



ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Govt. of ODISHA Undertaking)

Registered Office: Janpath, Bhubaneswar – 751022

CIN: U40102OR2004SGC007553

TENDER NOTICE No. TW-IT/OT/05/2016-17 DATE: 03-11-2016

Chief General Manager (IT), OPTCL, 3rd Floor, OPTCL TOWER, Janpath, Bhubaneswar on behalf of OPTCL invites bids in e-tender mode only from reputed eligible bidders for Implementation CCTV Surveillance System at 4 numbers of Grid Sub-Substations conforming to the terms and conditions mentioned as follows:

The interested eligible bidders may visit our website www.optcl.co.in on or after 03/11/2016 (14:00 Hrs) to go through / download the scope of supply and terms and conditions in detail. The techno-commercial bid shall be due for submission on dated 25/11/2016 (17:00 Hrs).

The interested bidders would be required to enrol themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents are available at www.tenderwizard.com/OPTCL from 03/11/2016 (14:00Hrs) up to 24/11/2016(17:00 Hrs).

Interested contractors may visit OPTCL's official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL for detail specification.

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

Chief General Manager (IT)

CONTENTS

Sl. No.	Chapter			Page No
A	SECTION - I	1	General Information to the Bidders	03
		2	Submission of Bids	03
		3	Bidding Schedule	05
		4	Scope of Work, Schedule of Quantity, Work Deliverables, Responsibility Matrix, Key Deliverables	07
		5	Opening of Bids	13
		6	Qualification of Bidder (Out Right Rejection)	14
B	SECTION - II	1	General Instructions to the Bidders	18
C	SECTION - III	1	General Conditions of the Contract	20
D	SECTION - IV	1	Schedule of Technical Requirements and detailed technical specifications	39
E	SECTION - V	1	Forms and Schedules	59

A. SECTION-I

1. General information to the Bidders

- I. **Name of the Project:** Procurement, Installation, Commissioning, Testing, Implementation of IP Based CCTV Surveillance System in OPTCL grids (Chandaka, Meramundali, Budhipadar, Jayanagar)
- II. The prospective bidders are advised to register their user ID, Password, company ID from 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 website of the OPTCL by the date and time indicated in the Tender notice.
- II. Bids submitted by telex/telegram 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 instruction, stipulated.
- IV. The participants to the tender should be registered under IT Act, Service tax Act
- V. The Bidder must possess Compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
- VI. Contractors / Vendors / Bidders are requested to follow the below steps for registration
 - (a) Click "Register", fill the online registration form.
 - (b) Pay the amount of Rs. 2300/- through DD in favour of KSEDC Ltd. Payable at Bangalore. 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 has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.

- VIII. If any Bidder wants to participate in the tender he/ she will have to follow the instructions given below:
- (a) Insert the PKI (which consist of your Digital Signature Certificate) in your System (Note: Make sure that necessary software of PKI be installed in your system)
 - (b) Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
 - (c) Go to Start > Programs > Internet Explorer.
 - (d) Type www.tenderwizard.com/OPTCL in the address bar, to access the Login Screen.
 - (e) Enter e-tender User Id and Password, click on "Go".
 - (f) Click on "Click here to login" for selecting the Digital Signature Certificate.
 - (g) Select the Certificate and enter DSC Password
 - (h) Re-enter the e-Procurement User Id Password
- IX. To make a request for Tender Document, Bidders will have to follow below mentioned steps:
- (a) Click "Un Applied" to view / apply for new tenders.
 - (b) Click on Request icon for online request
 - (c) Enter the required fields including details of DD for tender Processing fee
- X. After making the request Bidders will receive the Bid Documents which can be checked and downloaded by following the below steps:
- (a) Click to view the tender documents which are received by the user
 - (b) Tender document screen appears
 - (c) Click "Click here to download" to download the documents
- XI. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions:
- (a) Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not

- (b) Note down / take a print of bid control number once it is displayed on the screen

- XII. Competitors bid sheets will be available in the website
- XIII. For any e-tendering assistance, contact help desk number: [080- 40482000](tel: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 | : 10,500/-(non-refundable) including VAT@5% |
| 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 (j) below |
| 5 | Tender Processing Fee | : The bidders shall have to submit a non-refundable tender processing fee of Rs. 5750/- in the form of Demand Draft, drawn in favour of K.S.E.D.C. Ltd., Payable at Bangalore |
| 6 | EMD* | : All bids must be accompanied by a bid security (EMD) in the amount of 2,08,000/-(Two Lakhs Eight Thousand Only) |
| 7 | Mode of EMD | : The bid Security may be submitted in one of the following forms:
a. Crossed bank draft/pay order/bank certified cheque drawn in favour of the Drawing and Disbursing Officer, OPTCL, Headquarters, Bhubaneswar |

- 8 Submitted EMD, Tender Cost, Tender Processing Fee : The bidders shall scan the Demand Draft/Pay order Towards EMD, tender paper Cost and tender processing fee and upload the scanned image in the prescribed form in .gif or .jpg format in addition to submitted original
- : The said demand drafts are to be submitted in original at the office of the undersigned on or before the last date & time of submission of tender
- 9 Date of commencement of Sale of bidding document : 03/11/2016(14:00Hrs)
- 10 Last date of sale of bidding document : 24/11/2016(17:00Hrs)
- 11 Last date and time for Receipt of bids : 25/11/2016(17:00Hrs)
- 12 Date of Pre-Bid meeting : 17/11/2016(11:00Hrs)
- 13 Time and date of opening of Techno-commercial bids : 26/11/2016(after 13:30)
- 14 Time and of opening price bids : Will be Intimated Latter
- 15 Place of opening of bids : Office of Chief General Manager (IT), 3rd Floor, OPTCL Tower, OPTCL, Janpath, Bhubaneswar-751022
- 16 Address for communication : Chief General Manager (IT), 3rd Floor, OPTCL Tower, 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 Work, Schedule of Quantity, Work Deliverables, Responsibility Matrix, Key Deliverables:

Scope of work: Scope of work comprises supply, installation, commissioning and integrating all components of the IP based CCTV surveillance and monitoring system including video management and other software product etc. along with other accessories that meet the full functionality, provide hand-holding for 1 year, provide the maintenance services during the warranty and CAMC (Comprehensive AMC) period of the systems.

I. Supplies(Hardware/Software):

All the supplies to be made as per OPTCL's approved makes complying with the technical specification mentioned in the tender document. Please refer to the Schedule-J for list of Approved Makes for all the line items to be supplied for this project.

Sl. No.	Item	Quantity	Unit
1	Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)	29	Nos.
2	Outdoor Fixed Camera(with fixed camera housing and power injector)	12	Nos.
3	Indoor Dome camera(with power injector for dome camera)	09	Nos.
4	PTZ Controller	4	Nos.
5	Video Management Software for surveillance system	4	Nos.
6	24 U Networking Rack	4	Nos.
7	Outdoor Junction Box	41	Nos.
8	Media Convertor(Box Type)[Ethernet-SC Type]	41	Nos.
9	Media Convertor(Card Type)[Ethernet-SC Type]	41	Nos.
10	14 Slot Chassis for the media convertor	4	Nos.
11	LIU-Box with Accessories(6/12 port adaptor plate, pigtail, etc)	62	Nos.
12	Fiber Patch Cords [SC to LC Type]	82	Nos.

13	24 port L2 Managed Switch	4	Nos.
14	Rack Server with Monitor	4	Nos.
15	NAS for Video Storage(16 TB)	4	Nos.
16	Pole Mount Brackets	50	Nos.
17	Pole	8	Nos.
18	Camera Holder, LIU Box Holder	41	Nos.
19	32" LED Display	4	Nos.
20	Online UPS for Control Room-2KVA with batteries	4	Nos.
21	Interactive UPS for Camera-600VA	4	Nos.
22	Surge Protector for Outdoor Cameras	41	Nos.
23	6 CORE ARMOURED FO CABLE(Single Mode)	12	KM (approx)
24	CAT-6 STP CABLE	450	Mtrs (approx)
25	1.1KV ARMOURED CU-POWER CABLES	500	Mtrs (approx)
26	HDPE CONDUIT FOR FO AND POWER CABLES WITH ACCESSORIES	12	KM (approx)
27	HDPE CONDUIT FOR LAN (CAT 6) CABLE WITH ACCESSORIES	450	Mtrs (approx)
28	Other necessary items like casing & capping for UTP and power cables etc.	4	Lump sum
29	Electrical Cabling	4	Lump sum
30	Microsoft Windows Server 2012 Standard Edition 64 Bit with Media kit	4 nos. of license	
31	Antivirus for server	4 nos. of license	

II. Services:

Sl. No	Description	Unit of Measurement	Quantity
1	Installation, Commissioning, Testing, Implementation of IP Based CCTV Surveillance System in OPTCL grids (Chandaka, Meramundali, Budhipadar, Jayanagar)	Lump Sum	4

Note: 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.

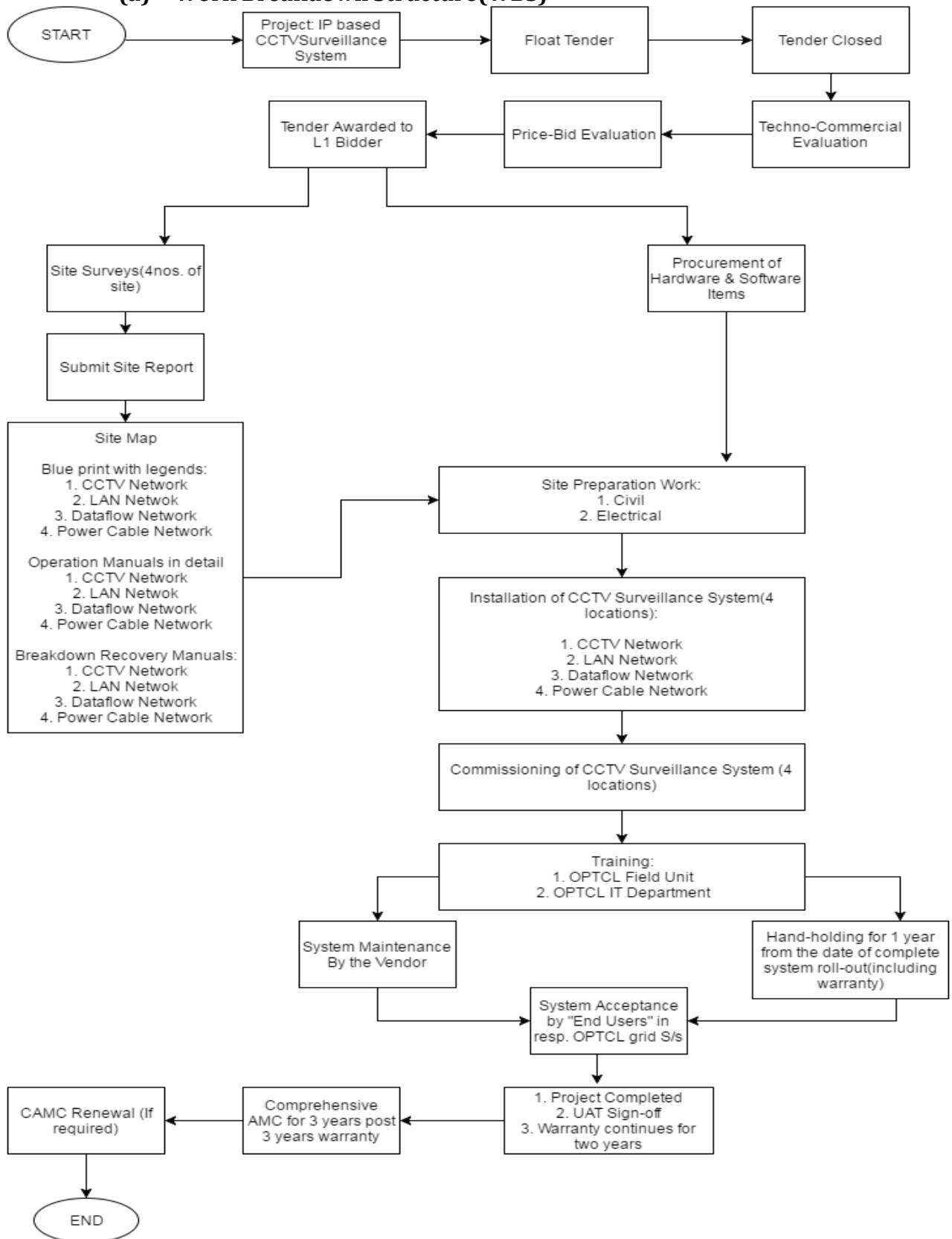
III. Comprehensive AMC for 3 years:

Sl. No.	Description	Unit of Measurement	Quantity
1	CAMC Charges for 3 years after the warranty period for CCTV, networking, equipment and software element for the 4 Grid Sub-Stations	Lump sum	01

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 materialise and operationalize all the functional specifications of this project shall be borne by the successful bidder at no extra cost to the purchaser.

IV. Work Deliverables

(a) Work Breakdown Structure(WBS)



(b) Responsibility Matrix:

RACI CHART					
Sl. No.	GENERAL ACTIVITY	GRID S/s	OPTCL - Project Team	CONSULTANT - CGM(IT)	VENDOR/ SI
1	Publishing of Tender & Bid Management	I	R	R/ C	I
2	Bid Evaluation	NA	R	C/ A	NA
3	Signing of the Contract	I	I	R/ A	R
4	Preparation of the Site Survey Report (4 sites)	C	C	C/ A	R
5	Finalise the list of Locations for Edge Devises in consultation with CGM(IT) & Prepare the detailed plan for Camera Connectivity with Command Centres	C	C	R/ A	NA
6	Prepare SRS documentation for the Video Surveillance Solution, Finalize Reporting Formats/Base Rule	C	C	C/ A	R
7	Validate the Technical Design and Review SRS documentation	C/ I	C	R/ C/ A	R
8	Submission of the Partial Acceptance Testing & Final Acceptance Testing Formats	C	R	C/ A	R
9	Supply, Installation, Configuration and Commissioning of various equipment, components, systems	C	C	C/ A	R
10	Supply, Installation of other facilities such as Interiors, Electrical, UPS etc.	C	C	C/ A	R
11	Provisioning of Connectivity between Cameras, Control Centre, Viewing Centres	C	C	C/ A	R
12	Preparing and implementing the Surveillance system information security policy, including policies on backup	I	C	C/ A	R

13	Preparation of the Policy Documents for Use & Operations of Surveillance System for the OPTCL grid locations CCTV System	C	C	C/ A	R
14	Guideline document/ manual to standardize file formats, compression types, interface, to be used by various agencies concerned with video/ photograph recording & storage.	I	C	C/ A	R
15	Guidelines for video data handling for submission of the video data to judiciary as legal evidence	I	C	C/ A	R
16	Preparation of the Guideline Documents for allowing CCTV Feed of OPTCL to Police CCTV System	I	C	C/ A	R
17	Training and Capacity Building for the OPTCL Grid S/s for Operation of the system	R	C	C/ A	R
18	Partial Acceptance Testing & Final Acceptance Testing of IT & Non-IT equipment in the CCTV system	R	R/C	C/ A	R
19	System Documents, User Documents as per ITIL (Information Technology Infrastructure Library) standards	I/ A	C	C/ A	R
20	Review and Validation of the Documentation submitted by System Integrator	I/C	R	R/ A	C
21	Providing technically qualified manpower for maintenance of the entire system	C/I	C	R/ A	R
22	On-Site Facilities Management services	I	C	C/ A	R
23	Comprehensive Warranty Maintenance of the supplied equipment	I	I	C/ A	R
24	Provision of on-site spares	C/ I	I	R/ C/ A	R
25	Hand-over of the system at the end of contractual period along with all documentation required to operate and maintain the system	R/ A	C	R/ A	R
26	Weekly Progress Reports	R/ A	C	A	R
27	Monthly Progress Reports	R/ A	C	A	R
28	Penalty for breach of SLA	C	C	R/ A	R

(c) Key Deliverables

Sl. No.	Activities/ deliverables	Submission Date	Amount
1	Submission & Acceptance of final complete site survey report (4 sites)	W+10days	60% of Total Project Cost
2	Procurement & Delivery of CCTV hardware & software (4 sites)	W+30 days	
3	Successful onsite inspection (4 sites)	W+45 days	20% of Total Project Cost
4	Successful completion of site preparation work (Civil + Electrical) (4 sites)	W+50 days	
5	Successful installation & commissioning of CCTV Surveillance System (4 sites)	W+70 days	
6	Successful Pilot testing (positive & negative) (4 sites)	W+80 days	
7	Successful system roll-out of the system (4 sites)	W+80 days	10% of Total Project Cost
8	Successful training given to OPTCL officers (field officer + IT officer) (4 sites)	W+85 days	
9	Submission of all operational manuals duly checked and accepted as given in WBS (4 sites)	W+90 days	
10	Successful system maintenance & Hand-holding for 1 year(including 1 year warranty)	Successful roll-out + 365 days	10% of Total Project Cost
11	System acceptance by "End Users" (4 sites)	Successful roll-out + 365 days	

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

Note: The end of life of all the CCTV Equipment and IT items quoted by the bidder should be a minimum of Six (6) years from the bid submission date.

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 authorisation letter from the Bidder to OPTCL to attend opening of Bids.
- II. **Part-I (OPTCL-IP Based CCTV Surveillance System Techno-Commercial Bid)** shall be opened on the stipulated date and time mentioned under clause 2(l) of Section-I. After technical evaluation, the **Part-II (OPTCL-IP Based**

CCTV Surveillance System Price-Bid) of successful/eligible bidders shall be opened on a later date to be decided by the purchaser.

- III. The bidders shall be intimated of the price bid opening date through OPTCL's web site in case of any change in the date of opening of the price bid.
- 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

- I. The bidder must be an Authorized Systems Integrator (ASI) having a direct purchase and support agreement with the OEMs of the IP Based CCTV Surveillance System equipment. The bidder should provide Manufacturer's Authorization Letter for all IP Based CCTV Surveillance System equipment quoted (except the items for which the bidder itself is the OEM) along with the bid. The ASI should also submit declaration, as a mandatory requirement, by OEMs that the quoted H/W items shall not be outdated within 6(six) years of supply and that OEM renders necessary spares support to ASI.
- II. 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.
- III. Duly certified by authorized CA.
- IV. The annual average turnover of the bidder shall be minimum Rs.5 crores for the financial years 2013-14, 2014-15 and 2015-16. Please submit scanned auditor certified copies.
- V. The bidder shall give an undertaking as a part of this contract to provide technical consultancy and guidance at no extra cost to OPTCL for proper configuration and performance and integration. The Bidder shall submit an undertaking to this effect.
- VI. In addition to the above the Bidder shall submit the following:
 - (a) The Bidder must be a certified "Systems Integrator" with latest version of the certifications of an ISO 9001, etc. Bidder has to submit photocopy of the original certificate along with their bid.

- (b) The bidder must have successfully executed at least one numbers of similar projects of value more than Rs.60 Lakhs or (sixty Lakhs) or two numbers of similar project of value more than Rs.40 Lakhs (forty lakhs) or three numbers of similar projects of value more than Rs.30 lakhs(Thirty lakhs)each during last three years. At least one such project should have been executed for any Govt. office / PSU / autonomous Govt. body .

Customer certified credentials shall be submitted.

- (c) The bidder must have full-fledged service centre at Bhubaneswar equipped with spare stock and certified manpower (self-certificate).
- (d) The tenders should be kept valid for a period of 180 (One hundred and eighty)days from the date of opening of the tender as notified in the tender notice failing which the tenders will be rejected, Price validity declaration by the Vendor shall be submitted.
- (e) The schedule of prices should be filled up fully carefully as per the price bid format given in SECTION-V.
- (f) The bidders should mandatorily submit the Product Performance Certificate from Central or State Govt./PSU/CPSU organization during the last three years from the date of advertisement.

VII. Tenderer must have submitted the tender paper cost as per the instruction under SECTION-I(3).

VIII. Tenders shall not be submitted telegraphically or by Fax.

IX. Tenders shall be accompanied by the prescribed earnest money deposit (EMD)

X. Tenders shall be submitted in two parts only.

XI. Delivery & Installation Schedule must be agreed upon

XII. Procedure to Submit the Bid:

- (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 as below are to be signed and scanned, then uploaded in the tenderwizard.com.

Sl. No.	Document / Description
1	Bid Declaration Form
2	Earnest Money Deposit (EMD): Crossed bank draft / pay order / Bank certified cheque as the case may be towards EMD.
3	Authentic copy of registration Certificate as MSE unit if any, for claiming 50% EMD exemption
4	Manufacturer's Authorisation certificate (MAF) from OEM/ Principal to execute the contract or submit the bid.
5	OEM's declaration that the equipment shall not be out dated for six (6) years and for necessary spare support to ASI.
6	Copies of certified auditor statement on Annual Turnover for last 3 years 2012-13, 2013-14, 2014-15.
7	Manufacture ship / authorized "System integrator" certificate.
8	An undertaking that there will be no ownership change in the forthcoming three years from bid submission date.
9	(a) Constitution or legal status, place of registration and principal place of business; (b) Copy of the Power of Attorney of the signatory if any of the bid to commit the bidder
10	Detail of maintenance and support infrastructure at Bhubaneswar
11	Declaration of No subcontracting of the contract shall be made
12	A list of bidder's banks
13	Declaration to be submitted w.r.t. information regarding any current litigation in which the bidder is involved, the parties concerned, and disputed amount;
14	Declaration to be submitted to provide technical consultancy and guidance at no extra cost to OPTCL for proper configuration and performance and integration with OPTCL IT System
15	Valid certified " Systems Integrator " certificate with latest version of certificate of ISO 9001 etc
16	Technical Deviation Statement if any as per "Deviations" title in the format described in Schedule-E
17	Price Schedule (Section-V) Tenders not quoted for all the items shall not be considered

18	Comprehensive AMC Price Schedule (Section-V.(C))
19	Xerox copy of PAN, Central Service Tax Reg. Number (for companies whose HQ is outside Odisha)/ Odisha service tax registration number
20	Attested copy of TIN
21	Sales Tax Clearance (Odisha)
22	An undertaking to provide goods and services confirming to vendor specifications
23	Performance as supplier of goods & Services of similar nature over the last three years.
24	Technical literatures and original specifications sheets of each item offered on or before the last date & time of submission of tender.
25	Copy of purchase orders and completion certificate from Govt./ PSU / reputed organizations as per SECTION-I.6.(VI).(b). Customer Certified Credentials shall be submitted along with the submitted Purchase Orders.
26	Product Performance Certificate from Central or State Govt./PSU/CPSU organization during the last three years from the date of advertisement.
27	Supporting Documents/Certifications to establish compliance in conformation with electro-magnetic compatibility requirements for Outdoor Cameras.

OUTRIGHT REJECTION:

- (a) 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 out rightly rejected. The above document is to be submitted in a sealed cover envelope super scribing the Tender Notice No & Date of opening of tender clearly on the envelope cover.

i.EMD : Crossed bank draft / pay order / Bank certified cheque / 50% EMD amount with registration certification as MSE for claiming exemption as the case may be towards EMD

ii.DD/Cash Receipt towards Tender paper Cost / Authentic Registration Certificate as MSE if any, for claiming tender paper cost exemption

iii.Tender Processing Fee : DD

B. SECTION-II

1. General Instruction to the Bidders

- I. These tender specifications cover the required quantity of materials. These quantities are to be supplied by the vendor on receipt of the order. The initial order will be supplied within the stipulated period. If required, the vendor may be additionally required to supply up to 40% of the initial ordered quantity within six months of the issue of the order without any change in the price and other terms and conditions of the original purchase order.
- II. Tenders will be opened in the office of the Chief General Manager (IT) on the stipulated date and time in the presence of such of the tenderers or their authorized representatives (limited to one person) only as may desire to be present, at the time of opening the bids.
- III. The tenderer may deviate from the specification while quoting if in his opinion such deviation is in line with the manufacturer's standard practice and conducive as better and more economical offer. All such deviations should however be clearly indicated giving full justifications for such deviation in a separate sheet(s) under "Deviations" title in the format described in section III.(1).XXX.
- IV. The purchaser reserves the right to reject the lowest or any other tenders or all tenders without assigning any reason what so ever 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 EARNEST MONEY DEPOSIT shall be offered in one of the following forms subject to the conditions mentioned below:
 - i. **Bank Draft:** A crossed bank draft/pay order/bank certified cheque drawn in favour 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 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).XXIII 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 Chief General Manager (IT), OPTCL, Bhubaneswar, two days before the pre-bid meeting via email to tel.skmishra@optcl.co.in & it.hsathapathy@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 under Section – IV: Schedule of Requirement. 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.

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.

- (g) 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.

C. SECTION-III

1. General Conditions of the Contract

I. SCOPE OF THE CONTRACT:

- (a) The **Scope of contract** includes the Supply, Installation, Integration, Testing, Commissioning of the items mentioned in Section – I. (4), at Four numbers of OPTCL Grid Sub-stations (Chandaka, Meramundali, Budhipadar, Jayanagar) with three years warranty(which includes hand-holding for 1 year) from the date of successful rollout of the complete system(i.e. system rollout for all 4 grid sub-stations), and comprehensive annual maintenance contract (CAMC) for a period of three years after expiry of the 3 years warranty period defined in the bidding document, in accordance with the enclosed Technical Specification, bill of quantity and render technical services as per delivery schedule.

II. 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 in consistent 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 machineries, apparatus, materials, articles and services to be provided with respect to items mentioned in schedule of Quantity at Of Section-I(4), 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, Excise Duty, Sales Tax, Octroi and other taxes and duties if applicable.
- (g) "General Condition" shall mean these General Condition 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 pattern, 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 (Schedule K). The cost is exclusive of Excise Duty, Sales Tax and 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 the

particular contract, specifications and drawings and agreement to be entered in.

- (m) Terms and condition 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.

III. **GUIDELINES FOR THE BIDDER:**

- (a) The Contractor 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. He 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 contractor other than information given to the contract in writing by the purchaser.

IV. **PATENT RIGHTS ETC:**

- (a) Any dispute arising in respect of copy right act for the equipment supplied 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.

V. **MANNER OF EXECUTION:**

- (a) 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.

VI. **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 production 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.
- (d) Nothing in GCC SECTION-III.II.(VI) shall in any way release the Supplier from any warranty or other obligations under this Contract.
- (e) **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 the General Conditions of Contract. The Purchaser may again test the equipment after completion of the installation and commissioning at the site of the installation. All the **IP Based CCTV Surveillance System** equipment shall be installed, 100%, and inspected on lab-simulated integration basis.

VII. **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 30(Thirty) days from the date of date of issue of "Work Order/Purchase Order".
- (c) The Installation and commissioning of the items ordered should be completed within 70(Seventy) days from the date of issue of "Work Order/Purchase Order".
- (d) **Software Items**
 - i. Original Licenses should be delivered in form of e-license / paper license at the id / address of the concerned Sub-Divisional Officers of the 4 Nos. of Grid Sub-Stations.

- ii. The delivery activation period of the Licenses ordered, as specified, should not exceed 04 (Four) weeks from the date of issue of "Purchase order".
- iii. Free installation to be made at the sites throughout Odisha.

VIII. **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.

IX. **DOCUMENTATION:**

- (a) The Supplier shall provide complete and legal 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.

X. **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 IT executive as nominated by CGM(IT), OPTCL and OPTCL Electrical officer as nominated by CGM(O&M). The acceptance will

involve trouble-free integrated operation of all items of supply for fifteen consecutive days. 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 Supplier 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.

XI. 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 misdemeanours.
- (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.

XII. SITE PREPARATIONS

- (a) The Purchaser is solely responsible for providing the storage, installation and commissioning site for the installation of IP Based CCTV Surveillance equipment in compliance with the technical and environmental specifications defined by the Supplier. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of IP Based CCTV Surveillance equipment.

XIII. CCTV EQUIPMENT INSTALLATION

- (a) The Supplier is responsible for all unpacking, assemblies, installation, wiring, cabling between IT / UPS equipment and connecting to power supplies. The Supplier will test all IP Based CCTV Surveillance equipment operations and accomplish all adjustments necessary for successful and continuous operation of all the IP Based CCTV Surveillance equipment being procured through this contract.

XIV. 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).XXIV 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.(XIV).(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).XXIV until the equipment is accepted. Execution of the contract under such circumstances shall however be on express written willingness of both the parties.

XV. REJECTION OF MATERIALS:

- (a) 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.

XVI. EXTENSION OF TIME:

- (a) If the delivery of equipment/materials is delayed due to reasons beyond the control of the contractor, the

contractor 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 delivery date as may be reasonable but without prejudice to other terms and conditions of the contract.

XVII. **WARRANTY:**

(a) **Software Items:** The vendor shall warrant that, the licenses so procured meet the OEM warranty.

(b) **Hardware Items:**

- 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. This warranty shall remain valid for thirty-six (36) months from the date of complete rollout of the system for all the 4 Grid Sub-Stations.

(c) The vendor shall warrant that the IP based CCTV Surveillance system thus installed, commissioned, tested and implemented in toto shall operate with full functionality in good working condition for a min. Of 3 years. An undertaking in this regard shall be submitted by the bidder.

(d) The free comprehensive support during the warranty period will include the following:

- i. 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.

- ii. The vender shall rectify the fault within 24 hours from the time of registration of the complaint.
- iii. System readjustment and/or system changing-over support on occasions of reconfiguration and/or upgrade and extensions if any.
- iv. 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.
- v. 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.
- vi. Any software support like update/enhancement/upgrade etc. Released till the completion of warranty and during Annual Maintenance (if Contracted) shall be supplied, installed and commissioned free of cost by the bidder, irrespective of whether or not OEM charges for the same.
- vii. Software support is defined especially as helpdesk, update/enhancement, upgrade, technical guidance on usage of features and functionality, problem solving and troubleshooting. Rectification of bugs, enabling features of the software already provided, providing additional user controlled reports, future product information, migration path details and consultancy.
- viii. Any corruption in the Software or media on defect in the Hardware shall be rectified/ replaced within 15 days of notification defect during the full period of

the contract including Warranty and CAMC, at no extras cost to the OPTCL.

- ix. In case of violation of any of the conditions of warranty (for three years). The Composite Bank Guarantee shall be invoked by OPTCL. In case the violation of the condition of warranty is not set right by the vendor, the Composite 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 Composite Bank Guarantee.
- x. 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 the Purchaser.
- xi. In case, the downtime of a unit exceeds 24 hours and the fault is not rectified or faulty equipment not replaced, a penalty of Rs.1000/- per day per faulty unit will be charged and will be recovered 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 and imposition of penalty.
- xii. **NOTE:** The penalty will be adjusted from the Composite 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 Composite Bank Guarantee shall be forfeited to the OPTCL.

XVIII. POST WARRANTY MAINTENANCE:

- (a) The Vendor shall provide post warranty maintenance for the entire project in toto 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

given in the Schedule-L) before one month of completion of of 3 years warranty, **failing which necessary action towards forfeiture of CBG will be initiated as deemed fit.**

- (b) A Bank Guarantee of 2% of the cost of the total project (excluding Comprehensive Annual Maintenance Charges) shall be furnished from any Nationalized/ Scheduled Bank to Chief. General Manager (I.T), OPTCL, Bhubaneswar before 1 month of completion of the 3 years warranty period executed in a non-judicial stamp paper worth of Rs. 29/- (Rupees Twenty nine) only subject to change as per Orissa 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) The annual maintenance charges shall be paid in quarterly instalments at the end of each quarter.
- (d) The firm has to conduct quarterly preventive maintenance of each equipment/ component of the project. In case the firm fails to conduct the quarterly preventive maintenance of any equipment /component of the project, a penalty of 30% of the CAMC charges of the equipment for the quarter shall be deducted from the CAMC charges.
- (e) The compressive warranty support & penalties on downtime thereof shall be applicable as specified under the Clause: SECTION-III.(1).XVII and 30% penalty mentioned above.
- (f) The Purchaser reserves the right to terminate the maintenance and repairs contract, after the warranty period, at any time without assigning any reasons and the Supplier cannot claim any compensation in this respect.
- (g) The vendor should also maintain the level of spares during post-warranty maintenance for the IP Based CCTV Surveillance equipment supplied at the ratio of 1:20. The same shall be verified by an officer nominated by the C.G.M (IT) in every Quarter during the period of contract.
- (h) In case, the downtime of a unit exceeds 24 hours and the fault is not rectified or faulty equipment not replaced

within, a penalty of Rs.1000/- per day per faulty unit will be charged and will be recovered 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 and imposition of penalty.

XIX. 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 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 unit prices under column No.6 of Price Schedule in Section-V.1.(III).(b).

XX. IMPORT LICENCE:

- (a) 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.

XXI. VALIDITY:

- (a) 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 tender. 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.

XXII. TERMS OF PAYMENT:

(a) Hardware & Software Items

Payment shall be made as mentioned in **SECTION-I.(4).(IV).(c)- Key Deliverables.**

- i. 60% of the Contract Price Shall be released on receipt of items in good condition on delivery, verification and stores entry of the all ordered IT Items which are fully factory 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
 - c. Bank Guarantee: The supplier shall furnish Bank Guarantee of appropriate amount to OPTCL covering 10% (Composite Bank Guarantee) of contract price valid for 40 months (thirty nine months) from date of delivery. For this purpose the contract price shall mean firm price.
 - d. Certificate from the Sub-Divisional Officers of the 4 Nos. of Grid Sub-Stations for receipt of e-License / paper License for the Software Items
 - e. Site Survey Report duly approved by CGM(IT)
 - f. Verification & Inspection Certificate
- ii. 20% of the amount shall be made on successful installation and commissioning of the system at the 4 designated Grid Sub-Stations of OPTCL. The payment shall be made on submission of the following documents:
 - a. Bills in triplicate
 - b. Installation certificate
 - c. Pilot Test Completion Certificate

- iii. 10% of the amount shall be made on successful system rollout, training to Field and IT officers of OPTCL and submission of necessary manuals, drawings and documentation. The payment shall be made on submission of the following documents:
 - a. Bills in triplicate
 - b. Successful System Roll-out certificate
 - c. OEM warranty certificate for 3 years from the date of successful roll-out of the complete system(Successful roll-out of all the 4 Grid Sub-Station).
 - d. Training Completion Certificate
 - e. Manuals, Drawings and other necessary documents
- iv. 10% of the amount shall be made on completion of 1 year 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

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.

XXIII. COMPOSITE BANK GUARANTEE:

- (a) A composite Bank Guarantee at the rate of 10% (Ten percent) of the value of the total project (excluding CAMC) shall be furnished from any Nationalised/Scheduled Bank to the Chief General Manager (I.T), OPTCL within 30 (thirty) days of issue of the purchase order, executed in a non-judicial stamp paper worth of Rs.29/- (Rupees twenty nine) only subject to change as per ODISHA Stamp Duty Act valid for a period of 39 (thirty nine) months from the

schedule date of delivery of last lot strictly 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 composite bank guarantee. The forfeiture of the composite 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) No interest will be payable on Composite Bank Guarantee amount.

XXIV. **SERVICE LEVELS AND PENALTIES TOWARDS NON PERFORMANCE**

(a) Delay in execution of any supply order against this tender shall attract penalty.

(b) **Penalty:** If the supplier fails to complete the delivery as per delivery schedule specified, OPTCL shall recover from the supplier as penalty a sum of 0.5% of the item value of the undelivered portion (item) for each calendar week or part thereof subject to a maximum of 5% of the ordered unit license price. Imposition of penalty is however subject to force majeure conditions.

(c) **Software Items:** For this purpose the date of receipt of e-license through e-mail shall be reckoned as the date of delivery. Imposition of penalty is however subject to force majeure conditions.

(d) **For installation and commissioning:** If the installation, commissioning training and acceptance is not completed within the schedule time the penalty @ 0.5% of the total installation cost for each week subject to minimum of 5% shall be recovered.

(e) **Force Majeure Clause:** 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.

XXV. INSURANCE:

- (a) 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".

XXVI. PAYMENT DUE FROM THE CONTRACTOR:

- (a) 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.

XXVII. JURISDICTION OF THE HIGH COURT OF ODISHA:

- (a) 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.

XXVIII. SALES TAX, INCOME TAX CLEARANCE, BALANCE SHEET AND PROFIT AND LOSS ACCOUNT:

- (a) Sales Tax certificate and PAN should be enclosed with the tender along with audited Balance Sheet and P&L statement for the three preceding financial years.

XXIX. CERTIFICATE FOR EXEMPTION FROM EXCISE DUTY:

- (a) Offers with exemption from Excise Duty shall be accompanied with authenticated proof of such exemption. Authenticated proof for this clause shall mean Photostat copy of exemption certificate.

XXX. **DEVIATION FROM SPECIFICATION:**

- (a) It is in the interest of the tenderers to study the specification, drawings etc. specified in the tender schedule thoroughly before tendering so that, if any deviations are made by the tenderers the same are prominently brought out in the body of their tender. A list of deviations shall be enclosed to the Tender. Unless deviations in scope, technical and commercial are specifically mentioned in the list of deviations, it shall be presumed that the tenderer has accepted the conditions in the Tender Specification in toto, notwithstanding any exemptions mentioned also elsewhere in the tender.

XXXI. **RIGHT TO REJECT/ACCEPT ANY TENDER:**

- (a) 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.

XXXII. **CONTRACTOR'S RESPONSIBILITY:**

- (a) 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.

XXXIII. **EVALUATION OF BIDS:**

- (a) 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.

XXXIV. **MINIMUM QUALIFICATION CRITERIA OF BIDDERS:**

- (a) All the prospective bidders are requested to note that their bids can only be considered for evaluation only if they fulfil all the required criteria mentioned in the General Information to Bidders in the tender. Bidders, who do not fulfil these criteria, need not submit their bids.

XXXV. **LANGUAGE AND MEASURES:**

- (a) All documents pertaining to the contract including specifications, schedule, notices, correspondences, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

XXXVI. **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 same manner.

XXXVII. **LEGAL ADDRESS OF THE PARTIES:**

- (a) The address of the parties to the contract shall be specified.
- i. **Purchaser:**
- Chief General Manager (IT), Odisha Power
Transmission Corporation Ltd.
3rd Floor, OPTCL Tower, Janpath,

Bhubaneswar – 751 022, ODISHA, India

ii. **Contractor:**

(To Be Filled By the Tenderer)

XXXVIII. **COPY RIGHT PROTECTION OF TENDER DOCUMENT:**

- (a) 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.

D. SECTION-IV

1. Schedule of Technical Requirements:

I. Introduction:

- (a) Odisha Power Transmission Corporation Limited is planning to install IP Based CCTV Surveillance system in all its grid substations across Odisha.

II. Scope:

- (a) The **Scope of contract** includes the Supply, Installation, Integration, Testing, Commissioning of the items mentioned in Section – I. (4), at Four numbers of OPTCL Grid Sub-stations (Chandaka, Meramundali, Budhipadar, Jayanagar) with three years warranty(which includes hand-holding for 1 year) from the date of successful rollout of the complete system(i.e. system rollout for all 4 grid sub-stations), and comprehensive annual maintenance contract (CAMC) for a period of three years after expiry of the 3 years warranty period defined in the bidding document, in accordance with the enclosed Technical Specification, bill of quantity and render technical services as per delivery schedule.

III. 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/Joystick-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 for a period of 30 days or more @ 30FPS, using necessary compression techniques for all cameras. It shall 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.

IV. 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 H 264/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 CD or DVD. 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:
 - i) Electrical Fast Transient (Level 4) – As per IEC 61000-4-4
 - ii) Damped Oscillatory (1MHz and 100KHz)(level 3)–As per IEC 61000-4 12

iii) AC Voltage Dips & Interruption/Variation (level 4) – As per IEC 61000-4-12

iv) Electrostatic Discharge (Level 4) – As per IEC 61000-4-2

v) Power Frequency Magnetic Field (level 4) – As per IEC 61000-4-8

vi) 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.

V. Technical Specifications:

(a) Hardware & Software:

- i. Outdoor PTZ Camera (with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)

Outdoor PTZ Camera (with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)			
Sl. No.	Item Description	Detailed Specification	
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
		Sensor	Progressive scan CMOS
		Lens focal length	4.3mm to 129mm focal length or higher
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 150-200mtrs
		Effective Viewable Distance	Minimum 180-200mtrs
		Wide Dynamic Range	WDR/DWDR
		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: 256
		Scanning System	Progressive
		Light Sensitivity	Colour mode: 0.022 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/Sodium Vapor Lamp/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
		Multiple Streams	The Camera shall provide at least two simultaneous video streams. Stream compression should be as following: 1. Primary Stream: H.264 2. Secondary Stream: H.264 or Motion-JPEG/MPEG-4.
		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	Max. 60W

		Consumption	
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 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. The housing shall have heater and blower. 2. The camera should be supplied with a power supply/adaptor
		Operating Temperature	-30 deg C to +60 deg C
		Humidity	90% or less (non-condensing)
7	STANDARDS & CERTIFICATIONS	Certification	UL and ISO/IEC/EN/CE/FCC certifications required. The bidder is required to submit the certifications along with the techno-commercial bid.
		IP Standard	IP66/IP67

ii. Outdoor Fixed Camera(with fixed camera housing and power injector)

Outdoor Fixed Camera(with fixed camera housing and power injector)			
Sl. No.	Item Description	Detailed Specification	
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
		Lens	3 to 10 mm, CS mount, Full HD, IR Correction or higher
2	OPERATIONAL	Night Vision	Night vision with IR-LED

		IR Features	The Camera shall have inbuilt IR or External IR Component.
		IR Distance	150-200mtrs
		Effective Viewable Distance	180-200mtrs
		Wide Dynamic Range	WDR/DWDR
		Backlight Compensation Feature	BLC/HLC/WDR
		Scanning System	Progressive
		Light Sensitivity	Colour mode: 0.021 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 / MPEG4(min.)
		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
		Multiple Streams	The Camera shall provide at least two simultaneous video streams. Stream compression should be as following: 1. Primary Stream: H.264 2. Secondary Stream: H.264 or Motion-JPEG/MPEG-4.
		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 manufacturer and should be an integrated unit. The housing should be Weather Proof IP65/66 rated and of aluminium construction. The housing shall have heater and blower. 2. The camera should be supplied with a power injector as per technical specification specified in the tender document
		Operating Temperature	-30 deg C to +50 deg C
		Humidity	90% or less (non-condensing)
7	STANDARDS & CERTIFICATIONS	Certification	UL and ISO/IEC/EN/CE/FCC certifications required. The bidder is required to submit the certifications along with the techno-commercial bid.
		IP Standard	IP66/IP67

iii. Indoor Dome camera(with power injector for dome camera)

Indoor Dome camera(with power injector for dome camera)			
Sl. No.	Item Description	Detailed Specification	
1	CAMERA	Type of camera	High-Definition Indoor Dome Camera, suitable for both day and night
		Place of installation	Indoor
		Industrial Grade	Yes
		Effective Pixel	Minimum 2 Mega Pixel
		Sensor	Progressive scan CMOS
		Lens focal length	3mm to 9mm(F1.2) focal length or higher
2	OPERATIONAL	Night Vision	Night vision with IR-LED
		IR Features	The Camera shall have inbuilt IR or External IR Component.

		IR Distance	150-200mtrs
		Effective Viewable Distance	180-200mtrs
		Wide Dynamic Range	WDR/DWDR
		Backlight Compensation Feature	BLC/HLC/WDR
		Scanning System	Progressive
		Light Sensitivity	Colour mode: 0.022 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
		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 / MPEG4(min.)
		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
		Streaming method	Triple streams or above
		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
		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

7	STANDARDS & CERTIFICATIONS	Operating Temperature	-30 deg C to +50 deg C
		Humidity	90% or less (non-condensing)
		Certification	UL and ISO/IEC/EN/CE/FCC certifications required. The bidder is required to submit the certifications along with the techno-commercial bid.
		IP Standard	IP66/IP67

iv. **PTZ CONTROLLER**

The PTZ Camera and PTZ Controller should be from the same OEM.

PTZ CONTROLLER		
Sl. No.	Item Description	Detailed Specification
1	Features	1. Fully functional dynamic keyboard/joystick controllers 2. Controls all pan, tilt, zoom, iris, preset functions 3. Control up to 255 units from a single keyboard 4. Many preset options and advanced tour programming 5. Compatible with all connected cameras
2	Key Application	wired keyboard control operation of PTZ functions for weather-proof dome cameras
3	Pan / Tilt / Zoom Protocol Languages Supported	Selectable
4	Display	LCD Display for programming
5	Additional Features	1. Dynamic joystick for smooth camera movements, preset location option for quick access to frequently monitored areas. 2. Plug and play with Rack server application of Integrated system

v. **VIDEO SURVEILLANCE APPLICATION SOFTWARE**

VIDEO MANAGEMENT SOFTWARE	
The VMS Software and CCTV Cameras should not be of the same OEM	
Sl. No.	Detailed Specifications
1	The video management system (VMS) specified is an enterprise-class client/server based IP video security solution that provides seamless management of digital video, audio and data across an IP network. The video management system is designed to work with ONVIF compliant 3rd party products as part of a total video security management system.

2	Digital video surveillance control software should be capable to display and manage the entire surveillance system. It should be capable of supporting variety of devices such as cameras, Servers, NAS boxes/Raid backup device etc
3	The software should have inbuilt facility to store configuration of encoders and cameras.
4	The software should Support flexible 1/2/4/8/16/32 Windows Split screen display mode and scroll mode on the PC monitor.
5	The software should be able to control all cameras i.e. PTZ control, Iris control, auto / manual focus, and colour balance of camera, Selection of presets, Video tour selection etc.
6	The software should have user access authority configurable on per device or per device group basis. The system shall provide user activity log with user ID, time stamp, action performed, etc.
7	The users should be on a hierarchical basis as assigned by the administrator. The higher priority person can take control of cameras, which are already being controlled by a lower priority user.
8	It should have recording modes viz. continuous, manual, or programmed modes on date, time and camera-wise. All modes should be disabled and enabled using scheduled configuration. It should also be possible to search and replay the recorded images on date, time and camera-wise. It should provide onscreen controls for remote operation of PTZ cameras. It should have the facility for scheduled recording. Different recording speeds (fps) and resolution for each recording mode for each camera should be possible.
9	The software for clients should also be working on a browser based system for remote users. This will allow any authorized user to display the video of any desired camera on the monitor with full PTZ and associated controls
10	Retrieval: The VMS application should allow retrieval of data instantaneously or any date / time interval chosen through search functionality of the application software. In case data is older than 30 days and available, the retrieval should be possible. The system should also allow for backup of specific data on any drives like DVD's or any other device in a format which can be replayed through a standard PC based software. Log of any such activity should be maintained by the system.
11	VMS shall provide the full functionality reporting tool which can provide reports for user login/logoff, camera accessibility report, server health check reports etc.

vi. **32 "LED TV(Display Device)**

32 "LED TV		
Sl. No.	Item Description	Detailed Specification
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
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
13	Warranty	Three Years Onsite comprehensive Warranty

vii. **24 PORT L2 MANAGED SWITCH**

24 PORT L2 MANAGED SWITCH		
Sl. No.	Item Description	Detailed Specification
1	Ports	a. 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only b. 4 SFP 100/1000 Mbps ports c. Auto sensing/ Auto negotiating Ports d. IPV6 Ready
2	Performance	Switching Capacity : min 48Gbps
3	Standards & Protocols	a. General : IEEE 802.1D MAC Bridges, IEEE 802.1p Priority, IEEE 802.1Q VLANs b IEEE 802.1s Multiple Spanning Trees, IEEE 802.1v VLAN, IEEE 802.3af, IEEE 802.3x Flow Control, QoS: 802.1p (CoS), Security: IEEE 802.1X Port Based Network Access Control
4	Management Features	a. Web Browser Configuration Menu b. SNMP Manager d. Telnet e. RMON
5	Certification	UL/cUL,FCC,CE,EN certification
6	Power Supply Redundancy	The switch must support Internal load sharing, Dual power supplies; vendors shall propose for Internal Redundant PSU's
7	Warranty	3 years onsite comprehensive warranty

viii. **Media Convertor(Box Type)[Ethernet-SC Type]**

Media Convertor(Box Type)[Ethernet-SC Type]		
Sl. No.	Item Description	Detailed Specification

1	Function	1. 100 Base-FX to 100 Mbps Tx Single mode media convertor 2. Distance Support: min. 15km 3. 1 RJ-45 port and 1 fibre port (SC type connector) 4. 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
10	Warranty	3 years on-site comprehensive warranty

ix. **Media Convertor(Card Type)[Ethernet-SC Type]**

Media Convertor(Card Type)[Ethernet-SC Type]		
Sl. No.	Item Description	Detailed Specification
1	Connector Type	Dual SC, Card Type, Ethernet-SC Type Media Convertor
2	Fiber Type	Multi-mode
3	Type	Industrial Grade
4	Compliance	Should be of IEEE standards
5	Operating Distance	2km
6	Power Consumption	6W
7	Operating Temperature	0°C to 40°C
8	Storage Temperature	-25°C to 70°C
9	Relative humidity operating and storage (non-condensing):	5% to 95%
10	Certifications	Should comply with FCC/EN/VCCI/CE/UL standards
11	Features	Auto-negotiation(IEEE 802.3u-compliant)/ Auto MDI/MDI-X/ Support Missing Link and Smart Missing Link /Managed or unmanaged operation/Transparent to IEEE 802.1Q VLAN packets
12	Status Indicators	System and port LEDs should there to show the status
13	Warranty	3 years onsite comprehensive warranty

x. **MEDIA CONVERTOR CHASSIS**

MEDIA CONVERTOR CHASSIS		
Sl. No.	Item Description	Detailed Specification
1	Feature	Min. 14 slots for slide-in modules and duplicated power supply modules
2	Type	Industrial Grade

3	LED	Front panel LEDs for status indication
4	Rack mountable	Yes
5	Redundant Power Supply	Should have redundant power supply feature
7	Operating Temperature	0 deg. C to +50deg.C
8	Operating Humidity	Up to 90% non-condensing
9	Certifications	Should have UL/EN/FCC/CE/VCCI Certifications
10	Compliance	Should be RoHS compliant
11	Warranty	3 years onsite comprehensive warranty

xi. **Fiber Patch Cords [SC to LC Type]**

PATCH CORDS(SC-LC Type)
Should be pre-moulded, connectorized, SC-LC Type

xii. **PoE Injector or Power Injector**

PoE Injector or Power Injector		
Sl. No.	Item Description	Detailed Specification
1	Type	Industrial Grade
2	Compliance	IEEE 802.3af compliant Supports half/full-duplex operation IEEE 802.3 compliant 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
8	Warranty	3 years onsite comprehensive warranty

xiii. **2KVA ONLINE UPS WITH BATTERIES**

2 KVA ONLINE UPS WITH BATTERIES		
Sl. No.	Features	Detailed Specification
1	Capacity	2KVA
2	Design	a) IGBT based True online double conversion design b) Nominal Input Voltage : 208/220/230/240V c) Nominal Input Frequency : 50Hz with range of 46 - 54Hz
3	Power Factor	0.9

e-Tender for CCTV Surveillance System at OPTCL

5	output	a) Output Voltage : 230V d) Waveform: Pure Sine Wave f) Efficiency : >90% k) Bypass : Automatic or Manual or Static Bypass
7	ENVIRONMENTAL	a) Operating temperature range : 0°C to 40°C b) Storage temperature : 0° C - 60° C. c) Relative humidity : 0 to 95% RH, non-condensing d) Operating altitude : upto 1000 mtrs
8	DISPLAY	Should have Graphical LCD Display for easy user interface
9	SAFETY STANDARDS AND CERTIFICATES	a) Environment : ISO 14001 or higher b) Safety : IEC/EN certification c) Quality : ISO 9001-2000 or higher
10	Credentials	a) The OEM should have their own office & Service Centre in Odisha b) Quoted products technical Catalogue must be available in OEM"s Web Site c) OEM must have 24X7 Toll Free Call Service Facility Toll Free Number to be provided
11	Communication	SNMP or better communication port for interfacing & Remote monitoring
12	Battery Type	1. TYPE: Sealed, lead acid, maintenance free (SMF) 2. RATED VOLTAGE: As per manufacturer standard 3. Battery backup: up to 4hrs(minimum)
13	Battery Housing	Closed housing with suitable lockers
14	Battery Life	Min. 3 years replacement guarantee
15	Warranty	Min. 3 years on site comprehensive warranty

xiv. 0.6 KVA INTERACTIVE UPS WITH BATTERIES

0.6 KVA INTERACTIVE UPS WITH BATTERIES		
Sl. No.	Features	Detailed Specification
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 10 Minutes
5	Output	a. Voltage : 220volts c. Transfer Time less than 10millisecond d. Sockets : Adequate Nos. of sockets with surge protection feature e. Frequency : 50Hz +/- 10%Hz
6	General Features	Lightning & Surge Protection Output Wave form— Modified/Stepped Sine wave Audio Alarms: Low Battery; Battery ON; Overload Protection feature should be there
7	Environment	a. Operating Temperature : 0-40 deg C b. Humidity : 0-90% non-condensing

9	Certification	ISO/CE certification should be there
10	Warranty	3 years onsite comprehensive warranty

xv. **24U, 19 INCHES FLOOR STANDING RACK**

24U, 19 INCHES FLOOR STANDING RACK		
Sl. No.	Detailed Specification	
1	Features	a. Floor standing rack b. Industrial Grade c. Load Rating of 500 kgs (min) d. Side/Rear: Steel Doors, plain, vented at bottom, fully perforated and/or dual perforated e. Front: Glass Doors with optional vented side trims for front-to-back air flow, toughened tinted glass with lock & key facility f. Powder coated finishing (Steel doors & side trims for glass door should be powder coated), Vertical pillars of the frame should be of aluminium. All other parts should be of sheet steel.
2	Size	a. Height : 24U b. Width : As per requirement c. Depth : As per requirement
3	Accessories	a. Equipment support angles b. Single Fan tray with min. 4 fans c. Adequate nos. of 1 U cable managers d. Adequate nos. of point for AC distribution box with ON/OFF button e. Cable entry provision at top and bottom f. Earthing kit g. Castors with foot-operated brakes

xvi. **Rack Server with Monitor**

RACK SERVER WITH MONITOR		
Sl. No.	Item Description	Detailed Specification
1	Processor	a. Single processor. b. Intel Xeon E5-2430 product family 6 core processor/ higher c. Processor Speed : 2.2 GHz or higher
2	Motherboard	OEM Motherboard
3	Memory	16GB DDR-III 1066 MHz or higher SDRAM Memory with scalable up to 96 GB/higher
5	RAID	SAS RAID Controller supporting RAID 0,1, & 5
6	Network Feature	a. 4 X 1 Port Ethernet controller (10/100/1000 Mbps)/ Higher b. IPV6 Ready
7	Ports	Min. 4 nos. of USB Ports and min 2 PCI Slots
8	Storage	2x450GB SAS Hot Swap HDD (10K rpm or higher)
9	Optical Drive	DVD /CD-RW Combo drive

10	Display	TCO-05 certified 18.5" wide TFT Monitor must be supplied with the server
11	Power Supply	Redundant Power Supply
12	Form Factor	Rack(2U)
14	Keyboard & Mouse	OEM Keyboard & OEM Optical two button scroll mouse must be supplied with the server
16	OS Required & Certification	Microsoft Windows Server 2012 std 64 Bit with Media kit
17	VMS installation	The VMS shall be installed in the server
18	Warranty	3 years onsite comprehensive warranty

xvii. **NAS FOR VIDEO STORAGE(16 TB)**

NAS FOR VIDEO STORAGE(16 TB)		
Sl. No.	Features	Detailed Specification
1	Form Factor	Single 2U chassis, Rack Mount
2	Processor	One Intel® Xeon® E5 series v3 Processor, 6 Core, 1.9GHz or Higher, 15M cache or Higher and should be scalable to 2 Processor.
3	Memory	16 GB DDR4 RAM or Higher
4	Hard Drives	<u>Drive Bay:</u> Internal, hot-pluggable
		Number of Drives : Shall be Provided with Minimum 4 Drives
		Drive Type: Shall support minimum SAS (7.2 RPM), SATA (7.2 RPM,) type of drives.
		Minimum Storage Capacity: 16 TB
		Configuration: Shall have separate dedicated drives for the OS (OS DRIVE) and drives for the Data Storage (DATA DRIVE)
5	Storage expandability	Shall have the External Storage Expansion capability using external Enclosure through associated hardware like storage controller and arrays.
6	RAID Support	1. Drives (HDD) Dedicated for the OS shall be configured on RAID 1 /RAID 5 . 2. Drives (HDD) Dedicated for the Data shall be configured in RAID5 or RAID6 .
7	Protocols support	SMB3,CIFS,NFS,FTP,iSCSI
8	Operating Support	Pre-configured Microsoft Windows Storage Server 2012 R2, Standard Edition
9	Network Connectivity	Ethernet 1Gb 4-port Network Adapter(NIC) <u>Note: Please provide Part code/product code, in case non-onboard NIC</u>

10	Storage Controller	1.The OEM storage controller shall support additional customer configurable RAID options along with Custom RAID Support : 0, 1, 5, 6, 10, 50, 60, etc
		2. Controller shall have minimum 1 GB Cache Memory
		3. Minimum 12Gb/s data transfer rate per port or lane
		4. PCI Express 3.0 compliant,8 lane or Link
		5.Performance and Features: Remote Management Feature, Data Protection features (like Snapshots),
11	Services and Features	Remote Management Feature, Data services like (Snapshots, Replication, de-duplication)
12	Management	Server Management Console/ Interface
13	Expansion Slots	Minimum 6 PCIe 3.0 slots
14	Power Supply and FAN	Redundant hot-plug Power Supply and redundant FAN
15	Rack Rail	Shall Have sliding Rack rail for rack support
16	Warranty	3 years on site comprehensive warranty.

xviii. **Surge Protector**

SURGE PROTECTOR		
Sl. No.	Item Description	Detailed Specification
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
10	Warranty	Min. 3 years on site comprehensive warranty

xix. **6 CORE ARMoured FO CABLE(Single Mode)**

6 CORE ARMoured FO CABLE(SINGLE MODE, MULTI-CORE)		
Sl. No.	Features	Detailed Specification
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.
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xx. **CAT-6 STP CABLE**

CAT6 STP CABLES		
Sl. No.	Features	Detailed Specification
1	Type	Unshielded 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

xxi. **1.1KV ARMoured CU-POWER CABLES**

1.1KV ARMoured CU-POWER CABLES		
Sl. No.	Features	Detailed Specification
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

xxii. **Outdoor Junction box**

OUTDOOR JUNCTION BOX		
Sl. No.	Detailed Specification	
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.
	Mount	Pole/Wall mount with all mounting accessories
2	Industrial Grade	Yes

3	Conformance	Weather proof with min. IP65 rated
4	Basic Features	1. It shall be weather proof so as to withstand the dust and high temperature climate of the plant. 2. For terminating all cables the junction box should have suitable terminating block or connections with proper locking arrangement. 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. 4. Grounding provision and locking facility for junction box shall be there
5	Accessories	a. Toughened glass window in the front door b. Wide range of terminals and terminal blocks to accommodate UPS, Media Convertor, LIU Panel/all the equipment's except the cameras. c. Natural and forced fan cooling system d. Customized cut outs on door, mounting plate e. CFL Light f. Stainless steel studs for grounding g. Min. 2mm thick mounting plate

xxiii. **POLE(FOR OUTDOOR CAMERAS)**

POLE(FOR OUTDOOR CAMERAS)		
SI No.	Features	Specifications
1	Pole Location	OPTCL Grid S/S
2	Material	GI-Tubular
3	Standard	ISI
4	Pole Height	1. The pole height shall be 10 metres above the ground for which a necessary foundation shall be made if required(The pole shall be 10 meters from Ground and 2 meter deep in Ground) 2. In case height lesser than 10 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.
5	Mounting	1. 13 mm thickness plate - Bottom Surface in earth avoid the shaking. 2. To be concrete structure in the ground in 2 Meter depth. 3. to be concrete structure above the ground half meter
6	Type of installation	Industrial
7	Security Features	Internal Cabling with door at the bottom(door with lock & key facility)

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

xxiv. **Pole Mount Brackets, Camera Holder, LIU-Box with Accessories(6/12 port adaptor plate, pigtail, etc)**

Pole Mount Brackets, Camera Holder, LIU Box Holder, LIU-Box with Accessories(6/12 port adaptor plate, pigtail, etc)		
Sl. No.	Detailed Specification	
1	Purpose/Size	The above items are should be fabricated as per the site requirement for proper integration of the system.

xxv. **CABLING**

CABLING		
Sl. No.	Cabling	Specifications
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

E. SECTION-V

1. Forms and Schedules

I. SCHEDULE-A

BID FORM

To:

Chief General Manager (IT),
Odisha Power Transmission Corporation Limited
3rd Floor, OPTCL Tower, Janpath,
Saheed Nagar, Bhubaneswar- 751 022

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 **"IP Based CCTV Surveillance System"** in conformity with the said Bidding Documents for the sum of _____ (Total Bid Amount in Words and Figures) or such other sums as may be ascertained 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 under SECTION-I.3 "Bidding Schedule", 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, 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 of20.....

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

II. SCHEDULE-B

MANUFACTURER'S AUTHORISATION FORM

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

Date: _____

NIT Ref No.: _____

RFP No.: _____

To

O/O Chief General Manager (IT)

Odisha Power Transmission Corporation Limited

3rd Floor, Corporate Building, OPTCL,

Janpath, Bhoi Nagar, BHUBANESWAR, Odisha 751022

WHEREAS _____ who are official
Manufacturers/OEM of _____ having factories/registered office at

do hereby authorize _____ to submit
a Bid in relation to the above NIT Ref No: _____ & RFP Ref. No: _____ 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 extend our full Support, guarantee and warranty in accordance
with SECTION-III.1.XVII of the General Conditions of Contract, with respect to the
Goods offered by the above firm in response to above NIT Ref No. /RFP Ref No.

Name _____

In the capacity of: _____

Signed _____

Duly authorized to sign the Authorization for and on behalf of _____

Date _____

Note: This letter of authority should be on the letterhead of the Manufacturer
and should be signed by a person competent and having the power of attorney to
bind the Manufacturer. It should be included by the Bidder in its bid.

III. SCHEDULE-C

(a) Bidder's Name & Address:

(b) PRICE BID FOR IP Based CCTV Surveillance System Equipment,
Installation & Commissioning:

Sl. No	Description	Country of Origin	Qty	Unit of Measurement	Unit Price including all taxes except Service Tax	Total Price excluding service tax
(1)	(2)	(3)	(4)	(5)	(6)	(7=4*6)
1	Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)		29	Nos.		
2	Outdoor Fixed Camera(with fixed camera housing and power injector)		12	Nos.		
3	Indoor Dome camera(with power injector for dome camera)		09	Nos.		
4	PTZ Controller		4	Nos.		
5	Video Management Software		4	Nos.		
6	24 U Networking Rack		4	Nos.		
7	Outdoor Junction Box		41	Nos.		
8	Media Convertor(Box Type)[Ethernet-SC Type]		41	Nos.		
9	Media Convertor(Card Type)[Ethernet-SC Type]		41	Nos.		
10	14 Slot Chassis for the media convertor		4	Nos.		
11	LIU-Box with Accessories (6/12 port adaptor plate, pigtail, etc.)		62	Nos.		

e-Tender for CCTV Surveillance System at OPTCL

12	Fiber Patch Cords [SC to LC Type]		82	Nos.		
13	24 port L2 Managed Switch		4	Nos.		
14	Rack Server with Monitor		4	Nos.		
15	NAS for Video Storage(16TB)		4	Nos.		
16	Pole Mount Brackets		50	Nos.		
17	Pole		8	Nos.		
18	Camera Holder, LIU Box Holder		41	Nos.		
19	32" LED Display		4	Nos.		
20	Online UPS for Control Room-2KVA with batteries		4	Nos.		
21	Interactive UPS for Camera-600VA		41	Nos.		
22	Surge Protector for Outdoor Cameras		41	Nos.		
23	6 CORE ARMOURED FO CABLE(Single Mode)		12	KM (approx)		
24	CAT-6 STP CABLE		450	Mtrs (approx)		
25	1.1KV ARMOURED CU-POWER CABLES		500	Mtrs (approx)		
26	HDPE CONDUIT FOR FO AND POWER CABLES WITH ACCESSORIES		12	KM (approx)		
27	PVC CONDUIT FOR LAN (CAT 6) CABLE WITH ACCESSORIES		450	Mtrs (approx)		
28	Other necessary items like casing & capping for UTP and power cables etc.		4	Lump sum		
29	Electrical Cabling		4	Lump sum		
30	Installation & Commissioning cost (4 nos. Of locations)		4	Lump sum		

31	Microsoft Windows Server 2012 Standard Edition 64 Bit with Media kit		4	Nos.		
32	Antivirus for server		4	Nos.		

(c)PRICE BID for Comprehensive Annual Maintenance Contract for 3 years for all the 4 Numbers of Grid Sub-Station(Chandaka, Jayanagar, Budhipadar, Meramundali):

Sl. No	Description	Country of Origin	Qty	Unit of Measurement	Unit Price per Quarter (in Rs.)	Service Tax as applicable (in Rs.)	Total Cost (in Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	[8=(6+7)*12 Quarters]
1	CAMC Charges for 3 years after the 3 year warranty period for CCTV, networking, equipment and software element for the 4 Nos. of Grid S/S(Chandaka, Jayanagar, Budhipadar, Meramundali)		1	Lump sum			

(d) Note:

- i. In case of discrepancy between unit price and total, the unit price shall prevail.
- ii. Continuation sheets of like size and format may be used as per the Bidder's requirement and shall be annexed to this schedule.
- iii. The price shall include all custom duties, sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item, or the custom duties and other taxes paid on previously imported item offered ex-warehouse, ex-showroom, or off-the-shelf. These factors should not be entered separately. Service Tax, if any shall be paid extra for the SECTION-V.(1).(III).(b) , as per the prevailing rates.

Date:.....

(Signature)

Place:

(Printed Name)

(Designation)

(Common Seal).....

IV.SCHEDULE-D**(a) IP Based CCTV Surveillance System****i. General Information**

All individual firms bidding for the package are requested to complete the information in this form. Nationality information to be provided for all owners or Bidders who are partnerships or individually owned firms.

Where the Bidder proposes to use named subcontractors for critical components of the works or for work contents in excess of 10 percent of the bid price, the following information should also be supplied for the specialist subcontractor(s).

- 1 Name of firm :
- 2 Head office address :
- 3 Telephone. :
- 4 Mobile No. :
- 5 Fax :
- 6 Telex :
- 7 Place of incorporation/ registration :
- 8 Year of incorporation/ registration :

Nationality of owners		
Sl. No.	Name	Nationality
1.		
2.		

ii. **Capability Statement**

1.	Name of Bidder			
2.	Classifications (1) Manufacturer (2) Authorized Agent (3) Dealer (4) Others (please specify)			
3.	Factory/Works: (a) Location (b) Description, Type and size of building (c) Is property on lease or free hold? If on lease, indicate date of expiry of lease in such case (d) Details of plant and facilities for manufacture/assembly of the goods			
4.	Type of equipment manufactured and supplied during last three years.			
	Name of equipment	Capacity/Size	Nos. manufactured	Nos. of orders on hand
5.	Types of equipment supplied during last three years other than those covered under 4 above.			
	Name of equipment	Capacity, size & model	Name of Manufacturers & country of origin	Total nos. supplied in India
				Nos. on orders on hand

6.	Turnover for similar equipment sold in last three years (in Indian Rupees)			
7.	Details of Testing facilities available a) List testing equipment available b) Give details of tests, which can be carried out on items offered. c) Details of testing organization available			
8.	Personnel/Organization: (Give Organization chart for following indicating clearly the Nos. of employees at various levels)			
	1. Quality Assurance 2. Production 3. Marketing 4. Service 5. Spare parts 6. Administrative			
9.	Nearest service centres to each of the destination installations: Location: Phone No.: Year of Establishment:			
10.	Details of Organization at Service Centre a) No. of skilled employees: b) No. of Unskilled employees: c) No. of Engineering employees d) No. of Administrative employees e) List of special repair/workshop facilities available f) Storage space for spare parts (sq. m.) g) Value of minimum stock of spares available at all the service centres in respective currency h) Value of the modes/types by number of equipment serviced by the centre in last two years			

11.	Names of three buyers to whom similar equipment was supplied in the past and to whom reference may be made by the Purchaser regarding the Bidder's technical and delivery ability.	
	(1)	
	(2)	
	(3)	

iii. Financial Capabilities

Name of Bidder:

Bidders shall provide financial information to demonstrate that they meet the requirements stated in the Instructions to Bidders. Each Bidder must fill in this form. If necessary, use separate sheets to provide complete banker information. A copy of the audited balance sheets should be attached.

Name of Banker	
Address of Banker	
Telephone No. Fax No. Contact Name & Title	

Summarise actual assets and liabilities in Indian Rupees for the previous three years. Based upon known commitments, summarise projected assets and liabilities in Indian Rupees for the next three years.

Financial information	Actual :		
in Indian Rupees	Previous three years		
	1	2	3
1. Total assets			
2. Current assets			

3. Total liabilities			
4. Current liabilities			
5. Profits before taxes			
6. Profits after taxes			

Specify proposed sources of financing to meet the cash flow demands of the Project, net of current commitments

Source of financing	Amount (Indian Rupees)
1.	
2.	
3.	

Attach audited financial statements for the last three years.

iv. **Litigation History**

Name of Bidder:

Bidders should provide information on any history of litigation or arbitration resulting from Contracts executed in the last five years or currently under execution

Year	Award For/ Against Applicant	Name of client, cause of litigation and matter in dispute	Disputed amount (Current Value in Indian Rupees)

Date: (Signature)

Place: (Printed Name)

(Designation)

(Common Seal)

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

v. Performance Statement (for a period of last three years for all the type of items offered)

Sl. No.	Order placed by (full address of Purchaser)	Order No. and date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery As per contract	Date of completion of delivery as per Actual	Remarks indicating reasons for late delivery, if any.	Balance qty., if any, to be supplied	Expected date of Commencement completion of balance supplies	Has the equipment been satisfactorily functioning? Attach certificate from the Purchaser/ Consignee

Date :

(Signature)

Place :

(Printed Name)

(Designation)

(Common Seal)

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

vi. Details of Service Support

SERVICE CENTRE AT BHUBANESWAR									
Location with Detail Address:									
Sl. No.	Address	Phone no.	Fax No.	Status of Office Working Days and Hours	Number of Software Engineers	Number of Hardware Engineers	Number of Hardware Staff	Value of Min. Stock Available at all times	List of Data Centers serviced in last two (2) years

Date:

(Signature)

Place:

(Printed Name)

(Designation)

(Common Seal)

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

V. SCHEDULE-E (DEVIATIONS AND ALTERNATIVES)

- (a) The Bidder shall itemize any alternatives and deviations from the bid document included in his Bid. Each item shall be listed below with the following information:
- (b) Any proposal in this section will be applicable only for the bidders whose Bid will be substantially responsive in accordance with **Section-II. (1) “Instructions to Bidders”**.
- (c) A Bid determined as not substantially responsive will be rejected and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- i. Reference Clause in the bid document.
 - ii. Detailed description of the alternative or deviation.
 - iii. Reason for the change.
 - iv. The change in bid price if the alternative or deviation is withdrawn and the bidder conforms to the specifications.

Date: (Signature)

Place: (Printed Name)

(Designation)

(Common Seal)

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

**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

VII. SCHEDULE-G (Technical Compliance Sheet)

Sl. No	Item Description	Features	Bidders Response (Yes/No)	Name of the submitted highlighted technical datasheet with reference page number	Remarks	Deviations (if any)
Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)						
Sl. No	Item Description	Detailed Specification				
1	CAMERA	Type of camera				
		Place of installation				
		Industrial Grade				
		Effective Pixel				
		Sensor				
		Lens focal length				
2	OPERATIONAL	Night Vision				
		IR Features				
		IR Distance				
		Effective Viewable Distance				
		Wide Dynamic Range				
		Backlight Compensation Feature				
		Pan/Tilt/Zoom Feature				
		Scanning System				
		Light Sensitivity				
		Electronic Shutter				
		Signal-to-Noise Ratio				
		Day/Night Feature				
		Motion Detection & Tamper Detection Feature				
		Privacy Masking Feature				
		De-Fog Feature				
		White Balance				
3	NETWORK	Ethernet				
		Image Resolution				
		Frame Rate per second				

		Compression Standards				
		Protocols				
		Security				
		Multiple Streams				
		Inter-operability				
		Web Access				
4	GENERAL	Input Voltage				
		Power Consumption				
5	RECORDING & STORAGE MANAGEMENT	Audio I/O				
		SD Card Slot				
		Type & Capacity				
		Recording Management				
6	ENVIRONMENTAL	Camera Housing & Mount				
		Operating Temperature				
		Humidity				
7	STANDARDS & CERTIFICATIONS	Certification				
		IP Standard				
Outdoor Fixed Camera(with fixed camera housing and power injector)						
Sl. No	Item Description	Detailed Specification				
1	CAMERA	Type of camera				
		Place of installation				
		Industrial Grade				
		Effective Pixel				
		Sensor				
		Lens				
2	OPERATIONAL	Night Vision				
		IR Features				
		IR Distance				
		Effective Viewable Distance				
		Wide Dynamic Range				
		Backlight Compensation Feature				
		Scanning System				
		Light Sensitivity				
		Signal-to-Noise Ratio				
		Day/Night Feature				
		Motion Detection & Tamper Detection Feature				

		Privacy Masking Feature				
		De-Fog Feature				
		White Balance				
3	NETWORK	Ethernet				
		Image Resolution				
		Frame Rate per second				
		Compression Standards				
		Protocols				
		Security				
		Multiple Streams				
		Inter-operability				
		Web Access				
4	GENERAL	Input Voltage				
		Power Consumption				
5	RECORDING & STORAGE MANAGEMENT	Audio I/O				
		SD Card Slot				
		Type & Capacity				
		Recording Management				
6	ENVIRONMENTAL	Camera Housing & Mount				
		Operating Temperature				
		Humidity				
7	STANDARDS & CERTIFICATIONS	Certification				
		IP Standard				
Indoor Dome camera(with power injector for dome camera)						
Sl. No	Item Description	Detailed Specification				
1	CAMERA	Type of camera				
		Place of installation				
		Industrial Grade				
		Effective Pixel				
		Sensor				
		Lens focal length				
2	OPERATIONAL	Night Vision				
		IR Features				
		IR Distance				
		Effective Viewable Distance				
		Wide Dynamic Range				
		Backlight Compensation				

		Feature				
		Scanning System				
		Light Sensitivity				
		Signal-to-Noise Ratio				
		Day/Night Feature				
		Motion Detection & Tamper Detection Feature				
		White Balance				
3	NETWORK	Ethernet				
		Image Resolution				
		Frame Rate per second				
		Compression Standards				
		Protocols				
		Security				
		Streaming method				
		Inter-operability				
		Web Access				
4	GENERAL	Input Voltage				
		Power Consumption				
		SD Card Slot				
		Type & Capacity				
		Recording Management				
6	ENVIRONMENTAL	Camera Housing & Mount				
		Operating Temperature				
		Humidity				
7	STANDARDS & CERTIFICATIONS	Certification				
		IP Standard				
PTZ CONTROLLER (The PTZ Camera and PTZ Controller should be from same OEM)						
Sl. No	Item Description	Detailed Specification				
1	Features	1. Fully functional dynamic keyboard/joystick controllers				
		2. Controls all pan, tilt, zoom, iris, preset functions				
		3. Control up to 255 units from a single keyboard				

		4. Many preset options and advanced tour programming				
		5. Compatible with all connected cameras				
2	Key Application	wired keyboard control operation of PTZ functions for weather-proof dome cameras				
3	Pan / Tilt / Zoom Protocol Languages Supported	Selectable				
4	Display	LCD Display for programming				
5	Additional Features	1. Dynamic joystick for smooth camera movements, preset location option for quick access to frequently monitored areas.				
		2. Plug and play with Rack server application of Integrated system				
VIDEO MANAGEMENT SOFTWARE						
The VMS and CCTV Cameras should not be from the same OEM						
Sl. No	Detailed Specifications					
1	The video management system (VMS) specified is an enterprise-class client/server based IP video security solution that provides seamless management of digital video, audio and data across an IP network. The video management system is designed to work with ONVIF compliant 3rd party products as part of a total video security management system.					
2	Digital video surveillance control software should be capable to display and manage the entire surveillance system. It should be capable of supporting variety of devices such as cameras, Servers, NAS boxes/Raid backup device etc					
3	The software should have inbuilt facility to store configuration of encoders and cameras.					

4	The software should Support flexible 1/2/4/8/16/32 Windows Split screen display mode and scroll mode on the PC monitor.				
5	The software should be able to control all cameras i.e. PTZ control, Iris control, auto / manual focus, and colour balance of camera, Selection of presets, Video tour selection etc.				
6	The software should have user access authority configurable on per device or per device group basis. The system shall provide user activity log with user ID, time stamp, action performed, etc.				
7	The users should be on a hierarchical basis as assigned by the administrator. The higher priority person can take control of cameras, which are already being controlled by a lower priority user.				
8	It should have recording modes viz. continuous, manual, or programmed modes on date, time and camera-wise. All modes should be disabled and enabled using scheduled configuration. It should also be possible to search and replay the recorded images on date, time and camera-wise. It should provide onscreen controls for remote operation of PTZ cameras. It should have the facility for scheduled recording. Different recording speeds (fps) and resolution for each recording mode for each camera should be possible.				
9	The software for clients should also be working on a browser based system for remote users. This will allow any authorized user to display the video of any desired camera on the monitor with full PTZ and associated controls				
10	Retrieval: The VMS application should allow retrieval of data instantaneously or any date / time interval chosen through search functionality of the application software. In case data is older than 30 days and available, the retrieval should be possible. The system should also allow for backup of specific data on any drives like DVD's or any other device in a format which can be replayed through a standard PC based software. Log of any such activity should be maintained by the system.				

11	VMS shall provide the full functionality reporting tool which can provide reports for user login/logoff, camera accessibility report, server health check reports etc.				
32 "LED TV					
Sl. No	Item Description	Detailed Specification			
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			
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			
13	Warranty	Three Years Onsite comprehensive Warranty			

24 PORT L2 MANAGED SWITCH						
Sl. No	Detailed Specification					
1	Ports	a. 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only b. 4 SFP 100/1000 Mbps ports c. Auto sensing/ Auto negotiating Ports d. IPV6 Ready				
2	Performance	Switching Capacity : min 48Gbps				
3	Standards & Protocols	a. General : IEEE 802.1D MAC Bridges, IEEE 802.1p Priority, IEEE 802.1Q VLANs b IEEE 802.1s Multiple Spanning Trees, IEEE 802.1v VLAN, IEEE 802.3af, IEEE 802.3x Flow Control, QoS: 802.1p (CoS), Security: IEEE 802.1X Port Based Network Access Control				
4	Management Features	a. Web Browser Configuration Menu b. SNMP Manager d. Telnet e. RMON				
5	Certification	UL/cUL,FCC,CE,EN certification				

6	Power Supply Redundancy	The switch must support Internal load sharing, Dual power supplies; vendors shall propose for Internal Redundant PSU ' s				
7	Warranty	3 years onsite comprehensive warranty				
Media Convertor(Box Type)[Ethernet-SC Type]						
Sl. No	Item Description	Detailed Specification				
1	Function	1. 100 Base-FX to 100 Mbps Tx Single mode media convertor				
		2. Distance Support: min. 15km				
		3. 1 RJ-45 port and 1 fibre port (SC type connector)				
		4. 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				
10	Warranty	3 years on-site comprehensive warranty				
Media Convertor(Card Type)[Ethernet-SC Type]						
Sl. No	Item Description	Detailed Specification				
1	Connector Type	Dual SC, Card Type,				

		Ethernet-SC Type Media Convertor				
2	Fiber Type	Multi-mode				
3	Type	Industrial Grade				
4	Compliance	Should be of IEEE standards				
5	Operating Distance	2km				
6	Power Consumption	6W				
7	Operating Temperature	0°C to 40°C				
8	Storage Temperature	-25°C to 70°C				
9	Relative humidity operating and storage (non-condensing):	5% to 95%				
10	Certifications	Should comply with FCC/EN/VCCI/CE/UL standards				
11	Features	Auto-negotiation(IEEE 802.3u-compliant)/ Auto MDI/MDI-X/ Support Missing Link and Smart Missing Link /Managed or unmanaged operation/Transparent to IEEE 802.1Q VLAN packets				
12	Status Indicators	System and port LEDs should there to show the status				
13	Warranty	3 years onsite comprehensive warranty				
MEDIA CONVERTOR CHASSIS						
Sl. No	Item Description	Detailed Specification				
1	Feature	Min. 12/14 slots for slide-in modules and duplicated power supply modules				
2	Type	Industrial Grade				
3	LED	Front panel LEDs for status indication				
4	Rack mountable	Yes				

5	Redundant Power Supply	Should have redundant power supply feature				
7	Operating Temperature	0 deg. C to +50deg.C				
8	Operating Humidity	Up to 90% non-condensing				
9	Certifications	Should have UL/EN/FCC/CE/VCCI Certifications				
10	Compliance	Should be RoHS compliant				
11	Warranty	3 years onsite comprehensive warranty				
PATCH CORDS(SC-LC Type)						
1	Should be pre-moulded, connectorized, SC-LC Type. Length of Patch Cords(3ft or 7ft) shall be provided as per site requirement					
PoE Injector or Power Injector						
Sl. No	Item Description	Detailed Specification				
1	Type	Industrial Grade				
2	Compliance	IEEE 802.3af compliant				
		Supports half/full-duplex operation				
		IEEE 802.3 compliant				
		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				

8	Warranty	3 years onsite comprehensive warranty				
2 KVA ONLINE UPS WITH BATTERIES						
Sl. No	Features	Detailed Specification				
1	Capacity	2KVA				
2	Design	a) IGBT based True online double conversion design				
		b) Nominal Input Voltage : 208/220/230/240V				
		c) Nominal Input Frequency : 50Hz with range of 46 - 54Hz				
3	Power Factor	0.9				
5	output	a) Output Voltage : 230V				
		d) Waveform: Pure Sine Wave				
		f) Efficiency : >90%				
		k) Bypass : Automatic or Manual or Static Bypass				
7	ENVIRONMENTAL	a) Operating temperature range : 0°C to 40°C				
		b) Storage temperature : 0° C - 60° C.				
		c) Relative humidity : 0 to 95% RH, non-condensing				
		d) Operating altitude : upto 1000 mtrs				
8	DISPLAY	Should have Graphical LCD Display for easy user interface				
9	SAFETY STANDARDS AND CERTIFICATES	a) Environment : ISO 14001 or higher				
		b) Safety : IEC/EN certification				
		c) Quality : ISO 9001-2000 or higher				
10	Credentials	a) The OEM should have their own office & Service Centre in				

		Odisha				
		b) Quoted products technical Catalogue must be available in OEM"s Web Site				
		c) OEM must have 24X7 Toll Free Call Service Facility Toll Free Number to be provided				
11	Communication	SNMP or better communication port for interfacing & Remote monitoring				
12	Battery Type	1. TYPE: Sealed, lead acid, maintenance free (SMF)				
		2. RATED VOLTAGE: As per manufacturer standard				
		3. Battery back Up: upto 4hrs(minimum)				
13	Battery Housing	Closed housing with suitable lockers				
14	Battery Life	Min. 3 years replacement guarantee				
15	Warranty	Min. 3 years on site comprehensive warranty				
0.6 KVA INTERACTIVE UPS WITH BATTERIES						
Sl. No	Features	Detailed Specification				
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 10 Minutes				
5	Output	a. Voltage : 220volts				
		c. Transfer Time less than 10millisecond				

		d. Sockets : Adequate Nos. of sockets with surge protection feature				
		e. Frequency : 50Hz +/- 10%Hz				
6	General Features	Lightning & Surge Protection				
		Output Wave form—Modified/Stepped Sine wave				
		Audio Alarms: Low Battery; Battery ON;				
		Overload Protection feature should be there				
7	Environment	a. Operating Temperature : 0-40 deg C				
		b. Humidity : 0-90% non-condensing				
9	Certification	ISO/CE certification should be there				
10	Warranty	3 years onsite comprehensive warranty				
24U, 19 INCHES FLOOR STANDING RACK						
Sl. No	Detailed Specification					
1	Features	a. Floor standing rack				
		b. Industrial Grade				
		c. Load Rating of 500 kgs (min)				
		d. Side/Rear: Steel Doors, plain, vented at bottom, fully perforated and/or dual perforated				
		e. Front: Glass Doors with optional vented side trims for front-to-back air flow, toughened tinted glass with lock & key facility				

		f. Powder coated finishing (Steel doors & side trims for glass door should be powder coated), Vertical pillars of the frame should be of aluminium. All other parts should be of sheet steel.				
2	Size	a. Height : 24U				
		b. Width : As per requirement				
		c. Depth : As per requirement				
3	Accessories	a. Equipment support angles				
		b. Single Fan tray with min. 4 fans				
		c. Adequate nos. of 1 U cable managers				
		d. Adequate nos. of point for AC distribution box with ON/OFF button				
		e. Cable entry provision at top and bottom				
		f. Earthing kit				
		g. Castors with foot-operated brakes				
RACK SERVER WITH MONITOR						
Sl. No	Item Description	Detailed Specification				
1	Processor	a. Single processor.				
		b. Intel Xeon E5-2430 product family 6 core processor/ higher				
		c. Processor Speed : 2.2 GHz or higher				
2	Motherboard	OEM Motherboard				
3	Memory	16GB DDR-III 1066 MHz or higher SDRAM Memory with scalable up to 96 GB/higher				
5	RAID	SAS RAID Controller supporting RAID 0,1, & 5				

6	Network Feature	a. 4 X 1 Port Ethernet controller (10/100/1000 Mbps)/ Higher				
		b. IPV6 Ready				
7	Ports	Min. 4 nos. of USB Ports and min 2 PCI Slots				
8	Storage	2x450GB SAS Hot Swap HDD (10K rpm or higher)				
9	Optical Drive	DVD /CD-RW Combo drive				
10	Display	TCO-05 certified 18.5" wide TFT Monitor must be supplied with the server				
11	Power Supply	Redundant Power Supply				
12	Form Factor	Rack(2U)				
14	Keyboard & Mouse	OEM Keyboard & OEM Optical two button scroll mouse must be supplied with the server				
16	OS Required & Certification	Microsoft Windows Server 2012 std 64 Bit with Media kit				
17	VMS installation	The VMS shall be installed in the server				
18	Warranty	3 years onsite comprehensive warranty				
NAS FOR VIDEO STORAGE(16 TB)						
Sl. No	Features	Detailed Specification				
1	Form Factor	Single 2U chassis, Rack Mount				
2	Processor	One Intel® Xeon® E5 series v3 Processor, 6 Core, 1.9GHz or Higher, 15M cache or Higher and should be scalable to 2 Processor.				
3	Memory	16 GB DDR4 RAM or Higher				
4	Hard Drives	Drive Bay: Internal, hot-pluggable				

		Number of Drives : Shall be Provided with Minimum 4 Drives				
		Drive Type: Shall support minimum SAS (7.2 RPM), SATA (7.2 RPM,) type of drives.				
		Minimum Storage Capacity: 16 TB				
		Configuration: Shall have separate dedicated drives for the OS (OS DRIVE) and drives for the Data Storage (DATA DRIVE)				
5	Storage expandability	Shall have the External Storage Expansion capability using external Enclosure through associated hardware like storage controller and arrays.				
6	RAID Support	1. Drives (HDD) Dedicated for the OS shall be configured on RAID 1 /RAID 5.				
		2. Drives (HDD) Dedicated for the Data shall be configured in RAID5 or RAID6.				
7	Protocols support	SMB3,CIFS,NFS,FTP,iS CSI				
8	Operating Support	Pre-configured Microsoft Windows Storage Server 2012 R2, Standard Edition				
9	Network Connectivity	Ethernet 1Gb 4-port Network Adapter(NIC)				
		<u>Note: Please provide Part code/product code, in case non- onboard NIC</u>				

10	Storage Controller	1.The OEM storage controller shall support additional customer configurable RAID options along with Custom RAID Support : 0, 1, 5, 6, 10, 50, 60, etc				
		2. Controller shall have minimum 1 GB Cache Memory				
		3. Minimum 12Gb/s data transfer rate per port or lane				
		4. PCI Express 3.0 compliant,8 lane or Link				
		5.Performance and Features: Remote Management Feature, Data Protection features (like Snapshots),				
11	Services and Features	Remote Management Feature, Data services like (Snapshots, Replication, de-duplication)				
12	Management	Server Management Console/ Interface				
13	Expansion Slots	Minimum 6 PCIe 3.0 slots				
14	Power Supply and FAN	Redundant hot-plug Power Supply and redundant FAN				
15	Rack Rail	Shall Have sliding Rack rail for rack support				
16	Warranty	3 years on site comprehensive warranty.				
SURGE PROTECTOR						
Sl. No	Item Description	Detailed Specification				
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				
10	Warranty	Min. 3 years on site comprehensive warranty				
6 CORE ARMoured FO CABLE(SINGLE MODE, MULTI-CORE)						
Sl. No	Features	Detailed Specification				
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.				
CAT6 STP CABLES						
Sl. No	Features	Detailed Specification				
1	Type	Unshielded 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	Upto 60deg C				
10	Approval	a. UL Listed				
		b. ETL verified to TIA / EIA Cat 6				
1.1KV ARMoured CU-POWER CABLES						
Sl. No	Features	Detailed Specification				
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				

The bidders are required to submit an undertaking for the below items to provide these items as per tender specification and site requirement				
OUTDOOR JUNCTION BOX				
Sl. No	Item Description	Features	Bidders Response (Yes/No)	Remarks / Deviations (if any)
	Detailed Specification			
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.		
	Mount	Pole/Wall mount with all mounting accessories		
2	Industrial Grade	Yes		
3	Conformance	Weather proof with min. IP65 rated		
4	Basic Features	1. It shall be weather proof so as to withstand the dust and high temperature climate of the plant.		
		2. For terminating all cables the junction box should have suitable terminating block or connections with proper locking arrangement.		
		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.		
		4. Grounding provision and locking facility for junction box shall be there		
5	Accessories	a. Toughened glass window in the front door		
		b. Wide range of terminals and terminal blocks to accommodate UPS, Media Converter, LIU Panel/all the equipment's except the cameras.		
		c. Natural and forced fan cooling system		
		d. Customized cut outs on door, mounting plate		
		e. CFL Light		
		f. Stainless steel studs for grounding		
		g. Min. 2mm thick mounting plate		

POLE(FOR OUTDOOR CAMERAS)				
SI No	Features	Specifications		
1	Pole Location	OPTCL Grid S/S		
2	Material	GI-Tubular		
3	Standard	ISI		
4	Pole Height	1. The pole height shall be 10 metres above the ground for which a necessary foundation shall be made if required(The pole shall be 10 meters from Ground and 2 meter deep in Ground)		
		2. In case height lesser than 10 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.		
5	Mounting	1. 13 mm thickness plate - Bottom Surface in earth avoid the shaking.		
		2. To be concrete structure in the ground in 2 Meter depth.		
		3. to be concrete structure above the ground half meter		
6	Type of installation	Industrial		
7	Security Features	Internal Cabling with door at the bottom(door with lock & key facility)		
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		

Pole Mount Brackets, Camera Holder, LIU Box Holder, LIU-BOX with Accessories(6/12 port adaptor plate, pigtail, etc)				
Sl. No	Detailed Specification			
1	Purpose/Size	The above items are should be fabricated as per the site requirement for proper integration of the system.		
CABLING				
Sl No	Cabling	Specifications		
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		

VIII. SCHEDULE-H (General Compliance Schedule)

Sl. No.	Item	Vendor's Compliance	Deviation (if any)
01	General Terms & Conditions	Agreed/Not agreed	
02	EMD/ NSIC/ DGS&D Certificate	Deposited/Not deposited	
03	Latest Income Tax PAN and Sales Tax Registration & clearance certificates.	Deposited/Not deposited	
04	Security Deposit	Agreed/Not agreed	
05	Payment Terms	Agreed/Not agreed	
06	Penalty Clause	Agreed/Not agreed	
07	Price Validity	Agreed/Not agreed	
08	Delivery & Installation Schedule	Agreed/Not agreed	
09	Warranty (3 years) & Post Installation clause	Agreed/Not agreed	
10	Minimum of 3 years onsite management of IP Based CCTV Surveillance System	Agreed/Not agreed	
11	Infrastructure of Bhubaneswar (for Installation and attendance of support calls)	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 Eligibility Clause. (ISO certificate, Turnover, Profitability, Order copies as required)	Submitted/ Not submitted.	
15	At least 3 Procurement orders in India with supporting documents	Submitted/ Not submitted.	
16	Authorized manufacturer ship / System Integrator ship certificate	Submitted/ Not submitted	
17	Original specification sheets for all items	Submitted/Not submitted	
18	Driver software, wherever applicable, to be supplied	Agreed/Not agreed.	
19	Equipment working environment: All the equipment shall work in AC & non-AC-room environment.	Agreed/Not agreed.	
20	A vendor must quote all the items	Agreed/Not agreed.	
21	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

Confirmation in one of the provisions between the vendor's alternatives provided shall be ticked.

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.

IX. SCHEDULE-I

**PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT,
PAYMENT AND PERFORMANCE**

**This Guarantee Bond is executed thisday of 200_ by us the(Bank)
at P.O. P.S..... Dist..... State**

WHEREAS THE ODISHA POWER TRANSMISSION CORPORATION LTD., a corporate body constituted under the Company Act, 1956 (herein after called "the OPTCL") has placed orders No.....Dt.....(hereinafter called The Contract) on M/s..... (hereinafter called "The Contractor") having corporate office at <Address of Contractor> for Procurement, Installation, Testing, Implementation of IP Based CCTV Surveillance System in OPTCL grids (Chandaka, Meramundali, Budhipadar, Jayanagar) for OPTCL AND

WHEREAS the Contractor has agreed to provide IP Based CCTV Surveillance System in OPTCL grids (Chandaka, Meramundali, Budhipadar, Jayanagar)..... at the OPTCL in terms of the said contract, AND

WHEREAS the OPTCL has agreed (1) to exempt the contractor from making payment of security, (2) to release 100% payment of the cost of materials as per the said agreement and (3) to exempt from performance guarantee on furnishing by the Contractor to the OPTCL a Composite Bank Guarantee (hereinafter called "Bank Guarantee") of 10% (ten percent) of the contract value in force of the said contract.

NOW THEREFORE in consideration of the OPTCL having agreed (1) to exempt the contractor from making payment of security (2) releasing 100% payment to the contractor and (3) to exempt from furnishing performance guarantee in terms of the said contract as aforesaid, we, the(Bank) (hereinafter referred to as 'the Bank') do hereby undertake to pay to the OPTCL an amount not exceeding Rs.....(Rupees) against any loss or damage caused to or suffered by or would be caused to or suffered by the OPTCL by reason of any breach by the said contractor of any of the terms and conditions contained in the said contract.

(2) We (the Bank.....) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Contractor of any of the terms or conditions contained in the said contract or by reason of the Contractor's failure to perform the said contract. 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.....)only.

(3) We (the Bank.....) also undertake to pay to the 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 unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor (s) shall have no claim against us for making such payment.

(4) We (the Bank.....) further agree that the Bank Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said

contract and that it shall continue to be so enforceable till all the dues of the OPTCL under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till Chairman-cum-Managing Director, Odisha Power Transmission Corporation Limited or his nominee certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractor and accordingly discharges this Bank Guarantee. We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only if you serve upon us written claim or demand on or before **<Date of expiry of guarantee including claim period >**

Unless a demand or claim under this guarantee is made on us in writing on or before the _____ we shall be discharged from all liability under this guarantee thereafter.

(5) We (the Bank.....) further agree that the 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 agreement or to extend time of performance by the said Contractor(s) and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the 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 provisions have effect of so relieving us.

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

(7) We (the Bank.....) lastly undertake not to revoke this Bank Guarantee during its currency except with the previous consent of the OPTCL in writing.

(8) We (the Bank.....) further agree that this Bank Guarantee shall also be invokable at our place of business at Bhubaneswar in the state of Odisha.

NOTWITHSTANDING anything contained hereinabove:

1. Our liability under the Bank Guarantee shall not exceed **Rs. (Rupees Only)**
2. This Bank Guarantee shall be valid up to **<EXPIRY DATE>**.
3. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before **<CLAIM DATE>** failing which our liability under the guarantee will automatically cease.
4. This Bank Guarantee shall also be invokable at **<Bhubaneswar address of bank>**
For(indicate the name of the Bank)

Witness:

- 1.
- 2.

NOTE :The B.G. is to be furnished in Non-judicial Stamp paper of Rs.100/- as applicable as per Odisha Stamp Duty Act. from any Nationalized Bank and Stamp paper must be purchased in the name of the issuing bank.

X. SCHEDULE-J (APPROVED MAKE, QUOTED MAKE & MODEL)

Sl. No.	Item	Approved Makes	Quoted Make	Quoted Model
1	Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)	Sony/Pelco/Bosch/ Honeywell/ Axis/ Infinova		
2	Outdoor Fixed Camera(with fixed camera housing and power injector)	Sony/Pelco/Bosch/ Honeywell/ Axis/ Infinova		
3	Indoor Dome camera(with power injector for dome camera)	Sony/Pelco/Bosch/ Honeywell/ Axis/ Infinova		
4	PTZ Controller	Sony/Pelco/Bosch/ Honeywell/ Axis/ Infinova		
5	Video Management Software	Open Platform		
6	24 U Networking Rack	Valrack/ Netrack/ APW President / Rittal		
7	Outdoor Junction Box	Standard		
8	Media Convertor(Box Type)[Ethernet-SC Type]	Phoenix/ Moxa /Allied Telesis/ Perle		
9	Media Convertor(Card Type)[Ethernet-SC Type]	Phoenix/ Moxa /Allied Telesis/ Perle		
10	14 Slot Chassis for the media convertor	Allied Telesis/ Perle/ Phoenix/ Moxa		
11	LIU-Box with Accessories(6/12 port adaptor plate, pigtail, etc)	Standard		
12	Fiber Patch Cords [SC to LC Type]	Molex/TE/ Systimax / Krone		
13	24 port L2 Managed Switch	Cisco/ HP/ Allied Telesis/ Juniper /Brocade		
14	Rack Server with Monitor	HP/Dell		
15	NAS for Video Storage(16TB)	HP/Dell		
16	Pole Mount Brackets	Standard		
17	Pole	Standard		

e-Tender for CCTV Surveillance System at OPTCL

18	Camera Holder, LIU Box Holder	Standard		
19	32" LED Display	Samsung/ Sony/ LG		
20	Online UPS for Control Room-2KVA with batteries	APC/ Emerson-Liebert; Battery-Exide/Amron		
21	Interactive UPS for Camera-600VA	APC/ Emerson-Liebert; Battery-Exide/ Amron		
22	Surge Protector for Outdoor Cameras	Emersion/ CITELE		
23	6 CORE ARMOURED FO CABLE(Single Mode)	Molex/TE/ Systimax/ Krone		
24	CAT-6 STP CABLE	Molex/TE/ Systimax/ Krone		
25	1.1KV ARMOURED CU-POWER CABLES	Polycab/Havells/ V-Guard		
26	HDPE CONDUIT FOR FO AND POWER CABLES WITH ACCESSORIES	Standard		
27	PVC CONDUIT FOR LAN (CAT 6) CABLE WITH ACCESSORIES	Standard		
28	Other necessary items like casing & capping for UTP and power cables etc.	NA		
29	Electrical Cabling	NA		
30	Installation & Commissioning cost(4 nos. Of locations)	NA		
31	Microsoft Windows Server 2012 Standard Edition 64 Bit with Media kit	Microsoft		
32	Antivirus for server	Reputed Make		

Signature with Date

Name in Block Letters

Seal of the Company

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

XI. SCHEDULE-K (LIST OF CONSIGNEE)

Sl. No.	Item	Consignee & Quantity					Unit
		Chandaka	Jayanagar	Budhipadar	Meramundali	Total	
1	Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket and power supply/adaptor)	4	4	10	11	29	Nos.
2	Outdoor Fixed Camera(with fixed camera housing and power injector)	5	5	1	1	12	Nos.
3	Indoor Dome camera(with power injector for dome camera)	2	2	2	3	09	Nos.
4	PTZ Controller	1	1	1	1	4	Nos.
5	Video Management Software	1	1	1	1	4	Nos.
6	24 U Networking Rack	1	1	1	1	4	Nos.
7	Outdoor Junction Box	9	9	11	12	41	Nos.
8	Media Convertor(Box Type)[Ethernet-SC Type]	9	9	11	12	41	Nos.
9	Media Convertor(Card Type)[Ethernet-SC Type]	9	9	11	12	41	Nos.
10	14 Slot Chasis for the media convertor	1	1	1	1	4	Nos.
11	LIU-Box with Accessories(6/12 port adaptor plate, pigtail, etc)	14	14	17	17	62	Nos.

e-Tender for CCTV Surveillance System at OPTCL

12	Fiber Patch Cords [SC to LC Type]	18	18	22	24	82	Nos.
13	24 L2 port Managed Switch	1	1	1	1	4	Nos.
14	Rack Server with Monitor	1	1	1	1	4	Nos.
15	NAS for Video Storage(16TB)	1	1	1	1	4	Nos.
16	Pole Mount Brackets	11	11	13	15	50	Nos.
17	Pole	4	4	0	0	8	Nos.
18	Camera Holder, LIU Box Holder	9	9	11	12	41	Nos.
19	32" LED Display	1	1	1	1	4	Nos.
20	Online UPS for Control Room- 2KVA with batteries	1	1	1	1	4	Nos.
21	Interactive UPS for Camera-600VA	9	9	11	12	4	Nos.
22	Surge Protector for Outdoor Cameras	9	9	11	12	41	Nos.
23	6 CORE ARMOURED FO CABLE(Single Mode)	As per site req.	As per site req.	As per site req.	As per site req.	12	KM (appr ox.)
24	CAT-6 STP CABLE	As per site req.	As per site req.	As per site req.	As per site req.	450	Mtrs (appr ox.)
25	1.1KV ARMOURED CU-POWER CABLES	As per site req.	As per site req.	As per site req.	As per site req.	500	Mtrs (appr ox.)
26	HDPE CONDUIT FOR FO AND POWER CABLES WITH ACCESSORIES	As per site req.	As per site req.	As per site req.	As per site req.	12	KM (appr ox.)
27	PVC CONDUIT FOR LAN (CAT 6) CABLE WITH ACCESSORIES	As per site req.	As per site req.	As per site req.	As per site req.	450	Mtrs (appr ox.)

e-Tender for CCTV Surveillance System at OPTCL

28	Other necessary items like casing & capping for UTP and power cables etc.	1	1	1	1	4	Lump sum
29	Electrical Cabling	1	1	1	1	4	Lump sum
30	Installation & Commissioning cost (4 nos. Of locations)	1	1	1	1	4	Lump sum
31	Microsoft Windows Server 2012 Standard Edition 64 Bit with Media kit	1	1	1	1	4 Nos. of License	
32	Antivirus for server	1	1	1	1	4 Nos. of License	

XII. SCHEDULE-L (PROFORMA FOR COMPREHENSIVE AMC)

PROFORMA FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT
 (To be furnished in a Non-judicial Stamp Paper worth of Rs. 10/- (Rupees Ten only))

AGREEMENT NO. _____/

AN AGREEMENT MADE on the ____ day of _____ 2016 BETWEEN the ODISHA POWER TRANSMISSION CORPORATION LIMITED represented by the Chief General Manager (IT) (hereinafter referred to as "the Customer") of one part and M/S.- _____, a company / Partnership firm represented by _____ the Managing Director / Director / Area Manager (hereinafter referred to as "the Contractor") having its registered office at _____ on the other part ;

WHEREAS the Contractor being desirous of rendering such services as defined by the scope of this agreement at location _____ (hereinafter referred as "Authorized Location") under the General Terms and conditions herein ;

WHEREAS the Customer being desirous of utilizing such services as defined by the scope of this agreement is entering into a maintenance contract with Contractor;

Now this Agreement witness as follows:

Contractor agrees to maintain the _____ as detailed in schedule of Equipment as per SECTION-I.4.I of the Tender no..... dt..... hereinafter referred as the "CCTV Equipment", for a period from to in accordance with the terms and conditions laid out in the Tender No..... dt..... and Work order No. _____ Dt. _____ forming part of this agreement and provisions laid out later in the agreement at charges of Rs. _____. The said amount mentioned in the Work order is one time charge and inclusive of any Taxes and/or other Governmental levies as applicable or becomes payable at the time of signing of the contract. The said total maintenance charges shall be payable quarterly, on completion of each quarter. No claims for refund/ recovery will be made by the Customer at any time except as per the clause – 2.6

Scope of this Maintenance agreement:

1. The scope of this Service agreement is as follows.

- 1.1 Preventive Maintenance (PM): The Contractor will conduct routine check-up of the complete CCTV Surveillance System and CCTV Equipment at all the 4 Grid Sub-Stations (Chandaka, Meramundali, Budhipadar, Jayanagar) covered in the Schedule of Equipment as per SECTION-I.4.I of the Tender no..... dt..... once in every three months. (Hence forth referred to as P.M. Period).
- 1.2 Problem Notification: Customer shall notify Contractor of any defect, errors and malfunctions in the equipment which prevent its smooth operation by the Customer.

Mode of Contact: Contractor shall provide Customer with telephone number (s) and / or other contact information in order to allow Customer to accomplish the required notification and lodge complaint. On receipt of complaint the Contractor shall respond with a complaint Acceptance No. and all future reference to the particular complaint shall bear reference of such Acceptance No.

- 1.3 Contractor shall provide technical support services to Customer to diagnose Hardware and Software defects, errors and malfunctions either by way of replacement/repair within 24 hours as may be necessary to put the system back to operational condition. Contractor shall provide/assist Customers in using the Hardware and Software in a way that can avoid diagnosed errors, malfunctions and defects.
- 1.4 In addition to the above if the contractor fails to provide preventive maintenance of any CCTV equipment during the preventive maintenance period, a penalty of 30% of the AMC value of the defaulted CCTV equipment for the P.M. period shall be imposed on the contractor.
- 1.5 If the contractor is not able to provide preventive maintenance in respect of some CCTV equipment, due to reasons attributed to OPTCL, no penalty shall be imposed in respect of those CCTV equipment subject to satisfactory evidence.
- 1.6 Contractor shall be responsible to solve any Application program related problems and activities related to system administration like taking backups and restoring.

2. General Terms and Conditions of Maintenance service:

- 2.1 This service agreement is initially for the period mentioned in the agreement and is subject to renewal on expiry at the option of the Customer, for a further period at each time and so on unless specifically terminated by either party by giving minimum one month written notice, prior to the end of the maintenance contract period, under the agreement.
- 2.2 The maintenance service under this contract shall be provided by the Contractor directly.
- 2.3 The contractor shall respond to the calls registered by the user and resolve the problem within 24 hours.
- 2.4 The Customer shall provide adequate working space and adequate storage facilities for test equipment within the installation site, free of cost for the Contractor personnel. Customer will make the systems available to Contractor for maintenance purposes without any charge.
- 2.5 The Contractor shall render services during normal working hours of Customer's office on all working days.

- 2.6 In the event of the Contractor terminating the agreement for the reason attributable to its own, the customer shall be entitled for refund of 125 % of the maintenance charges on the pro-rata monthly basis for the left out period. For the purpose of this calculation, in case of termination in the middle of the month, any un-expired days below 15 days will be ignored and above 15 days shall be construed as a month, for that particular month.
- 2.7 The Customer shall not directly or indirectly, open, alter, try to tamper with or in any way do any act which will result in intruding with the internal operation of the machine (except routing input/output and data processing), and make any modification in the configuration existing at the time of signing this contract.
- 2.8 In case, the downtime of a unit exceeds 24 hours and the fault is not rectified or faulty equipment not replaced, a penalty of Rs.1000/- per day per faulty unit will be charged and will be recovered 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 and imposition of penalty.
- 2.9 The firm has to conduct quarterly preventive maintenance of each equipment/component of the project. In case the firm fails to conduct the quarterly preventive maintenance of any equipment /component of the project, a penalty of 30% of the CAMC charges of the equipment for the quarter shall be deducted from the CAMC charges.
- 2.10 The compressive warranty support & penalties on downtime thereof shall be applicable as specified under the Clause: SECTION-III.(1).XVII of the Tender No..... dt..... and 30% penalty mentioned above.
- 2.11 The Purchaser reserves the right to terminate the maintenance and repairs contract, after the warranty period, at any time without assigning any reasons and the Supplier cannot claim any compensation in this respect.
- 2.12 The vendor should also maintain the level of spares during post-warranty maintenance for the IP Based CCTV Surveillance equipment supplied at the ratio of 1:20. The same shall be verified by an officer nominated by the C.G.M (IT) in every Quarter during the period of contract.
- 2.13 Non-Solicitation: During the course of this agreement customer or Contractor will not hire directly or through third party any of the Contractor or customer personnel respectively, without prior written consent from Contractor and/or customer until after 6 months from the date of separation of that employee from Contractor and/or customer from the date of conclusion/termination of this agreement, whichever is later. Customer will not have him/her as a consultant or adviser.

- 2.14 During the period when this product support agreement is in effect, the CCTV system covered under the contract shall not be relocated or shifted to a new location beyond the territory of the city/place where it is first located without prior written consent of Contractor. In case of relocation of the system, Contractor has a right to revise support charges depending on the new location. In the event of customer not abiding to this, Contractor reserves the right to terminate the agreement and the customer will not be entitled to any compensation whatsoever in such cases. Contractor will quote separately for the relocation charges.
- 2.15 Limitations of Liability: Contractor's liability under this agreement does not extend to upgrade the system without Contractor's consent. Under no circumstances, the Contractor's total liability shall exceed the amount paid by customer for services to be rendered, and in no event the Contractor shall be liable for any consequential, incidental or other damages, however caused, whether for breach of contract, negligence or otherwise not attributed to him.
- 2.16 Termination of Contract: If either party fails to comply with the terms and conditions of this Agreement, the other party may terminate this agreement upon fifteen (15) days written notice to the breaching party, specifying any such breach, unless the breach specified therein has been remedied within such fifteen (15) days period. Either party may terminate this agreement without cause and for any reason, upon (30) days written notice to the other party. If the contract is cancelled by the customer due to the reasons attributed to the contractor, the Customer shall be entitled for refund of the maintenance charge paid as per clause - 2.6 without prejudice to the rights of the Contractor. On termination of this contract, the Customer may call upon Contractor to enter into a fresh support agreement with revised terms and conditions.
- 2.17 Force Majeure: Contractor shall not be liable or deemed to be in default of any delay or failure in performance stated herein under resulting directly or indirectly from causes beyond its reasonable control the fact of which to be given in writing to the satisfaction of the Customer and if the Contractor is prevented from performing its functions under this instrument for a period longer than three months, Contractor liability ceases under this agreement and then both the parties shall discuss the course of action to be taken afterwards.
- 2.18 Change of Ownership: The obligation of the Contractor under this contract shall cease forth with if the customer ceases to be the owner of the system.
- 2.19 Non-Transferable: The customer shall not be entitled to assign this service agreement or any benefit or interest herein to any other external agency without the prior written consent of the Contractor.
- 2.20 Jurisdiction: All disputes or differences between the parties to this agreement, touching or concerning the construction, meaning or effect of this agreement,

or the respective rights and liabilities of the parties hereto, or their enforcement there under, shall be referred as per the provision of the Indian Arbitration Act 1960 and only courts at Bhubaneswar under the jurisdiction of High Court of Orissa shall have jurisdiction in all matters arising out of or connected with this agreement, who shall either decide the dispute or difference himself or appoint an arbitrator to decide the dispute or difference and refer it to such arbitrator for his award and the decision of the first mentioned person or his appointee shall be final and binding on the parties hereto.

3. Entire Agreement & Sever ability

This agreement together with the terms and conditions mentioned in the Tender Document No..... dt..... and Work Order No..... dt....., constitutes the entire agreement between the parties with respect to the subject matter hereof, taking precedence over and superseding any prior or contemporaneous oral or written agreements of understandings. Unless otherwise provided herein, this Agreement may not be modified, amended, rescinded, or waived, in whole or part, except by a written instrument signed by the duly authorized representatives of both parties.

The invalidity or un-enforceability of any terms or provisions of this agreement shall not affect the validity or enforceability of the remaining terms and provisions which shall remain in full force and effect unless such invalidity or un-enforceability does substantially alter the underlying intent of this Agreement or whether the invalid or unenforceable provision comprises an integral part of or are otherwise inseparable from the remainder of this agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date indicated below:

WITNESSES

For Customer

CUSTOMER

1.

2.

Seal

For Contractor

CONTRACTOR

1.

2.

Seal
