

# ଓଡ଼ିଶା ବିଫ୍ୟୁତ୍ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲିଃ. ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)
Regd. Office: Janpath: Bhubaneswar-751022.

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

CIN: U4102OR2004SGC007553

# Implementation of IP Based CCTV Surveillance System at 29 Grid Sub-Stations of OPTCL - Phase 4

# TENDER NOTICE NO. TW-IT/OT/03/543/2020-21 DATE: 11-12-2020

Chief General Manager (IT), OPTCL, 3rd Floor, IT Department, Janpath, Bhubaneswar on behalf of OPTCL invites bids in e-tender mode from reputed eligible bidders for "*Implementation of IP Based CCTV Surveillance System at 29 Grid Sub-Stations of OPTCL – Phase 4*" conforming to the terms and conditions mentioned in the e-Tender document.

The interested eligible bidders may visit our website <u>www.optcl.co.in</u> on or after 11/12/2020 (16:00 Hrs) to go through / download the scope of work and terms and conditions in detail. The techno-commercial bid shall be due for submission on dated 31/12/2020 (17:00 Hrs).

The interested bidders would be required to enroll themselves on the tender portal <a href="https://www.tenderwizard.com/OPTCL">www.tenderwizard.com/OPTCL</a>. Complete set of bidding documents are available at <a href="https://www.tenderwizard.com/OPTCL">www.tenderwizard.com/OPTCL</a> from 11/12/2020 (16:00 Hrs) up to 31/12/2020 (16:00 Hrs).

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

Chief General Manager (IT) OPTCL

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#### A. SECTION-I

#### 1. General information to the Bidders

- **I. Name of the Project:** "Implementation of IP Based CCTV Surveillance System at 29 Grid Sub-Stations of OPTCL Phase 4".
- **II.** The prospective bidders are advised to register their user ID, Password, company ID from the website <a href="www.tenderwizard.com/OPTCL">www.tenderwizard.com/OPTCL</a> by clicking on hyper link "Register Me".

#### 2. Submission of Bids

- I. The bidder shall submit the bid in Electronic Mode only i.e. www.tenderwizard.com/OPTCL. The bidder must ensure that the bids are received in the specified portal of the OPTCL Tender Wizard by the date and time indicated in the Tender notice.
- **II.** Bids submitted in any other form will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.
- **III.** The OPTCL reserves the right to reject any bid, which is not submitted according to the instructions, stipulated.
- IV. The participants of the tender should be registered under IT Act, GST Act.
- V. The Bidder must possess Compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
- VI. The Bidders are requested to follow the below steps for registration
  - (a) Click "Register", fill the online registration form.
  - (b) Pay the registration amount of Rs. 2360/- through online payment mode in the Keonics Tender Wizard Portal. This registration is valid for two years.
  - (c) Send the acknowledgment copy for verification.
  - (d) As soon as the verification is done the e-tender User ID will be enabled.
- VII. After viewing Tender Notification, if bidder intends to participate in tender, he/she has to use his/her e-tendering User Id and Password which has been received after registration and acquisition of DSCs.
- VIII. For any e-tendering assistance, contact help desk number: 080- 40482000 (Bangalore)

# 3. Bidding Schedule

1 Type of Bidding : Two- part bidding

2 Tender Documents : The bidders can view the tender documents from Website

"www.optcl.co.in" free of cost

: 13,440/-(non-refundable) including GST @ 12%. Tender Cost 3

: Demand Draft payable to Drawing and Disbursing officer, 4 Mode of paying Tender cost

> Headquarters office, OPTCL, Bhubaneswar. The DD must be issued by a nationalized bank on or before the last date for sale of bidding documents, as per clause (10) below

Tender Processing Fee The bidders shall have to submit a non-refundable

> tender processing fee of Rs. 5900/- through online payment mode in the Keonics Tender Wizard Portal.

EMD\* : All bids must be accompanied by a bid security (EMD) in

the amount of 2,52,280/-(Two Lakhs Fifty Two

Thousand Two Hundred Eighty Only)

: The bid Security may be submitted in form a demand draft Mode of EMD

in favor of the Drawing and Disbursing Officer, OPTCL,

Headquarters, Bhubaneswar

8 Submitted EMD, Tender Cost, : The bidders shall scan the Demand Draft/Online

**Tender Processing Fee** 

Payment Receipt towards EMD, tender paper Cost and tender processing fee and upload the scanned image in

the prescribed form in .jpg/.pdf format in addition to

submitted original

: The said demand drafts/Online Payment Receipts are to be submitted in original at the office of the undersigned

on or before the last date & time of submission of bid.

9 Date of commencement

of Sale of bidding

document

: 11/12/2020 (16:00Hrs)

10 Last date and time of sale of

bidding document

: 31/12/2020 (16:00Hrs)

11 Last date and time for

Receipt of bids

: 31/12/2020 (17:00Hrs)

12 Date and time of Pre-Bid

meeting

: 21/12/2020 (11:00Hrs)

13 Date and time of opening of Techno-commercial bids : 01/01/2021 (15:00 Hrs)

14 Time and of opening

price bids

: Will be Intimated Latter

15 Place of opening of bids & Address for communication : Office of Chief General Manager (IT), 3rd Floor, IT Department, OPTCL, Janpath, Bhubaneswar- 751022

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

# 4. Scope of the Project:

# I. Scope of work:

Scope of work comprises procurement, installation, commissioning, integrating, testing of all components of the IP based CCTV Surveillance System at 29 Grid Sub-Stations of OPTCL: Phase 4, that meet the full functionality; provide hand-holding for 90 days after successful installation, commissioning, integration, pilot testing and system roll out at all the 29 locations, along with 03 years Warranty and thereafter 03 years Comprehensive AMC Support.

- a. The bidders are strongly advised to visit the different sites in order to understand all activities involved in the project and accordingly quote for the tender.
- b. System integration of all the hardware, software, networking items supplied by the successful bidder as part of this project shall be the sole responsibility of the successful bidder. The bidder must ensure the connectivity to headquarter at Bhubaneswar for viewing where the Optic Fiber connectivity is available. Any additional goods and services required for the completion of the system integration in order to materialize and operationalize all the functional specifications of this project shall be borne by the successful bidder at no extra cost to the purchaser. Any excavation/digging work or any other such work, if required shall be the responsibility of the successful bidder.
- c. Bidders Need to submit the following as a mandatory requirement for this Bid:
  - 1. Understanding of the Project
  - 2. Approach Methodology:
    - a. Approach to meet the Scope:
    - b. Technical Understanding of the Project
    - c. Technical Architecture of this Project (Line Diagram)
    - d. Bill of Materials without Price
  - 3. Implementation Methodology
  - 4. Resource Management
  - 5. Time line in WBS
  - 6. Call Resolution Methodology including Call Escalation Matrix
  - d. CCTV Surveillance System shall be implemented in the following 29 locations:

#	Name of the Grid S/S	#	Name of the Grid S/S
1	220/33 KV Grid S/S, Balimela	16	132/33KV Grid S/S Birmaharajpur
2	220/33 KV Grid S/S, Laxmipur	17	132/33KV Grid S/S Brajabiharipur
3	132/33 KV GIS Hirakud	18	220/33 KV Grid S/S Kalimela
4	220/132/33 KV Grid S/S Kuarmunda	19	Govindpalli
5	220/33 KV Grid S/S, Deogarh	20	220/132/33 KV Grid S/S Pratapsasan
6	220/33 KV Grid S/S, Lephripada	21	132/33 KV Grid S/S Satasankha
7	132/33KV Grid S/S Lakhanpur	22	220/33 KV Grid S/S Nayagarh
8	220/33 KV Grid S/S Rengali	23	Meramundali B
9	220/33 KV Grid S/S Daspalla	24	132/33 KV Grid S/S Bolangir Old
10	220/33 KV Grid S/S Telkoi	25	Samanghara
11	Goda	26	Choudwar
12	132/33KV Grid S/S G.Udayagiri	27	Brajaraj Nagar
13	132/33KV Grid S/S Bhatli	28	132/33 KV Grid S/S Chainpal
14	132/33KV Grid S/S Thuapalli	29	Mancheswar
15	220/132/33 KV Grid S/S Gunupur		

# II. Schedule of Quantity

# a. Supply & Installation & Commissioning:

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

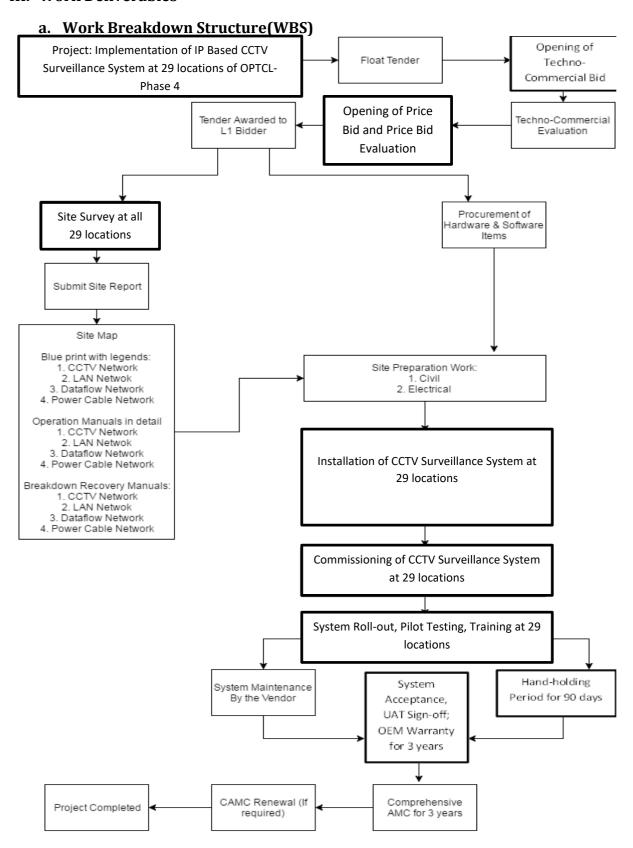
#	Item Code	Schedule- A Items	UOM	Qty.
		Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-	Nos.	
1.	CCSCA01	wall mount bracket, power supply/ adaptor, camera holder and other		77 5 30 3 29 58 29
	0000,101	accessories)		, ,
		[Range: 100 mtrs]	N.T.	
2	CCCC402	Outdoor Fixed Camera (with fixed camera housing, power injector,	Nos.	_
2.	CCSCA02	camera holder and other accessories) [Range: 50 mtrs]		5
		Indoor Dome Camera (with power injector for dome camera)	Nos.	
3.	CCSCA03	[Range: 30 mtrs]	1403.	30
4.			Nos.	3
		8 Channel NVR with 2 SATA for 2nos. of HDD (with additional mouse	Nos.	29
5.	CCSCA05	and keyboard)		
6.	CCSCA06	4 TB Surveillance HDD	Nos.	58
7.	CCSCA07	16 Port Managed Network Switch	Nos.	29
8.	CCSCA08	32" LED Display	Nos.	29
9.	CCSCA09	Media Convertor (Box Type)	Nos.	108
10.	CCSCA10	600 VA Interactive UPS	Nos.	114
11.	CCSCA11	Surge Protector for Outdoor Cameras	Nos.	77
12.	CCSCA12	Fiber Patch Cords	Nos.	108
13.			Mtrs.	8430
14.	CCSCA14	CAT6 STP Cable (Outdoor)	Mtrs.	3160
15.	CCSCA15	CAT6 STP Cable (Indoor)	Mtrs.	1240
16.	CCSCA16	1.1 KV Armoured Cu-Power Cable	Mtrs.	2340
17.	CCSCA17	6U Network Rack	Nos.	29
#		Schedule- B Items	UOM	Qty.
18.	CCSCB01	HDPE Conduit Pipe for Fiber Optic Cables with necessary accessories	Mtrs.	8430
19.	CCSCB02	PVC Conduit Pipe for CAT6 Cables with necessary accessories	Mtrs.	2340
20.	CCSCB03	Outdoor Junction Box	Nos.	82
21.	CCSCB04	Pole with pole mount brackets and other accessories		74
22.	CCSCB05	LIU-Box with Accessories (adaptor plate, pigtail, etc.)	Nos.	108
	23. CCSCB06 Computer Desk		Nos.	32
#		Schedule- C (Installation & Commissioning)	UOM	Qty.
24.	CCSCC01	Installation & Commissioning cost [including casing-capping for UTP and power cables etc. and Electrical Cabling & Other Miscellaneous	Lump sum	29
44.		Work as per site requirement	Suiii	

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

# b. Comprehensive AMC Support for 3 years:

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

#### III. Work Deliverables



# IV. Project Timelines with Payment Breakup

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

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

# 5. Opening of Bids

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

- day after the last date of submission of bid.
- V. OPTCL reserves the right to cancel/withdraw the invitation for bids without assigning any reasons and shall bear no liability whatsoever consequent upon such a decision.

# 6. Qualification of Bidder

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

#	Qualification Requirement	Mandatory Supporting Documents
A	Organization's Financial & Certification Status	
a.	The Bidder should be a company incorporated/ registered in India under the Companies Act, 1956 and operating in the field of IT/ITeS business for the last five consecutive years.  Note:  In case any bidder has undergone corporate restructuring (including merger, demerger, hive off, slump sale etc.), it may showcase credentials of its erstwhile / current entity provided sufficient documentary proof is submitted with the bid to evince that such credentials have accrued to / transferred to / are in the name of the bidding entity and the bidding entity is authorized to use such credentials.	Certificate of Incorporation and copy of Memorandum and Articles of Associations of the company evidencing that they are working in the field of IT/ITeS business for the last five years should be attached.
b.	The Bidder should have positive net worth, and should have an average turnover of more than INR 10 crores, for the last three Financial Years ending on 31st March 2020.	Copy of the audited annual accounts of the bidder showing turnover of the bidder for the last three financial years supported by Chartered Accountant certificate for Net-worth and turnover.
c.	The Bidder shall not be under a declaration of ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies as on bid submission date. The bidder should not quote any product of any OEM which is blacklisted by any of the Government agency.	Undertaking in this regard by the authorized signatory of the bidder.
d.	The Bidder must have PAN Card, GSTIN.	Valid Scanned Copies of the PAN Card, GSTIN.
e.	The Bidder must have valid ISO 9001:2008 certificate/ equivalent for CCTV Surveillance System and Networking System as on bid submission date	Copy of the valid ISO 9001:2008 certification
f.	The Bidder should have at least one office in Odisha.	Latest copy of Property tax /Electricity Bill/Telephone Bill/G.S.T./Lease agreement etc. should be submitted as proof

g.	The bidder should submit power of attorney certifying the authorized signatory	Power of Attorney executed by the Bidder in favor of the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this Tender. Board resolution also to be submitted in favor of Power of Attorney.
h.	Bidder shall be financially sound and must not be anticipating any ownership change for coming 03 (three) years from bid submission date.	An undertaking to this effect shall be submitted by the Bidder duly certified by authorized CA.
i.	The Bidder shall have support center in Odisha with % spare stock (10% of the ordered quantity) should be available at the service center in Odisha with at least 05 (five) technically qualified professionals in the area of CCTV Surveillance System and Networking as on bid submission date.	Undertaking from the bidder in its letter signed by authorized signatory mentioning the details of its maintenance & support center 2`along with maintenance & support engineers with their qualification and years of experience.
В	Past Performance & Relevant Project Experience	
	The Bidder should have designed, supplied, installed, tested, commissioned and operated IP Based CCTV Surveillance project(s) at least in any Central Govt. / State Govt. / PSU /Autonomous Body(Govt.) in India conforming to the scope of the work during the last three (03) financial years:  • One (1) project with Order Value of minimum INR 1 Crores; OR	Copy of Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order. Completion certificate Submit suitable, verifiable evidence to demonstrate the experience.
	<ul> <li>Two (2) projects each with Order Value of minimum INR 0.75 Crores each.</li> <li>Three (3) projects each with Order Value of minimum INR 0.5 Crores each.</li> </ul>	
C.	OEM Requirement	
a	<ul> <li>The Bidder should submit valid letter from the OEMs (MAF as per prescribed format) for Schedule- A Items confirming following:</li> <li>Authorization for bidder</li> <li>Confirm that the products quoted are not end of life products</li> <li>Undertake that the OEM support including spares, patches for the quoted products shall be available for the entire contract period</li> </ul>	The Bidder should submit valid letter from the respective OEMs for Schedule-A Items confirming to this effect.
b	The OEM or any of its divisions or group companies must never be black listed by any government/ PSU organizations in India or USA in last 5 Years.	The Bidder should submit an undertaking in this regard by the authorized signatory of the OEM.
d	All systems and components shall be provided with comprehensive repair and spare parts replacement for at least 6 Years from date of sale. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair for the said period.	The Bidder should submit an undertaking for availability of spare parts at least for 6 years.

# 7. Procedure to Submit the Bid

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

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

#	Document / Description		
A.	<u>Documents needs to be Submitted in Hardcopy</u>		
1.	Earnest Money Deposit(EMD) : Demand Draft (Original)		
	<ul> <li>Tender Processing Fee : Online Payment Receipt(Copy)</li> </ul>		
	Tender Paper Cost: Demand Draft(Original)		
	Undertaking for acceptance of Term and conditions as mentioned in the Bid		
	Sheet (Schedule-II) (Signed, sealed and scanned copy)		
	• Authentic copy of registration Certificate as MSE unit if any, for claiming 50%		
	EMD exemption.		
	• Forms and Schedules as mentioned in the Section –V (Schedule A, Schedule		
_	D to Schedule –H)		
В.	Documents needs to be Submitted in Softcopy along with Bid Sheets		
2.	Bid Declaration Form		
3.	The Bidder should submit valid letter from the OEMs (MAF as per prescribed format)		
4.	Copy of the audited annual accounts of the bidder showing turnover of the bidder		
	for the last three financial years ending on 31st March 2020, supported by		
	Chartered Accountant certificate for Net-worth and turnover.		
5.	An undertaking that there will be no ownership change in the forthcoming three years		
	from bid submission date.		
6.	Constitution or legal status, place of registration and principal place of business;		
	GST Registration Certificate & PAN Card		
7.	Copy of Power of Attorney executed by the Bidder in favor of the duly Authorized		
	Representative, certifying him as an authorized signatory for the purpose of this		
8.	Tender. Board resolution also to be submitted in favor of Power of Attorney.  Latest copy of Property tax /Electricity Bill/Telephone Bill/G.S.T./Lease agreement etc.		
О.			
	should be submitted as proof.		
9.	Undertaking from the bidder in its letter signed by authorized signatory mentioning the		
	details of its maintenance & support center along with maintenance & support engineers with their qualification and years of experience.		
10	The Bidder shall submit an undertaking of ineligibility for corrupt or fraudulent		
10.	practices or blacklisted with any of the Government agencies as on bid submission date.		
11.	Copy of the valid ISO 9001:2008 certification/ equivalent		
12.			
13.			
14.	Technical literatures and original specifications sheets of each item offered on or		
L	before the last date & time of submission of tender.		
15.	iv. For Comprehensive AMC Support for 03 years, if the price quoted per year is		
	below 2% of the total quoted Supply and Installation cost, the bids shall be out rightly		
	rejected during the Price Bid Stage, i.e. the Comprehensive AMC Support Cost for 03		
	years should be minimum 6% of the total quoted Supply and Installation cost.		

- An undertaking to this effect should be submitted.
- 16. The bidder shall submit the following in support of Past Performance & Relevant Project Experience:
  - a. Copy of Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order.
  - b. Completion certificate
  - c. Submit suitable, verifiable evidence to demonstrate the experience.
- 17. Supporting Documents/Certifications to establish compliance in conformation with electro-magnetic compatibility requirements for Outdoor Cameras.
- 18. The bidder must enclose a certificate either from OEM or from customer that the offered Make Camera has been installed in Extra High Voltage environment of 132kV or above.
- 19. The following Document need to be submitted in Softcopy (signed and sealed) along with Techno commercial bid as a mandatory requirement (Refer Section-I .4.I. c)
  - a. Understanding of the Project
  - b. Approach Methodology:
  - c. Implementation Methodology
  - d. Resource Management
  - e. Time line in WBS
  - f. Call Resolution Methodology & Call Escalation Matrix

# 8. Outright Rejection

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

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

#### B. SECTION-II

#### 1. General Instruction to the Bidders

- I. This tender covers the required quantity of materials. These quantities are to be supplied by the bidder on receipt of the work order. The initial order will be supplied within the stipulated period. The purchaser reserves the right to increase or decrease the quantities of the items under this contract within six months of the issue of the order without any change in the quoted price and other terms & conditions of the original work order. The variation shall be limited to +/- 25% of the BOQ on the same price and terms & conditions.
- II. Tenders will be opened in the Office of the Chief General Manager (IT) on the stipulated date and time in the presence of their authorized representatives (limited to one person), at the time of opening the bids.
- III. Only "non-material deviations" (which means only those deviations that do not qualify as material deviations as defined in ITB clause of bid document) will be considered by the purchaser. Please describe all the non-material deviations w.r.t Terms and conditions described in the General conditions of contract & Special conditions of contract, Section VIII.

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

# **Format for Deviations**

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

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

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

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

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

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

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

- successful tenderer, this will be refunded only after furnishing of security money referred to Section–III.(1).XXII. Suits, if any arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.
- v. Earnest Money will be forfeited if the tenderer fails to accept the letter of intent and / Purchase orders issued in his favour as well as satisfactory completion of the project.

# (b) Revision of Tender Price By Bidders:

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

#### **SECTION-III**

#### 1. General Conditions of the Contract

#### I. DEFINITION OF TERMS:

In writing these General Conditions of Contract, the Specification and bill of quantity, the following works shall have the meanings hereby indicated unless there is something in the subject matter or contract 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 items, machineries, apparatus, materials, articles and services to be provided with respect to items mentioned in the tender, under the contract by the contractor.
- **f.** "Contract Price" shall mean the sum named in or calculated in accordance with the provisions of the contract as the "contract price" which shall include packing, forwarding freight, Insurance and other taxes and duties if applicable.
- g. "General Condition" shall mean these General 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 calendarmonth.
- **j.** "Writing" shall include any manuscript, typed/hand written/ printed or other statement re-produced in any visible form and whether under seal or under hand.
- **k.** "F.O.R. Destination" costs shall mean the cost of equipment and material at the consignee's store. The cost is exclusive of other local Taxes, but is inclusive of packing, forwarding and insurance & Freight charges.
- **1.** 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.

### II. GUIDELINES FOR THE BIDDER:

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

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

#### **III. PATENT RIGHTS ETC:**

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

#### IV. MANNER OF EXECUTION:

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

## V. INSPECTIONS AND TESTING

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

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

# VI. <u>DISPATCH INSTRUCTIONS:</u>

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

## VII. MANUALS AND DRAWINGS:

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

#### **VIII. DOCUMENTATION:**

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

#### IX. ACCEPTANCE TEST:

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

#### X. SUPPLIER'S OBLIGATIONS

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

- accidents or loss of life during installation and commissioning activities. The Supplier will pay all indemnities arising from such incidents and will not hold the Purchaser responsible or obligated.
- **c.** The Supplier is responsible for managing the activities of its personnel or sub-contracted personnel and will hold itself responsible for any misdemeanors.
- **d.** The Supplier will treat as confidential all data and information during the execution of his responsibilities and will not reveal such information to any other party without the prior written approval of the Purchaser.

#### **XI. SITE PREPARATIONS**

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

#### **XII. CONTRACT'S DEFAULT LIABILITY:**

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

#### **XIII. REJECTION OF MATERIALS:**

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

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

#### **XIV. EXTENSION OF TIME:**

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

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

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

# XVI. WARRANTY:

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

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

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

#### XVII. COMPREHENSIVE AMC SUPPORT AND MAINTENANCE:

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

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

#### XVIII. PRICE

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

#### XIX. <u>IMPORT LICENCE:</u>

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

#### XX. VALIDITY:

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

## XXI. TERMS OF PAYMENT:

# a. Supply Installation & Commissioning of the CCTV System

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

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

# b. Comprehensive AMC Support:

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

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

No advance payment in any form will be made.

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

## XXII. BANK GUARANTEE:

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

## XXIII. <u>INSURANCE:</u>

Insurance of Stores covered by this specification shall be done by the suppliers with their own insurance unless otherwise stated. The responsibility of

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

#### **XXIV. NO DEVIATION CERTIFICATE:**

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

# XXV. PAYMENT DUE FROM THE CONTRACTOR:

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

# XXVI. <u>JURISDICTION OF THE HIGH COURT OF ODISHA:</u>

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

# XXVII. RIGHT TO REJECT/ACCEPT ANY TENDER:

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

#### XXVIII. <u>CONTRACTOR'S RESPONSIBILITY:</u>

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

# XXIX. EVALUATION OF BIDS:

In comparing bids and in making awards the purchaser may consider such factors as compliance with specifications, relative quantity, land adaptability of supplies or services, experience, financial soundness, records of integrity in

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

# XXX. FORCE MAJUERE:

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

# XXXI. <u>CORRESPONDENCES:</u>

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

### XXXII. COPY RIGHT PROTECTION OF TENDER DOCUMENT:

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

### C. **SECTION-IV**

# 1. Schedule of Technical Requirements:

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

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

#### **II.** System Requirements:

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

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

# i. **EMI/EMC Requirements**:

The Cameras should generally conform to Electro-magnetic compatibility requirements for outdoor cameras in EHV switchyards. The major EMC required for Outdoor Cameras shall be as under:

- Electrical Fast Transient (Level 4) As per IEC 61000-4-4
- Damped Oscillatory (1MHz and 100KHz)(level 3)-As per IEC 61000-4
   12
- AC Voltage Dips & Interruption/Variation (level 4) As per IEC 61000-4-12
- Electrostatic Discharge (Level 4) As per IEC 61000-4-2
- Power Frequency Magnetic Field (level 4) As per IEC 61000-4-8
- Ripple on DC Power Supply (level 4) As per IEC 61000-4-17
- Surge Test (level 4) As per IEC:61000-4-5

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

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

## 2. Detailed Technical Specifications:

#	Item Description		Detailed Specification
I.	SCHEDULE-A		
A.	Outdoor PTZ Camera(with PTZ camera housing, gooseneck- with wall mount bracket, power supply or adaptor and other necessary accessories)[Range 100 Meters]		
	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
1		Image Sensor	Progressive scan CMOS 1/2.8" or better
			Full HD, IR Correction or higher
		Lens	The focal length of the lens shall be provided so as to meet specification the IR distance of min. 100 meters and effective viewable distance of min. 100 meters and optical zoom of 30x.

#	Item Description		Detailed Specification
			Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid.
		Night Vision	Night vision with IR-LED/ IR Cut Filter
		IR Features	The Camera shall have inbuilt IR or External IR Component
		IR Distance	Minimum 100mtrs
		Effective Viewable Distance	Minimum 100mtrs
		Wide Dynamic Range	Should have WDR feature 120 dB or better
		Backlight Compensation Feature	BLC/HLC/WDR
2	OPERATIONAL	Pan/Tilt/Zoom Feature	Pan/Tilt/Zoom feature should be available i. PAN: Preset Speed: 240°/s, Pan Range: 360° continuous ii. TILT: Tilt Preset Speed: 160°/s, Tilt Range: -0° ~ 90° iii. ZOOM: Optical Zoom: 30X(min.),Digital Zoom: 12X(min.) iv. PRESET: Number of preset: Min. 256
		Light Sensitivity	Colour mode: 0.25 lux, B/W mode: 0.11 lux @ 30IRE, F1.6 or better
		Electronic Shutter	Should have automatic Electronic Shutter feature
		Signal-to-Noise Ratio	Min 50dB
		Day/Night Feature	Should have Day/Night Feature
		Motion Detection & Tamper Detection Feature	Should have Motion Detection & tamper Detection Feature
		Privacy Masking Feature	Should have Privacy Masking Feature
		De-Fog Feature	Should have De-Fog Feature
		White Balance	Should have Auto, Manual, Indoor-Outdoor white balance feature
		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)
	NETWORK	Compression Standards	H.264, MJPEG / MPEG4
3		Protocols	IPv4,IPv6 ready, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP,TCP, UDP, IGMP, ICMP, DHCP, PPPoE/802.3at POE+
		Security	User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login

#	Item Description		Detailed Specification
	-	Multiple Streams	Multiple and individually configurable streams in H.264 and MJPEG.
		Inter-operability	Should have Onvif conformance feature
		Web Access	Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi- language
4	CENEDAL	Input Voltage	24 VAC and PoE (Power Over Ethernet)
4	GENERAL	Power Consumption	Max. 60W
		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
5	RECORDING & STORAGE MANAGEMENT	Type & Capacity	A memory card (a maximum of 128GB 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	Shall support manual / alarm / edge
6	ENVIRONMENTAL	Camera Housing & Mount  Operating Temperature  Humidity	1. The Camera housing and gooseneck stand-wall mount bracket should be of same make as that of Camera and suitable for the model no offered as specified by the manufacturer and should be an integrated unit. The housing should be Weather Proof IP65/66 rated and of aluminium construction with vandal resistance of IK10. The housing shall have heater and blower.  2. The camera should be suitable for wall mounting, ceiling mounting, pole mounting and switchyard mounting. All accessories required for mounting shall be provided.  5 deg C to +60 deg C
		Humidity	90% or less (non-condensing)
7	STANDARDS & CERTIFICATIONS	Certification Ingress Protection/ Vandal Proof	UL, CE, IEC, FCC, ISO and BIS certifications IP66/IP67, IK10
B.	Outdoor Fixed Camera(wit accessories)	1	, power injector and other necessary
	,	Type of camera  Place of installation	High-Definition Outdoor Fixed Camera, suitable for both day and night surveillance Outdoor Type
	CAMERA	Industrial Grade	Yes
1		Effective Pixel	Minimum 2 Mega Pixel
		Sensor	Progressive scan CMOS 1/2.8" or better
		_	Lens Type: Varifocal Lens
		Lens	Full HD, IR Correction or higher
		1	,

#	Item Description		Detailed Specification
			The focal length of the lens shall be provided so as to meet specification of the IR distance (min. 50 meters) and effective viewable distance (min. 50 meters).  Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid.
		Night Vision	Night vision with IR-LED
		IR Features	The Camera shall have inbuilt IR or External IR Component.
		IR Distance	50mtrs
		Effective Viewable Distance	50mtrs
		Wide Dynamic Range	Should have WDR feature 120 dB or better
	OPERATIONAL	Backlight Compensation Feature	BLC/HLC/WDR
2		Light Sensitivity	Colour mode: 0.25 lux, B/W mode: 0.05 lux @ 30IRE, F1.2 or better
		Signal-to-Noise Ratio	Min 50dB
		Day/Night Feature	Should have Day/Night Feature
		Motion Detection & Tamper Detection Feature	Should have Motion Detection & Tamper Detection Feature
		Privacy Masking Feature	Should have privacy masking feature
		De-Fog Feature	Should have De-Fog Feature
		White Balance	Should have Automatic/Manual White Balance Feature
	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
3		Protocols	TCP/IP/IPv4, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6,
		Security	User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login
		Multiple Streams	Multiple and individually configurable streams in H.264 and MJPEG.
		Inter-operability	Should have Onvif conformance feature

#	Item Description		Detailed Specification
		Web Access	Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi- language
4	CENEDAL	Input Voltage	24 VAC and PoE(Power Over Ethernet)
4	GENERAL	Power Consumption	Max. 30W
		Audio I/O	Input: 1 channel Output: 1 channel
5	RECORDING & STORAGE MANAGEMENT	SD Card Slot	Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card
		Type & Capacity	A memory card (a maximum of 128GB 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	Shall support manual / alarm / edge
	ENVIRONMENTAL	Management  Camera Housing &  Mount	recording  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. 2. The camera should be supplied with a power injector as per
6			technical specification specified in the tender document 3. The camera should be suitable for wall mounting, ceiling mounting, pole mounting and switchyard mounting. All accessories required for mounting shall be provided.
		Operating Temperature	5 deg C to +60 deg C
		Humidity	90% or less (non-condensing)
		Certification	UL, CE, IEC, FCC, ISO and BIS certifications
7	STANDARDS & CERTIFICATIONS	Ingress Protection/Vandal Proof	IP66/IP67, IK10
C.	Indoor Dome camera (wit accessories)	h power injector for dor	me camera with other necessary
	CAMERA	Type of camera	High-Definition Indoor Camera, suitable for both day and night surveillance
		Place of installation	Indoor
		Industrial Grade	Yes
		Effective Pixel	Minimum 2 Mega Pixel
1		Sensor	Progressive scan CMOS 1/2.8" or better
		Lens	Full HD, IR Correction or higher
			The focal length of the lens shall be provided so as to meet specification of the IR distance (min. 30 meters) and effective viewable distance (min. 30 meters).
	<u>L</u>	l	,

#	Item Description		Detailed Specification
			Bidder needs to submit the camera lens' sizing sheet from OEM to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person of OEM and should be submitted as an integral part of the technical bid.
		Night Vision	Night vision with IR-LED
		IR Features	The Camera shall have inbuilt IR or External IR Component.
		IR Distance	30mtrs
		Effective Viewable Distance	30mtrs
		Wide Dynamic Range	Should have WDR feature
2	OPERATIONAL	Backlight Compensation Feature	BLC/HLC/WDR
_		Light Sensitivity	Colour mode: 0.25 lux, B/W mode: 0.05 lux @ 30IRE, F1.2 or better
		Signal-to-Noise Ratio	Min 50dB
		Day/Night Feature	Should have Day/Night Feature
		Motion Detection & Tamper Detection Feature	Should have Motion Detection & Tamper Detection Feature
		White Balance	Should have auto/manual/indoor/outdoor white balance feature
		Ethernet	10Base-T / 100Base-TX/ RJ45 connector
	NETWORK	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
2		Protocols	TCP/IP/IPv4, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP,IGMP, 802.1X, QoS, IPv6,
3		Security	User authentication protection, IP address filtering, 802.1x authentication, Password Protection, HTTPS encryption, User based login
		Streaming method	Multiple and individually configurable streams in H.264 and MJPEG.
		Inter-operability	Should have Onvif conformance feature
		Web Access	Supported Browser : IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi- language
4	GENERAL	Input Voltage	24 VAC and PoE(Power Over Ethernet)
4	ULIVERAL	Power Consumption	Max. 12.5W
5	RECORDING & STORAGE MANAGEMENT	SD Card Slot	Built-in SD card slot: SD/SDHC/SDXC/ any other latest technology card

#	Item Description		Detailed Specification
	113m 2 Cooription		A memory card (a maximum of 128GB
		Type & Capacity	micro SDHC/ micro SDXC) or more can be Supplied along with camera and should record automatically when network not available and same data to be push back to storage once network established for camera
		Recording Management	Shall support manual / alarm / edge recording
6	ENVIRONMENTAL	Camera Housing & Mount	The camera should be supplied with a power power injector as per technical specification specified in the tender document
		Operating Temperature	5 deg C to +50 deg C
		Humidity	90% or less (non-condensing)
	STANDARDS &	Certification	UL, CE, IEC, FCC, ISO & BIS certifications.
7	CERTIFICATIONS	Ingress Protection	IP66/IP67
D.	Fish Eye Camera with acce	essories	
		Lens Field of View	Shall have 180º Horizontal, 180º Vertical field of view
		Image Sensor	Minimum 5 MP with minimum 1/2.3 inch CMOS Sensor
	GENERAL	Lens	Shall have 360° Fisheye.  The focal length of the lens shall be provided so as to meet specification the IR distance and effective viewable distance.  Bidder needs to submit the camera lens' sizing sheet to meet the tender requirement. This should be considered as a mandatory technical requirement, duly signed and sealed by authorised person and should be submitted as an integral part of the technical bid.
1		Minimum Illumination	Shall Have minimum illumination of 0.1 lux
		Effective Viewable Distance	15 mtrs (min.)
		IR Distance	15 mtrs (min.)
		IR Features	The Camera shall have inbuilt IR or External IR Component.
		Frame Rate	Minimum 15 fps
		Video Motion	Shall have facility for the configurable
		Detection	regions as per the interest Shall have Configurable password
		Security	protection feature
		Advanced Event Management	Triggered by motion, external input or HTTP event, result configurable, external output,FTP/SMTP upload, Local recording
		Networking Protocols	TCP/IP, HTTP, DHCP, DNS, NTP, FTP and SMTP

#	Item Description		Detailed Specification
	•	Local storage	Shall have Built-in SD card slot. Supports cards (microSDHC / microSDXC) card of minimum 128 GB capacity. Speed class 10 or higher required.
		Audio Connections	Audio In through 3.5 mm jack
		White Balance Range	Shall have Auto White Balance Modes
		Video Stream	H.264
		Video Compression	Multi-levels of compression and frame rate adjustment
		Video Resolution	Fisheyes view including full 360 degree view at Different Resolution
		Maximum Frame Rate	Minimum 15 fps
	VIDEO	Image Control Settings:	brightness / contrast / saturation / exposure compensation,compression quality and wall / ceiling / table mount
2		Image Enhancement	WDR (Wide Dynamic Range) of minimum 60dB
		PTZ Functionality	Pan, Tilt and Zoom functionality with remote management through OEM Management software
		Web Browser Compatibility	Internet Explorer 9, EDGE (Latest version), Mozilla Firefox (Latest version) and Google Chrome (Latest Version) and other compatible browsers . Plug-in required for full functionality
		Bit Rate Control	Shall have options for Bit Rate Control and Quality Control
		Ports	RJ45 for 1000Base-TX, DC Input jack, Jack for external I/O, Port for test video output
3	ELECTRICAL	Network Cable Type	CAT5 or better for 1000Base-TX
3	ELECTRICAL	Power Input	12 VDC/Power-over-Ethernet 48 VDC, Power over Ethernet (PoE), IEEE standard 802.3af
		Power Consumption	Maximum 9 W (PoE 48 VDC) / 8 W (DC 12 VDC)
4	MECHANICAL	Camera Mount	Surface mount
1	MEGIMINICAL	Housing Material	Aluminium with transparent bubble
	ENVIRONMENTAL	Operating Temperature	Range 5 to +50° C
_		Operating Humidity	Up to 95% non-condensing
5		Ingress Protection	IP67/IP66
		Impact Resistance	IK10
6	CERTIFICATIONS	Standards And Approvals	IEEE802.3af, CE, AS/NZS CISPR 22:2009+A1:2010,FCC, ICES-003, CU, RCM, UL 60950-1(ed.2) & CAN/CSA C22.2No. 60950-1-07, RoHS, IP66/67, IK10 and ONVIF Compliant
E.	8 Channel NVR with 2 SAT	A for 2nos. of HDD (with	additional mouse and keyboard)
1	8 Channel NVR or better		8ch 1080P IP cameras inputs; Supports recording at Full Resolution & high quality at highest bit rate for all channels at a time.

#	Item Description	Detailed Specification
2	Resolution	Resolution 1920×1080, 1280×1024, 1280×720, 1024×768; Display Split 1/4/8/9/16; Recording Compression H.264 Version 3 / MJPEG Resolution 1080P(1920×1080) / 720p;
3	Codec	H.264, MJPEG dual codec decoding
4	Audio / Video	1/1ch Mic in/out; 4ch sync real-time playback; Two-way Talk 1 channel Input, 1 channel Output; HDMI,VGA output,1 BNC output; Minimum 4ch alarm in & 2ch relay out,RS485
5	Storage	Min. 4 SATA hard disk ports, each shall supports a hard disk with capacity min. 4TB.
		2 USB, RJ45 (1000M);
6	Video Detection & Alarm	Shall have Video Motion Detection and Alarm Feature on events such as Video Loss & Camera Blank
7	Playback & Backup Features	Sync Playback. Search Mode Time/Date, Alarm, Motion detection with simultaneous search options; Digital Zoom; Backup Mode USB Device / Network
		Ethernet: Min. 2 nos. RJ-45 port (1000M);
8	Network	Network Protocols: HTTP, TCP/IP, IPv4/IPv6, UPNP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support IP camera, DVR, NVS and etc.); Support Multicast
9	Auxiliary Interface	USB 2 ports USB3.0; RS232 1 port, For PC communication & Keyboard; RS485 1 port, For PTZ control
	Power	Power Supply AC220V;
10		Power Consumption: Max. 40W(without HDD)
		Working Environment 5 -+55°C / 10-90%RH
11	Compliant / Certification	CE, FCC, EMC & ROHS certification and UL certification for Core Adaptor are mandatory; and ONVIF Complaint
F.	4 TB Surveillance Hard Disk	
1	Capacity	4TB
2	Interface	Sata 6GB/s
3	Max Sustainable Transfer Rate	180MB/s
4	Cache	64Mb
5	Bytes per sec	4096
6	Operating (ambient, min)	0 deg C
7	Operating(drivecase, Max)	70 deg C
G.	32" LED TV (Display Device)	22# LED Disales E B LIDMU EL : M
1	Screen Size	32" LED Display Full HDTV, Flat Type
2	Industrial Grade	Yes

Motion Rate	#	Item Description	Detailed Specification								
Motion Rate			•								
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-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories 14 The port densities of switch shall be as follows: 16 x 10/100/1000BaseT with 2 x 1000BaseX SFP uplink port. 2 All the switches shall be 1U Rack mountable. Rack mounting kits, Indian style power cables should be supplied with the switches. 3 The switches shall support virtual stacking and manageable using a single IP address. 4 The switching performance of the switches shall have wire-speed performance. 5 The switching performance of the switches shall have wire-speed performance. 6 Shall have minimum 512 MB DRAM and 256 MB Flash 7 Shall support 16,000 MAC addresses and 256 active VLANs 8 The switches shall support IPv4 & IPv6 static routing and RIP from day one. 9 Shall support at least 400 IPv4 & IPv6 static routing and RIP from day one. 10 Shall support SDN/Open flow or equivalent. 11 Shall support SDN/Open flow or equivalent. 12 Shall support TDLD or equivalent to detect and disable links due to fibre cuts or port faults. 13 Shall support TDLD or equivalent to detect and disable links due to fibre cuts or port faults. 14 Shall support TPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 15 Shall support TPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 16 Shall support to guard or equivalent; shall support BPDU guard and IP source guard. 17 Shall support TPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 18 Switch shall be manageable via Web based GUI, SSH/Telnet, Console Access. The switch shall support port mirroring, NTP, SNMPv1,v2,v3 and RMON. 19 The switches shall be covered u											
Power Supply											
Environment Yes Yes  10 Standard Remote Controller Yes Yes  11 Power Cable Yes Wall Mount kit-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application C.D. P. Josh cable, power cord and Other accessories  11 The port densities of switch shall be as follows: 16 x 10/100/1000BaseT with 2 x 1000BaseX SFP uplink port.  22 All the switches shall be 1U Rack mountable. Rack mounting kits, Indian style power cables should be supplied with the switches.  33 The switches shall support virtual stacking and manageable using a single IP address.  44 The switching performance of the switches shall be as follows: Switch: 36 Gbps switching capacity and 26.7 Mbps forwarding rate. All switches shall have wire-speed performance.  55 The switches shall have 1 x RJ45 or USB port for console based management.  56 Shall have minimum 512 MB DRAM and 256 MB Flash  57 Shall support 16,000 MAC addresses and 256 active VLANs  58 The switches shall support IPv4 & IPv6 static routing and RIP from day one.  59 Shall support at least 400 IPv4 & IPv6 unicast and multicast routes.  50 Shall support SDN/Open flow or equivalent.  50 Shall support SDN/Open flow or equivalent.  50 Shall support DLD. Or equivalent to detect and disable links due to fibre cuts or port faults.  50 Shall support TPV6 RSTP/MSTP and LACP.  51 Shall support FPV6 RSTP/MSTP and LACP.  52 Shall support FPV6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  53 Shall support FPV6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  54 Shall support FPV6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  55 Shall support FPV6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  56 Shall support FPV6 Router Advertisement guard to allow ad			* '								
8 Environment ENERGY STAR compliant 9 Wide Colour Enhancer Yes 10 Standard Remote Controller Yes 11 Power Cable Yes 11 Power Cable Wall Mount kit-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories  11 The port managed network switch 12 Minimum Technical Requirements 13 The port densities of switch shall be as follows: 16 x 10/100/1000BaseT with 2 x 1000BaseX SFP uplink port. 14 All the switches shall be 1U Rack mountable. Rack mounting kits, Indian style power cables should be supplied with the switches. 15 The switches shall support virtual stacking and manageable using a single IP address. 16 The switching performance of the switches shall be as follows: Switch: 36 Gbps switching capacity and 26.7 Mbps forwarding rate. All switches shall have wire-speed performance. 17 The switches shall have 1 x RJ45 or USB port for console based management. 18 Shall support 16,000 MAC addresses and 256 MB Flash 19 Shall support 16,000 MAC addresses and 256 active VLANs 10 Shall support 1 Least 400 IPv4 & IPv6 static routing and RIP from day one. 11 Shall support DDL or equivalent to detect and disable links due to fibre cuts or port faults. 12 Shall support DDL or equivalent to detect and disable links due to fibre cuts or port faults. 13 Shall support STP/RSTP/MSTP and LACP. 14 Shall support STP/RSTP/MSTP and LACP. 15 Shall support STP root guard or equivalent; shall support BPDU guard and IP source guard. 16 Shall support TPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 16 Shall support IPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 17 Shall support port security, RADIUS, 802.1x based authentication, SSHv3, SMMPv3 18 Support port performing, NTP, SMPv1,v2,v3 and RMON. 19 The switch shall be manageable via Web based GUI, SSH/Telnet, Console Access. The switch shall support port microing, NTP, SMPv1,v2,v3 and and RMON. 19 The switch shall be covered	7	Power Supply									
Wide Colour Enhancer   Yes			•								
10 Standard Remote Controller Yes 11 Power Cable Yes 12 Other Accessories Wall Mount kit-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories  1 The port densities of switch shall be as follows: 16 x 10/100/1000BaseT with 2 x 1000BaseX SFP uplink port. 1 All the switches shall be 1U Rack mountable. Rack mounting kits, Indian style power cables should be supplied with the switches. 2 The switches shall support virtual stacking and manageable using a single IP address. 3 The switches shall support virtual stacking and manageable using a single IP address. 4 The switches shall have 1 x RJ45 or USB port for console based management. 5 The switches shall have 1 x RJ45 or USB port for console based management. 6 Shall have minimum 512 MB DRAM and 256 MB Flash 7 Shall support 16,000 MAC addresses and 256 active VLANs 8 The switches shall support IPv4 & IPv6 static routing and RIP from day one. 9 Shall support at least 400 IPv4 & IPv6 static routing and RIP from day one. 10 Shall support SDN/Open flow or equivalent. 11 Shall support STP/RSTP/MSTP and LACP. 13 Shall support STP/RSTP/MSTP and LACP. 14 Shall support STP/RSTP/MSTP and LACP. 15 Shall support STP root guard or equivalent; shall support BPDU guard and IP source guard. 16 Shall support STP root guard or equivalent; shall support BPDU guard and IP source guard. 17 Shall support FSP Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements. 18 Shall support leight queues per port; shall have 802.1p CoS, DSCP 2 Switch shall be manageable via Web based GUI, SSH/Teinet, Console Access. The switch shall support port mirroring, NTP, SMPY1,v2,v3 and RMON. 1 The switches shall be IPv6 ready logo certified. 1 Function Media Convertor (Box Type)	8										
11   Power Cable   Yes   Wall Mount kit-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories   The port managed network switch	9	Wide Colour Enhancer	Yes								
Wall Mount kit-cum-Table Stand kit, HDMI Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories	10	Standard Remote Controller	Yes								
Cable, Quick Setup Guide, warranty card, application CD, D-sub cable, power cord and Other accessories  H. 16 port managed network switch  Minimum Technical Requirements  The port densities of switch shall be as follows: 16 x 10/100/1000BaseT with 2 x 1000BaseX SFP uplink port.  All the switches shall be 1U Rack mountable. Rack mounting kits, Indian style power cables should be supplied with the switches.  The switches shall support virtual stacking and manageable using a single IP address.  The switching performance of the switches shall be as follows: Switch: 36 Gbps switching capacity and 26.7 Mbps forwarding rate. All switches shall have wire-speed performance.  The switches shall have 1 x RJ45 or USB port for console based management.  Shall support 16,000 MAC addresses and 256 active VLANs  The switches shall support IPv4 & IPv6 static routing and RIP from day one.  Shall support at least 400 IPv4 & IPv6 unicast and multicast routes.  Shall support SDN/Open flow or equivalent.  Shall support SDN/Open flow or equivalent.  Shall support STP/RSTP/MSTP and LACP.  Shall support STP/RSTP/MSTP and LACP.  Shall support STP root guard or equivalent; shall support BPDU guard and IP source guard.  Shall support IPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  Shall support IPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  Shall support IPv6 Router Advertisement guard to allow administrator to filer unwanted or rogue advertisements.  Shall support eight queues per port; shall have 802.1p CoS, DSCP  Switch shall be manageable via Web based GUI, SSH/Telnet, Console Access. The switch shall support port mirroring, NTP, SNMPv1,v2,v3 and RMON.  The switches shall be IPv6 ready logo certified.  The switches shall be IPv6 ready logo certified.  The switches shall be Covered under 8x5xNBD warranty for the duration as mentioned in the RFP.	11	Power Cable	Yes								
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1 Function 100 Base-FX to 100 Mbps Tx Single mode media convertor	I.	Media Convertor (Box Type)									
1 Function media convertor			100 Base-FX to 100 Mbps Tx Single mode								
Distance Support: min. 1km	1	Function									
			Distance Support: min. 1km								

#	Item Description	Detailed Specification				
п	item bescription	1 RJ-45 port (should support 60 watt on				
		PoE port)and 1 fibre port (SC type				
		connector)				
		Full wire speed forwarding rate				
2	Туре	Industrial Grade				
3	Operating Temperature	0 deg. C to +60deg.C				
4	Operating Humidity	Up to 95% non-condensing				
5	Mounting Kit	Included				
6	Data Transfer Rate	Min. 1 Gbps				
7	Compliant Standards	IEEE 802.3, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z				
8	Status Indicators	LED status indicators should be there				
9	Features	Auto Cross/ Link Fault Pass Through function (LFP)/LLR /auto-negotiation				
J.	PoE Injector or Power Injector					
		Industrial Grade				
1	Туре	IEEE 802.3af compliant				
-	-390	Supports half/full-duplex operation IEEE 802.3 compliant				
		IEEE 802.3u compliant IEEE 802.3ab				
2	Compliance	compliant				
		10/100/1000BASE-T port				
3	Gigabit Connectivity	Power Over Ethernet (PoE) Injector for 10/100/1000T connections delivers power				
3	digabit connectivity	up to 100 metres				
4	Power Consumption	19.2 watts max				
5	Operating Temperature	0 to 50 °C				
6	Humidity	10-90% non-condensing				
7	Certifications	Should have CE/FCC/VCCI/IC/UL Certifications				
K.	0.6 KVA Interactive UPS with Batteries					
1	Technology	600VA with built-in automatic voltage				
1	recillology	regulator				
2	Capacity	600VA				
3	Input	a. Voltage Range : 145-290volts or better				
	r	b. Frequency Range: 50Hz +/-10%				
4	Batteries	a. Type SMF12 V of 7AH type Leak Proof				
		b. Backup Time Minimum 20 Minutes				
5		a. Voltage : 220volts				
	Outrout	b. Transfer Time less than 10millisecond				
	Output	c. Sockets : Adequate Nos. of sockets with surge protection feature				
		d. Frequency : 50Hz +/- 10%Hz				
6		Lightning & Surge Protection				
		Output Wave form— Modified/Stepped				
	General Features	Sine wave Audio Alarms: Low Battery;				
		Battery ON;				
		Overload Protection feature should be there				

#	Item Description	Detailed Specification						
_		a. Operating Temperature : 0-60 deg C						
7	Environment	b. Humidity: 0-90% non-condensing						
8	Certification	ISO/CE certification should be there						
L.	6U NETWORK RACK							
1	Standards	Standard EIA/NEMA rails						
2	Door	Front Glass Door with Lock						
3	Fan	airflow fans with adjustable						
4	power sockets	power sockets						
5	mounting rails	fully adjustable mounting rails						
6	cable entry facility	Ventilated Top cover and Bottom cover with cable entry facility						
7	industry standard	Conforming to industry standard practices						
8	mounting shelf	Equipment mounting shelf with a depth of 600mm and 1U height						
M.	Surge Protector							
1	Purpose	Power over Ethernet Surge Protector for isolated ground protection at camera end						
2	Operating Voltage	48VDC						
3	Operating Current	0.75 Amps						
4	Peak Surge Current 10kA							
5	Transmission speeds	10BaseT/100BaseT/1000BaseT						
6	SPD Technology	Gas Discharge Tube						
7	Connectors	RJ45 Connection						
8	Certifications	UL/IEC approved						
9	Dimensions	As per requirement of the cameras						
N.	6 Core Armoured FO Cable (Single Mode, Multi-Cor	те)						
1	Cable Type	Minimum Single Mode 6 (six) core Optical Fiber, 9/125 <sup>m</sup> , 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.						
0.	CAT6 STP Cables (Outdoor)							
1	Туре	Shielded Twisted Pair, Category 6, TIA / EIA 568-B.2, STP Cable;						
		should be of Industrial Grade						
2	Networks Supported	Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and above.						
3	Type Of Conductors	4 pair 23 AWG Conductors						
4	Insulation	Polyethylene						
5	Jacket	Flame/Fire Retardant PVC						
6	Temperature	Up to 60deg C						
7	Approval	a. UL Listed						

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

#	Item Description	Detailed Specification					
		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					
		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					
		a. CFL Light					
6	Accessories	b. Stainless steel studs for grounding					
		c. Min. 2mm thick mounting plate					
B.	Pole (For Outdoor Cameras)						
1	Pole Location	OPTCL Grid S/S					
2	Material	GI-Tubular					
3	Standard	Fabrication in accordance with IS-1161					
4	Pole Height	1. The pole height shall be 09 metres in accordance with YST310, above the ground for which a necessary foundation shall be made if required(The pole shall be 09 meters from Ground and 3 meter deep in Ground)  2. In case height lesser than 09 meter above the ground is required then bottom (broader) portion of the pole shall be cut accordingly. The dome of the camera shall be tightly secured against the pole in such a way that even during the high speed wind the dome shall not shake / vibrate, thus the camera output shall be jitter free during such time also.					
5	Mounting	<ol> <li>1. 13 mm thickness plate - Bottom Surface in earth avoid the shaking.</li> <li>2. To be concrete structure in the ground in 3 Meter depth.</li> <li>3. to be concrete structure above the ground half meter</li> </ol>					
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					

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

# D. <u>SECTION-V</u> FORMS & SCHEDULES

### I. SCHEDULE-A

### **BID FORM**

To:

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

### Ladies and/or Gentlemen,

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

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

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

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

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

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

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

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

We understand tha	it you are not bou	ind to accept the lowest or any bid you may receive.
Dated this	day of	20
Signature		in the capacity of
		duly authorized to sign for and on behalf
of		(IN BLOCK LETTERS)

## II. SCHEDULE-B

## **MANUFACTURER'S AUTHORISATION FORM**

## MANUFACTURER'S AUTHORISATION FORM

(To be obtained from all OEMs on OEM's I	Letter Head)			
Date:				
Ref No.:				
Invitation for Bid No.:	-			
To:				
WHEREAS				
manufacturers ofhaving	factories			at
			do	hereby
Bids indicated above, the purpose of manufactured by us and to subsequently	which is to provide	the foll		
We hereby confirm the following:				
• Confirm that the products quoted are Bid Submission date. If in case the supposite withdrawn till the time of delivery of easuperior product at no extra cost.	ort for the product quot	ed has	been st	opped/
• Undertake that the support including products shall be available for the entire p		grades	for the	quoted
• There shall not be any withdrawal software release on the devices or softwork of CCTV Surveillance System at 29 Grid NIT.	are quoted by the bidde	r for "Ir	npleme	entation
(Note: In case the support for future releasuch Hardware/software shall not be quo		n bid su	bmissio	on date,
• In case, on the quoted Hardware, the s shall replace the non-supported Hardwar		•	•	
Name				
In the capacity of				
Signed				
Duly authorized to sign the Bid for and on	behalf of			
Date				

# III. SCHEDULE-C (For viewing only)

## (a) Bidder's Name & Address:

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

(D)	y PRICE BID FOR IP Based CC1 v Sui veinance (Supply Componenc)												
	1	2	3	4	5	6	7	8	9	10	11 = 8 or (9+10)	12 =6+11	13 = 12*4
#	Item Code	Description	Country of Origin	Qty.	Unit of Measurement	Unit Price	GST (%)	IGST Amt	CGST Amt	SGST Amt	Total GST	Unit Price including Total GST	Total Price
	SCHEDULE-A	A ITEMS											
1	CCSCA01	Outdoor PTZ Camera(with PTZ camera housing, gooseneck stand-wall mount bracket, power supply/ adaptor, camera holder and other accessories) [Range: 100 mtrs]		77	Nos.								
2	CCSCA02	Outdoor Fixed Camera (with fixed camera housing, power injector, camera holder and other accessories) [Range: 50 mtrs		5	Nos.								
3	CCSCA03	Indoor Dome Camera (with power injector for dome camera) [Range: 30 mtrs]		30	Nos.								
4	CCSCA04	Fish Eye Camera with accessories		3	Nos.								

	1	2	3	4	5	6	7	8	9	10	11 = 8 or (9+10)	12 =6+11	13 = 12*4
#	Item Code	Description	Country of Origin	Qty.	Unit of Measurement	Unit Price	GST (%)	IGST Amt	CGST Amt	SGST Amt	Total GST	Unit Price including Total GST	Total Price
5	CCSCA05	8 Channel NVR with 2 SATA for 2nos. of HDD (with additional mouse and keyboard)		29	Nos.								
6	CCSCA06	4 TB Surveillance HDD		58	Nos.								
7	CCSCA07	16 Port Managed Network Switch		29	Nos.								
8	CCSCA08	32" LED Display		29	Nos.								
9	CCSCA09	Media Convertor (Box Type)		108	Nos.								
10	CCSCA10	600 VA Interactive UPS		114	Nos.								
11	CCSCA11	Surge Protector for Outdoor Cameras		77	Nos.								
12	CCSCA12	Fiber Patch Cords		108	Nos.								
13	CCSCA13	6 Core Armoured Fiber Optic Cable		8430	Mtrs.								
14	CCSCA14	CAT6 STP Cable (Outdoor)		3160	Mtrs.								

	1	2	3	4	5	6	7	8	9	10	11 = 8 or (9+10)	12 =6+11	13 = 12*4
#	Item Code	Description	Country of Origin	Qty.	Unit of Measurement	Unit Price	GST (%)	IGST Amt	CGST Amt	SGST Amt	Total GST	Unit Price including Total GST	Total Price
15	CCSCA15	CAT6 STP Cable (Indoor)		1240	Mtrs.								
16	CCSCA16	1.1 KV Armoured Cu-Power Cable		2340	Mtrs.								
17	CCSCA17	6U Network Rack		29	Nos.								
	SCHEDULE-I	B ITEMS											
18	CCSCB01	HDPE Conduit Pipe for FO with necessary accessories		8430	Mtrs.								
19	CCSCB02	PVC Conduit Pipe for CAT6 with necessary accessories		2340	Mtrs.								
20	CCSCB03	Outdoor Junction Box		82	Nos.								
21	CCSCB04	Pole with pole mount brackets and other accessories		74	Nos.								
22	CCSCB05	LIU-Box with Accessories(adaptor plate, pigtail, etc)		108	Nos.								
23	CCSCB06	Computer Desk		32	Nos.								
	SCHEDULE-0	CITEMS											

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

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

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

1						
ı	N	•	м	-4	n	•
	w		,,		_	_

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

Date:	(Signature)
Place:	(Printed Name)
	(Designation)
	(Common Seal)

# IV. SCHEDULE-D <u>DETAILS OF SERVICE & SUPPORT CENTER AT ODISHA</u>

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

(Signature)
(Name)

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

### V. SCHEDULE-E

### **NO DEVIATION CERTIFICATE**

To,

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

Dear Sir,
We, the undersigned, hereby declare that while responding to your RFP Notice No.
dated, our bid response DOES NOT
DEVIATE from the Tender Document and their amendment/corrigendum issued till the
date of bid submission except for non- material deviations as per the Format detailed in
SECTION-II.(1).III.
Name:
In the capacity of:
Signed
Duly authorized to sign the Bid for and on behalf of
Date

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

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

## **Bidder's Name & Address**

I (We) hereby certify that the equipme, an Eligible Source Country	nt and materials to be supplied are produced in .
I (We) hereby certify that my (our)	) company is incorporated and registered in intry.
Date:	(Signature)
Place:	(Printed Name)
(Designation)	
(Common Seal)	

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

VII. SCHEDULE-G (General ComplianceSchedule)

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

Signature with Date

Name in Block Letters

Seal of the Company

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

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

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

Signature with Date Name in Block Letters Seal of the Company N.B: To be signed and the scanned copy to be uploaded And Hard copy to be submitted

## IX. SCHEDULE-I (LIST OF CONSIGNEE)

Location-wise Estimated Bill of Quantity for Implementation of CCTV Surveillance System at 29 Grid Sub-Stations of OPTCL – Phase 4

#	Item Code	MON	220/33 KV Grid S/S, Balimela	220/33 KV Grid S/S, Laxmipur	132/33 KV GIS Hirakud	220/132/33 KV Grid S/S Kuarmunda	220/33 KV Grid S/S, Deogarh	220/33 KV Grid S/S, Lephripada	132/33KV Grid S/S Lakhanpur	220/33 KV Grid S/S Rengali	220/33 KV Grid S/S Daspalla	220/33 KV Grid S/S Telkoi	Goda	132/33KV Grid S/S G.Udayagiri	132/33KV Grid S/S Bhatli	132/33KV Grid S/S Thuapalli	220/132/33 KV Grid S/S Gunupur	132/33KV Grid S/S Birmaharajpur	132/33KV Grid S/S Brajabiharipur	220/33 KV Grid S/S Kalimela	Govindpalli	220/132/33 KV Grid S/S Pratapsasan	132/33 KV Grid S/S Satasankha	220/33 KV Grid S/S Nayagarh	Meramundali B	132/33 KV Grid S/S Bolangir Old	Samanghara	Choudwar	Brajaraj Nagar	132/33 KV Grid S/S Chainpal	Mancheswar	Total Quantity
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1	CCSCA01	Nos.	2	ω	2	ω	2	2	2	4	2	2	ω	ω	2	2	ω	2	2	ω	2	4	2	ω	4	ω	ω	ω	ω	ω	ω	77
2	CCSCA02	Nos.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	5
3	CCSCA03	Nos.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	ъ	1	1	1	1	2	30
4	CCSCA04	Nos.	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	ω

#	Item Code	MON	220/33 KV Grid S/S, Balimela	220/33 KV Grid S/S, Laxmipur	132/33 KV GIS Hirakud	220/132/33 KV Grid S/S Kuarmunda	220/33 KV Grid S/S, Deogarh	220/33 KV Grid S/S, Lephripada	132/33KV Grid S/S Lakhanpur	220/33 KV Grid S/S Rengali	220/33 KV Grid S/S Daspalla	220/33 KV Grid S/S Telkoi	Goda	132/33KV Grid S/S G.Udayagiri	132/33KV Grid S/S Bhatli	132/33KV Grid S/S Thuapalli	220/132/33 KV Grid S/S Gunupur	132/33KV Grid S/S Birmaharajpur	132/33KV Grid S/S Brajabiharipur	220/33 KV Grid S/S Kalimela	Govindpalli	220/132/33 KV Grid S/S Pratapsasan	132/33 KV Grid S/S Satasankha	220/33 KV Grid S/S Nayagarh	Meramundali B	132/33 KV Grid S/S Bolangir Old	Samanghara	Choudwar	Brajaraj Nagar	132/33 KV Grid S/S Chainpal	Mancheswar	Total Quantity
u	CCSCA05	Nos.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	ב	29
6	CCSCA06	Nos.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	58
7	CCSCA07	Nos.	12	1	1	Ь	ב	ь	ב	ב	ב	ъ	ъ	ב	ב	ב	ב	1	1	ב	ъ	ъ	ъ	ב	ב	1	1	ב	1	ъ	1	29
8	CCSCA08	Nos.	12	1	1	1	1	1	1	1	1	1	ь	1	1	1	1	1	1	1	1	1	1	ъ	1	ъ	1	ב	1	1	ъ	29
9	CCSCA09	Nos.	0	4	0	6	4	2	4	6	2	2	6	2	2	2	6	2	0	4	4	6	2	4	8	4	6	6	4	6	4	108

#	Item Code	MON	220/33 KV Grid S/S, Balimela	220/33 KV Grid S/S, Laxmipur	132/33 KV GIS Hirakud	220/132/33 KV Grid S/S Kuarmunda	220/33 KV Grid S/S, Deogarh	220/33 KV Grid S/S, Lephripada	132/33KV Grid S/S Lakhanpur	220/33 KV Grid S/S Rengali	220/33 KV Grid S/S Daspalla	220/33 KV Grid S/S Telkoi	Goda	132/33KV Grid S/S G.Udayagiri	132/33KV Grid S/S Bhatli	132/33KV Grid S/S Thuapalli	220/132/33 KV Grid S/S Gunupur	132/33KV Grid S/S Birmaharajpur	132/33KV Grid S/S Brajabiharipur	220/33 KV Grid S/S Kalimela	Govindpalli	220/132/33 KV Grid S/S Pratapsasan	132/33 KV Grid S/S Satasankha	220/33 KV Grid S/S Nayagarh	Meramundali B	132/33 KV Grid S/S Bolangir Old	Samanghara	Choudwar	Brajaraj Nagar	132/33 KV Grid S/S Chainpal	Mancheswar	Total Quantity
10	CCSCA10	Nos.	ω	4	4	4	ω	ω	ω	6	ω	ω	4	4	ω	ω	4	4	ω	4	ω	5	ω	4	7	4	б	ъ	4	ъ	4	114
11	CCSCA11	Nos.	2	ω	2	ω	2	2	2	4	2	2	w	3	2	2	ω	2	2	3	2	4	2	w	4	ω	w	w	ω	ω	ω	77
12	CCSCA12	Nos.	0	4	0	6	4	2	4	6	2	2	6	2	2	2	6	2	0	4	4	6	2	4	8	4	6	6	4	6	4	108
13	CCSCA13	Mtrs.	0	250	0	550	220	120	250	470	150	200	500	180	150	150	420	150	0	320	240	500	150	250	600	400	650	470	350	500	240	8430
14	CCSCA14	Mtrs.	180	200	150	30	20	100	20	340	110	110	30	210	120	100	30	200	200	100	20	120	110	100	40	130	40	40	130	40	140	3160

#	Item Code	MON	220/33 KV Grid S/S, Balimela	220/33 KV Grid S/S, Laxmipur	132/33 KV GIS Hirakud	220/132/33 KV Grid S/S Kuarmunda	220/33 KV Grid S/S, Deogarh	220/33 KV Grid S/S, Lephripada	132/33KV Grid S/S Lakhanpur	220/33 KV Grid S/S Rengali	220/33 KV Grid S/S Daspalla	220/33 KV Grid S/S Telkoi	Goda	132/33KV Grid S/S G.Udayagiri	132/33KV Grid S/S Bhatli	132/33KV Grid S/S Thuapalli	220/132/33 KV Grid S/S Gunupur	132/33KV Grid S/S Birmaharajpur	132/33KV Grid S/S Brajabiharipur	220/33 KV Grid S/S Kalimela	Govindpalli	220/132/33 KV Grid S/S Pratapsasan	132/33 KV Grid S/S Satasankha	220/33 KV Grid S/S Nayagarh	Meramundali B	132/33 KV Grid S/S Bolangir Old	Samanghara	Choudwar	Brajaraj Nagar	132/33 KV Grid S/S Chainpal	Mancheswar	Total Quantity
15	CCSCA15	Mtrs.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	150	30	150	80	30	80	60	1240
16	CCSCA16	Mtrs.	60	90	90	90	60	60	60	60	60	60	120	60	60	60	90	90	60	90	60	90	60	90	180	90	90	90	90	90	90	2340
22	CCSCA17	Nos.	1	ъ	Ъ	ъ	1	בו	1	1	1	1	1	1	1	1	Ъ	Ь	1	1	1	1	1	1	1	ב	Ъ	1	1	1	בו	29
17	CCSCB01	Mtrs.	0	250	0	550	220	120	250	470	150	200	500	180	150	150	420	150	0	320	240	500	150	250	600	400	650	470	350	500	240	8430
18	CCSCB02	Mtrs.	160	170	130	0	0	80	0	290	90	90	0	180	100	80	0	170	180	70	0	80	90	70	0	100	0	0	100	0	110	2340

#	Item Code	MON	220/33 KV Grid S/S, Balimela	220/33 KV Grid S/S, Laxmipur	132/33 KV GIS Hirakud	220/132/33 KV Grid S/S Kuarmunda	220/33 KV Grid S/S, Deogarh	220/33 KV Grid S/S, Lephripada	132/33KV Grid S/S Lakhanpur	220/33 KV Grid S/S Rengali	220/33 KV Grid S/S Daspalla	220/33 KV Grid S/S Telkoi	Goda	132/33KV Grid S/S G.Udayagiri	132/33KV Grid S/S Bhatli	132/33KV Grid S/S Thuapalli	220/132/33 KV Grid S/S Gunupur	132/33KV Grid S/S Birmaharajpur	132/33KV Grid S/S Brajabiharipur	220/33 KV Grid S/S Kalimela	Govindpalli	220/132/33 KV Grid S/S Pratapsasan	132/33 KV Grid S/S Satasankha	220/33 KV Grid S/S Nayagarh	Meramundali B	132/33 KV Grid S/S Bolangir Old	Samanghara	Choudwar	Brajaraj Nagar	132/33 KV Grid S/S Chainpal	Mancheswar	Total Quantity
19	CCSCB03	Nos.	2	ω	2	ω	2	2	2	ъ	2	2	ω	ω	2	2	ω	ω	2	ω	2	4	2	ω	4	ω	4	4	ω	4	ω	82
20	CCSCB04	Nos.	2	ω	2	ω	2	2	2	4	2	2	З	ω	2	ב	2	ω	2	ω	2	4	2	ב	4	ω	ω	ω	ω	ω	ω	74
21	CCSCB05	Nos.	0	4	0	6	4	2	4	6	2	2	6	2	2	2	6	2	0	4	4	6	2	4	8	4	6	6	4	6	4	108
23	CCSCB06	Nos.	ъ	1	1	1	ъ	1	1	1	1	1	בן	1	1	בן	1	₽	1	1	1	1	1	ב	1	1	1	ב	2	ω	ь	32
24	CCSCC01	Lump sum	ь	1	1	1	1	1	1	1	1	1	ב	1	1	1	1	ב	1	1	1	1	1	1	1	1	1	1	1	1	1	29

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

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

Ref No:	
Bank Guarantee No	
Date:	
BG Amount:	
Validity Period:	
This Guarantee Bond is executed this day of	
Whereas the ODISHA POWER TRANSMISSION CORPORATION LIMITED, Janpat Bhubaneswar, a company constituted under the Companies Act-1956 (hereinafter called OPTCL) has issued Letter of Award (LOA) No	ed for t") he ks ity he
1. Now therefore, in accordance with the terms and conditions of LOA N  dated for the due fulfillment by the said Contractor of the terms and conditions contained in the said agreement, on production	he
of a Bank Guarantee for Rs (Rupees only, we the bank [Indicate bank Name , Address & Code (hereinafter referred to as "the Bank") at the request of M/s. / S contractor do hereby undertake to pay to OPTCL, a	_) : ] ::i.
amount not exceeding Rs (Rupe) only .	es
2. We, the Bank [indicate the name of the Bank, Addre & Code] do hereby undertake to pay the amounts due and payable under this guarant without any demur, merely on a demand from OPTCL. Any such demand made on the bar shall be conclusive as regards the amount due and payable by the bank under the guarantee. However, our liability under this guarantee shall be restricted to an amount n exceeding Rs. (Rupeesin Words).	ee nk nis

3. We, the
4. We, the Bank further agree that the guarantee herein contained shall remain in full force and effect during the aforesaid period of days and it shall continue to be so enforceable till all the dues of OPTCL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till OPTCL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor and accordingly discharges this guarantee.  Unless a demand or claim under this guarantee is made on us or our Branch Office at
Bhubaneswar <mention &="" address="" at="" bank="" bhubaneswar="" branch="" code="" issuing="" name,="" of="" office="" the=""> in writing on or before (Date), we shall be discharged from all liability under this guarantee thereafter.</mention>
Address & Code] further agree with the Board that OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bid or to extend time or performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by OPTCL against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation postponement or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving us.
6. This guarantee will not be discharged due to the change in the name, style or constitution of the Bank and/or of the contractor(s).
7. We, the Bank [indicate the name of the bank. Address & Code] lastly undertake not to revoke this guarantee during its currency except with the previous consent of OPTCL in writing.
8. We, theBank (Name, Address & Code) further agree that this guarantee shall also be invokable at our place of business at <b>Bhubaneswar</b> (indicate Name, Address & Code of the Branch at Bhubaneswar) in the State of Odisha.
"Notwithstanding anything contained herein"
a) Our liability under the bank guarantee shall not exceed Rs (Rupees in words) only.
h) This Bank guarantee shall be valid up to

liabl upor	We or our Branch at <b>Bhubaneswar</b> <mention &="" address="" code="" name,=""> shall be to pay guaranteed amount or any part thereof under this guarantee only if you serve in us at Branch of Bhubaneswar a written claim or demand on or before</mention>
T requ	The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with ired details to the beneficiary's advising bank ( <b>ICICI Bank Bhubaneswar</b> , IFSC Code 20000061).
Date	ed, theDay of
For_	[Indicate name of Bank]
Full Desi Pow Date	ature
WII	TNESS: (SIGNATURE WITH NAME AND ADDRESS)
1. Si	gnature
Fu	ll Name
2. Si	gnature
Fu	ll Name
N.B.	:
1.	Name of the Contractor:
2.	BG No & Date:
3.	Amount (In Rs.):
4.	Validity up to:
5.	LOA No
6.	Package No
7.	Name, Address & Code of Issuing Bank:
8.	Name, Address & Code of Bhubaneswar Branch of the Issuing Bank:

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

# Format for SFMS details

## (The Unique Identifier for field 7037 is "OPTCL541405793")

Sl. No	PARTICULARS	TYPE	DETAILS
1	Type of Bank Guarantee	Mandatory	Contract Performance
2	Currency & Amount	Mandatory	
3	Validity Period(from—to)	Mandatory	
4	Effective Date	Mandatory	
5	End date of lodgment of Claim	Mandatory	
6	Place of lodgment of claim	Mandatory	Bhubaneswar,
			Branch Name of
			Bhubaneswar
			Branch code of
			Bhubaneswar
			Branch Address at
			Bhubaneswar
7	Issuing Branch IFSC Code	Mandatory	
8	Issuing Branch name & address	Mandatory	
9	Name of applicant and its	Mandatory	
	details		
10	Name of Beneficiary and its	Mandatory	
	details		
11	Beneficiary's Bank/Branch and	Mandatory	ICICI Bank Ltd
	IFSC Code		IFSC Code-ICICooooo61
12	Beneficiary's Bank/Branch	Mandatory	ICICI Bank Ltd
	name and address		Bhubaneswar Main
			Branch, Bhubaneswar
13	Sender to receiver information	Mandatory	
14	Purpose of Guarantee	Mandatory	Contract Performance
15	Reference/Description of the	Mandatory	LOA No
	underlined tender/contract		

#### Note:

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