



ଓଡିଶା ବିଦ୍ୟୁତ୍ ଶକ୍ତି ପ୍ରଚାରଣ ନିଗମ ଲିଃ.

ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)

Regd. Office: Janpath: Bhubaneswar-751022.

Telephone: (0674) 2540051 (EPABX), Website: www.optcl.co.in

CIN: U4102OR2004SGC007553

***Implementation of IP Based CCTV Surveillance System at 29 locations
(26 Grid Sub-Stations and 03 Stores Sub-Divisions) of OPTCL – Phase 3***

TENDER NOTICE NO. TW-IT/OT/01/526/2019-20 DATE: 12-06-2019

Senior General Manager (IT), OPTCL, 3rd Floor, IT Department, Janpath, Bhubaneswar on behalf of OPTCL invites bids in e-tender mode from reputed eligible bidders for “***Implementation of IP Based CCTV Surveillance System at 29 locations (26 Grid Sub-Stations and 03 Stores Sub-Divisions) of OPTCL – Phase 3***” conforming to the terms and conditions mentioned in the e-Tender document.

The interested eligible bidders may visit our website www.optcl.co.in on or after 12/06/2019 (16:00 Hrs) to go through / download the scope of work and terms and conditions in detail. The techno-commercial bid shall be due for submission on dated 02/07/2019 (17:00 Hrs).

The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents are available at www.tenderwizard.com/OPTCL from 12/06/2019 (16:00 Hrs) up to 02/07/2019 (16:00 Hrs).

N.B.: All subsequent addendums/corrigendum to the tender shall be hosted in the OPTCL's official website <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL only.

**Sr. General Manager (IT)
OPTCL**

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A. SECTION-I

1. General information to the Bidders

- I. **Name of the Project:** “Implementation of IP Based CCTV Surveillance System at 29 locations (26 Grid Sub-Stations and 03 Stores Sub-Divisions) of OPTCL – Phase 3”.
- II. The prospective bidders are advised to register their user ID, Password, company ID from the website www.tenderwizard.com/OPTCL by clicking on hyper link “Register Me”.

2. Submission of Bids

- I. The bidder shall submit the bid in Electronic Mode only i.e. www.tenderwizard.com/OPTCL. The bidder must ensure that the bids are received in the specified portal of the OPTCL Tender Wizard by the date and time indicated in the Tender notice.
- II. Bids submitted in any other form will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.
- III. The OPTCL reserves the right to reject any bid, which is not submitted according to the instructions, stipulated.
- IV. The participants of the tender should be registered under IT Act, GST Act.
- V. The Bidder must possess Compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
- VI. The Bidders are requested to follow the below steps for registration
 - (a) Click “Register”, fill the online registration form.
 - (b) Pay the registration amount through online payment mode in the Keonics Tender Wizard Portal. This registration is valid for one year.
 - (c) Send the acknowledgment copy for verification.
 - (d) As soon as the verification is done the e-tender User ID will be enabled.
- VII. After viewing Tender Notification, if bidder intends to participate in tender, he/she has to use his/her e-tendering User Id and Password which has been received after registration and acquisition of DSCs.
- VIII. For any e-tendering assistance, contact help desk number: 080- 40482000 (Bangalore)

3. Bidding Schedule

- 1 Type of Bidding : Two- part bidding
- 2 Tender Documents : The bidders can view the tender documents from Website "www.optcl.co.in" free of cost
- 3 Tender Cost : 13,440/- (non-refundable) including GST @ 12%.
- 4 Mode of paying Tender cost : Demand Draft payable to Drawing and Disbursing officer, Headquarters office, OPTCL, Bhubaneswar. The DD must be issued by a nationalized bank on or before the last date for sale of bidding documents, as per clause (10) below
- 5 Tender Processing Fee : The bidders shall have to submit a non- refundable tender processing fee of Rs. 5900/- through online payment mode in the Keonics Tender Wizard Portal. All bids must be accompanied by a bid security (EMD) in the amount of 3,96,000/- (Three Lakhs Ninety Six Thousand Only)
- 6 EMD* : The bid Security may be submitted in form a demand draft
- 7 Mode of EMD : in favor of the Drawing and Disbursing Officer, OPTCL, Headquarters, Bhubaneswar
- 8 Submitted EMD, Tender Cost, Tender Processing Fee : The bidders shall scan the Demand Draft/Online Payment Receipt towards EMD, tender paper Cost and tender processing fee and upload the scanned image in the prescribed form in .jpg/.pdf format in addition to submitted original
The said demand drafts/Online Payment Receipts are to be submitted in original at the office of the undersigned on or before the last date & time of submission of bid.
- 9 Date of commencement of Sale of bidding document : 12/06/2019 (16:00Hrs)
- 10 Last date and time of sale of bidding document : 02/07/2019 (16:00Hrs)
- 11 Last date and time for Receipt of bids : 02/07/2019 (17:00Hrs)
- 12 Date and time of Pre-Bid meeting : 24/06/2019 (11:00Hrs)
- 13 Date and time of opening of Techno-commercial bids : 03/07/2019 (11:00 Hrs)
- 14 Time and of opening price bids : Will be Intimated Letter
- 15 Place of opening of bids & Address for communication : Office of Chief General Manager (IT), 3rd Floor, IT Department, OPTCL, Janpath, Bhubaneswar- 751022

****Tender papers shall be free of cost, 50% exemption on payment of EMD will be allowed to the local MSEs registered with respective DICs, Khadi village, cottage industries, OSIC and NSIC. Registration / Scope of business of MSE should cover the items to be procured in this tender.**

4. Scope of the Project:

I. Scope of work:

Scope of work comprises procurement, installation, commissioning, integrating, testing of all components of the IP based CCTV Surveillance System at 29 locations of OPTCL (26 Grid Sub-Stations and 03 EHT Stores Sub-Division): Phase 3, that meet the full functionality; provide hand-holding for 90 days after successful installation, commissioning, integration, pilot testing and system roll out at all the 29 locations, along with 03 years Warranty and thereafter 03 years Comprehensive AMC Support.

a. The bidders are strongly advised to visit the different sites in order to understand all activities involved in the project and accordingly quote for the tender.

b. System integration of all the hardware, software, networking items supplied by the successful bidder as part of this project shall be the sole responsibility of the successful bidder. Any additional goods and services required for the completion of the system integration in order to materialize and operationalize all the functional specifications of this project shall be borne by the successful bidder at no extra cost to the purchaser. Any excavation/digging work or any other such work, if required shall be the responsibility of the successful bidder.

c. Bidders Need to submit the following as a mandatory requirement for this Bid:

1. Understanding of the Project
2. Approach Methodology:
 - a. Approach to meet the Scope:
 - b. Technical Understanding of the Project
 - c. Technical Architecture of this Project (Line Diagram)
 - d. Bill of Materials without Price
3. Implementation Methodology
4. Resource Management
5. Time line in WBS
6. Call Resolution Methodology including Call Escalation Matrix

d. CCTV Surveillance System shall be implemented in the following 29 locations:

| # | Name of the Grid S/S | # | Name of the Grid S/S |
|----|------------------------------------|-----|--------------------------------------|
| 1. | 400/220/132kV Grid S/S New Duburi | 14. | 220/132/33kV Grid S/S Katapali |
| 2. | 400/220/132kV Grid S/S Mendhasal | 15. | 220/132/33kV Grid S/S Bolangir (New) |
| 3. | 400/220/132kV Grid S/S Lapanga | 16. | 220/132/33kV Grid S/S Bargarh New |
| 4. | 220/132/33kV Grid S/S Bhanjanagar | 17. | 220/132/33kV Grid S/S Kesinga |
| 5. | 220/132/33kV Grid S/S Atri | 18. | 220/33kV Grid S/S Bonai |
| 6. | 220/132/33kV Grid S/S Bidanasi | 19. | 132/33kV Grid S/S Tushra |
| 7. | 220/132/33kV Grid S/S Cuttack | 20. | 132/33kV Grid S/S Tirtole |
| 8. | 220/132/33kV Grid S/S Paradeep | 21. | 132/33kV Grid S/S Kantabanji |
| 9. | 220/132/33kV Grid S/S Duburi (Old) | 22. | 132/33kV Grid S/S Dhenkikote |
| 10 | 220/132/33kV Grid S/S Bhadrak | 23. | 132/33kV Grid S/S Ghense |
| 11 | 220/132/33kV Grid S/S Balasore | 24. | 132/33kV Grid S/S Udala |
| 12 | 220/132/33kV Grid S/S Joda | 25. | 132/33kV Grid S/S Agarpada |
| 13 | 220/132/33kV Grid S/S Tarkera | 26. | 132/33kV Grid S/S Maneswar |
| # | Name of the Store Sub-Divisions | # | Name of the Store Sub-Divisions |
| 1. | EHT Stores Depot Choudwar | 2. | EHT Stores Depot Banarpal |
| 3. | EHT Stores Depot Bhubaneswar | | |

II. Schedule of Quantity

a. Supply & Installation & Commissioning:

All the supplies should be made as per OPTCL's approved makes complying with the technical specification mentioned in the tender document.

| # | Item Code | Schedule- A Items | UOM | Qty. |
|-----|-----------|--|----------|-------|
| 1. | CCSCA01 | Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 200 mtrs] | Nos. | 37 |
| 2. | CCSCA02 | Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 100 mtrs] | Nos. | 81 |
| 3. | CCSCA03 | Outdoor Fixed Camera (with fixed camera housing, power injector, camera holder and other accessories) [Range: 50 mtrs] | Nos. | 14 |
| 4. | CCSCA04 | Indoor Dome Camera (with power injector for dome camera) [Range: 30 mtrs] | Nos. | 29 |
| 5. | CCSCA05 | 16 Channel NVR with 2 SATA for 2nos. of HDD (with additional mouse and keyboard) | Nos. | 29 |
| 6. | CCSCA06 | 4 TB Surveillance HDD | Nos. | 58 |
| 7. | CCSCA07 | 16 Port Managed Network Switch | Nos. | 29 |
| 8. | CCSCA08 | 32" LED Display | Nos. | 29 |
| 9. | CCSCA09 | Media Convertor (Box Type) | Nos. | 194 |
| 10. | CCSCA10 | 600 VA Interactive UPS | Nos. | 147 |
| 11. | CCSCA11 | Surge Protector for Outdoor Cameras | Nos. | 126 |
| 12. | CCSCA12 | Fiber Patch Cords | Nos. | 194 |
| 13. | CCSCA13 | 6 Core Armoured Fiber Optic Cable | Mtrs. | 30300 |
| 14. | CCSCA14 | CAT6 STP Cable (Outdoor) | Mtrs. | 2120 |
| 15. | CCSCA15 | CAT6 STP Cable (Indoor) | Mtrs. | 1850 |
| 16. | CCSCA16 | 1.1 KV Armoured Cu-Power Cable | Mtrs. | 3030 |
| 17. | CCSCA17 | 6U Network Rack | Nos. | 28 |
| # | | Schedule- B Items | UOM | Qty. |
| 18. | CCSCB01 | HDPE Conduit Pipe for Fiber Optic Cables with necessary accessories | Mtrs. | 30300 |
| 19. | CCSCB02 | PVC Conduit Pipe for CAT6 Cables with necessary accessories | Mtrs. | 2120 |
| 20. | CCSCB03 | Outdoor Junction Box | Nos. | 119 |
| 21. | CCSCB04 | Pole with pole mount brackets and other accessories | Nos. | 115 |
| 22. | CCSCB05 | LIU-Box with Accessories (adaptor plate, pigtail, etc.) | Nos. | 194 |
| 23. | CCSCB06 | Computer Desk | Nos. | 28 |
| # | | Schedule- C (Installation & Commissioning) | UOM | Qty. |
| 24. | CCSCC01 | Installation & Commissioning cost [including casing-capping for UTP and power cables etc. and Electrical Cabling & Other Miscellaneous Work as per site requirement] | Lump sum | 29 |

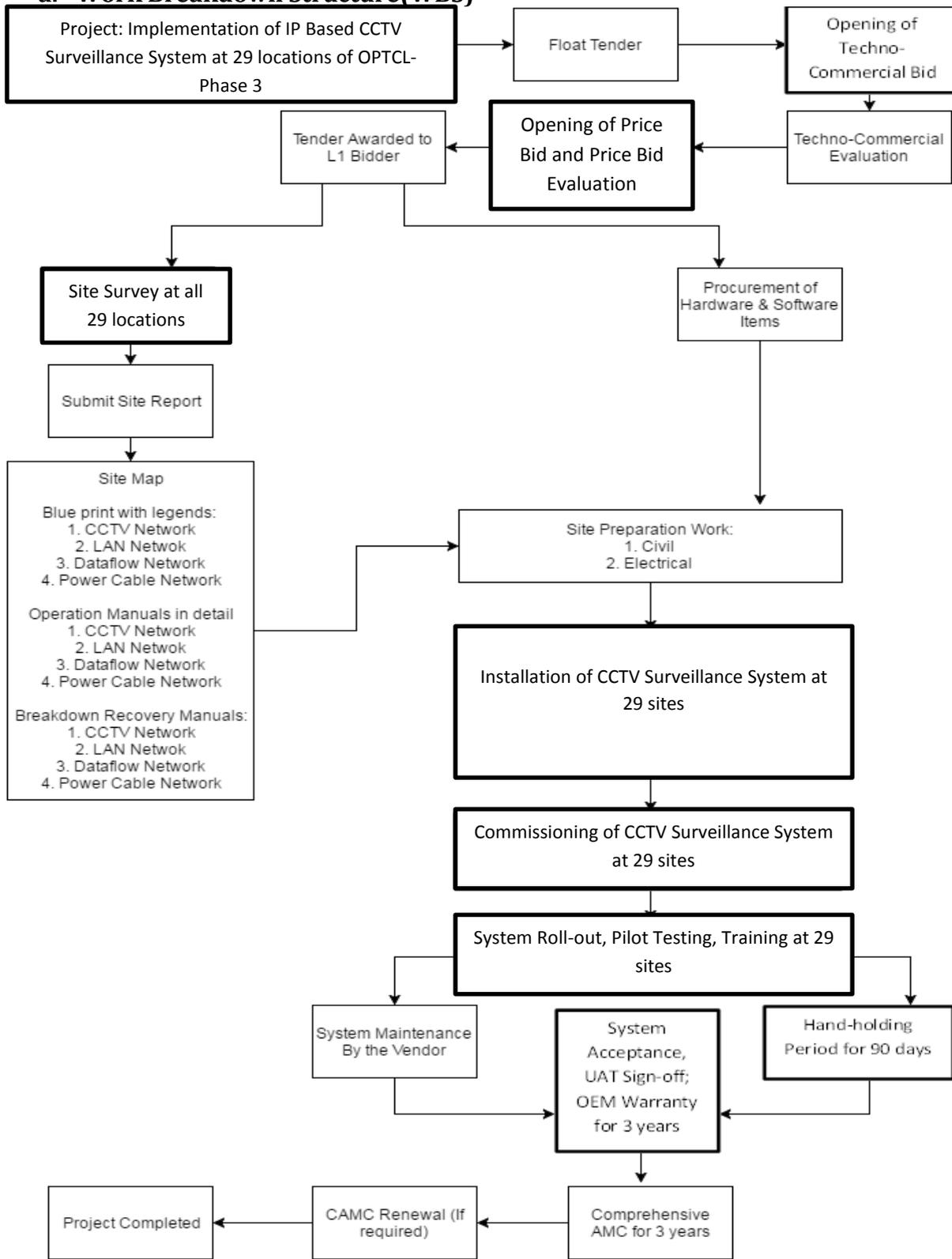
Please refer to the Schedule-H for list of Approved Makes for all the line items to be supplied for this project.

b. Comprehensive AMC Support for 3 years:

| # | Item Code | Description | Unit of Measurement |
|---|-----------|--|---------------------|
| 1 | CCAMC | Comprehensive AMC Charges for 3 years after warranty period for 29 locations | Lump sum |

III. Work Deliverables

a. Work Breakdown Structure(WBS)



IV. Project Timelines with Payment Breakup

| # | Activities/ deliverables | Project Deadlines | Amount |
|---|---|---|--|
| 1 | Submission & Acceptance of preliminary site survey report, Inspection of the BoQ items, Procurement & Delivery of BoQ items (Hardware & Software) (29 locations) | W+60days | 60% of Total Project Cost(excluding CAMC cost & Installation & Commissioning Cost) |
| 2 | Successful installation & commissioning, Successful system roll-out of the entire system, Successful training given to OPTCL officers (field officer + IT officer) and Submission of all the manuals/documents/drawings of CCTV Surveillance System duly checked and accepted as given in the tender (29 locations) | W+120days | 30% of the balance supply cost, 90% of the installation & commissioning cost (excluding CAMC cost) |
| 3 | Successful system maintenance & Hand-holding for 90 days and System acceptance by "End Users" (29 locations) | UAT Sign-off+ 90days | 10% of Total Project Cost(excluding CAMC cost) |
| 4 | Warranty Period | 36 months from date of installation at the last location or 38months from the date of delivery of the last lot of items, whichever is later | |
| 5 | Comprehensive AMC Support | 3 years from the date of expiry of warranty period | Quarterly Payment at the end of each quarter |

N.B.: ‘W’ refers to the date of acceptance of Work Order.

5. Opening of Bids

- I. Bids will be opened in the presence of Bidders or Bidders’ representatives who choose to attend at the specified date and time. Bidders’ representatives should submit authorization letter from the Bidder to OPTCL to attend opening of Bids.
- II. **Part-I (Techno-Commercial Bid)** shall be opened on the stipulated date and time mentioned under clause SECTION-I.3 [Bidding Schedule]. After technical evaluation, the **Part-II (Price-Bid)** of successful bidders who qualify in the techno-commercial bid shall be opened on a later date - to be decided by the purchaser.
- III. The date of opening of price bids shall be intimated through OPTCL’s web site and tender wizard portal.

- IV. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser’s office, the due date for submission of bids will be the following working day and the due date for opening of bids will be the next day after the last date of submission of bid.
- V. OPTCL reserves the right to cancel/withdraw the invitation for bids without assigning any reasons and shall bear no liability whatsoever consequent upon such a decision.

6. Qualification of Bidder

The Bidder must possess the requisite experience, strength and capabilities in providing the services necessary to meet the requirements as described in the RFP document. The bids must be complete in all respect and should cover the entire scope of work as stipulated in the tender document. The invitation to bid is open to all Bidders who qualify the eligibility criteria as given below:

| # | Qualification Requirement | Mandatory Supporting Documents |
|----|---|---|
| A | Organization’s Financial & Certification Status | |
| a. | The Bidder should be a company incorporated/ registered in India under the Companies Act, 1956 and operating in the field of IT/ITeS business for the last five consecutive years. Note: In case any bidder has undergone corporate restructuring (including merger, demerger, hive off, slump sale etc.), it may showcase credentials of its erstwhile / current entity provided sufficient documentary proof is submitted with the bid to evince that such credentials have accrued to / transferred to / are in the name of the bidding entity and the bidding entity is authorized to use such credentials. | Certificate of Incorporation and copy of Memorandum and Articles of Associations of the company evidencing that they are working in the field of IT/ITeS business for the last five years should be attached. |
| b. | The Bidder should have positive net worth, and should have an average turnover of more than INR 20 crores, for the last three Financial Years ending on 31 st March 2019. | Copy of the audited annual accounts of the bidder showing turnover of the bidder for the last three financial years supported by Chartered Accountant certificate for Net-worth and turnover. |
| c. | The Bidder shall not be under a declaration of ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies as on bid submission date. | Undertaking in this regard by the authorized signatory of the bidder. |
| d. | The Bidder must have PAN Card, GSTIN. | Valid Scanned Copies of the PAN Card, GSTIN. |
| e. | The Bidder must have valid ISO 9001:2008 certificate for CCTV Surveillance System and Networking System as on bid submission date | Copy of the valid ISO 9001:2008 certification |

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|-----------|---|---|
| f. | The Bidder should have at least one office in Odisha. | Latest copy of Property tax /Electricity Bill/Telephone Bill/G.S.T./Lease agreement etc. should be submitted as proof |
| g. | The bidder should submit power of attorney certifying the authorized signatory | Power of Attorney executed by the Bidder in favor of the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this Tender. Board resolution also to be submitted in favor of Power of Attorney. |
| h. | Bidder shall be financially sound and must not be anticipating any ownership change for coming 03 (three) years from bid submission date | An undertaking to this effect shall be submitted by the Bidder duly certified by authorized CA. |
| i. | The Bidder shall have support center in Odisha with % spare stock (10% of the ordered quantity) should be available at the service center in Odisha with at least 05 (five) technically qualified professionals in the area of CCTV Surveillance System and Networking as on bid submission date. | Undertaking from the bidder in its letter signed by authorized signatory mentioning the details of its maintenance & support center along with maintenance & support engineers with their qualification and years of experience. |
| B | Past Performance & Relevant Project Experience | |
| | The Bidder should have designed, supplied, installed, tested, commissioned and operated IP Based CCTV Surveillance project(s) at least in any Central Govt. / State Govt. / PSU /Autonomous Body(Govt.) in India conforming to the scope of the work during the last three (03) financial years: <ul style="list-style-type: none"> • One (1) project with Order Value of minimum INR 1.5 Crores; OR • Two (2) projects each with Order Value of minimum INR 1.2 Crores each. • Three (3) projects each with Order Value of minimum INR 1.0 Crores each. | Copy of Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order. Completion certificate Submit suitable, verifiable evidence to demonstrate the experience. |
| C. | OEM Requirement | |
| | The Bidder should submit valid letter from the OEMs (MAF as per prescribed format) for Schedule- A Items confirming following: <ul style="list-style-type: none"> • Authorization for bidder • Confirm that the products quoted are not end of life products • Undertake that the OEM support including spares, patches for the quoted products shall be available for the entire contract period | The Bidder should submit valid letter from the respective OEMs for Schedule- A Items confirming to this effect. |

Procedure to Submit the Bid:

All the supporting documents mentioned below are to be signed and scanned, then uploaded in the tender wizard portal of OPTCL.

- a. Tenders shall be in two Parts: The Tenderers are required to submit the tenders in two parts viz. Tenders shall be submitted in electronic mode only through (www.tenderwizard.com/ OPTCL).
 - i. Part-I (Techno commercial)
 - ii. Part-II (Price bid)
- b. All the supporting documents mentioned below are to be signed and scanned, then uploaded in the tender wizard portal.

| # | Document / Description |
|---|--|
| A. Documents needs to be Submitted in Hardcopy | |
| 1. | <ul style="list-style-type: none"> • Earnest Money Deposit(EMD) : Demand Draft (Original) • Tender Processing Fee : Online Payment Receipt(Copy) • Tender Paper Cost: Demand Draft(Original) • Undertaking for acceptance of Term and conditions as mentioned in the Bid Sheet (Schedule-II) (Signed, sealed and scanned copy) • Authentic copy of registration Certificate as MSE unit if any, for claiming 50% EMD exemption. • Forms and Schedules as mentioned in the Section –V (Schedule A, Schedule D to Schedule –H) |
| B. Documents needs to be Submitted in Softcopy along with Bid Sheets | |
| 2. | Bid Declaration Form |
| 3. | The Bidder should submit valid letter from the OEMs (MAF as per prescribed format) |
| 4. | Copy of the audited annual accounts of the bidder showing turnover of the bidder for the last three financial years ending on 31st March 2019, supported by Chartered Accountant certificate for Net-worth and turnover. |
| 5. | An undertaking that there will be no ownership change in the forthcoming three years from bid submission date. |
| 6. | Constitution or legal status, place of registration and principal place of business; GST Registration Certificate & PAN Card |
| 7. | Copy of Power of Attorney executed by the Bidder in favor of the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this Tender. Board resolution also to be submitted in favor of Power of Attorney. |
| 8. | Latest copy of Property tax /Electricity Bill/Telephone Bill/G.S.T./Lease agreement etc. should be submitted as proof. |
| 9. | Undertaking from the bidder in its letter signed by authorized signatory mentioning the details of its maintenance & support center along with maintenance & support engineers with their qualification and years of experience. |
| 10. | The Bidder shall submit an undertaking of ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies as on bid submission date. |
| 11. | Copy of the valid ISO 9001:2008 certification |
| 12. | No Deviation Certificate as per the prescribed format |
| 13. | Scanned Copy of Income Tax Return for the last three Financial Years. |
| 14. | Technical literatures and original specifications sheets of each item offered on or |

| | |
|-----|--|
| | before the last date & time of submission of tender. |
| 15. | iv. For Comprehensive AMC Support for 03 years, if the price quoted per year is below 2% of the total quoted Supply and Installation cost, the bids shall be out rightly rejected during the Price Bid Stage, i.e. the Comprehensive AMC Support Cost for 03 years should be minimum 6% of the total quoted Supply and Installation cost. An undertaking to this effect should be submitted. |
| 16. | The bidder shall submit the following in support of Past Performance & Relevant Project Experience: <ul style="list-style-type: none"> a. Copy of Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order. b. Completion certificate c. Submit suitable, verifiable evidence to demonstrate the experience. |
| 17. | Supporting Documents/Certifications to establish compliance in conformation with electro-magnetic compatibility requirements for Outdoor Cameras. |
| 18. | The bidder must enclose a certificate either from OEM or from customer that the offered Make Camera has been installed in Extra High Voltage environment of 132kV or above. |
| 19. | The following Document need to be submitted in Softcopy (signed and sealed) along with Techno commercial bid as a mandatory requirement (Refer Section-I .4.I. c) <ul style="list-style-type: none"> a. Understanding of the Project b. Approach Methodology: c. Implementation Methodology d. Resource Management e. Time line in WBS f. Call Resolution Methodology & Call Escalation Matrix |

II. OUTRIGHT REJECTION:

Apart from uploading scanned image as above, the following documents need to be submitted in original to the undersigned on or before the last date & time of submission of tender otherwise the bid shall be out rightly rejected. The above document is to be submitted in a sealed envelope super scribing the Tender Notice No. & Date of opening of tender on the envelope cover.

- i. EMD : Demand Draft /50% EMD amount with registration certification as MSE for claiming exemption, as the case may be towards EMD
- ii. Demand Draft towards Tender paper Cost / Authentic Registration Certificate as MSE if any, for claiming tender paper cost exemption
- iii. Tender Processing Fee: Should be paid online and copy of the payment receipt shall be submitted along with the bid.
- iv. **For Comprehensive AMC Support for 03 years, if the price quoted per year is below 2% of the total quoted “Supply and Installation cost”, the bids shall be out rightly rejected during the Price Bid Stage, i.e. the Comprehensive AMC Support Cost for 03 years should be minimum 6% of the total quoted Supply and Installation cost. An undertaking to this effect should be submitted during the Techno-Commercial Bid**

B. SECTION-II

1. General Instruction to the Bidders

- I. This tender covers the required quantity of materials. These quantities are to be supplied by the bidder on receipt of the work order. The initial order will be supplied within the stipulated period. The purchaser reserves the right to increase or decrease the quantities of the items under this contract within six months of the issue of the order without any change in the quoted price and other terms & conditions of the original work order. The variation shall be limited to +/- 30% of the contract price on the same price and terms & conditions.
- II. Tenders will be opened in the Office of the Chief General Manager (IT) on the stipulated date and time in the presence of their authorized representatives (limited to one person), at the time of opening the bids.
- III. Only “non-material deviations” (which means only those deviations that do not qualify as material deviations as defined in ITB clause of bid document) will be considered by the purchaser. Please describe all the non-material deviations w.r.t Terms and conditions described in the General conditions of contract & Special conditions of contract, Section VIII.

If bidder desires to take any non-material deviation from the terms & conditions of the tender, it should be mentioned specifically in this deviation sheet. Unless such deviations are mentioned in this deviation sheet, the same will not be taken into consideration.

Format for Deviations

| Sl. No. | Tender Reference (Section / Clause number) | Details of Clauses / Section needing deviation | Deviation proposed |
|---------|---|--|--------------------|
| | | | |
| | | | |

Except aforesaid deviations, the entire order, if placed, shall be executed in accordance with specifications and any other conditions, variations/deviations etc. if found, elsewhere in this proposal should not be given any consideration while finalizing the tender.

It is not mandatory to consider and accept the deviation mentioned on deviation sheet proposed by the bidder.

Note: - Continuation sheet of like size & format may be used as per bidder’s requirement wherever necessary.

- IV. The purchaser reserves the right to reject the lowest or any other tenders or all tenders without assigning any reason whatsoever if it is considered expedient in the overall interest of OPTCL.
- V. The tender shall be accompanied by Earnest Money Deposit of value specified under in Section-I.3.

(a) The EMD (Earnest Money Deposit) shall be offered in one of the following forms subject to the conditions mentioned below:

- i. **Demand Draft:** A Demand Draft drawn in favor of *Drawing and Disbursing Officer*, OPTCL Headquarters, Bhubaneswar – 751022.
- ii. No interest shall be paid on Earnest Money Deposit
- iii. No adjustment towards Earnest Money Deposit shall be permitted against any outstanding amount with OPTCL.
- iv. In the case of the un-successful tenderer, the Earnest Money will be refunded immediately after the tender is decided. In the case of

successful tenderer, this will be refunded only after furnishing of security money referred to Section–III.(1).XXII. Suits, if any arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.

- v. Earnest Money will be forfeited if the tenderer fails to accept the letter of intent and / Purchase orders issued in his favour as well as satisfactory completion of the project.

(b) Revision of Tender Price By Bidders:

- i. After opening of tenders and within the validity period, no reduction or Enhancement in price will be entertained. If there is any change in price, the tender shall stand rejected and E.M.D. deposited shall be forfeited. In case of bidders who are exempted from depositing E.M.D. and who revise their price within the validity period, the bids for similar items against subsequent tender call notice of OPTCL, may not be considered.
 - ii. If required, the Tenderers may be asked to extend the validity period of bids under the same terms and conditions as per the original tender except for the change in delivery period, In such an event the Tenderers are free to change any or all conditions of their bids including price at their own risk.
 - iii. If required, the tenderer may be requested to revalidate the tender after expiry of the validity period if required under the same terms and conditions as per original tender except for the change in delivery period, if necessary. In such an event the tenderers are free to change any or all conditions of their bids including price at their own risk.
- (c) Tenderers are expected to be fully conversant with the meaning of all the clauses of the specifications before submitting their tenders. In case of doubt regarding the meaning of any clause the tenderer may ask for clarification in writing from the Senior General Manager (IT), OPTCL, Bhubaneswar, two days before the pre-bid meeting via email to tel.skmishra@optcl.co.in & it.hsatapathy@optcl.co.in.
- (d) This however, does not entitle the tenderer to ask for time beyond due date fixed for receipt of tender.
- (e) Conditional Offer: Conditional offers shall not be accepted.
- (f) Tenderers shall quote for all the items as per the Technical Specification detailed under Section – IV. Tenders not quoted for all the items shall not be considered. In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the tenderer.
- (g) For evaluation the price mentioned in words shall be taken as final, if there is any difference in figure and words in the price bid.
- (h) The price bids of the technically and otherwise acceptable bids shall only be evaluated. The price bids of others' (along with E.M.D. if any) shall be returned to the bidders unopened.
- VI. The tender terms and conditions mentioned in the RFP/Tender Document shall prevail over the terms and conditions mentioned in the techno-commercial bid and price bid, in case of any ambiguity.

SECTION-III

1. General Conditions of the Contract

I. DEFINITION OF TERMS:

In writing these General Conditions of Contract, the Specification and bill of quantity, the following works shall have the meanings hereby indicated unless there is something in the subject matter or contract inconsistent with such constructions.

- a. "The Purchaser" shall mean the **ODISHA POWER TRANSMISSION CORPORATION LTD.** or OPTCL.
- b. "The Engineer" shall mean the engineers appointed by the Purchaser for the purpose of this contract.
- c. "Purchaser's representative" shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.
- d. "The Contractor" shall mean the Bidder whose bid has been accepted by the Purchaser and shall include the Bidders' executions, administrators' successors and permitted agencies.
- e. "**IP Based CCTV Surveillance System Equipment**" shall mean and include all items, machineries, apparatus, materials, articles and services to be provided with respect to items mentioned in the tender, under the contract by the contractor.
- f. "Contract Price" shall mean the sum named in or calculated in accordance with the provisions of the contract as the "contract price" which shall include packing, forwarding freight, Insurance and other taxes and duties if applicable.
- g. "General Condition" shall mean these General Conditions of Contract.
- h. "The Specification" shall mean the specification annexed to or issued with the General Conditions and shall include the schedules and drawings attached thereto as well as all samples and patterns, if any.
- i. "Month" shall mean of calendar month.
- j. "Writing" shall include any manuscript, typed/hand written/ printed or other statement re-produced in any visible form and whether under seal or under hand.
- k. "F.O.R. Destination" costs shall mean the cost of equipment and material at the consignee's store. The cost is exclusive of other local Taxes, but is inclusive of packing, forwarding and insurance & Freight charges.
- l. The "term" contract shall mean & include General Conditions, Specifications, and Schedules, Drawings, form of tender, covering letter, schedule of prices or the final General Condition, any special conditions applying to the particular contract, specifications and drawings and agreement to be entered in.
- m. Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian Contract Act, failing that in the ODISHA General Clauses Act.

II. GUIDELINES FOR THE BIDDER:

The bidder shall examine the instructions to Tenderers, General Conditions of Contract, Specification, the Schedules of Quantity and delivery and rest of the bidding document to satisfy himself as to all terms and conditions and

circumstances affecting the contract price. The bidder shall quote price (s) according to his own allowances except as otherwise provided therein will be levied. The purchaser shall not be responsible for any misunderstanding or incorrect information obtained by the bidder other than information given to the contract in writing by the purchaser.

III. PATENT RIGHTS ETC:

Any dispute arising in respect of copy right act for the equipment supplied hardware or software configured by the vendor and used by the purchaser shall be the responsibility of the vendor and the purchaser in no way shall be held responsible in any form or court of law in this regard.

IV. MANNER OF EXECUTION:

All equipment supplied under the contract shall be manufactured in the manner set out in the specification and to the reasonable satisfaction of the purchaser. All the IP Based CCTV Surveillance System equipment supplied by the contractor shall be new, unused and conforming to relevant standards.

V. INSPECTIONS AND TESTING

- a. The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. The Purchaser shall notify what inspections and tests the Purchaser requires and where they are to be conducted.
- b. The inspections and tests may be conducted on the premises of the Manufacturer or Supplier at point of dispatch. The Supplier shall provide all reasonable facilities and assistance, including access to drawings and data, shall be furnished to the inspectors at no charge to the Purchaser.
- c. The Purchaser's right to inspect, test, and where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Purchaser or its representative prior to the Goods' shipment.

NOTE: The inspection of the Goods shall be carried out to check whether the Goods are in conformity with the technical specifications attached to the contract and shall be in line with the inspection/test procedures laid down in the Technical Specifications and General Conditions of Contract. The Purchaser may again test the equipment after completion of the installation and commissioning at the site of the installation.

VI. DISPATCH INSTRUCTIONS:

- a. Free delivery should be made at the place as specified in the firm's work order.
- b. The delivery period of the items ordered, as specified, should not exceed 60(Sixty) days from the date of date of acceptance of "Work Order/Purchase Order".
- c. The Installation and commissioning of the items ordered should be completed within 120(One Hundred Twenty) days from the date of acceptance of "Work Order/Purchase Order".

VII. MANUALS AND DRAWINGS:

- a. Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals, drawings (CCTV network, LAN network, power network, data flow network.) of the goods, equipment, network connectivity and computer architecture designs. These shall be in such detail as will enable the Purchaser to operate, maintain, adjust and repair all parts of the equipment as stated in the specifications.
- b. The manuals and drawings shall be in the English language and in such form and numbers as stated in the contract.

VIII. DOCUMENTATION:

The Supplier shall provide complete documentation of all IP Based CCTV Surveillance System equipment and the associated software. The supplier shall also indemnify the purchaser against any levies/penalties on account of any default in this regard.

IX. ACCEPTANCE TEST:

- a. The installation and commissioning will be deemed complete only after it passes successfully through the acceptance test and an acceptance certificate is issued by the competent authority.
- b. The acceptance test will be conducted by the Purchaser, their consultant or any other person nominated by the Purchaser, at its option in presence of OPTCL officers as nominated by OPTCL. The acceptance will involve trouble-free integrated operation of all supplied and installed items for the complete hand-holding period. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part should occur. No missing modules/sections will be allowed. The bidder shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the Purchaser. An average uptake efficiency of 100% for the duration of test period shall be considered as satisfactory. Sampled IT Items, as decided by IT, OPTCL, shall be subjected to acceptance test procedures for drawing conclusions in this regard.
- c. In the event of the IP Based CCTV Surveillance equipment of the Contract failing to pass the acceptance test, a period not exceeding **ten days** will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserves the rights to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- d. Successful conduct and conclusion of the acceptance tests for the installed goods and equipment and configured services shall also be the sole responsibility and at the cost of the Supplier.

X. SUPPLIER'S OBLIGATIONS

- a. The Supplier is obliged to work closely with the Purchaser's staff, act within its own authority and abide by directives issued by the Purchaser during implementation activities.
- b. The Supplier will abide by the job safety measures prevalent in India and will free the Purchaser from all demands or responsibilities arising from

accidents or loss of life during installation and commissioning activities. The Supplier will pay all indemnities arising from such incidents and will not hold the Purchaser responsible or obligated.

- c. The Supplier is responsible for managing the activities of its personnel or sub-contracted personnel and will hold itself responsible for any misdemeanors.
- d. The Supplier will treat as confidential all data and information during the execution of his responsibilities and will not reveal such information to any other party without the prior written approval of the Purchaser.

XI. SITE PREPARATIONS

The Purchaser will designate the installation sites before the scheduled installation date to allow the bidder to perform a site inspection to verify the appropriateness of the sites before the installation of IP Based CCTV Surveillance equipment.

XII. CONTRACT'S DEFAULT LIABILITY:

- a. The purchaser may upon written notice of default to the contractor terminate the contract in circumstances detailed hereunder.
 - i. If in the judgment of the purchaser, the contractor fails to make delivery of equipment within the time specified in the contract or within the period for which extension has been granted by the purchaser, to the contractor.
 - ii. If in the judgment of the purchaser, the contractor fails to supply with any of the other provisions of this contract.
- b. In the event purchaser terminates the contract in whole or in parts as provided in Section-I(4), the purchaser reserves the right to purchase upon such terms and in such a manner as he may deem appropriate, equipment similar to that of terminated and the contractor will be liable to the purchaser for any additional costs for such similar equipment and/or for penalty for delay as defined in Section –III.(1).XV until such reasonable time as may be required for the final supply of equipment. Execution of contract under such circumstances shall however be on express written willingness of both the parties.
- c. In the event the purchaser does not terminate the contract as provided in SECTION-III.(XII).(a) above, Contractor shall continue the performance of the contract, in which case he shall be liable to the purchaser for penalty for delay as set out in Section –III.(1).XV until the equipment is accepted. Execution of the contract under such circumstances shall however be on express written willingness of both the parties.

XIII. REJECTION OF MATERIALS:

In the event on any of the materials/ equipment supplied by the contractor is found defective in materials or workmanship or otherwise not in conformity with the requirements of the contract specification, the purchaser shall reject the materials/equipment and request the contractor in writing to rectify the same. The contractor on receipt of such notification shall either rectify or replace the defective equipment free of cost to the purchaser. If the contractor fails to do so within 30 days of written notice, the purchaser may:

- i. At its option replace or rectify such defective equipment and recover the extra costs so involved from the contractor and/or
- ii. Terminate the contract for balance work/supplies, with enforcement of penalty as per contract.
- iii. Acquires the affected equipment/materials and services at reduced price considered equitable under the circumstances
- iv. The contractor shall not be allowed any extension in contract completion period due to time taken to replenish the rejected material/work.

XIV. EXTENSION OF TIME:

If the execution of the project is delayed due to reasons beyond the control of the bidder, the bidder shall without delay give notice to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice may agree to extend the contract period as may be reasonable but without prejudice to other terms and conditions of the contract.

XV. PRICE REDUCTION SCHEDULE FOR SUPPLY, INSTALLATION, COMMISSIONING, INTEGRATION, TESTING, ACCEPTANCE & HAND-HOLDING PHASE

- a. Delay in execution of any supply, installation, commissioning, integration, testing & acceptance against this tender shall attract Price Reduction.
- b. **For Supply Component:** If the supplier fails to complete the delivery as per delivery schedule specified, OPTCL shall impose price reduction on the supplier of 0.5% of the taxable value of the undelivered portion (item) for each calendar week or part there of subject to a maximum of 5% of the total taxable value. Imposition of penalty is however subject to force majeure conditions.
- c. **For installation and commissioning:** If the installation, commissioning, integration, testing and acceptance is not completed within the scheduled time, a price reduction of 0.5% of the installation & commissioning cost (site-wise) for each week or part thereof subject to maximum of 5% , shall be imposed on the supplier.
- d. **During the hand-holding period:** In case, the downtime of a unit exceeds 24 hours from the time of intimation of OPTCL and the fault is not rectified or faulty equipment is not replaced, a price reduction of 0.5% of the taxable value of per faulty unit per day will be made and will be recovered from the invoices or performance bank guarantee or from any sum thereafter that may become due to the vendor out of this contract or any other contract with OPTCL, Bhubaneswar. 24 hours or part thereof beyond the stipulated downtime shall be counted as a full day for calculation for imposition of price reduction.

XVI. WARRANTY:

- i. The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract and all the Services configured shall render trouble free function. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the Supplier, that

may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- ii. **The OEM Warranty for “Schedule-A Items” (SECTION-I.4.II.a) shall remain valid for thirty-six (36) months from the date of installation at the last locations or Thirty Eight (38) months from the date of delivery, whichever is later for all the 29 locations of OPTCL.**
- iii. **The Warranty for “Schedule-B Items” (SECTION-I.4.II.a) from OEMs/SI shall remain valid for thirty-six (36) months from the date of installation at the last locations or Thirty Eight (38) months from the date of delivery, whichever is later for all the 29 locations of OPTCL.**
- iv. The free comprehensive support during the warranty period will include the following:
 - a. All defects and complaints shall be communicated to the “vendor” by the “Purchaser” through email or any other complaint registration method mutually agreed by the purchaser and vendor.
 - b. The vendor shall rectify the fault within 24 hours from the time of registration of the complaint.
 - c. System readjustment and/or system changing-over support on occasions of reconfiguration and/or upgrade and extensions if any.
 - d. The vendor shall be responsible for any defects that may arise out under normal usage due to faulty materials attached to the system, designing lacuna or poor workmanship. The vendor shall have to take immediate remedial measure for such defects at his own cost when called upon to do so by the Purchaser.
 - e. The vendor should also guarantee that the equipment and its accessories supplied are complete and fully compatible in every respect, and conform to technical specifications of design, material and workmanship mentioned in the quotation. The vendor should also guarantee that the equipment and its accessories supplied would perform satisfactorily as per requirements mentioned in the specification.
 - f. Any software support like update/enhancement/upgrade etc. Released till the completion of warranty and during CAMC Support shall be supplied, installed and commissioned free of cost by the bidder, irrespective of whether or not OEM charges for the same.
 - g. Any corruption in the Software or Firmware or defect in the Hardware shall be repaired/ replaced within 01 months of notification defect during the full period of the contract including Warranty and CAMC, at no extra cost to the OPTCL. However, SI must supply the spare of same or higher configuration in place of the defective items during the phase of repair/rectification/replacement of the faulty materials at no extra cost to OPTCL.
 - h. In case of violation of any of the conditions of warranty (for three years), the Performance Bank Guarantee shall be invoked by OPTCL. In case the violation of the condition of warranty is not set right by the vendor, the Performance Bank Guarantee shall be extended beyond three years for which the vendor shall request the banker for the same. The formalities for extension of warranty should be completed well in advance of the expiry of warranty period by the vendor/bidder;

otherwise OPTCL will be forced to invoke the said Performance Bank Guarantee.

- i. If any equipment gives continuous trouble, say three times in one month, during the warranty period, the Supplier shall replace the equipment with new equipment without any additional cost to OPTCL.
- j. In case, the downtime of a unit exceeds 24 hours from the time of intimation of OPTCL and the fault is not rectified or faulty equipment not replaced, a price reduction of 0.5% of the taxable value of per faulty unit per day will be made and will be recovered from the invoices or from the performance guarantee or from any sum thereafter that may become due to the vendor out of this contract or any other contract with OPTCL, Bhubaneswar. 24 hours or part thereof beyond the stipulated downtime shall be counted as a full day for calculation for imposition of price reduction.
- k. In case, the faulty units will not be replaced/rectified/repared within the time frame of 01 months from the registration of issue by OPTCL as mentioned in the above point no. (g), necessary price reduction shall be made as per the above point (j) even if active spare items are supplied & installed in place of the faulty items.
- l. **The firm has to conduct quarterly preventive maintenance at each location of the project. In case the firm fails to conduct the quarterly preventive maintenance of any location of this project during the warranty period, a price reduction of 10% of the CAMC charges of that location for the quarter shall be deducted from the subsequent CAMC invoices.**
- m. **NOTE:** The above price reduction will be made from the immediate next invoices raised by the firm. The Price Reduction value will be adjusted from the Performance Bank Guarantee till it exceeds 50% of the guarantee amount at which point, the Senior General Manager (IT), OPTCL reserves the right to cancel the contract. In such cases, the full amount of Performance Bank Guarantee shall be forfeited to OPTCL.

XVII.COMPREHENSIVE AMC SUPPORT AND MAINTENANCE:

- a. The Vendor shall provide CAMC Support and Maintenance for the entire project in total soon after the warranty period is over for a period of three years. The vendor must complete 3 yrs. CAMC agreement (as per the CAMC agreement format to be given by OPTCL along with the Work Order) before two months of completion of 3 years warranty, **failing which necessary action towards forfeiture of the 10% Performance Bank Guarantee (submitted during the supply, installation & commissioning phase) will be initiated as deemed fit.**
- b. The annual maintenance charges shall be paid in quarterly installments at the end of each quarter.
- c. **The firm has to conduct quarterly preventive maintenance at each location of the project. In case the firm fails to conduct the quarterly preventive maintenance of any locations of the project during the CAMC period, a price reduction of 100% of the CAMC charges of that location for the quarter shall be deducted from the CAMC invoices.**
- d. The Purchaser reserves the right to terminate the CAMC contract, after

- the warranty period, at any time without assigning any reasons and the Supplier cannot claim any compensation in this respect.
- e. Minimum 10% (10% of the ordered quantity of this contract) spares stock should be maintained by the bidder in the local service centers available at Odisha during the entire Contract Period.
 - f. In case, the downtime of a unit exceeds 24 hours from the time of intimation of OPTCL and the fault is not rectified or faulty equipment not replaced, a price reduction of 0.5% of the taxable value of per faulty unit per day will be made and will be recovered from the invoices or from the bank guarantee or from any sum thereafter that may become due to the vendor out of this contract or any other contract with OPTCL, Bhubaneswar. 24 hours or part thereof beyond the stipulated downtime shall be counted as a full day for calculation and imposition of price reduction.
 - g. In case, the faulty units will not be replaced/rectified/repared within the time frame of 01 months from the registration of issue by OPTCL as mentioned in the above point no. (g), necessary price reduction shall be imposed as per the above point (j) even if active spare items are supplied & installed in place of the faulty items.
 - h. **NOTE:** The above price reduction values will be adjusted from the quarterly invoices. In case the price reduction exceeds the invoice amount, the price reduction will be adjusted from the AMC Bank Guarantee till it exceeds 50% of the guarantee amount at which point, the Chief General Manager (IT), OPTCL reserves the right to cancel the contract. In such cases, the full amount of AMC Bank Guarantee shall be forfeited to OPTCL.

XVIII. PRICE

- a. Bidders are requested to quote their FIRM price only for each individual item covered under schedule of requirement. No price variation shall be entertained at any time during the contract period.
- b. All prices quoted must be firm and valid for 180 (One hundred and eighty) days from the date of opening of the techno-commercial bid.
- c. The prices shall be FOR destination only at the consignees store(s) inclusive of packing, forwarding, freight and insurance.
- d. Wherever the issue of foreign exchange is involved due to import of materials from a country other than India, the same shall be paid by the vendor. Import License, marine freight, insurance, customs duty, surcharge, port handling and clearing charges etc. all shall be vendors account and purchasers shall not be responsible in any way in this regard. All such costs shall be presumed to have been included in the quoted unit prices.
- e. For Comprehensive AMC Support for 03 years, if the price quoted per year is below 2% of the total quoted Supply and Installation cost, the bids shall be out rightly rejected during the Price Bid Stage, i.e. the Comprehensive AMC Support Cost for 03 years should be minimum 6% of the total quoted Supply and Installation cost. An undertaking to this effect should be submitted during the Techno-Commercial Bid

XIX. IMPORT LICENCE:

In case imported materials are offered no assistance will be given for Import License or release of Foreign Exchange. The firm should arrange to import materials from their own quota.

XX. VALIDITY:

Prices and conditions of sale of the offer should be valid for a period of **180(one hundred and eighty)** days from the date of opening of the techno-commercial bid. However, the tenderer shall confirm in writing in the tender in this regard, otherwise, must mention his validity period in writing in the tender failing which the tender shall be rejected.

XXI. TERMS OF PAYMENT:

a. Supply Installation & Commissioning of the CCTV System

- i. 60% of the Contract Price (excluding CAMC cost and Installation & Commissioning Cost) shall be released on completion of the preliminary site-survey reports, submission of survey reports, receipt of items in good condition on delivery, verification and stores entry of the ordered IT Items which are fully inspected and inspection report is duly accepted by IT, OPTCL on submission of the following documents.
 - a. Bills in triplicate
 - b. Delivery Challan duly signed by consignee of each location.
 - c. Performance Bank Guarantee as per the Bank Guarantee Clause
 - d. Verification & Inspection Certificate duly signed by IT officers and approved by Sr. General Manager (IT).
 - e. Submission of preliminary site-survey reports and drawings duly signed by the concerned OPTCL Officers and vendor's representatives.
- ii. 30% of the balance supply amount and 90% of the Installation & Commissioning cost [Contract Price excluding CAMC Cost] shall be made on successful installation and commissioning of the CCTV Surveillance system, complete system rollout, training to Field and IT officers of OPTCL and submission of necessary manuals, drawings and documentation at all the 29 designated locations of OPTCL. The payment shall be made on submission of the following documents:
 - a. Bills in triplicate
 - b. Installation & Commissioning certificate
 - c. Training Certificate
 - d. Successful System Roll-out certificate
 - e. OEMs/SI warranty certificate as per the warranty clause
 - f. Training Completion Certificate
 - g. Manuals, Drawings and other necessary documents.
- iii. 10% of the amount (Contract Price excluding CAMC Cost) shall be made on completion of 90days hand holding by the supplier and UAT sign off. The payment shall be made on submission of the following documents:

- a. Bills in triplicate
- b. User Acceptance Test Certificate
- c. Performance Certificate during the Handholding period.
- d. UAT Sign-off Report

b. Comprehensive AMC Support:

Quarterly Payment shall be made after Completion of each Quarter on submission of the following documents:

- a. Bills in Triplicate
- b. AMC Bank Guarantee as per the Bank Guarantee Clause (XXII.b)
- c. Quarterly Preventive Maintenance Report duly signed by Officer-in-Charge of Grid Sub-stations.
- d. Quarterly Call resolution log report.
- e. Copy of Service Report for the downtime of any equipment, if any, during the particular quarter duly signed by Officer-in-Charge of Grid Sub-Stations.

No advance payment in any form will be made.

Handling of foreign exchange component and customs clearances, if any, must be taken care of by the bidder.

XXII. BANK GUARANTEE:

- a. A **Performance Bank Guarantee** at the rate of 10% (Ten percent) of the value of the total project cost (excluding CAMC) shall be furnished from any Nationalized/Scheduled Bank to the Chief General Manager (I.T), OPTCL within 30 (thirty) days of acceptance of the work order, executed in a non-judicial stamp paper worth of Rs.100/- (Rupees Hundred) only subject to change as per ODISHA Stamp Duty Act valid for a valid for 43 months (forty three months) from date of acceptance of this contract as per proforma enclosed, towards security, 100% payment and performance guarantee purposes failing which the purchase order the purchaser may forfeit the whole amount of the Performance bank guarantee. The forfeiture of the Performance Bank guarantee shall not in any way affect, limit or extinguish any remedy or relief to which the above authority may at any time be lawfully entitled.
- b. An **AMC Bank Guarantee** of 2% of the cost of the total project cost shall be furnished from any Nationalized/ Scheduled Bank to Chief General Manager (I.T), OPTCL, Bhubaneswar before 2 months of completion of the 3 years warranty period executed in a non-judicial stamp paper worth of Rs. 100/- (Rupees One Hundred) only subject to change as per Odisha Stamp Duty Act. Valid for a period of 39 months (Thirty Nine months) from the date of commencement of CAMC period. No interest will be payable on the Bank Guarantee.
- c. No interest will be payable on the Bank Guarantee amount.

XXIII. INSURANCE:

Insurance of Stores covered by this specification shall be done by the suppliers with their own insurance unless otherwise stated. The responsibility of delivery of the stores at destination in good condition rests with the supplier.

Any claim with the Insurance Company or transport agency arising due to loss or damage in transit has to be settled by the supplier. The supplier shall undertake free replacement of materials damaged or lost which will be reported by the consignee within 30(Thirty) days of receipt of the materials at destination without awaiting for the settlement of their claims with the carriers and underwriters. In case the replacement of damaged item/part is not done within 30 (Thirty) days, the material shall be treated as not delivered and shall attract penalty till replacement as per clause under heading “Rejection of Materials”.

XXIV. NO DEVIATION CERTIFICATE:

The Bidder needs to submit a No Deviation Certificate as per the format given in SECTION-V.V(SCHEDULE-E).

XXV. PAYMENT DUE FROM THE CONTRACTOR:

All costs and damages, for which the contractor is liable to the purchaser, will be deducted by the purchaser from any money due to the contractor under the contract or through the composite Bank Guarantee submitted by him.

XXVI. JURISDICTION OF THE HIGH COURT OF ODISHA:

Suits, if any, arising out of this contract shall be filed by either party in a court of law to which the jurisdiction of High Court of ODISHA extends.

XXVII. RIGHT TO REJECT/ACCEPT ANY TENDER:

The purchaser reserves the right either to reject or to accept any or all tenders. The purchaser has exclusive right to alter the quantities of materials at the time of placing final purchase order. After placing of the order the purchaser may defer the delivery of the materials. It may be clearly understood by the tenderer that the purchaser need not assign any reason for the above action.

XXVIII. CONTRACTOR'S RESPONSIBILITY:

Notwithstanding anything mentioned in the specification or subsequent approval or acceptance of the purchaser, the ultimate responsibility for design of materials and satisfactory performance shall rest with the tenderers.

XXIX. EVALUATION OF BIDS:

In comparing bids and in making awards the purchaser may consider such factors as compliance with specifications, relative quantity, land adaptability of supplies or services, experience, financial soundness, records of integrity in dealings, performance of materials/equipment earlier supplied, utility to

furnish repairs and maintenance services, the time of delivery, capability to perform including available facilities such as adequate shops, plants, equipment and technical organization. All costs incidental to execution of the Contract including take-back items shall be taken into consideration in addition to the above for evaluation of offers.

XXX. FORCE MAJUERE:

The supplier shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of God, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargoes / failure in downloading, activating the license due network problems, server down, link failure, site not ready, consignee absent and provided that the supplier shall within Ten (10) days from the beginning of such delay notify the purchaser in writing of the cause of delay along with documentary evidence. The purchaser shall verify the facts and grant such extension, if facts justify.

XXXI. CORRESPONDENCES:

- a. Any notice to the contractor under the terms of the contract shall be served by Registered mail or by hand at the contractor's principal place of business.
- b. Any notice to the purchaser shall be served at the OPTCL's principal office in the samemanner.

XXXII. COPYRIGHT PROTECTION OF TENDER DOCUMENT:

The contractor shall treat the details of the Specification and other Tender documents as private and confidential and they shall not be reproduced without written authorization from the purchaser.

C. SECTION-IV

1. Schedule of Technical Requirements:

I. Technical requirements of major equipment of IP Based CCTV Surveillance System:

- a. The IP based CCTV Surveillance system shall be an integrated system with IP network centric functional and management architecture aimed at providing high-speed manual/automatic operation for best performance.
- b. The system should facilitate viewing of live and recorded images and controlling of all cameras by the authorized users.
- c. The system shall use video signals from various types of indoor/outdoor CCTV Cameras installed at different locations, process them for viewing on workstations/monitors/display unit in the control Room and simultaneously record all the cameras after compression using H.264/MPEG-4 or better standard. Mouse/Keyboard controllers shall be used for Pan, Tilt, Zoom, and other functions of desired cameras.
- d. The System shall provide sufficient storage of all the camera recordings using necessary compression techniques for all cameras. **It must be ensured that data once recorded shall not be altered by any means.** The recording resolution and frame rate for each camera shall be user programmable.

II. System Requirements:

- a. System must provide built-in facility of watermarking or Digital certificate to ensure tamperproof recording.
- b. All cameras may be connected through OPTCL LAN.
- c. All camera recordings shall have Camera ID & location/area of recording as well as date/time stamp. Camera ID, Location/Area of recording & date/time shall be programmable by the system administrator with User ID & Password.
- d. Facility of camera recording in real-time mode (30 FPS)/25/15/12.5/10 or lower FPS as well as in any desired combination must be available in the system.
- e. Facility of Camera recording in Full HD (1280X1920p), D1, 4CIF, CIF, VGA, as well as in any combination i.e. any camera can be recorded in any quality.
- f. In order to optimize the memory, while recording, video shall be compressed using H264/MPEG-4 or better standard and streamed over the IP network.
- g. System shall be triplex i.e. it should provide facility of Viewing, Recording & Replay simultaneously.
- h. The offered system shall have facility to export the desired portion of

clipping (from a specific date/time to another specific date/time) on an external storage device. Viewing of this recording shall be possible on standard PC using standard software like windows media player etc.

- i. The Cameras should generally conform to Electro-magnetic compatibility requirements for outdoor cameras in EHV switchyards. The major EMC required for Outdoor Cameras shall be as under:
 - Electrical Fast Transient (Level 4) – As per IEC 61000-4-4
 - Damped Oscillatory (1MHz and 100KHz)(level 3)–As per IEC 61000-4-12
 - AC Voltage Dips & Interruption/Variation (level 4) – As per IEC 61000-4-12
 - Electrostatic Discharge (Level 4) – As per IEC 61000-4-2
 - Power Frequency Magnetic Field (level 4) – As per IEC 61000-4-8
 - Ripple on DC Power Supply (level 4) – As per IEC 61000-4-17

Supporting Documents/Certifications to establish compliance with the above requirement shall be submitted during the submission of Techno-Commercial Bid for all the offered outdoor camera Make and Models.

- j. The bidder must enclose a certificate either from OEM or from a customer that the offered Make Camera has been installed in Extra High Voltage Environment of 132kV or above.

2. Detailed Technical Specifications:

| # | Item Description | Detailed Specification | |
|----|--|------------------------|---|
| I. | SCHEDULE-A | | |
| A. | Outdoor PTZ Camera(with PTZ camera housing, gooseneck- with wall mount bracket, power supply or adaptor and other necessary accessories) [Range 200 Meters] | | |
| 1 | CAMERA | Type of camera | High-Definition Outdoor PTZ Camera, suitable for both day and night surveillance |
| | | Place of installation | Outdoor Type |
| | | Industrial Grade | Yes |
| | | Effective Pixel | Minimum 2 Mega Pixel |
| | | Image Sensor | Progressive scan CMOS 1/2.8" or better |
| | | Lens | Full HD, IR Correction or higher The focal length of the lens shall be provided so as to meet specification the IR distance of min. 180 meters and effective viewable distance of min. 200 meters and optical zoom of 30x. Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid. |
| 2 | OPERATIONAL | Night Vision | Night vision with IR-LED/ IR Cut Filter |
| | | IR Features | The Camera shall have inbuilt IR or External IR Component |

| # | Item Description | Detailed Specification | |
|---|--------------------------------|---|---|
| | | IR Distance | Minimum 180mtrs |
| | | Effective Viewable Distance | Minimum 200mtrs |
| | | Wide Dynamic Range | Should have WDR feature |
| | | Backlight Compensation Feature | BLC/HLC/WDR |
| | | Pan/Tilt/Zoom Feature | Pan/Tilt/Zoom feature should be available i. PAN: Preset Speed: 240°/s, Pan Range: 360° continuous ii. TILT: Tilt Preset Speed: 160°/s, Tilt Range: -0° ~ 90° iii. ZOOM: Optical Zoom: 30X(min.), Digital Zoom : 12X(min.) iv. PRESET: Number of preset: Min. 256 |
| | | Light Sensitivity | Colour mode: 0.25 lux, B/W mode: 0.11 lux @ 30IRE, F1.6 or better |
| | | Electronic Shutter | Should have automatic Electronic Shutter feature |
| | | Signal-to-Noise Ratio | Min 50dB |
| | | Day/Night Feature | Should have Day/Night Feature |
| | | Motion Detection & Tamper Detection Feature | Should have Motion Detection & tamper Detection Feature |
| | | Privacy Masking Feature | Should have Privacy Masking Feature |
| | | De-Fog Feature | Should have De-Fog Feature |
| | | White Balance | Should have Auto, Manual, Indoor-Outdoor white balance feature |
| 3 | NETWORK | Ethernet | 10Base-T / 100Base-TX, RJ45 connector |
| | | Image Resolution | 1920×1080(1080p) |
| | | Frame Rate per second | Frame rate: 25 frames/s (PAL) or 30 frames/s(NTSC) |
| | | Compression Standards | H.264, MJPEG / MPEG4 |
| | | Protocols | IPv4,IPv6 ready, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP,TCP, UDP, IGMP, ICMP, DHCP, PPPoE/802.3at POE+ |
| | | Security | User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login |
| | | Multiple Streams | Multiple and individually configurable streams in H.264 and MJPEG. |
| | | Inter-operability | Should have Onvif conformance feature |
| | | Web Access | Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language |
| 4 | GENERAL | Input Voltage | 24 VAC and PoE (Power Over Ethernet) |
| | | Power Consumption | Max. 60W |
| 5 | RECORDING & STORAGE MANAGEMENT | Audio I/O | Input : 1 channel Output : 1 channel |
| | | SD Card Slot | Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card |

| # | Item Description | Detailed Specification | |
|-----------|---|------------------------|--|
| | | Type & Capacity | A memory card (a maximum of 32GB micro SDHC/ micro SDXC) or more can be Supplied along with camera and should record automatically when network not available and same data to be push back to storage once network is established for camera |
| | | Recording Management | Shall support manual / alarm / edge recording |
| 6 | ENVIRONMENTAL | Camera Housing & Mount | 1. The Camera housing and gooseneck stand-wall mount bracket should be of same make as that of Camera and suitable for the model no offered as specified by the manufacturer and should be an integrated unit. The housing should be Weather Proof IP65/66 rated and of aluminium construction with vandal resistance of IK10. The housing shall have heater and blower. 2. The camera should be suitable for wall mounting, ceiling mounting, pole mounting and switchyard mounting. All accessories required for mounting shall be provided. |
| | | Operating Temperature | -10 deg C to +60 deg C |
| | | Humidity | 90% or less (non-condensing) |
| 7 | STANDARDS & CERTIFICATIONS | Certification | UL, CE, IEC, FCC, ISO and BIS certifications |
| | | Ingress Protection | IP66/IP67 |
| B. | Outdoor PTZ Camera(with PTZ camera housing, gooseneck- with wall mount bracket, power supply or adaptor and other necessary accessories)[Range 100 Meters] | | |
| 1 | CAMERA | Type of camera | High-Definition Outdoor PTZ Camera, suitable for both day and night surveillance |
| | | Place of installation | Outdoor Type |
| | | Industrial Grade | Yes |
| | | Effective Pixel | Minimum 2 Mega Pixel |
| | | Image Sensor | Progressive scan CMOS 1/2.8" or better |
| | | Lens | Full HD, IR Correction or higher The focal length of the lens shall be provided so as to meet specification the IR distance of min. 100 meters and effective viewable distance of min. 100 meters and optical zoom of 30x. Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid. |
| 2 | OPERATIONAL | Night Vision | Night vision with IR-LED/ IR Cut Filter |
| | | IR Features | The Camera shall have inbuilt IR or External IR Component |
| | | IR Distance | Minimum 100mtrs |

| # | Item Description | Detailed Specification | |
|---|--------------------------------|---|---|
| | | Effective Viewable Distance | Minimum 100mtrs |
| | | Wide Dynamic Range | Should have WDR feature |
| | | Backlight Compensation Feature | BLC/HLC/WDR |
| | | Pan/Tilt/Zoom Feature | Pan/Tilt/Zoom feature should be available i. PAN: Preset Speed: 240°/s, Pan Range: 360° continuous ii. TILT: Tilt Preset Speed: 160°/s, Tilt Range: -0° ~ 90° iii. ZOOM: Optical Zoom: 30X(min.), Digital Zoom : 12X(min.) iv. PRESET: Number of preset: Min. 256 |
| | | Light Sensitivity | Colour mode: 0.25 lux, B/W mode: 0.11 lux @ 30IRE, F1.6 or better |
| | | Electronic Shutter | Should have automatic Electronic Shutter feature |
| | | Signal-to-Noise Ratio | Min 50dB |
| | | Day/Night Feature | Should have Day/Night Feature |
| | | Motion Detection & Tamper Detection Feature | Should have Motion Detection & tamper Detection Feature |
| | | Privacy Masking Feature | Should have Privacy Masking Feature |
| | | De-Fog Feature | Should have De-Fog Feature |
| | | White Balance | Should have Auto, Manual, Indoor-Outdoor white balance feature |
| 3 | NETWORK | Ethernet | 10Base-T / 100Base-TX, RJ45 connector |
| | | Image Resolution | 1920×1080(1080p) |
| | | Frame Rate per second | Frame rate: 25 frames/s (PAL) or 30 frames/s(NTSC) |
| | | Compression Standards | H.264, MJPEG / MPEG4 |
| | | Protocols | IPv4,IPv6 ready, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP,TCP, UDP, IGMP, ICMP, DHCP, PPPoE/802.3at POE+ |
| | | Security | User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login |
| | | Multiple Streams | Multiple and individually configurable streams in H.264 and MJPEG. |
| | | Inter-operability | Should have Onvif conformance feature |
| | Web Access | Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language | |
| 4 | GENERAL | Input Voltage | 24 VAC and PoE (Power Over Ethernet) |
| | | Power Consumption | Max. 60W |
| 5 | RECORDING & STORAGE MANAGEMENT | Audio I/O | Input : 1 channel Output : 1 channel |
| | | SD Card Slot | Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card |

| # | Item Description | Detailed Specification | |
|----|--|------------------------|--|
| | | Type & Capacity | A memory card (a maximum of 32GB micro SDHC/ micro SDXC) or more can be Supplied along with camera and should record automatically when network not available and same data to be push back to storage once network is established for camera |
| | | Recording Management | Shall support manual / alarm / edge recording |
| 6 | ENVIRONMENTAL | Camera Housing & Mount | 1. The Camera housing and gooseneck stand-wall mount bracket should be of same make as that of Camera and suitable for the model no offered as specified by the manufacturer and should be an integrated unit. The housing should be Weather Proof IP65/66 rated and of aluminium construction with vandal resistance of IK10. The housing shall have heater and blower. 2. The camera should be suitable for wall mounting, ceiling mounting, pole mounting and switchyard mounting. All accessories required for mounting shall be provided. |
| | | Operating Temperature | -10 deg C to +60 deg C |
| | | Humidity | 90% or less (non-condensing) |
| 7 | STANDARDS & CERTIFICATIONS | Certification | UL, CE, IEC, FCC, ISO and BIS certifications |
| | | Ingress Protection | IP66/IP67 |
| C. | Outdoor Fixed Camera(with fixed camera housing, power injector and other necessary accessories) | | |
| 1 | CAMERA | Type of camera | High-Definition Outdoor Fixed Camera, suitable for both day and night surveillance |
| | | Place of installation | Outdoor Type |
| | | Industrial Grade | Yes |
| | | Effective Pixel | Minimum 2 Mega Pixel |
| | | Sensor | Progressive scan CMOS 1/2.8" or better |
| | | Lens | <p>Lens Type: Varifocal Lens</p> <p>Full HD, IR Correction or higher</p> <p>The focal length of the lens shall be provided so as to meet specification of the IR distance (min. 50 meters) and effective viewable distance (min. 50 meters).</p> <p>Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid.</p> |
| 2 | OPERATIONAL | Night Vision | Night vision with IR-LED |
| | | IR Features | The Camera shall have inbuilt IR or External IR Component. |
| | | IR Distance | 50mtrs |

| # | Item Description | Detailed Specification | |
|---|--------------------------------|---|--|
| | | Effective Viewable Distance | 50mtrs |
| | | Wide Dynamic Range | Should have WDR feature |
| | | Backlight Compensation Feature | BLC/HLC/WDR |
| | | Light Sensitivity | Colour mode: 0.25 lux, B/W mode: 0.05 lux @ 30IRE, F1.2 or better |
| | | Signal-to-Noise Ratio | Min 50dB |
| | | Day/Night Feature | Should have Day/Night Feature |
| | | Motion Detection & Tamper Detection Feature | Should have Motion Detection & Tamper Detection Feature |
| | | Privacy Masking Feature | Should have privacy masking feature |
| | | De-Fog Feature | Should have De-Fog Feature |
| | | White Balance | Should have Automatic/Manual White Balance Feature |
| 3 | NETWORK | Ethernet | 10Base-T / 100Base-TX/ RJ45 connector |
| | | Image Resolution | 1920×1080(1080p) |
| | | Frame Rate per second | Frame rate: min. 25 frames/s (PAL) or min. 30 frames/s(NTSC) |
| | | Compression Standards | H.264, MJPEG |
| | | Protocols | TCP/IP/IPv4, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, |
| | | Security | User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login |
| | | Multiple Streams | Multiple and individually configurable streams in H.264 and MJPEG. |
| | | Inter-operability | Should have Onvif conformance feature |
| | | Web Access | Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language |
| 4 | GENERAL | Input Voltage | 24 VAC and PoE(Power Over Ethernet) |
| | | Power Consumption | Max. 30W |
| 5 | RECORDING & STORAGE MANAGEMENT | Audio I/O | Input : 1 channel Output : 1 channel |
| | | SD Card Slot | Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card |
| | | Type & Capacity | A memory card (a maximum of 32GB micro SDHC/ micro SDXC) or more can be Supplied along with camera and should record automatically when network not available and same data to be push back to storage once network established for camera |
| | | Recording Management | Shall support manual / alarm / edge recording |
| 6 | ENVIRONMENTAL | Camera Housing & Mount | 1. The Camera housing should be of same make as that of Camera and suitable for the model no offered as specified by the |

| # | Item Description | Detailed Specification | |
|-----------|--|---|--|
| | | | manufacturer and should be an integrated unit. The housing should be Weather Proof IP65/66 rated and of aluminium construction. 2. The camera should be supplied with a power injector as per technical specification specified in the tender document 3. The camera should be suitable for wall mounting, ceiling mounting, pole mounting and switchyard mounting. All accessories required for mounting shall be provided. |
| | | Operating Temperature | -10 deg C to +60 deg C |
| | | Humidity | 90% or less (non-condensing) |
| 7 | STANDARDS & CERTIFICATIONS | Certification | UL, CE, IEC, FCC, ISO and BIS certifications |
| | | Ingress Protection | IP66/IP67 |
| D. | Indoor Dome camera (with power injector for dome camera with other necessary accessories) | | |
| 1 | CAMERA | Type of camera | High-Definition Indoor Camera, suitable for both day and night surveillance |
| | | Place of installation | Indoor |
| | | Industrial Grade | Yes |
| | | Effective Pixel | Minimum 2 Mega Pixel |
| | | Sensor | Progressive scan CMOS 1/2.8" or better |
| | | Lens | Full HD, IR Correction or higher |
| | | | The focal length of the lens shall be provided so as to meet specification of the IR distance (min. 30 meters) and effective viewable distance (min. 30 meters). |
| | | Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid. | |
| 2 | OPERATIONAL | Night Vision | Night vision with IR-LED |
| | | IR Features | The Camera shall have inbuilt IR or External IR Component. |
| | | IR Distance | 30mtrs |
| | | Effective Viewable Distance | 30mtrs |
| | | Wide Dynamic Range | Should have WDR feature |
| | | Backlight Compensation Feature | BLC/HLC/WDR |
| | | Light Sensitivity | Colour mode: 0.25 lux, B/W mode: 0.05 lux @ 30IRE, F1.2 or better |
| | | Signal-to-Noise Ratio | Min 50dB |
| | | Day/Night Feature | Should have Day/Night Feature |
| | | Motion Detection & Tamper Detection | Should have Motion Detection & Tamper Detection Feature |

| # | Item Description | Detailed Specification | |
|-----------|--------------------------------|--|--|
| | | Feature | |
| | | White Balance | |
| | | Should have auto/manual/indoor/outdoor white balance feature | |
| 3 | NETWORK | Ethernet | 10Base-T / 100Base-TX/ RJ45 connector |
| | | Image Resolution | 1920×1080(1080p) |
| | | Frame Rate per second | Frame rate: min. 25 frames/s (PAL) or min. 30 frames/s(NTSC) |
| | | Compression Standards | H.264, MJPEG |
| | | Protocols | TCP/IP/IPv4, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP,IGMP, 802.1X, QoS, IPv6, |
| | | Security | User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login |
| | | Streaming method | Multiple and individually configurable streams in H.264 and MJPEG. |
| | | Inter-operability | Should have Onvif conformance feature |
| | Web Access | Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language | |
| 4 | GENERAL | Input Voltage | 24 VAC and PoE(Power Over Ethernet) |
| | | Power Consumption | Max. 12.5W |
| 5 | RECORDING & STORAGE MANAGEMENT | SD Card Slot | Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card |
| | | Type & Capacity | A memory card (a maximum of 32GB micro SDHC/ micro SDXC) or more can be Supplied along with camera and should record automatically when network not available and same data to be push back to storage once network established for camera |
| | | Recording Management | Shall support manual / alarm / edge recording |
| 6 | ENVIRONMENTAL | Camera Housing & Mount | The camera should be supplied with a power power injector as per technical specification specified in the tender document |
| | | Operating Temperature | -10 deg C to +50 deg C |
| | | Humidity | 90% or less (non-condensing) |
| 7 | STANDARDS & CERTIFICATIONS | Certification | UL, CE, IEC, FCC, ISO & BIS certifications. |
| | | Ingress Protection | IP66/IP67 |
| E. | 16 Channel NVR | | |
| 1 | 16 Channel NVR | 16ch 1080P IP cameras inputs; Supports recording at Full Resolution & high quality at highest bit rate for all channels at a time. | |
| 2 | Resolution | Resolution 1920×1080, 1280×1024, 1280×720, 1024×768; Display Split 1/4/8/9/16; Recording Compression H.264 Version 3 / MJPEG Resolution 1080P(1920×1080) / 720p; | |

| # | Item Description | Detailed Specification |
|-----------|------------------------------------|---|
| 3 | Codec | H.264, MJPEG dual codec decoding |
| 4 | Audio / Video | 1/1ch Mic in/out; 4ch sync real-time playback; Two-way Talk 1 channel Input, 1 channel Output; HDMI,VGA output,1 BNC output; Minimum 4ch alarm in & 2ch relay out,RS485 |
| 5 | Storage | Min. 8 SATA hard disk ports, each shall supports a hard disk with capacity min. 4TB. 2 USB, RJ45 (1000M); |
| 6 | Video Detection & Alarm | Shall have Video Motion Detection and Alarm Feature on events such as Video Loss & Camera Blank |
| 7 | Playback & Backup Features | Sync Playback. Search Mode Time/Date, Alarm, Motion detection with simultaneous search options; Digital Zoom; Backup Mode USB Device / Network |
| 8 | Network | Ethernet: Min. 2 nos. RJ-45 port (1000M); Network Protocols: HTTP, TCP/IP, IPv4/IPv6, UPNP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support IP camera, DVR, NVS and etc.); Support Multicast |
| 9 | Auxiliary Interface | USB 2 ports USB2.0; RS232 1 port, For PC communication & Keyboard; RS485 1 port, For PTZ control |
| 10 | Power | Power Supply AC220V; Power Consumption: Max. 40W(without HDD) Working Environment -10 -+55°C / 10-90%RH |
| 11 | Compliant / Certification | CE, FCC, EMC & ROHS certification and UL certification for Core Adaptor are mandatory; and ONVIF Compliant |
| F. | 4 TB Surveillance Hard Disk | |
| 1 | Capacity | 4TB |
| 2 | Interface | Sata 6GB/s |
| 3 | Max Sustainable Transfer Rate | 180MB/s |
| 4 | Cache | 64Mb |
| 5 | Bytes per sec | 4096 |
| 6 | Operating (ambient, min) | 0 deg C |
| 7 | Operating(drivecase, Max) | 70 deg C |
| G. | 32" LED TV (Display Device) | |
| 1 | Screen Size | 32" LED Display Full HDTV, Flat Type |
| 2 | Industrial Grade | Yes |
| 3 | Resolution | 1920x1080 |
| 4 | Motion Rate | 60 |
| 5 | Audio | Dolby Digital Plus / Dolby Pulse |
| 6 | Connectivity | 2 HDMI port, 1 No. of USB Port |

| # | Item Description | Detailed Specification |
|--|---------------------------------------|--|
| 7 | Power Supply | 1. Power Supply: 220-240V 2. Power Consumption: 64W |
| 8 | Environment | ENERGY STAR compliant |
| 9 | Wide Colour Enhancer | Yes |
| 10 | Standard Remote Controller | Yes |
| 11 | Power Cable | Yes |
| 12 | Other Accessories | Wall Mount kit/Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories |
| H. 16 port managed network switch | | |
| 1 | Architecture & Performance | POE Ports : 16 ports or better |
| | | The Switch should have Non-blocking wire speed switch fabric |
| | | The Switch should support Min. 16K Mac address or more |
| | | Should support IEEE 802.3az standard for minimize the power consumption on per port basis by supplying power on the basis of cable length and active ports only |
| | | Should support Dual Software (firmware) image |
| 2 | Standard | POE Ports : 16 ports or better |
| | | The Switch should have Non-blocking wire speed switch fabric |
| | | IEEE 802.3 10BASE-T Ethernet ,IEEE 802.3u 100BASE-TX Ethernet ,IEEE 802.3ab 1000BASE-T Ethernet ,IEEE 802.3z 1000BASE-X Ethernet ,IEEE 802.3x flow control ,802.3af PoE and IEEE802.3at PoE plus |
| | | IEEE 802.1D spanning tree protocol IEEE 802.1w rapid spanning tree protocol, IEEE 802.1s multiple spanning tree protocol |
| | | IEEE 802.1p class of service, priority protocols ,IEEE 802.1X port authentication,IEEE 802.3ad LACP aggregation |
| 3 | Traffic Management and QoS | Rate limiting: Rule-based/port-based bandwidth control, 64 kbps granularity |
| | | Port-based egress traffic shaping |
| | | Switch should support Jumbo frames of 9KB |
| | | should support broadcast storm control to avoid unwanted traffic attack on CPU |
| | | should support IEEE 802.1p with priority queues for different traffic types |
| | | Supports IGMP/IGMP snooping v1, v2, v3 |
| 4 | Link Aggregation | Should support congestion control on all ports |
| | | IEEE 802.3ad LACP link aggregation compliant |
| | | Up to 8 aggregation groups, |
| | | Resilient Network |
| | | Should support IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) |
| | | Should support IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) |
| 5 | User Security and Authentication | Should support Multiple Rapid Spanning Tree Protocol |
| | | should support MAC filtering per port secures access to each port |
| | | should support IEEE 802.1Q tag-based and port-based VLAN |
| | | Switch should support Protocol Based VLAN, IP subnet based, Guest VLAN and MVR |

| # | Item Description | Detailed Specification |
|--|---|---|
| | | Should support IEEE 802.1x based on guest VLAN and MAC-based |
| | | should support Layer 2 Protocol Tunneling(L2PT) |
| | | should support GVRP, automatic VLAN member registration |
| | | should support at least 1K static VLAN, up to 4K dynamic VLAN |
| | | should support Port-base VLAN & VLAN isolation |
| | | should support limited MAC number per port |
| | | Should be capable to set mac ageing time |
| | | should support Loop guard to avoid loops in network generated on unmanaged switches |
| | | should support RADIUS MAC login |
| | | should support 802.1X port-based authentication, compensated assignment over VLAN and bandwidth for valid access |
| | | Should support 802.1ab LLDP and MED |
| | | Should support NTP , Syslog and DNS client |
| | Network Administration Security | Should support SSL |
| | | Should support static and dynamic IP-MAC and Port binding for port security |
| | | Should support DHCP snooping to set the authorized ports to communicate with DHCP servers |
| Should support ARP inspection | | |
| Should support AAA through Radius and Tacacs + servers | | |
| 7 | IPv6 Support | IPv6 over Ethernet ,IPv6 Addressing, ICMPv6 ,Dual Stack ,Neighbor discovery |
| 8 | Network Management | Web-based management SSH ,SNMP v1, v2c, v3 |
| | | RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms and events) for enhanced traffic management, monitoring and analysis |
| | | Port mirroring: supports source/destination/both port mirroring |
| | | Switch should be supplied with management software to manage and maintain multiple layer2 switches for Centralized and batch configurations like IP configurations, IP renew, Web GUI access, Firmware update, device locating etc. |
| | | Should support s-flow for traffic analyzing |
| | | Should support OAM and Connectivity fault management |
| | | Should have Cluster Stacking to manage up to 24 switches by single IP address |
| 9 | Intelligent ACL (L2/L3/L4 Access List Control) | Based on MAC address , VLAN, IP address, Protocol, TCP/UDP type and DSCP |
| 10 | Certification | CE mark, FCC, UL, CSA |
| 11 | Environmental specifications | Operating temperature 0 Deg C to 50 Deg C or better |
| | | Operating Humidity 10% to 95 % (Non condensing) |
| 12 | Power | Switch should be able to automatically detect the power consumption status of each Powered Device |
| | | Input should be 100-240V AC , 50/60 Hz |
| | | Maximum power consumption should not be more than 480 W |
| | | Power budget for PoE should be 180 watts or better |

| # | Item Description | Detailed Specification |
|--|-----------------------|---|
| I. Media Convertor (Box Type) | | |
| 1 | Function | 100 Base-FX to 100 Mbps Tx Single mode media convertor Distance Support: min. 15km 1 RJ-45 port and 1 fibre port (SC type connector) Full wire speed forwarding rate |
| 2 | Type | Industrial Grade |
| 3 | Operating Temperature | 0 deg. C to +60deg.C |
| 4 | Operating Humidity | Up to 95% non-condensing |
| 5 | Mounting Kit | Included |
| 6 | Data Transfer Rate | Min. 1 Gbps |
| 7 | Compliant Standards | IEEE 802.3, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z |
| 8 | Status Indicators | LED status indicators should be there |
| 9 | Features | Auto Cross/ Link Fault Pass Through function (LFP)/LLR /auto-negotiation |
| J. PoE Injector or Power Injector | | |
| 1 | Type | Industrial Grade IEEE 802.3af compliant Supports half/full-duplex operation IEEE 802.3 compliant |
| 2 | Compliance | IEEE 802.3u compliant IEEE 802.3ab compliant 10/100/1000BASE-T port |
| 3 | Gigabit Connectivity | Power Over Ethernet (PoE) Injector for 10/100/1000T connections delivers power up to 100 metres |
| 4 | Power Consumption | 19.2 watts max |
| 5 | Operating Temperature | 0 to 50 °C |
| 6 | Humidity | 10-90% non-condensing |
| 7 | Certifications | Should have CE/FCC/VCCI/IC/UL Certifications |
| K. 0.6 KVA Interactive UPS with Batteries | | |
| 1 | Technology | 600VA with built-in automatic voltage regulator |
| 2 | Capacity | 600VA |
| 3 | Input | a. Voltage Range : 145-290volts or better b. Frequency Range : 50Hz +/-10% |
| 4 | Batteries | a. Type SMF12 V of 7AH type Leak Proof b. Backup Time Minimum 20 Minutes |
| 5 | Output | a. Voltage : 220volts b. Transfer Time less than 10millisecond c. Sockets : Adequate Nos. of sockets with surge protection feature d. Frequency : 50Hz +/- 10%Hz |
| 6 | General Features | Lightning & Surge Protection |

| # | Item Description | Detailed Specification |
|-----------|---|---|
| | | Output Wave form— Modified/Stepped Sine wave Audio Alarms: Low Battery; Battery ON; Overload Protection feature should be there |
| 7 | Environment | a. Operating Temperature : 0-60 deg C b. Humidity : 0-90% non-condensing |
| 8 | Certification | ISO/CE certification should be there |
| L. | 6U NETWORK RACK | |
| 1 | Standards | Standard EIA/NEMA rails |
| 2 | Door | Front Glass Door with Lock |
| 3 | Fan | airflow fans with adjustable |
| 4 | power sockets | power sockets |
| 5 | mounting rails | fully adjustable mounting rails |
| 6 | cable entry facility | Ventilated Top cover and Bottom cover with cable entry facility |
| 7 | industry standard | Conforming to industry standard practices |
| 8 | mounting shelf | Equipment mounting shelf with a depth of 600mm and 1U height |
| M. | Surge Protector | |
| 1 | Purpose | Power over Ethernet Surge Protector for isolated ground protection at camera end |
| 2 | Operating Voltage | 48VDC |
| 3 | Operating Current | 0.75 Amps |
| 4 | Peak Surge Current | 10kA |
| 5 | Transmission speeds | 10BaseT/100BaseT/1000BaseT |
| 6 | SPD Technology | Gas Discharge Tube |
| 7 | Connectors | RJ45 Connection |
| 8 | Certifications | UL/IEC approved |
| 9 | Dimensions | As per requirement of the cameras |
| N. | 6 Core Armoured FO Cable (Single Mode, Multi-Core) | |
| 1 | Cable Type | Minimum Single Mode 6 (six) core Optical Fiber, 9/125 ^μ m, armoured outdoor type application. |
| 2 | Type | Industrial Grade |
| 3 | Armoured | Corrugated Steel Tape (CST) Armoured of min. 0.125 mm thickness |
| 4 | Standards | OFC should be TEC approved. The Vendor has to submit the Manufactures test reports along with OFC, Make with ISI mark. |
| O. | CAT6 STP Cables (Outdoor) | |
| 1 | Type | Shielded Twisted Pair, Category 6, TIA / EIA 568-B.2, STP Cable; should be of Industrial Grade |
| 2 | Networks Supported | Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and above. |
| 3 | Type Of Conductors | 4 pair 23 AWG Conductors |
| 4 | Insulation | Polyethylene |

| # | Item Description | Detailed Specification |
|------------|---------------------------------------|--|
| 5 | Jacket | Flame/Fire Retardant PVC |
| 6 | Temperature | Up to 60deg C |
| 7 | Approval | a. UL Listed |
| | | b. ETL verified to TIA / EIA Cat 6 |
| P. | CAT6 STP Cable (Indoor) | |
| 1 | Type | Shielded Twisted Pair, Category 6, TIA / EIA 568-B.2, STP Cable; |
| | | should be of Industrial Grade |
| 2 | Networks Supported | Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and above. |
| 3 | Type Of Conductors | 4 pair 23 AWG Conductors |
| 4 | Insulation | Polyethylene |
| 5 | Jacket | Flame/Fire Retardant PVC |
| 9 | Temperature | Up to 60deg C |
| 10 | Approval | a. UL Listed |
| | | b. ETL verified to TIA / EIA Cat 6 |
| Q. | 1.1KV Armoured CU-Power Cables | |
| 1 | Model | 3 Core 2.5 Sq.mm Armoured Copper Cable |
| 2 | Type | Industrial Grade |
| 3 | Voltage Rating | Up to and including 1100 Volts |
| 4 | Type of Conductor | Copper |
| 5 | No of cores | 3 |
| 6 | No. of strands/core | 7(multi) |
| 7 | Colour code | Red/Yellow/Blue |
| 8 | Construction | 2.5 sq.mm multi stranded annealed bare electrolytic grade, Conductor Resistance < 7.5 Ohms/Km |
| 9 | Primary Insulation | Extruded PVC compound as per IS 5831 type C |
| 10 | Inner sheath | Extruded PVC Compound type ST2 |
| 11 | Armoured Material | Galvanised steel wire |
| 12 | Outer sheath | Extruded PVC Compound type ST2 |
| II. | SCHEDULE-B | |
| A. | Outdoor Junction Box | |
| 1 | Purpose/Size | All the equipment's except the cameras shall be accommodated in the junction box, which is to be mounted on same pole. |
| | | |
| 2 | Mount | Pole/Wall mount with all mounting accessories |
| 3 | Industrial Grade | Yes |
| 4 | Conformance | Weather proof with min. IP65 rated |
| | | 1. It shall be weather proof so as to withstand the dust and high temperature climate of the plant. |

| # | Item Description | Detailed Specification |
|-----------|-----------------------------------|--|
| | | <p>2. For terminating all cables the junction box should have suitable terminating block or connections with proper locking arrangement.</p> <p>3. All the cables shall be clamped with suitable clamp to avoid the damage of the core / conductors due to cables weight. The cable inlet points at junction box should be water proof by providing rubber linings with sealing compound.</p> <p>4. Grounding provision and locking facility for junction box shall be there</p> <p>a. Toughened glass window in the front door</p> <p>b. Wide range of terminals and terminal blocks to accommodate UPS, Media Converter, LIU Panel/all the equipment's except the cameras.</p> <p>c. Natural and forced fan cooling system</p> <p>d. Customized cut outs on door, mounting plate</p> |
| 6 | Accessories | <p>a. CFL Light</p> <p>b. Stainless steel studs for grounding</p> <p>c. Min. 2mm thick mounting plate</p> |
| B. | Pole (For Outdoor Cameras) | |
| 1 | Pole Location | OPTCL Grid S/S |
| 2 | Material | GI-Tubular |
| 3 | Standard | ISI |
| 4 | Pole Height | <p>1. The pole height shall be 09 metres above the ground for which a necessary foundation shall be made if required(The pole shall be 09 meters from Ground and 3 meter deep in Ground)</p> <p>2. In case height lesser than 09 meter above the ground is required then bottom (broader) portion of the pole shall be cut accordingly. The dome of the camera shall be tightly secured against the pole in such a way that even during the high speed wind the dome shall not shake / vibrate, thus the camera output shall be jitter free during such time also.</p> |
| 5 | Mounting | <p>1. 13 mm thickness plate - Bottom Surface in earth avoid the shaking.</p> <p>2. To be concrete structure in the ground in 3 Meter depth.</p> <p>3. to be concrete structure above the ground half meter</p> |
| 6 | Type of installation | Industrial |
| 7 | Security Features | Internal Cabling with door at the bottom(door with lock & key facility) |

| # | Item Description | Detailed Specification |
|---|--|--|
| 8 | General Features | a. Pole should be fabricated from MS, weather proof & powder coated painted. |
| | | b. Should have provision of lightening arrester |
| | | c. Provision for earthing |
| | | d. Provision to mount the junction box at min. height of 1.25 meter from ground level for switch with lock & various cable arrangements for camera & network equipment. Vendor should supply all the mounting accessories. |
| 9 | Other Provision | Junction box Mounting provision, cable wiring provision internal to the pole with suitable opening(IN/OUT) |
| 10 | Environment | Should Withstand cyclonic storms |
| C. Display Monitor Desk | | |
| 1 | Monitor Desk for placing the NVR, 32" LED Display Monitor and UPS. The Monitor Desk shall have the Lock & Key Shelf (Min. 2 Nos.) and Keyboard Shelf, Cable Guide Hole | |
| D. Pole Mount Brackets, Camera Holder, LIU Box Holder, LIU-Box with Accessories(6/12port adaptor plate, pigtail) | | |
| 1 | Purpose/Size | The above items are should be fabricated as per the site requirement for proper integration of the system. |
| E. Cabling | | |
| 1 | LAN | LAN Cabling shall include connection from and between each individual CCTV and network equipment. This will include OFC cable, CAT6, patch cords, 6/8/24 ports patch connectors, etc. panel, 6/8/24 ports LIU with couplers, SM pigtails with SC/LC connectors, etc. |
| 2 | LAN Accessories | Other necessary items like casing & capping for OFC, UTP CAT6 cables etc. |
| 3 | Power Cabling | This shall include power supply to all CCTV & network equipment |
| 4 | Power cabling accessories | Other necessary items like casing & capping for electrical cabling |

D. SECTION-V
FORMS & SCHEDULES

I. SCHEDULE-A

BID FORM

To:

Senior General Manager (IT),
Odisha Power Transmission Corporation
Limited,
3rd Floor, OPTCL Tower, Janpath,
Saheed Nagar, Bhubaneswar- 751022

Ladies and/or Gentlemen,

Having examined the bidding documents, including addenda nos..... (insert numbers), the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the equipment, accessories & associated services under the contract “Implementation of IP Based CCTV Surveillance System at 29 locations of OPTCL (26 Grid Sub-Stations and 03 Stores Sub-Divisions) -Phase 3 with 03 years warranty and thereafter 03 years Comprehensive AMC Support” in conformity with the said Bidding Documents and in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our bid is accepted, to deliver the goods in accordance with in the stipulated delivery period as mentioned in the bidding documents.

If our bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to 10% (ten per cent) of the Contract Price for the due performance of the Contract, in the form prescribed by the Purchaser.

We agree to abide by this bid for a period of 180 days from the date fixed for bid opening, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Until a formal contract is prepared and executed between us, this bid, together with your written acceptance thereof and your Notification of Award, shall constitute a binding Contract between us.

We undertake that, we are accepting all the clauses, terms and conditions mentioned in the tender documents. Also, we undertake not to sub-contract any of the work awarded in whole or in part.

We confirm that we will provide technical consultancy and guidance at no extra cost to OPTCL for proper configuration and performance.

We undertake to provide goods and services confirming to tenders specifications.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely “Prevention of Corruption Act 1988”.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this.....day of 20.....

Signature in the capacity of
..... duly authorized to sign for and on behalf
of.....(IN BLOCK LETTERS)

II. SCHEDULE-B

MANUFACTURER’S AUTHORISATION FORM

MANUFACTURER’S AUTHORISATION FORM

(To be obtained from all OEMs on OEM’s Letter Head)

Date: -----

Ref No.: -----

Invitation for Bid No.: -----

To:

WHEREAS who are official manufacturers of having factories at do hereby authorize to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us and to subsequently negotiate and sign the Contract.

We hereby confirm the following:

- Confirm that the products quoted are not “end of life or end of sale products” as on Bid Submission date. If in case the support for the product quoted has been stopped/ withdrawn till the time of delivery of equipment, the same will be changed with the superior product at no extra cost.
- Undertake that the support including spares, patches, and upgrades for the quoted products shall be available for the entire period of the Project.
- There shall not be any withdrawal of support on the quoted hardware/system software release on the devices or software quoted by the bidder for “Implementation of CCTV Surveillance System at 29 locations of OPTCL (28 Grid Sub-Stations and 03 Stores Sub-Divisions)” vide above NIT.

(Note: In case the support for future releases is not available as on bid submission date, such Hardware/software shall not be quoted.)

- In case, on the quoted Hardware, the support is withdrawn subsequently, the bidder shall replace the non-supported Hardware with a better hardware, at no additional cost.

Name.....

In the capacity of.....

Signed

Duly authorized to sign the Bid for and on behalf of.....

Date.....

III. SCHEDULE-C

(a) Bidder's Name & Address:

(b) PRICE BID FOR IP Based CCTV Surveillance (Supply Component)

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 = 8 or (9+10) | 12 = 6+11 | 13 = 12*4 |
|-------------------------|-----------|---|-------------------|------|---------------------|------------|---------|----------|----------|----------|------------------------|--------------------------------|-------------|
| # | Item Code | Description | Country of Origin | Qty. | Unit of Measurement | Unit Price | GST (%) | IGST Amt | CGST Amt | SGST Amt | Total GST | Unit Price including Total GST | Total Price |
| SCHEDULE-A ITEMS | | | | | | | | | | | | | |
| 1 | CCSCA01 | Outdoor PTZ Camera (with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 200 mtrs.] | | 37 | Nos. | | | | | | | | |
| 2 | CCSCA02 | Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 100 mtrs] | | 81 | Nos. | | | | | | | | |
| 3 | CCSCA03 | Outdoor Fixed Camera (with fixed camera housing, power injector, camera holder and other accessories) [Range: 50 mtrs | | 14 | Nos. | | | | | | | | |

Implementation of IP Based CCTV Surveillance System at 29 locations of OPTCL - Phase 3

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 = 8 or (9+10) | 12 = 6+11 | 13 = 12*4 |
|----|-----------|--|-------------------|------|---------------------|------------|---------|----------|----------|----------|------------------------|--------------------------------|-------------|
| # | Item Code | Description | Country of Origin | Qty. | Unit of Measurement | Unit Price | GST (%) | IGST Amt | CGST Amt | SGST Amt | Total GST | Unit Price including Total GST | Total Price |
| 4 | CCSCA04 | Indoor Dome Camera (with power injector for dome camera) [Range: 30 mtrs] | | 29 | Nos. | | | | | | | | |
| 5 | CCSCA05 | 16 Channel NVR with 2 SATA for 2nos. of HDD (with additional mouse and keyboard) | | 29 | Nos. | | | | | | | | |
| 6 | CCSCA06 | 4 TB Surveillance HDD | | 58 | Nos. | | | | | | | | |
| 7 | CCSCA07 | 16 Port Managed Network Switch | | 29 | Nos. | | | | | | | | |
| 8 | CCSCA08 | 32" LED Display | | 29 | Nos. | | | | | | | | |
| 9 | CCSCA09 | Media Convertor (Box Type) | | 194 | Nos. | | | | | | | | |
| 10 | CCSCA10 | 600 VA Interactive UPS | | 147 | Nos. | | | | | | | | |
| 11 | CCSCA11 | Surge Protector for Outdoor Cameras | | 126 | Nos. | | | | | | | | |
| 12 | CCSCA12 | Fiber Patch Cords | | 194 | Nos. | | | | | | | | |

Implementation of IP Based CCTV Surveillance System at 29 locations of OPTCL - Phase 3

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 = 8 or (9+10) | 12 =6+11 | 13 = 12*4 |
|-------------------------|-----------|---|-------------------|-------|---------------------|------------|---------|----------|----------|----------|------------------------|--------------------------------|-------------|
| # | Item Code | Description | Country of Origin | Qty. | Unit of Measurement | Unit Price | GST (%) | IGST Amt | CGST Amt | SGST Amt | Total GST | Unit Price including Total GST | Total Price |
| 13 | CCSCA13 | 6 Core Armoured Fiber Optic Cable | | 30300 | Mtrs. | | | | | | | | |
| 14 | CCSCA14 | CAT6 STP Cable (Outdoor) | | 2120 | Mtrs. | | | | | | | | |
| 15 | CCSCA15 | CAT6 STP Cable (Indoor) | | 1850 | Mtrs. | | | | | | | | |
| 16 | CCSCA16 | 1.1 KV Armoured Cu-Power Cable | | 3030 | Mtrs. | | | | | | | | |
| 17 | CCSCA17 | 6U Network Rack | | 28 | Nos. | | | | | | | | |
| SCHEDULE-B ITEMS | | | | | | | | | | | | | |
| 18 | CCSCB01 | HDPE Conduit Pipe for FO with necessary accessories | | 30300 | Mtrs. | | | | | | | | |
| 19 | CCSCB02 | PVC Conduit Pipe for CAT6 with necessary accessories | | 2120 | Mtrs. | | | | | | | | |
| 20 | CCSCB03 | Outdoor Junction Box | | 119 | Nos. | | | | | | | | |
| 21 | CCSCB04 | Pole with pole mount brackets and other accessories | | 115 | Nos. | | | | | | | | |
| 22 | CCSCB05 | LIU-Box with Accessories(adaptor plate, pigtail, etc) | | 194 | Nos. | | | | | | | | |

Implementation of IP Based CCTV Surveillance System at 29 locations of OPTCL - Phase 3

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 = 8 or (9+10) | 12 = 6+11 | 13 = 12*4 |
|---------------------------------|-----------|--|-------------------|------|---------------------|------------|---------|----------|----------|----------|------------------------|--------------------------------|-------------|
| # | Item Code | Description | Country of Origin | Qty. | Unit of Measurement | Unit Price | GST (%) | IGST Amt | CGST Amt | SGST Amt | Total GST | Unit Price including Total GST | Total Price |
| 23 | CCSCB06 | Computer Desk | | 28 | Nos. | | | | | | | | |
| SCHEDULE-C ITEMS | | | | | | | | | | | | | |
| 24 | CCSCC01 | Installation & Commissioning cost [including casing-capping for UTP and power cables etc. and Electrical Cabling & Other Miscellaneous Work as per site requirement] | | 29 | Lump sum | | | | | | | | |
| Total Price in figures : | | | | | | | | | | | | | |
| Total Price in Rupees : | | | | | | | | | | | | | |

(c) PRICE BID for Comprehensive Annual Maintenance Contract for 03 years for all the 29 locations of OPTCL

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 = 6 or (7+8) | 10 = 4 + 9 | 11 = 10*12 quarters |
|---------------------------------|-----------|--|----------------|-----------------------------|---------|----------|----------|----------|----------------|---|-------------------------|
| Sl. No | Item Code | Description | Basis of Price | Unit Price For each quarter | GST (%) | IGST Amt | CGST Amt | SGST Amt | Total GST | Unit Price for each quarter including Total GST | Total Price for 3 years |
| 1 | CCAMC | Comprehensive AMC Support Charges for 03 years for all the 29 locations of OPTCL | Lump sum | | | | | | | | |
| Total Price in figures : | | | | | | | | | | | |
| Total Price in Rupees : | | | | | | | | | | | |

Note:

- In case of discrepancy between unit price and total, the unit price shall prevail.

Date:

(Signature)

Place:

(Printed Name)

(Designation)

(Common Seal)

IV. SCHEDULE-D

DETAILS OF SERVICE & SUPPORT CENTER AT ODISHA FOR VIDEO CONFERENCING SYSTEM

| Sl. No. | Address | Phone no. | Fax No. | Status of Office Working Days and Hours | Number of Service Engineers | Whether minimum 10 % spare of the ordered quantity is available (Yes/ No) | List of Firms serviced in last two (2) years |
|---------|---------|-----------|---------|---|-----------------------------|---|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Date:

(Signature)

.....

Place:

(Name)

.....

(Designation)

(Common Seal).....

N.B: To be signed and the scanned copy to be uploaded And Hard copy to be submitted

V. SCHEDULE-E

NO DEVIATION CERTIFICATE

To,

**Sr. General Manager (IT),
Odisha Power Transmission Corporation Limited,
3rd Floor, IT Department, OPTCL Main Building,
Janpath, Bhoi Nagar, Bhubaneswar- 751 022**

Dear Sir,

We, the undersigned, hereby declare that while responding to your RFP Notice No. dated, our bid response DOES NOT DEVIATE from the Tender Document and their amendment/corrigendum issued till the date of bid submission except for non- material deviations as per the Format detailed in SECTION-II.(1).III.

Name:

In the capacity of:

Signed

Duly authorized to sign the Bid for and on behalf of

Date

N.B: To be signed and the scanned copy to be uploaded And Hard copy to be submitted

VI. SCHEDULE-F (FORM OF CERTIFICATE OF ORIGIN AND ELIGIBILITY)

Bidder's Name & Address

I (We) hereby certify that the equipment and materials to be supplied are produced in, an Eligible Source Country.

I (We) hereby certify that my (our) company is incorporated and registered in, an Eligible Source Country.

Date: (Signature)

Place:..... (Printed Name)

(Designation)

(Common Seal)

N.B: To be signed and the scanned copy to be uploaded And Hard copy to be submitted

VII. SCHEDULE-G (General Compliance Schedule)

| Sl. No. | Item | Vendor's Compliance | Deviation (if any) |
|---------|---|---------------------------|---------------------|
| 01 | General Terms & Conditions | Agreed/Not agreed | |
| 02 | EMD, NSIC Certificate(if any) | Deposited/Not deposited | |
| 03 | Latest Income Tax Clearance, PAN and GST Registration certificates. | Deposited/Not deposited | |
| 05 | Payment Terms | Agreed/Not agreed | |
| 06 | Price Reduction Clause | Agreed/Not agreed | |
| 07 | Price Validity | Agreed/Not agreed | |
| 08 | Delivery & Installation Schedule | Agreed/Not agreed | |
| 09 | Warranty (03 years) & 03 years CAMC clause | Agreed/Not agreed | |
| 10 | Management of IP Based CCTV Surveillance System for entire contract period | Agreed/Not agreed | |
| 11 | Service Centre at Odisha with sufficient spare stock and service engineers | Exist/Does not Exist | |
| 12 | Training and Documentation | Agreed/Not agreed | |
| 13 | CAMC support for min. 3 years after the expiry of Warranty Period of 3 years. | Agreed/Not agreed | |
| 14 | Credentials with documentary support as per Qualification Criteria (ISO certificate, Turnover, Profitability, Order copies as required, etc.) | Submitted/ Not submitted. | |
| 16 | MAF from respective OEMs | Submitted/ Not submitted | |
| 17 | Original data sheets for all items | Submitted/Not submitted | |
| 18 | Driver software, wherever applicable, to be supplied | Agreed/Not agreed. | |
| 19 | Quoted all items | Agreed/Not agreed. | |
| 20 | Technical viability of the project for all the equipment offered by the vendor. | Submitted/ Not Submitted. | |

Signature with Date

Name in Block Letters

Seal of the Company

Note: In case the vendor's confirmation is negative, specific comments are to be filled in the deviation column. If the space is insufficient, a separate sheet may be enclosed.

VIII. SCHEDULE-H (APPROVED MAKE, QUOTED MAKE & MODEL)

| # | Item | Make | Quoted Make | Quoted Model |
|-----|--|---|-------------|--------------|
| 1. | Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 200 mtrs.] | Sony/Pelco/Bosch/ Axis/ Infinova | | |
| 2. | Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 100 mtrs.] | Sony/Pelco/Bosch/ Axis/ Infinova | | |
| 3. | Outdoor Fixed Camera (with fixed camera housing, power injector, camera holder and other accessories) [Range: 50 mtrs.] | Sony/Pelco/Bosch/ Axis/ Infinova | | |
| 4. | Indoor Dome Camera (with power injector for dome camera) [Range: 30 mtrs.] | Sony/Pelco/Bosch/ Axis/ Infinova | | |
| 5. | 16 Channel NVR with 2 SATA for 2nos. of HDD (with additional mouse and keyboard) | Sony/Pelco/Bosch/ Axis/ Infinova | | |
| 6. | 4 TB Surveillance HDD | Seagate/WD | | |
| 7. | 16 Port Managed Network Switch | Cisco/ HP/ Allied Telesis/ Juniper /Brocade/ SAN-Telequip | | |
| 8. | 32" LED Display | Samsung/ Sony/ LG | | |
| 9. | Media Convertor (Box Type) | Phoenix/ Moxa /Allied Telesis/ Perle/ SAN-Telequip | | |
| 10. | 600 VA Interactive UPS | APC/ Emerson-Liebert; Battery-Exide/ Amron | | |
| 11. | Surge Protector for Outdoor Cameras | Emersion/ CITELE/ SAN-Telequip | | |
| 12. | Fiber Patch Cords | Molex/TE/ Systimax / Krone/ Commscope | | |
| 13. | 6 Core Armoured Fiber Optic Cable | Molex/TE/ Systimax/ Krone/ Commscope | | |
| 14. | CAT6 STP Cable (Outdoor) | Molex/TE/ Systimax/ Krone/ Commscope | | |
| 15. | CAT6 STP Cable (Indoor) | Molex/TE/ Systimax/ Krone/ Commscope | | |
| 16. | 1.1 KV Armoured Cu-Power Cable | Polycab/Havells/ V-Guard | | |
| 17. | HDPE Conduit Pipe for FO with necessary accessories | Open | | |
| 18. | PVC Conduit Pipe for CAT6 with necessary accessories | Open | | |
| 19. | Outdoor Junction Box | Open | | |
| 20. | Pole with pole mount brackets and other accessories | Open | | |
| 21. | LIU-Box with Accessories(adaptor plate, pigtail, etc) | Open | | |
| 22. | 6U Network Rack | Valrack/ Netrack/ APW President / Rittal | | |
| 23. | Computer Desk | Open | | |

Signature with Date

Name inBlock Letters

Seal of the Company

N.B: To be signed and the scanned copy to be uploaded And Hard copy to be submitted

IX. SCHEDULE-I (LIST OF CONSIGNEE)

Location-wise Estimated Bill of Quantity for Implementation of CCTV Surveillance System at 29 locations of OPTCL (26 Grid Sub-Stations & 03 Stores Sub-Divisions)

| # | Item Code | UOM | | | | | |
|----|--------------------------------------|------|-------------|-------------|-------------|-------------|--|
| 1 | | | | | | | |
| 2 | CCSCA01 | Nos. | | | | | |
| 3 | CCSCA02 | Nos. | | | | | |
| 4 | CCSCA03 | Nos. | | | | | |
| 5 | CCSCA04 | Nos. | | | | | |
| 6 | 400/220/132kV Grid S/S New Duburi | | 6 | 0 | 0 | 1 | |
| 7 | 400/220/132kV Grid S/S Mendhasal | | 6 | 0 | 0 | 1 | |
| 8 | 400/220/132kV Grid S/S Lapanga | | 3 | 8 | 0 | 2 | |
| 9 | 220/132/33kV Grid S/S Bhanjanagar | | 1 | 3 | 0 | 2 | |
| 10 | 220/132/33kV Grid S/S Atri | | 1 | 3 | 0 | 1 | |
| 11 | 220/132/33kV Grid S/S Bidanasi | | 1 | 4 | 0 | 1 | |
| 12 | 220/132/33kV Grid S/S Cuttack | | 2 | 2 | 0 | 1 | |
| 13 | 220/132/33kV Grid S/S Paradeep | | 2 | 2 | 2 | 1 | |
| 14 | 220/132/33kV Grid S/S Duburi (Old) | | 0 | 4 | 0 | 1 | |
| 15 | 220/132/33kV Grid S/S Bhadrak | | 0 | 5 | 0 | 1 | |
| 16 | 220/132/33kV Grid S/S Balasore | | 0 | 5 | 1 | 1 | |
| 17 | 220/132/33kV Grid S/S Joda | | 2 | 3 | 0 | 2 | |
| 18 | 220/132/33kV Grid S/S Tarkera | | 0 | 5 | 1 | 1 | |
| 19 | 220/132/33kV Grid S/S Katapali | | 0 | 6 | 2 | 1 | |
| 20 | 220/132/33kV Grid S/S Bolangir (New) | | 0 | 7 | 0 | 1 | |
| 21 | 220/132/33kV Grid S/S Bargarh New | | 0 | 3 | 1 | 1 | |
| 22 | 220/132/33kV Grid S/S Kesinga | | 1 | 4 | 0 | 1 | |
| 23 | 220/33kV Grid S/S Bonai | | 1 | 1 | 0 | 1 | |
| 24 | 132/33kV Grid S/S Tushra | | 0 | 2 | 0 | 1 | |
| 25 | 132/33kV Grid S/S Tirtole | | 1 | 0 | 1 | 1 | |
| 26 | 132/33kV Grid S/S Kantabanji | | 1 | 0 | 1 | 1 | |
| 27 | 132/33kV Grid S/S Dhenikikote | | 0 | 2 | 0 | 1 | |
| 28 | 132/33kV Grid S/S Ghense | | 1 | 0 | 1 | 1 | |
| 29 | 132/33kV Grid S/S Udala | | 0 | 2 | 0 | 1 | |
| 30 | 132/33kV Grid S/S Agarpada | | 0 | 3 | 0 | 1 | |
| 31 | 132/33kV Grid S/S Maneswar | | 1 | 0 | 1 | 1 | |
| 32 | Stores Depot Choudwar | | 0 | 3 | 1 | 0 | |
| 33 | Stores Depot Bhubaneswar | | 0 | 3 | 2 | 0 | |
| 34 | Stores Depot Banarpal | | 1 | 1 | 1 | 0 | |
| 35 | Total Quantity | | 37 | 81 | 14 | 29 | |
| 36 | MOU | | Nos. | Nos. | Nos. | Nos. | |

| # | Item Code | UOM | 400/220/132kV Grid S/S New Duburi | 400/220/132kV Grid S/S Mendhasal | 400/220/132kV Grid S/S Lapanga | 220/132/33kV Grid S/S Bhanjanagar | 220/132/33kV Grid S/S Atri | 220/132/33kV Grid S/S Bidanasi | 220/132/33kV Grid S/S Cuttack | 220/132/33kV Grid S/S Paradeep | 220/132/33kV Grid S/S Duburi (Old) | 220/132/33kV Grid S/S Bhadrak | 220/132/33kV Grid S/S Balasore | 220/132/33kV Grid S/S Joda | 220/132/33kV Grid S/S Tarkera | 220/132/33kV Grid S/S Katapali | 220/132/33kV Grid S/S Bolangir (New) | 220/132/33kV Grid S/S Bargarh New | 220/132/33kV Grid S/S Kesinga | 220/33kV Grid S/S Bonai | 132/33kV Grid S/S Tushra | 132/33kV Grid S/S Tirtole | 132/33kV Grid S/S Kantabanji | 132/33kV Grid S/S Dhenkikote | 132/33kV Grid S/S Ghense | 132/33kV Grid S/S Udala | 132/33kV Grid S/S Agarpada | 132/33kV Grid S/S Maneswar | Stores Depot Choudwar | Stores Depot Bhubaneswar | Stores Depot Banarpal | Total Quantity | UOM | |
|----|-----------|-------|-----------------------------------|----------------------------------|--------------------------------|-----------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------------|------------------------------------|-------------------------------|--------------------------------|----------------------------|-------------------------------|--------------------------------|--------------------------------------|-----------------------------------|-------------------------------|-------------------------|--------------------------|---------------------------|------------------------------|------------------------------|--------------------------|-------------------------|----------------------------|----------------------------|-----------------------|--------------------------|-----------------------|----------------|-------|-------|
| 15 | CCSCA15 | Mtrs. | 100 | 100 | 130 | 100 | 70 | 90 | 50 | 60 | 30 | 70 | 70 | 100 | 100 | 100 | 80 | 100 | 70 | 40 | 30 | 60 | 60 | 30 | 40 | 40 | 30 | 80 | 30 | 0 | 0 | 30 | 1850 | Mtrs. |
| 16 | CCSCA16 | Mtrs. | 180 | 300 | 250 | 80 | 100 | 100 | 80 | 80 | 80 | 100 | 100 | 100 | 150 | 160 | 180 | 80 | 80 | 100 | 40 | 40 | 20 | 20 | 40 | 20 | 30 | 30 | 60 | 300 | 150 | 3030 | Mtrs. | |
| 22 | CCSCA17 | Nos. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 28 | Nos. | |
| 17 | CCSCB01 | Mtrs. | 4500 | 4500 | 5000 | 1400 | 800 | 1000 | 700 | 1100 | 1000 | 900 | 1000 | 950 | 2000 | 1000 | 1800 | 600 | 1300 | 150 | 0 | 0 | 0 | 0 | 150 | 0 | 0 | 0 | 150 | 150 | 150 | 30300 | Mtrs. | |
| 18 | CCSCB02 | Mtrs. | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 0 | 50 | 0 | 100 | 160 | 90 | 90 | 180 | 50 | 150 | 200 | 80 | 220 | 200 | 200 | 2120 | Mtrs. | |

| # | Item Code | UOM | 400/220/132kV Grid S/S New Duburi | 400/220/132kV Grid S/S Mendhasal | 400/220/132kV Grid S/S Lapanga | 220/132/33kV Grid S/S Bhanjanagar | 220/132/33kV Grid S/S Atri | 220/132/33kV Grid S/S Bidanasi | 220/132/33kV Grid S/S Cuttack | 220/132/33kV Grid S/S Paradeep | 220/132/33kV Grid S/S Duburi (Old) | 220/132/33kV Grid S/S Bhadrak | 220/132/33kV Grid S/S Balasore | 220/132/33kV Grid S/S Joda | 220/132/33kV Grid S/S Tarkera | 220/132/33kV Grid S/S Katapali | 220/132/33kV Grid S/S Bolangir (New) | 220/132/33kV Grid S/S Bargarh New | 220/132/33kV Grid S/S Kesinga | 220/33kV Grid S/S Bonai | 132/33kV Grid S/S Tushra | 132/33kV Grid S/S Tirtole | 132/33kV Grid S/S Kantabanji | 132/33kV Grid S/S Dhenkikote | 132/33kV Grid S/S Ghense | 132/33kV Grid S/S Udala | 132/33kV Grid S/S Agarpada | 132/33kV Grid S/S Maneswar | Stores Depot Choudwar | Stores Depot Bhubaneswar | Stores Depot Banarpal | Total Quantity | UOM |
|----|-----------|----------|-----------------------------------|----------------------------------|--------------------------------|-----------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------------|------------------------------------|-------------------------------|--------------------------------|----------------------------|-------------------------------|--------------------------------|--------------------------------------|-----------------------------------|-------------------------------|-------------------------|--------------------------|---------------------------|------------------------------|------------------------------|--------------------------|-------------------------|----------------------------|----------------------------|-----------------------|--------------------------|-----------------------|----------------|----------|
| 19 | CCSCB03 | Nos. | 9 | 9 | 11 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 7 | 3 | 5 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 3 | 3 | 3 | 119 | Nos. |
| 20 | CCSCB04 | Nos. | 9 | 9 | 11 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 7 | 7 | 3 | 5 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 3 | 115 | Nos. |
| 21 | CCSCB05 | Nos. | 18 | 18 | 22 | 8 | 8 | 10 | 6 | 8 | 8 | 10 | 10 | 10 | 10 | 8 | 14 | 6 | 10 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 194 | Nos. |
| 23 | CCSCB06 | Nos. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 28 | Nos. |
| 24 | CCSCC01 | Lump sum | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 29 | Lump sum |

X. SCHEDULE-J
PROFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE (CPBG)

(To be stamped in accordance with Stamp Act and the Non-Judicial stamp paper of appropriate value should be in the name of the Issuing Bank.)

Ref No:

Bank Guarantee No.

Date:

BG Amount:

Validity Period:

This Guarantee Bond is executed this..... day of by us the..... Bank at , P.O..... , Dist....., State..... and Code No.....

Whereas the ODISHA POWER TRANSMISSION CORPORATION LIMITED, Janpath, Bhubaneswar, a company constituted under the Companies Act-1956 (hereinafter called OPTCL) has issued Letter of Award (LOA) No..... Dated..... for the purpose of work under Package No..... (herein after called “the Agreement”) to M/s. / Sri. , Address..... (herein after called the “Contractor”) for supply, erection, installation & commissioning and associated civil works under the above LoA and whereas OPTCL has agreed (1) to exempt demand of security deposit under the terms and conditions of the LOA (2) to release payment of the cost of the Contract Price to the Contractor on furnishing by the Contractor to OPTCL a Contract Performance Bank Guarantee (CPBG) of the value of 10% of the Contract Price of the said Agreement.

1. Now therefore, in accordance with the terms and conditions of LOA No. _____ dated _____ for the due fulfillment by the said Contractor of the terms and conditions contained in the said agreement, on production of a Bank Guarantee for Rs. _____ (Rupees _____) only, we the bank _____ [Indicate bank Name , Address & Code] (hereinafter referred to as “the Bank”) at the request of M/s. / Sri. _____ contractor do hereby undertake to pay to OPTCL, an amount not exceeding Rs. _____ (Rupees _____) only .

2. We, the _____ Bank [indicate the name of the Bank, Address & Code] do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from OPTCL. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees----- in Words).

3. We, the Bank also undertake to pay to OPTCL any money so demanded not withstanding any dispute or disputes raised by the Contractor in any suit or proceeding instituted / pending before any court or tribunal relating thereto, our liability under this present being absolute and irrevocable. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor shall have no claim against us for making such payment.

4. We, the _____ Bank further agree that the guarantee herein contained shall remain in full force and effect during the aforesaid period of _____ days and it shall continue to be so enforceable till all the dues of OPTCL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till OPTCL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor and accordingly discharges this guarantee.

Unless a demand or claim under this guarantee is made on us or our Branch Office at Bhubaneswar <Mention Name, Address & Code of the Branch Office at Bhubaneswar of issuing Bank> in writing on or before (Date), we shall be discharged from all liability under this guarantee thereafter.

5. We, the _____ Bank [indicate the name of the Bank, Address & Code] further agree with the Board that OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bid or to extend time or performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by OPTCL against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation postponement or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving us.

6. This guarantee will not be discharged due to the change in the name, style or constitution of the Bank and/or of the contractor(s).

7. We, the _____ Bank [indicate the name of the bank, Address & Code] lastly undertake not to revoke this guarantee during its currency except with the previous consent of OPTCL in writing.

8. We, the _____ Bank (Name, Address & Code) further agree that this guarantee shall also be invocable at our place of business at **Bhubaneswar** (indicate Name, Address & Code of the Branch at Bhubaneswar) in the State of Odisha.

“Notwithstanding anything contained herein”

a) Our liability under the bank guarantee shall not exceed Rs. ----- (Rupees in words-- -----) only.

b) This Bank guarantee shall be valid up to -----.

c) We or our Branch at **Bhubaneswar**<Mention Name, Address & Code.....> shall be liable to pay guaranteed amount or any part thereof under this guarantee only if you serve upon us at----- Branch of Bhubaneswar a written claim or demand on or before,

The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with required details to the beneficiary's advising bank (**ICICI Bank Bhubaneswar**, IFSC Code ICIC0000061).

Dated, the _____ Day of _____

For _____ [Indicate name of Bank]

Signature.....
Full Name.....
Designation.....
Power Of Attorney.....
Dated.....
Seal of the Bank.....

WITNESS: (SIGNATURE WITH NAME AND ADDRESS)

1. Signature.....
Full Name.....
2. Signature.....
Full Name.....

N.B.:

1. Name of the Contractor:
2. BG No & Date:
3. Amount (In Rs.):
4. Validity up to:
5. LOA No.....
6. Package No.....
7. Name, Address & Code of Issuing Bank:
8. Name, Address & Code of Bhubaneswar Branch of the Issuing Bank:

The Bank Guarantee shall be accepted after getting SFMS advice as per details below.

Format for SFMS details

(The Unique Identifier for field 7037 is “OPTCL541405793”)

| Sl. No | PARTICULARS | TYPE | DETAILS |
|--------|---|-----------|--|
| 1 | Type of Bank Guarantee | Mandatory | Contract Performance |
| 2 | Currency & Amount | Mandatory | |
| 3 | Validity Period(from—to --) | Mandatory | |
| 4 | Effective Date | Mandatory | |
| 5 | End date of lodgment of Claim | Mandatory | |
| 6 | Place of lodgment of claim | Mandatory | Bhubaneswar, Branch Name----- of Bhubaneswar Branch code----- of Bhubaneswar Branch Address ----- at Bhubaneswar |
| 7 | Issuing Branch IFSC Code | Mandatory | |
| 8 | Issuing Branch name & address | Mandatory | |
| 9 | Name of applicant and its details | Mandatory | |
| 10 | Name of Beneficiary and its details | Mandatory | |
| 11 | Beneficiary's Bank/Branch and IFSC Code | Mandatory | ICICI Bank Ltd IFSC Code-ICIC0000061 |
| 12 | Beneficiary's Bank/Branch name and address | Mandatory | ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar |
| 13 | Sender to receiver information | Mandatory | |
| 14 | Purpose of Guarantee | Mandatory | Contract Performance |
| 15 | Reference/Description of the underlined tender/contract | Mandatory | LOA No---- |

Note:

- 1. Contractor shall furnish single CPBG for the contract (Supply, Erection, Installation & Commissioning and Associated Civil Works).**
- 2. Strikeout the portion which are not required.**
- 3. In case a Contractor is a Joint Venture/Consortium, The CPBG shall be submitted by the Lead Partner mentioning the Name & Address of the Lead Partner & Other Partner.**