e-Focal Point Branch of the participating Banks, National Informatics Centre, Odisha and the State Procurement Cell, Odisha will notify the contact number and address of the Help Desk for resolution of any dispute regarding e-Receipt.

14. Applicability and modification of existing rules / orders:

The modalities prescribed in this Office Memorandum for downloading of tender paper, submission and rejection of bid, acceptance of Bids as well as refund and forfeiture of earnest deposit will be applicable for electronic submission of bids through e-

procurement portal. Existing provisions regulating cost of tender paper, earnest money deposit in OPWD Code and OGFR would stand modified to the extent prescribed.

- 15.** These arrangements would be made effective after signing of MoU between the designated Banks and the State Procurement Cell, firming up of Banking arrangements and technical integration between designated Bank and e-Procurement Portal.
1. This shall take effect from the date of issue of this Office Memorandum.
 2. Accordingly, relevant existing codal/ contractual provision exist vide Office Memorandum No.6785/W Dt.09.05.2017 of Works Department stands modified to the above extent.
 3. This has been concurred in by the Finance Department vide their UOR No.-39-WF-I Dt.09.11.2017.

Sd/05.12.2017
E.I.C-cum-Secretary to Govt.

[For any Technical related queries please call at Help desk numbers of State Procurement Cell (SPC), Govt. of Odisha – 1800 3456 765, 0674-2530998, 2530996]

ANNXURE-I of Appendix - IV

Back-end Transaction Matrix of Electronic receipt and remittance of Cost of Tender Paper and Earnest Money Deposit on submission of bids.

	Cost of Tender Paper on submission of bids	Earnest Money Deposit on submission of bids
Government Departments	I. The payment towards the cost of Tender Paper, in case Government Departments, shall be collected in separate Pooling accounts opened in Focal Point Branch called e-FPB of respective designated banks [as stated in Para 2] at Bhubaneswar on T+1_day. II. With reference to the Notice Inviting Tender/ Bid Identification Number, the amount so realized is to be remitted to Government Account under the Head Of Account 0075-Misc. General Services-800-Other Receipts-0097-Misc. Receipts-02237-Cost of Tender Paper through Odisha Treasury Portal after opening of the bid.	I. In case of tenders of Government Departments, amount towards Earnest Money Deposit on submission of bids shall be collected in a pooling account opened for this purpose at Focal Point Branch called e-FPB of respective designated banks at Bhubaneswar and the banks will remit the amount to respective bidder's account within two working days on receipt of instruction from TIA through refund and settlement of e-procurement system. II. In case of forfeiture of Earnest Money Deposit on submission of bids, the e- Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority within two working days of receipt of instruction from TIA.
State PSUs Statutory Corporations, Autonomous Bodies and Local Bodies.	I. In case of State PSUs, Statutory corporations, Autonomous Bodies and Local Bodies etc. the amount towards Cost of Tender Paper, on submission of bids shall be collected in separated pooling accounts opened in Focal Point Branch called e-FPB of respective designated Banks at Bhubaneswar on T+1 days. II. The Paper cost will be transferred to the respective current accounts of concerned State PSUs, Statutory Corporation, Autonomous Bodies and Local Bodies etc. after opening of bid.	I. Amount towards EMD on submission of bids shall be collected in a separate pooling account of Focal Point Branch called e-FPB of respective designated banks at Bhubaneswar and the banks will remit the amount to respective bidder's account on receipt of instruction from TIA through refund and settlement of e-procurement system within two working days from receipt of such instruction. II. In case of forfeiture of Earnest Money deposit on submission of bids, the e- Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority within two working days of receipt of instruction from TIA.