e-Tender for Procurement of IT Items for GRIDCO and SLDC Data Center and OPTCL.

ODISHA POWER TRANSMISSION CORPORATION LIMITED
(A Govt. of ODISHA Undertaking)
Registered Office: Janpath, Bhubaneswar – 751022

TENDER NOTICE No.<u>TW-IT/OT/02/2016-17</u>

Chief General Manager(IT), OPTCL, 3rd Floor, OPTCL TOWER, Janpath, Bhubaneswar on behalf of OPTCL invites bids in e-tender mode only from reputed eligible bidders for Procurement of IT Items for GRIDCO and SLDC Data Center and OPTCL confirming to the terms and conditions mentioned as follows.

The interested eligible bidders may visit our website www.optcl.co.in on or after 14-07-2016, 10:00 Hrs. to go through / download the scope of supply and terms and conditions in detail. The techno-commercial bid shall be due on dated 04-08-2016, 13.30 Hrs.

The interested bidders would be required to enroll themselves on the tender portal **www.tenderwizard.com/OPTCL**. Complete set of bidding documents are available at **www.tenderwizard.com/OPTCL** from 14-07-2016, 10:00 Hrs. up to 04-08-2016 (13.00 Hrs).

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

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

Chief General Manager (IT)

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SECTION- I

1. GENERAL INFORMATION TO BIDDERS

The prospective bidders are advised to register their user ID, Password, company ID from website www.tenderwizard.com/OPTCL by clicking on hyper link "Register Me".

1.1 Submission of Bids: -

The bidder shall submit the bid in Electronic Mode only i.e **www.tenderwizard.com/OPTCL**. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice.

Bids submitted by telex/telegram will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.

The participants to the tender should be registered under IT Act / Finance tax Act,1994.

1. The Bidder must possess Compatible Digital Signature Certificate (DSC) of Class- III.

2. Contractors / Vendors / Bidders / Bidders are requested to follow the below steps for <u>Registration:</u>
   a. Click "Register", fill the online registration form.
   b. Pay the amount of Rs. 2300/- online by Debit card/Credit card/ Net Banking. This registration is valid for two years.
   c. Send the acknowledgment copy for verification.
   d. As soon as the verification is being done the e-tender user id will be enabled.

3. After viewing Tender Notification, if bidder intends to participate in tender, he has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.

4. If any Bidder wants to participate in the tender he will have to follow the instructions as given below:

   a) Insert the PKI (which consist of your Digital Signature Certificate) in your System.
      a. (Note: Make sure that necessary software of PKI be installed in your system).
      b. Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
      c. Go to Start > Programs > Internet Explorer.
      d. Type www.tenderwizard.com/OPTCL in the address bar, to access the Login Screen.
      e. Enter e-tender User Id and Password, click on "Go".
      f. Click on "Click here to login" for selecting the Digital Signature Certificate.
      g. Select the Certificate and enter DSC Password.

h. Re-enter the e-Procurement User Id Password

5. To make a request for Tender Document, Bidders will have to follow below mentioned steps.
- Click "Un Applied" to view / apply for new tenders.
- Click on Request icon for online request.
- Enter the required fields including details of D.D for tender Processing fee.

6. After making the request Bidders will receive the Bid Documents which can be checked and downloaded by following the below steps:
- Click to view the tender documents which are received by the user.
- Tender document screen appears.
- Click "Click here to download" to download the documents.

7. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions.

- Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not
- Note down / take a print of bid control number once it is displayed on the screen

8. Competitors bid sheets will be available in the website.

9. For any e-tendering assistance, contact help desk number mentioned below.

<p align="center">Bangalore – 080- 40482000</p>

2.   The Bidding Process & Schedule

a.	Type of Bidding	Two-part bidding
b.	**The tender,**	This tender no.TW-IT/OT/02/2016-17 consists of one Schedule.
	Bidder Participation	The interested eligible bidders, have to submit their bids for all items of the schedule. The bidders can view the tender documents from website www.optcl.co.in or www.tenderwizard.com/OPTCLfree of cost.
	Bidding process	The bids have to be submitted online in www.tenderwizard.com/OPTCL site as per the clause 5. " Manners to submit " the bid below. The bids which are not out-rightly rejected as per the clause 4.1 below are then scrutinized for meeting the qualifying criteria. The bidders who qualify as above are then evaluated on the basis of price quote. The Successful Bidder (SB) based on L1 prices shall address the supply contract. It is the sole discretion of the purchaser in the interest of OPTCL to select L1 bidder, for each of Item, or L1 bidder for all the items together.
c.	**Amendment to Bidding Document**	At any time prior to the deadline for submission of the bids, OPTCL may amend the bidding document by giving reasonable time and issuing addenda. Any addendum / modification / errata / corrigendum issued shall be part of the bidding document and shall be hosted in OPTCL's website/e-tender portal. The bidder shall visit the e-tender portal of OPTCL for any addendum / modification / errata / corrigendum

d.	Withdrawal, substitution and Modification of Bids	No Bid shall be withdrawn, substituted, or modified after the deadline for submission of bids. However, a Bidder may withdraw, substitute, or modify its Bid under the following situation 1. After expiry of the bid validity period as per ITB. 2. Any material changes to the scope of work after submission of bid document. 3. Any material changes in the bidding documents after submission of bid document. 4. If the due date of the submission has been extended by the OPTCL after submission of bid
e.	Tender Documents	The bidders can view the tender documents from website www.optcl.co.in and the tender portal www.tenderwizard.com/OPTCL free of cost.
f	Tender Cost	₹ 10,500/- (non-refundable) including VAT@5%.
g	Mode of Payment of Tender cost	Demand Draft in favor of DDO Hqrs OPTCL Bhubaneswar payable at Bhubaneswar. The DD must be issued by a nationalized bank **on or before the last date for submission of bidding documents.**
h	Tender Processing Fee	Tender processing fee of ₹ 5750/-(5000 + Service Tax 15%) may be made by Debit Card / Credit Card / Net Banking in www.tenderwizard.com/OPTCL or DD in favour of KSEDC Ltd Payable at Bangalore **Bidders shall have to submit acknowledgement of paying if paid online.**
i	EMD*	The tender shall be accompanied by Earnest Money deposit of **Rs. 4.0 lakhs** only. Tenders without this required EMD will be rejected out rightly.
j.	Mode of EMD	All bids must be accompanied by a bid security (EMD) of amount as mentioned at 2. i. above, along with the technical Bid. Bid security can be submitted by a crossed **bank draft/pay order** drawn in favor of " The Drawing and Disbursing Officer, Head Quarters, OPTCL, Bhubaneswar" or through Bank Guarantee from any Nationalised/Scheduled Bank as per the format enclosed.

k.	Submission of EMD/Tender Cost/ Tender Processing Fee	Please see documents to attach, at 5. below
l.	Date and time of commencement of downloading of bidding documents	14-07-2016, 10:00 Hrs
m.	Last date and time of downloading/closing of bidding documents	04-08-2016, 13:00 Hrs
n.	Last date and time of submission of bid documents	04-08-2016 13:30 Hrs
o.	Pre-Bid Meeting and Date of Pre-Bid Meeting	Only the Bidders who are eligible, seriously interested, submit their queries if any on this pre-bid meeting Date and time viz ., 22-07-2016 15:30 Hrs
p.	Time of opening of Techno- Commercial	05-08-2016 12:00 Hrs.
q.	Time of opening of Price bids	Will be intimated later
r.	Place of Opening of Bids	3rd Floor Conference Hall OPTCL Building OPTCL Janpath Bhubaneswar or Online through e-tender portal
s.	Address for communication	Chief General Manager (IT), 3rd Floor, OPTCL Tower, OPTCL, Janpath, Bhubaneswar – 751022 infotech@optcl.co.in

In the event of the date specified for bid receipt, opening being declared as a holiday for purchaser's office, the due date shall be shifted to next immediate working day at the appointed time and place.

*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.**

3. Scope of Work: - Supply, Installation & Commissioning

The **Scope of work** includes the Supply, Installation, Commissioning of the IT items with Technical specifications mentioned at Annexure – X. The end of life of all the IT Hardware items quoted by the bidder should be a minimum Six(6) years from the bid submission date.

4. Outright Rejection, Qualifying Requirements

The documents uploaded and / or submitted as per the clause **5. "Manner to submit the bid"** shall form the basis for scrutinizing for Outright Rejection & Qualifying Requirements

4.1 OUT RIGHT REJECTION CRITERIAS:

The bids shall be summarily rejected if the following requirements are not met.

Sl	Requirement
1.	Tenders shall be complete in all respects and submitted through e-tender mode only; tenders submitted by any other mode shall not be entertained.
2.	The Tenders should be kept valid for **a period of 180 days from the date of submission of bids** for this the bid form mentioned at Schedule-A has to be submitted
3.	The Tender shall be accompanied by Earnest Money Deposit of value and mode specified at 2.0 Bidding Process & Schedule above
4.	Tenderer must have submitted the tender paper cost as per the instruction at 2.0 above
5.	Must submit Tender Processing Fee as stated in Section 1 of clause 2.h
6.	The schedule of prices should be filled up fully carefully to indicate the break-up of prices including taxes and duties. (**Section – V**).
7.	In addition to that mentioned at clause 2.b Section-I, the bidder must quote for all the items. Technical Compliance sheet submitted for all the items in the chosen schedule / schedule shall be the basis. Bidders not quoting for all the items, shall be deemed non- responsive / incomplete bid.

4.2 Qualifying Requirement

> **Price Evaluation of Techno-commercial Bids shall be taken up only in respect of Bidders who fulfill the Qualifying Requirements.**
>
> The bidders should have / possess the following qualifications / experience.

Sl	Requirement
1	The bidder should provide copy of OEM"s Authorized Partner / Retailer **Certificate** for all IT H/W, S/W items quoted (except the items for which the bidder itself is the OEM) along with the bid. **The bidder should submit a declaration, by OEMs as a mandatory requirement that the quoted H/W items shall not be outdated within 6(six) years of supply and that OEM renders necessary spares support.**
2	Bidder shall be financially sound and must not be anticipating any ownership change for three years from bid submission. **An undertaking to this effect shall be submitted by the Bidder.**
3	**The bidder shall give an undertaking** as a part of this contract to provide technical configuration, consultancy and guidance at no extra cost to OPTCL for proper configuration and integration of H/W or S/W items.
4	The Bidder should be a certified ISO 9001-2000, 2008 etc.
5	For all items the bidder must have full-fledged service center at Bhubaneswar equipped with spare stock and certified manpower. The bidder must have a office since last 5 years at Bhubaneswar.
6	The tenders should be kept valid for a period of **180** days from the date of opening of the tender as notified in the tender notice failing which the tenders will be rejected.
7	Should submit audited Annual Accounts for last three financial years 2012-13, 2013-14, 2014-15.
8	Delivery & Installation Schedule must be agreed upon
9	The annual turnover of the bidder in each FY 13-14,14-15,15-16. As per Audited Financial Statement should not be less than Rs. 24 crore.
10	**Experience of minimum 3 nos of similar projects in 13-14,14-15,15-16.**
11	**Minimum Order value of Rs.3.0** crore in supply and installation of similar items with **a government / PSU / autonomous public body, in a single order.**

5. Manner to submit the bid

(A) Hard Form of Documents (In Original): Timely Submission of the Documents is the sole responsibility of the bidder

The following documents shall be furnished in original in a sealed envelope in the office of the undersigned on or before the last date and time of submission of tender.

- DD towards Tender Cost, DD/BG towards EMD and DD towards Tender Processing Fees/ Documentary proof of payment of Tender Processing Fees through e-payment mode. DDs / Bankers Cheque must be issued on or before the last date of submission of Tender

- Authentic copy of registration Certificate as MSE unit if any, for claiming 50% EMD exemption.

- Power of Attorney notarized copy for signing the bid document if any.

(B.) Scanned Copies to be uploaded in .pdf format
All the supporting documents as below are to be signed and scanned, then uploaded in the tenderwizard.com.

All the supporting documents as below are to be signed and scanned, then uploaded in the tenderwizard.com.Attach name must be as mentioned as given below

Attachments	Document / Description
doc1	Bid Declaration Form **SCHEDULE-A**
doc2	Earnest Money Deposit (EMD) DD / Bank certified cheque/ Bank Guarantee as the case may be from any Nationalized / Scheduled Commercial Bank, DD
doc4	Manufacturers Authorization form on prescribed Schedule-B
doc5	OEM''s declaration *that the equipment shall not be outdated for six(6) years and for necessary spare support to ASI.*
doc6	Copies of certified auditor statement on Annual Turnover and Audited Financial Statement (BS, PL) for last 3 years 2013-14, 2014-15,2015-16
doc8	**An undertaking that there will be no** ownership change for three years from bid submission
doc9	a) Constitution or legal status, Certificate of Incorporation and principal place of business; b) written power of attorney of the signatory of the bid to commit the bidder if any
doc10	Detail of maintenance and support infrastructure at Bhubaneswar
doc11	Information regarding any current litigation in which the bidder is involved, the parties concerned, and disputed amount; **Declaration** to

doc12	Declaration to provide technical consultancy and guidance **at no extra cost to OPTCL** for proper configuration and integration with OPTCL IT System
doc13	Valid certificate like ISO 9001-2000, 2008
doc14	Technical Deviation Statement if any as per "Deviations" title in the format described in Schedule-E
doc15	Price Schedule (Section-VI)
doc16	Photo copy of PAN, Service Tax Regn. Certificate.
Doc17	Attested copy of TIN / CST
Doc18	All the required / relevant schedules of this tender including Schedule
Doc19	Duly filled,Signed, Stamped with official stamp on the specification Compliance table at Section. V

(C) KEY-IN on the Schedules (.XLS) in the Tender Portal:

Following are the schedules in .XLS format to be downloaded, filled in and uploaded by the Bidder as per the OWNER format in the www.tenderwizard.com/OPTCL portal.

1. File Name: **Technocommercilsheet.xls**

Sl.	Particulars	Sheets in .XLS format
1.	Bidders information	Sheet-I
2.	Acceptance of Important Terms and Conditions	Sheet-II
3.	Techno-commercial Schedule	Sheet-III
4.	Make & Model Declaration	Sheet-IV

2. File Name : TenderPriceSchedule.xls

Price schedules in XLS format to be downloaded, filled in and uploaded by the Bidder as per the OWNER format and to be uploaded on the official tender portal of the OWNER:www.tenderwizard.com/OPTCL

N.B
Notwithstanding anything stated above, OPTCL reserves the right to review the Bidder's capability and capacity to perform the contract at the time of award and reserves the right to accept or reject any or all tenders without assigning any reason thereof.

On request, original documents should be produced by the bidder failing which the tender would be deemed unresponsive hence incomplete.

SECTION: II

1. INSTRUCTIONS TO BIDDERS

a. Bidders are expected to fully conversant with the meaning of all the clauses of the Bid document before submitting their tenders. In case of doubt regarding the meaning of any clause the Bidder may ask clarification in writing, before submitting the bid before the due date in much advance, from the Chief General Manager (IT), 3rd Floor, O P T C L Building, Janpath, Bhubaneswar - 751022, infotech@optcl.co.in. This however, does not entitle the bidder to ask for time beyond due date fixed for techno commercial bid or due date as may be fixed by Purchaser for Financial Bid.

b. Conditional offers shall not be accepted

c. The tenderers or their authorized representatives (limited to one person) may be present, at the time of opening the bids.

d. After opening of the techno-commercial bid if some modification of specification is agreed upon by OPTCL the same shall be published in the OPTCL website.

e. If necessary the bidder may be requested to revalidate the tender after expiry of the validity period under the same terms and conditions as per original bid except any change in the delivery period. In such an event, the bidders are free to change any or all conditions of their bids including price at their own risk.

   If the bidder does not revalidate the tender, the tender shall stand rejected and E.M.D. deposited shall be forfeited.

f. The bidder's deviations if any should be clearly indicated giving full justifications for such deviation in a separate sheet(s) under Schedule-F.

g. Over writing shall be avoided. Erasures and other changes shall bear the dated initial of the person signing the tender along with company seal.

h. 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 Bidder.

i. For evaluation, the price mentioned in words shall be taken if there is any difference in figure and words in the price bid.

j. 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.

SECTION - III

GENERAL CONDITIONS OF CONTRACT (GCC)

1.   **SCOPE OF THE CONTRACT:**

The **Scope of work** includes the Supply, Installation, Integration, Testing and Commissioning of the items mentioned in Section – I, at GRIDCO, SLDC DC and OPTCL Offices, in Bhubaneswar.

2.   **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.

2.1   "The Purchaser" shall mean the ODISHA POWER TRANSMISSION CORPORATION LTD or OPTCL.

2.2   "The Engineer" shall mean the engineers appointed by the Purchaser for the purpose of this contract.

2.3   "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.

2.4   "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.

2.5   "IT items" shall mean and include all machineries, apparatus, materials, articles and services to be provided with respect to items mentioned in schedule of Quantity at Clause
3. Of Section-I, under the contract by the contractor.

2.6   "Contract Price" shall mean the sum named in or calculated in accordance with the provisions of the contract as the "contract price" which shall include packing, forwarding freight, Insurance, Excise Duty, Sales Tax, Octroi and other taxes and duties if applicable.

2.7   "General Condition" shall mean these General Condition of Contract.

2.8   "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.

2.9   "Month" shall mean of calendar month.

2.10   "Writing" shall include any manuscript, type written printed or other statement re-produced in any visible form and whether under seal or under hand.

2.11   "F.O.R. Destination" costs shall mean the cost of equipment and material at the consignee"s store(Schedule K). The cost is inclusive of Excise Duty, Sales Tax and other local Taxes, but is inclusive of packing, forwarding and insurance & Freight charges.

2.12   The "term" contract shall mean & include General Conditions, Specifications, 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.

2.13   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.

3   GUIDELINES FOR THE BIDDER:

Disclaimer

The Contractor shall examine the instructions to Tenderers, General Conditions of Contract, Specification, the Schedules of Quantity and delivery and rest of the bidding document to satisfy himself as to all terms and conditions and circumstances affecting the contract price. He shall quote price (s) according to his own allowances except as otherwise provided therein will be levied. The purchaser shall not be responsible for any misunderstanding or incorrect information obtained by the contractor other than information given to the contract in writing by the purchaser.

4   Purchaser's right to accept/reject bids:
Under the prevailing circumstances, the purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of OPTCL.

5   Right Regarding Alteration of Quantities Tendered.
The Purchaser may alter the quantities of materials/equipment at the time of placing orders.

6   Additional Quantities
The vendor shall supply the items on receipt of the Purchase order. The initial order will be supplied within the stipulated period. If required, the vendor may be additionally required to supply up to 25% of the initial ordered quantity within six months of the issue of the order without any change in the price and other terms and conditions of the original purchase order.

7   EMD
The EMD submitted shall be of proper amount and validity. No interest shall be paid on the Earnest Money Deposit. No adjustment towards EMD shall be permitted against any outstanding amount with OPTCL.

In the case of unsuccessful bidder, the EMD will be refunded immediately after the tender is decided. In the case of successful bidder, this will be refunded only after furnishing of Composite Performance Bank Guarantee referred under payment terms.

EMD will be forfeited if the bidder fails to accept the letter of intent and/or Purchase order issued in his favor.

8 Bidder's Liberty to deviate from Specification.
The bidder may deviate from the specification while quoting, if in his opinion, such deviation is better than the specified configuration and conducive to a better and more economical offer. All such deviations should however be clearly indicated giving full justifications for such deviation

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

10 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 IT/UPS equipment supplied by the contractor shall be new, unused and conforming to relevant standards

11 INSPECTIONS AND TESTING
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.

The inspections and tests may be conducted on the premises of the Manufacturer or Supplier at point of dispatch. The Supplier shall provide all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

The Purchaser"s right to inspect, test, and where necessary, reject the Goods after the Goods" arrival at 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.

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

12 DELIVERY & INSTALLATION SCHEDULE:

a) Free delivery and installation will be arranged by the supplier, at GRIDCO, SLDC Data Center and OPTCL H.Qrs., as per the consignee to be intimated in the PO.

b) The delivery, installation and commissioning of *the items ordered, should be within 8(eight) weeks from the date of issue of Purchase Order.*

13 MANUALS AND DRAWINGS
The supplier shall provide OEM supplied user manuals, accompanying CD/DVD, Drawings.

14 DOCUMENTATION

The Supplier shall provide complete and legal documentation of all IT equipments and the associated software. The supplier shall also indemnify the purchaser against any levies/penalties on account of any default in this regard.

15 SUCCESSFUL INSTALLATION
The installation and commissioning of the items will be deemed complete only when the installation certificate is signed by the consignee of the items / user of the item.

In the event of the IT items of the Contract fails to be fully operational at the time of installation, a period not exceeding **ten days** will be given to rectify the defects and clear the installation, failing which the Purchaser reserves the rights to get the equipment replaced by the Supplier at no extra cost to the Purchaser.

16. SUPPLIER'S OBLIGATIONS

(i) 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.

(ii) 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.

(iii) The Supplier is responsible for managing the activities of its personnel or sub-contracted personnel and will hold itself responsible for any misdemeanors.

(iv) 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.

17. SITE PREPARATIONS

The Purchaser is solely responsible for providing the storage, installation and commissioning site for the installation of IT items, compliance with the technical

and environmental specifications defined by the Supplier.

18. CONTRACT'S DEFAULT LIABILITY:

[i] The Purchaser may, after 7 days of serving written notice of default by the supplier, terminate the contract in circumstances detailed hereunder.

[a] If in the judgement of the Purchaser, the supplier fails to make delivery of equipment / material within the time specified in the contract or within the period for which if extension has been granted by the Purchaser in writing in response to written request of the supplier.

[b] If in the judgement of the Purchaser, the supplier fails to comply with any of the provisions of this contract.

[ii] In the event, Purchaser terminates the contract in whole or in part as provided in Clause-18.i. a & b Section III above, the Purchaser reserves the right to purchase upon such terms and in such a manner as he may deem appropriate in relation to the equipment/material similar to that terminated and the supplier will be liable to the Purchaser for any additional costs for such similar equipment/material and/or for penalty for delay as defined in clause-27 of this section until such reasonable time as may be required for the final supply of equipment.

[iii] In the event the Purchaser does not terminate the contract as provided in clause 18(i) above, supplier shall be liable to the Purchaser for penalty for delay as set out in Clause- 27 of this section until the equipment is accepted.

19. 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.
The contractor shall not be allowed any extension in contract completion period due to time taken to replenish the rejected material/work.

20. EXTENSION OF TIME:

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

21. **WARRANTY Terms:**

The vendor shall warrant all the IT items for 3 years from the date of installation of the same. In case the violation of the condition of warranty is not set right by the vendor, the Composite Bank Guarantee shall have to 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 before 3 months of the expiry of warranty period, by the vendor/bidder, otherwise OPTCL will be forced to en-cash the said Composite Bank Guarantee.

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

(ii) This warranty shall remain valid for thirty-six (36) months after the Goods, 100% inspected, have been delivered, commissioned at the final destination indicated in the Contract or 40 months from the date of 100% delivery whichever is earlier. Warranty certificate shall be issued by the OEM.

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

a) The fault shall be rectified within 24 hours from the time of registration of the call at the OEMs call center / toll free no applicable.

b) System readjustment and/or system changing-over support on occasions of reconfiguration and/or upgrade and extensions if any.

c) 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.

d) 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.

e) Any update/enhancement/upgrade to firmware etc. released till the completion of warranty shall be supplied, installed and commissioned free of cost by the bidder, irrespective of whether or not OEM charges for the same.

f) Helpdesk, technical guidance on usage of features and functionality, problem solving and troubleshooting, rectification of bugs, enabling, and features of the software already provided.

iv) If any equipment gives continuous trouble, say six times in one month, during the warranty period, the Supplier shall replace the equipment with new equipment without any additional cost to the Purchaser.

22. **PRICE:**

(i)   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.

(ii)   All prices quoted must be firm and valid for 180 days from the date of opening of the commercial bid.

(iii)   All prices quoted shall not be affected by any escalation in prices of labor or materials, machinery, equipment, etc. or in rupee exchange rate during the price validity period whatsoever. However duties, levies, or taxes in respect of finished products will be at the rate prevalent at the time of delivery. In cases where the prices offered are included in basic product, the same should be mentioned against all those specific items.

(iv)   The prices shall be FOR Destination only at the consignees store(s) inclusive of packing, forwarding, freight and insurance. In addition, the breakup of destination price shall be given as per Schedule of prices in Section - VI.

(v)   Where ever the issue of foreign exchange is involved due to import of materials from a country other than India, the same shall be paid by the vendor. Import License, marine freight, insurance, customs duty, surcharge, port handling and clearing charges etc. all shall be vendors account and purchasers shall not be responsible in any way in this regard. All such costs shall be presumed to have been included in unit prices under column No.5 of Price Schedule D.

23. IMPORT LICENCE:

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

24. VALIDITY:

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

25. TERMS OF PAYMENT:

i. 80% payment shall be released on receipt of items in good condition on delivery, verification and stores entry of the all ordered IT Items which are fully inspected and inspection report is duly accepted by IT, OPTCL.

ii. No advance payment in any form will be made.

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

iv. The contract price shall mean firm price.

For 80% Payment : Bellow mentioned documents are required

1. Bills in triplicate duly certified for verification, stock entry and countersigned.
2. Delivery Chalan.
3. Approved OEM warranty certificate
4. Submission of BG as per clause 26. Below
5. Inspection Report

v. Balance 20% shall be payable after submission of installation certificate of last item, bills in triplicate.

Paying Officer:
DDO HQRS OPTCL, DDO Gridco & DDO SLDC shall be the paying officer for their respective items.

26. COMPOSITE BANK GUARANTE:

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

The CBG must be valid for a period of 42 (forty two) months from the

schedule date of delivery of last lot strictly as per pro-forma enclosed, towards security, 100% payment and performance guarantee purposes, failing which the purchase order will be treated as cancelled. In the event of any breach or default in all or any of the conditions set forth and provided in the purchase order, the purchaser may forfeit the whole amount of the composite bank guarantee. The forfeiture of the composite Bank guarantee shall not in any way affect, limit or extinguish any remedy or relief to which the above authority may at any time be lawfully entitled.

No interest will be payable on Composite Bank Guarantee amount.

27. **PENALTIES TOWARDS NON PERFORMANCE**

Delay in execution of any supply order against this tender shall attract penalty.
i) Penalty

For H/W Items
If the supplier fails to complete the delivery and installation as per delivery schedule specified, OPTCL shall recover from the supplier as penalty a sum of 0.5% of the item value of the undelivered/uninstalled portion (item) for each calendar week or part there of subject to a maximum of 5% of the ordered unit / license price. Imposition of penalty is however subject to force majeure conditions.

For S/W Items
For this purpose the date of receipt of e-license through e-mail shall be reckoned as the date of delivery. Imposition of penalty is however subject to force majeure conditions.

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

28. INSURANCE:

Insurance of Stores covered by this specification shall be done by the suppliers with their own insurance unless otherwise stated. The responsibility of delivery of the stores at destination in good condition rests with the supplier. Any claim with the Insurance Company or transport agency arising due to loss or damage in transit has to be settled by the supplier. The supplier shall undertake free replacement of materials damaged or lost which will be reported by the consignee within 30 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 days, the

material shall be treated as not delivered and shall attract penalty till replacement as per clause under heading "Rejection of Materials".

29 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.

30. LIMITATION OF LIABILITY

The CONTRACTOR's total liability for all claims, costs, losses, expenses, actions, proceedings arising out of or in connection with this W.O. and scope of work shall be limited to the fees paid. In no event shall either party be liable for any indirect, special, incidental, consequential or punitive damages (including without limitation damages for business interruption, loss of business profits, loss of business information or any other monetary loss) howsoever caused arising out of or in connection with the W.O. and whether or not the party has been advised of the possibility of such damages. The CONTRACTOR shall be liable only for a fault, which is exclusively attributable to it or its contractors, and shall be discharged of its liabilities to the extent that a fault is attributable to the OWNER or its contractors.

31. JURISDICTION OF THE HIGH COURT OF ODISHA:

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

32 CERTIFICATE FOR EXEMPTION FROM EXCISE DUTY:

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

33. CONTRACTOR'S RESPONSIBILITY:

Not withstanding any thing 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.

34. LANGUAGE AND MEASURES:

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

35. CORRESPONDENCES:

(i)   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.

(ii)   Any notice to the purchaser shall be served at the OPTCL's principal office in the same manner.

36.   LEGAL ADDRESS OF THE PARTIES:

The address of the parties to the contract shall be specified.

PURCHASER:

Chief General Manager (IT), ODISHA Power Transmission Corporation Ltd. 3rd Floor, OPTCL Tower, Janapath,
Bhubaneswar – 751 022, ODISHA, India

<u>CONTRACTOR:</u>
(TO BE FILLED BY THE TENDERER)

37.   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.

TECHNICAL SPECIFICATIONS

Specification Compliance or Deviations tables with reference to the specifications of items mentioned at SCHEDULE – D.

SL No.	ITEM DESCRIPTION	PURPOSE	Compliance (Yes/No)	Deviations if any
For GRIDCO Data Center:				
1	Data Chest	For securely keep data cartridge		
2	SSL Certificate for OPTCL,GRIDCO & SLDC	For encrypted access to servers		
3	SPAM Protection for Mail Server	To save the mail server from spam attack and block some unwanted mail that are getting delivered to mailbox.		
4	BLADE Server	For installation & expansion of required infrastructure services		
5	KVM	For accessing servers in Val-rack		
6	Data Cartridge	To take the backup through Data protector		
7	HBA Module	For storage connectivity		
8	SAN Switch with 24 nos. of SFP Module(FC Cable)	Server to storage connectivity through FC		
9	Red Hat Enterprise Linux Server OS Standard 2 socket	OS Installation		
10	Single Tape Drive	to take the backup , in case of DP failure		
11	CCTV Camera	For Data center surveillance		
12	Access Control with 10nos. Finger print and 10nos. Swipe Cards	To restrict unauthorized person entry within DC		
13	Precision AC	for cooling the DC		
14	Red Hat Enterprise Virtualization with Red Hat Virtualisation Manager standard with 2 socket	OS Virtualization, Migration, cloning and Management		
15	SAN Storage with capacity of 5 TB	to expand the space of the existing SAN storage space for the data in redundant mode		
16	Firewall or UTM (Unified Threat Management)	To protect IT assets from unauthorized access and external attacks		
17	Router	To route the network traffics from point to point and multi point		
For SLDC Data Center				
1	KVM Switch	For accessing servers in Val-rack		
2	SAN Storage with capacity of 20 TB	to expand the space of the server & store the data in redundant mode with Enclosure		
3	Blade Enclosure with SAN Switch	For Connecting Blades		

SL No.	ITEM DESCRIPTION	PURPOSE	Compliance (Yes/No)	Deviations if any
4	Blade Server(12 Blades)	For installation & expansion of required infrastructure services		
5	Windows Server	OS Installation		
6	Red Hat Enterprise Linux Server OS Standard 2 socket	OS Installation		
7	CCTV Camera	For Data center surveillance		
8	Access Control with 10nos. Finger print and 10nos. Swipe Cards	To restrict unauthorized person entry within DC		
9	Firewall or UTM (Unified Threat Management)	To protect IT assets from unauthorized access and external attacks		
10	Router	To route the network traffics from point to point and multi point		
11	Precision AC	for cooling the DC		
12	Red Hat Enterprise Virtualization with Red Hat Virtualisation Manager with 2 socket	OS Virtualization, Migration, cloning and Management		
For OPTCL H.Qrs.				
1	Oracle Toad Software Licenses (Development Suite – 2nos.)	For Development Functionality, Code Analysis and SQL Tuning,		
2	Oracle Toad Software Licenses (DBA Suite – 1no.)	Schema, Data and Change Management, Reporting DBA activities, Performance Diagnosis and Tuning.		

SECTION – V

Forms and Schedules

Procurement of IT items

BID FORM

To

Chief General Manager (IT),
ODISHA Power Transmission Corporation Limited 3rd Floor, OPTCL Tower, Janpath,
Saheed Nagar, Bhubaneswar- 751 022 Ladies and/or Gentlemen,

Having examined the bidding documents, including Addenda Nos. …….. *(insert numbers),* the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the equipment, accessories & associated services under the Contract"Procurement of IT H/W,S/W" in conformity with the said Bidding Documents for the sum of
_____*(Total Bid Amount in Words and Figures)* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our bid is accepted, to deliver the Goods in accordance with in the stipulated delivery period as mentioned in the Bidding Documents.

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

We agree to abide by **this bid for a period of 180 days** from the date fixed for bid opening under Clause - 4 "General Instruction to Bidders", and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

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

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

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

Dated this....................day of   200.................

Signature   ....
in   the capacity of
duly authorised to sign for and
on behalf of(IN BLOCKLETTERS)
....

No. _____

Dated _____

To:

The Chief General Manager (IT),

ODISHA Power Transmission Corporation Ltd.,

3rdFloor, OPTCL Building,

Janpath,

Bhubaneswar - 751 022. ODISHA

IFB No. _____

Dear Sir,

We *[name of the Manufacturer   ]* who are established and reputable manufacturers of *[name and/or description of the goods   ]* having factories at *[address of factory   ]* do hereby authorise*[name and address of Agent   ]* to submit a bid, and subsequently negotiate and sign the Contract with you for the goods manufactured by us against the above IFB.

We hereby extend our full guarantee and warranty as per Clause 21 of the General Conditions of Contract for the goods and services offered for supply by the above firm against this Invitation for Bids (IFB).

_____

[Signature for and on behalf of Manufacturer] [Name]

[Name of the Manufacturer]

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

Price Schedule for Goods to be keyed in the .xls/.xlx template provided in the tender portal.

Bidder's Name &Address:

I. PRICE BID FOR IT (Hardware/Software) EQUIPMENT OF GRIDCO:

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Sl. No	Description	Country of Origin	Qty. (nos.)	Unit Price ex-works/ex-warehouse/ex-showroom/off the self	Unit Packing and forwarding charges	Excise duty, if any,	Sales taxes /VAT payable, if Contract is awarded	Unit cost of Freight in Rs.	Insurance in Rs.	Service Tax / Entry Tax	Unit Price Col. 5+6+7+8+9+10+11	Total Landing Cost in Rs Col 12 x Col 4
IT Hardware :												
1	Data Chest		1									
2	Blade Server		8									
3	KVM		1									
4	Data Catridge		10									
5	HBA Module		6									
6	SAN Switch with 24 nos. of SFP Module(FC Cable)		2									
7	Single Tape Drive		1									
8	CCTV Camera		4									
9	Access Control with 10nos. Finger print and 10nos. Swipe Cards		2									
10	Precision AC		2									
11	SAN Storage with capacity of 5 TB(upgradation of existing Storage)		1									
12	Router		1									

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Sl. No	Description	Country of Origin	Qty. (nos.)	Unit Price ex-works/ex-warehouse/ex-showroom/off the self	Unit Packing and forwarding charges	Excise duty, if any,	Sales taxes /VAT payable, if Contract is awarded	Unit cost of Freight in Rs.	Insurance in Rs.	Service Tax / Entry Tax	Unit Price Col. 5+6+7+8+9+ 10+11	Total Landing Cost in Rs Col 12 x Col 4
13	UTM (Unified Threat Management) for Firewall		1									
IT Software:												
1	Red Hat Enterprise Linux Server OS Standard (3 yrs) for 2 socket		8									
2	SSL Certificate for GRIDCO, OPTCL and SLDC		3									
3	SPAM protection for Mail Servers		8									
4	Red Hat Enterprise Virtualization with Red Hat Virtualisation Manager with Standard (3 years) for 2 socket		8									

Bidder's Name & Address :

II.   PRICE BID FOR IT (Hardware/Software) EQUIPMENT OF SLDC:

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Sl. No	Description	Country of Origin	Qty. (nos.)	Unit Price ex-works/ex-warehouse/ex-showroom/off the self	Unit Packing and forwarding charges	Excise duty, if any,	Sales taxes /VAT payable, if Contract is awarded	Unit cost of Freight in Rs.	Insurance in Rs.	Service Tax / Entry Tax	Unit Price Col. 5+6+7+8+9+ 10+11	Total Landing Cost in Rs Col 12 x Col 4
IT Hardware :												
1	Blade Server		12									
2	KVM		1									
3	CCTV Camera		3									
4	Access Control with 10nos. Finger print and 10nos. Swipe Cards		2									
5	Precision AC		2									
6	Blade enclosure with SAN Switch		1									
7	Router		1									
8	SAN Storage with capacity of 20 TB		1									
9	UTM (Unified Threat Management) for Firewall		1									
IT Software:												
1	Red Hat Enterprise Linux Server OS Standard (3 yrs) for 2 socket		6									
2	Red Hat Enterprise Virtualization with Red Hat Virtualisation Manager with Standard (3 years) for 2 socket		14									
3	Windows Server OS 2012		6									

Bidder's Name &Address :

III.   PRICE BID FOR IT (Software) EQUIPMENT OF OPTCL:

IT Software:											
1	Oracle Toad Software Licenses (Development Suite)	2									
2	Oracle Toad Software Licenses (DBA Suite)	1									

Note:
- (1)   In case of discrepancy between unit price and total, the unit price shall prevail.
- (2)   @ The price shall include all custom duties, sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item, or the custom duties and other taxes paid on previously imported item offered ex-warehouse, ex-showroom, or off-the-shelf. These factors should not be entered separately.
- (3)   The above three price schedule(I, II and III) shall be evaluated independently and POs shall be placed accordingly.

Procurement of IT Items

1.0   General Information

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

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

1.	Name of firm	
2.	Head office address	
3.	Telephone.	Contact
4.	Fax	Telex
5.	Place of incorporation/registration	Year of incorporation/registration

Nationality of owners		
	Name	Nationality
1		
2		
3		

2.0   Capability Statement

1.	Name of Bidder	
2	Classifications (1) Manufacturer (2) Authorized Agent (3) Dealer (4) Others (please specify)	
3.	Factory/Works: (a) Location (b) Description, Type and size of building (c) Is property on lease or free hold? If on lease, indicate date of expiry of lease in such case (d) Details of plant and facilities for manufacture/assembly of the goods	

4.	Type of equipment manufactured and supplied during last three years.		
Name of equipment	Capacity/Size	Nos. manufactured	Nos. of orders on hand

5.	Details of Organization at Service Centre a) No. of skilled employees: b) No. of Unskilled employees: c) No. of Engineering employees d) No. of Administrative employees e) List of special repair/workshop facilities available f) Storage space for spare parts (sq. m.) g) Value of minimum stock of spares available at all the service centres in respective currency h) Value of the modes/types by number of equipment serviced by the centre in last two years	
6.	Names of three buyers to whom similar equipment was supplied in the past and to whom reference may be made by the Purchaser regarding the Bidder‟s technical and delivery ability.	
	(1)	

	(2)	
	(3)	

3.0   Banker Information

Name of Bidder:

Bidders shall provide financial information to demonstrate that they meet the requirements stated in the Instructions to Bidders. Each Bidder must fill in this form. If necessary, use separate sheets to provide complete banker information.

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

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

4.0   Litigation History

Name of Bidder

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

Year	Award FOR or AGAINST Applicant	Name of client, cause of litigation and matter in dispute	Disputed amount (Current Value in Indian Rupees)

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

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

Date :   (Signature) ....

Place :   (Printed Name) ....

(Designation) ....

(Common Seal) ....

6.1   Details of Service Support

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

Date :   (Signature) ....

Place :   (Printed Name) ....

                                                                                             (Designation) ....

                                                                                             (Common Seal) ....

Procurement of
IT Items

(DEVIATIONS AND ALTERNATIVES)

The Bidder shall item wise any alternatives and deviations from the bid document included in his Bid. Each item shall be listed below with the following information:

Any proposal in this section will be applicable only for the bidders whose Bid will be substantially responsive in accordance with **"Instructions to Bidders"**.

A Bid determined as not substantially responsive will be rejected and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

1.   Reference Clause in the bid document.

2.   Detailed description of the alternative or deviation.

3.   Reason for the change.

4.   The change in bid price if the alternative or deviation is withdrawn and the bidder conforms to the specifications.

Date: (Signature) ....

Place: (Printed Name) ....

                                                                 (Designation) ....

                                                                 (Common Seal) ....

<p style="text-align:center;">Procurement of
IT Items</p>

<p style="text-align:center;">**(FORM OF CERTIFICATE OF ORIGIN AND ELIGIBILITY)**</p>

Bidder's Name & Address

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

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

Date: (Signature) ....

Place: (Printed Name) ....

                                                                     (Designation) ....

          (Common Seal) ....

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

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

This Guarantee Bond is executed this ………day of ………….. 200_by us the……………(Bank) at …………………. P.O. …………………. P.S………………… Dist……………… State ………………….

WHEREAS THE ODISHA POWER TRANSMISSION CORPORATION LTD., a corporate
body constituted under the Company Act, 1956 (herein after called "the OPTCL") has placed orders No……………Dt……………(hereinafter called "The Contract) on M/s……………. (hereinafter called "The Contractor") for supply, install, testing and commissioning of the ………………… AND

WHEREAS the Contractor has agreed to supply, install, testing and commissioning of……………… at the OPTCL in terms of the said contract, AND

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

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

(2) We (the Bank………) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Contractor of any of the terms or conditions contained in the said contract or by reason of the Contractor‟s failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs……(Rupees……………….).

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

(4) We (the Bank………) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be so enforceable till all the dues of the OPTCL under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till Chairman-cum-Managing Director, ODISHA Power Transmission Corporation Limited or his

nominee certifies that the terms and conditions

of the said contract have been fully and properly carried out by the said Contractor and accordingly discharges this guarantee.

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

(5) We (the Bank……..) further agree that the OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the saidagreement or to extend time of performance by the said Contractor(s) and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us.

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

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

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

Dated at …………. the ………… day of ………… Two thousand ……………

Witness :
(For and on behalf of the Bank)

Signatory
(for and on behalf of the Bank)

1.

2.

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

DETAILED TECHNICAL PARTICULARS OF ITEMS TENDERED

SL NO	DESCRIPTION
1	**CCTV Camera : (For Data centre surveillance)** 720 TVL, 1/3" PICADIS, Effective Pixels: 1280(H)×960(V), 20m IR Distance, ICR, 0.1 Lux/F1.2, 0.3 Lux/F2.2,12 VDC, Smart IR, High dynamic range, Wide operating temperature Range (-40°~60°), IP66, (2.8/3.6/6/8mm Lens, Default: 6mm / F2.2 Lens) - 4358.4/-
2	**Access Control: IP based Fingerprint Access Control (To restrict unauthorised person entry within DC)** CPU: 400MHz DSP Memory: 4MB flash + 8MB RAM Fingerprint sensor: 500 dpi optical sensor Identification speed: 2,000 match in 1 second Fingerprint capacity :10,000 templates (5,000 users) Log capacity: 50,000 events RF card Proximity: (125kHz EM), Mifare (13.56MHz) Operation modes: Fingerprint, RF card, RF card + fingerprint Network interface: TCP/IP, RS485 Wieg and output: Configurable up to 64 bits TTL I/O: 2 inputs for exit switch and door sensor Internal relay: Deadbolt, EM lock, door strike, automatic door Sound and interface: Multi-color LED and multi-tone buzzer Operating voltage: 12VDC Size: 50 x 160 x 37mm (W x H x D) **Controller: Access Modular Controller** Hardware CPU RENESAS M32C84 Integrated Microcontroller (32Bit, 30MHz) 512 kB-EPROM/FLASH 256 kB-SRAM Serial EEPROM RTC Pluggable 2 GB compact flash Battery for SRAM and RTC Host address can be set via sliding switch Host interface: **- RS485 (2- or 4-wire); opto-decoupled** **- RS232** **- Ethernet 10/100BaseT (TCP/IP) with RJ45** 4 reader interfaces: - **Wiegand or** **- RS-485, 2-wire, opto-coupled, 19.200 Bd** 8 relay outputs: **- max. switching voltage: 30 V DC** **- max. switching current: 1,25 A** **8 monitored analog inputs** Tamper switch

	Reset button
	Temperature: 0°C to +45°C (32°F to 113°F)
	Power supply: 10 to 30 VDC, max. 60 VA
	Available for external devices: 55 VA
	Environment class: IP 30
	Housing Base: PPO (UL 94 V-0)
	Upper: Polycarbonate (UL 94 V-0)
	Color: White
	Dimensions: WxHxD: 232 x 90 x 63 mm (9.13 x 3.54 x 2.48 in.)
	Weight: Approx. 0.53 kg (1.17 lb)
	Type: Rail mounting
3	**Firewall: (To protect IT assets from unauthorized access and external attacks)** **Support &Warranty:** Standard warranty should be mentioned, Should have local presales and sales support. ❖ General Features: **UTM Appliance Throughput** - Minimum 20GbpsModular Firewall with 64 bit OS. - Minimum 4300 Mbps of Antivirus Enabled - Minimum 3200 Mbps Ipsec VPN Throughput - Minimum 180,000 new sessions - Minimum 7000 Mbps IPS throughput - Minimum 1500 Mbps WAF throughput - Minimum 4.5 Mn concurrent sessions/Sec - Unlimited Authenticated Users/Nodes ❖ **8nos. of 10/100/1000 Ethernet UTP ports , 2nos.USB Ports,** ❖ **Future ready 8X 1G SFP Port with 4 X10G SFP Port** ❖ **Hardware Bypass- 2nos.** - Identity based Firewall - Intrusion Prevention System - Gateway Anti-virus - Web Content & Application Filtering - Web Application Firewall - Bandwidth Management - Proposed appliance should support inbuilt Flash Memory - Inbuilt-on Appliance Reporting with minimum 200GB or more disc Space - Network: OSPF, Round Robin load balance, RIPv2, BGP, equal & unequal cost load balance, High Availability, QoS, etc, Round Robin Balance. - Support for user authentication over SMS. Country Based Blocking, FQDN support and should support MIX mode deployment **Security Features : Gateway Antivirus, Anti-Spyware and Anti Malware:**Checkmark Certified.Virus, Worm, Trojan Detection and Removal, Automatic Virus signature database update, Real-Time blacklist, MIME header check, Redirect spam mails to dedicated email address, image-spam filter, Spam Notification, Zero hour Virus outbreak protection. Recurrent pattern Detection Technology for AS. Self Service Quarantine area. **Web and Application Filtering**: Checkmark Certified.URL, Keyword, File type block, Block Java applets, cookies, ActiveX, Block malware, phishing, pharming URL, block P2P application, anonymous proxies, Customized block on group basis. Minimum of 82 categories with more than 42 million URLS supported with more than 5000 application support. **Intrusion Prevention System (IP$):** Checkmark Certified.For different attacks like Mail Attack, FTP Attack, HTTP Attack, DNS Attack, ICPM Attack, TCP/IP Attack, DOS and DDOS Attack, TelNet Attack. Signatures: Default (4000+), Custom, IPS Policies: Multiple, Custom, User-based policy creation, Automatic real-time updates from CR Protect networks, Protocol Anomaly Detection.

	VPN: IPSec, L2TP, PPTP and SSL as a part of Basic Appliance, VPN redundancy, Hub and Spoke support, 3DES, DES, AES, Twofish, Blowfish, Serpent Encryption, MD5,SHA1 Hash algorithms, IPSec NAT Transversal, VPNC Certified. • Includes reports for Centralized management, Monitoring & Logging, Command line interface. Monitoring Gateways, **Monitoring suspicious activity and alerts,** Graphical real-time and historical monitoring, email: **Load Balance&LAG:** For Automated Failover/Failback, Multi-WAN failover, WRR based Load Balancing. High availability: Active-Active. QoS, OSPF, RIPv2, BGP. Link Aggregation, Policy routing based on Application and User, support Round Robin Load Balancing. • **Bandwidth Management:** Application and user identity based bandwidth management, Multi WAN bandwidth reporting, Guaranteed and Burstable bandwidth policy. Bandwidth for User, Group, Firewall Rule, URL and Applications. • **Monitoring and Reporting System:\$** Integrated Web-based Reportingincludes notification of reports, viruses and attacks reports. IPS, Web filter, Antivirus, Anti-spam system reports. IP and User basis report, 45+ Compliance reports and 1000+ drilled down reports on the appliance. Web surfing logs can be keeps for one year, on the appliance. Firewall /UTM must have ICSA Firewall – Corporate and Check mark UTM Level 5 Certifications. **License for UTM (Unified Threat Management:** Three Years for Gate Way Antivirus, spyware, web/URL Filtering, content and application filtering. IPS, License period will be counted after activation.

GRIDCO DATA CENTRE REQUIREMENTS

4. Blade Server Upgrade for HP C7000 Blade Enclosure – 8 No	
	Specification
	2 x Intel Xeon 8-Core E5-2600 V4 series CPU @ 2.1 GHz or Higher.
	64 GB DDR4 2100 MHz dual rank registered ECC RAM using 16GB or higher DIMMs, scalable to 512GB.
	Integrated PCIe 3.0 based 12G SAS Raid Controller with RAID 0, 1 with 1GB of Flash backed write cache onboard.
	2 x 300GB SAS 10K hot swap, front accessible disk drives
	Minimum of 1 * internal USB 3.0 port and 1* internal SDHC card slot. Minimum one free PCI expansion slot.
	Must have dual port 10Gb Adapter connected to the two interconnect Ethernet modules of the enclosure.
	Must have 2 x 8Gbps FC ports
	Fully compatible with Windows Server OS, RHEL OS and VM Ware. Hardware should be with 5 years of warranty

5. Data Catridge - 10 No	
	Specification
	LTO6 Tape cartridge with Bar code

6. HBA Module - 6 No	
Specification	
Dual port 8Gbps FC HBA upgrade to be connected in existing DL580 G7 servers.	

GRIDCO DATA CENTRE REQUIREMENTS

7. SAN Switch - 2 No

	Specification
	Shall be configured with minimum of 24 ports. All ports should be populated with minimum 8 Gbps SFP's and 24 no of 5Mtr LC-LC cables need to be provided.
	Required scalability shall not be achieved by cascading the number of switches and shall be offered within the common chassis only
	Should deliver 8 Gbit/Sec Non-blocking architecture with 1:1 performance for up to 24 ports in a energy-efficient fashion
	Should protect existing device investments with auto-sensing 4, 8, and 16 Gbit/sec capabilities.
	The switch shall support different port types such as FL_Port, F_Port, E_Port, EX_Port.
	The switch should be rack mountable
	Should provide enterprise-class availability features such as redundant and hot pluggable components like power supply and FAN
	Non disruptive Microcode/ firmware Upgrades and hot code activation.
	The switch shall provide Aggregate bandwidth of 768 Gbit/sec end to end.
	Switch shall have support for web based management and should also support CLI.
	The switch should have USB port for firmware download, support save, and configuration upload/download.
	Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than 100 Watt of power.
	Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).
	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expidite high-priority traffic
	The switch shall be able to support ISL trunk up to 128 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.
	SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.
	It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning
	The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.
	Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.

GRIDCO DATA CENTRE REQUIREMENTS

8. Linux Server OS - 8 No.s

Specification
RHEL 2 Socket Standard

9. Tape Drive Upgrade for existing HP MSL2024 - 1 No

Specification
Single LTO6 Drive upgrade in the existing MSL2024 Tape Library

10. RHEV - 8 No

Specification
Red Hat Enterprise Virtualization 2 socket Standard
RHEV Manager

11. Storage Upgrade for Existing MSA 2040 - 1 No

Specification
12 No of 600GB 15K SAS Drive for MSA 2040
2 No of Enclosure for MSA 2040 Storage

SLDC DATA CENTRE REQUIREMENTS

12. Storage - 1 No

Specification
Unified storage solution with support and configuration for both NAS and SAN functionality designed.. Minimum 6 core @ 2.2 GHz processor per controller. Additonally purpose built ASIC, XOR engine should be offered so that there shall be no load on the storage CPU during Raid Parity calculations
True active-active controller so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning, Data Tiering etc.
Offered Storage Array shall be given with Minimum of 64GB cache in a single unit and shall be scalable to 128GB without any controller change. Minimum 2 controller storage scalable to 4 or more controller need to be proposed. Storage should support cache backup functionality. Offered Storage array shall also have additional support for Flash Cache using SSD / Flash drives. Both File services as well as Block operations shall be able to utilize flash cache. More than 1000 GB Flash cache shall be supported.
Support for SSD, SAS & NL-SAS disks within same storage system and enclosure
It should support RAID levels 0, 1, 10, 5 and 6. All disk should be offered with 12Gbps speed for performance.
The storage must be configured with 20 TB of usable capacity in RAID 5 with 1200GB or lower SAS drives (Minimum 24 no of drives need to be provided). The storage system must support at least 450 Drives scalability.

180Gbps FC frontend scalable to 360Gbps via FC and 180Gbps SAS/FC backend scalable to 360Gbps without any controller change.

Storage should be configured with thin provisioning and automatic thin reclaim software.

It should support heterogeneous client OSs, which includes all popular flavors of Windows and Linux.

Dedicated management and replication ports.

Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc. The same should support 2048 LUNs/Initiators

The storage must have the capability to expand LUNs/ volumes online. Every supplied disk shall be able to participate into multiple and different raid sets simultaneously. Offered storage shall support dynamic migration of Volume from one Raid set to another set while keeping the application online.

Must support for creation of point-in-time copies/ snapshots

The storage should be configured with Thin provisioning and thin reclaim licenses. Storage array should support real time automated tiering at Sub-LUN level across all the 3 tiers of storage, i.e, SSD, SAS and NL-SAS. It should support simultaneous movement of Sub-LUN data from NL-SAS to SAS to SSD and vice versa based on application I/O workload.

Must support replication features (Synchronous and Asynchronous) for both file and block. Must support three site replication features natively.

Comprehensive management software for fully managing and administering the storage including deployment, automation, provisioning and monitoring

All necessary cables for enclosure interconnections must be part of the storage system supply

13. Blade Enclosure - 1 No

Blade Enclosure – Spécifications

The blade enclosure must conform industry Standard and rack mountable with appropriate rack mount & rail kit.

Form factor 10U or lower. The blade enclosure must support 14 or more blade servers. Blade enclosure should support all current generation processors from the OEM.

It must have at least 8 or more interconnect bays supporting Ethernet switch, FC Switch and SAS Switch etc.

Must be configured with dual redundant Ethernet modules having 10Gig for all downlink ports and 4 * 10Gig and 4 * 1 Gig uplink ports per switch. The should be offered with feature of slicing 10Gig downlink ports to 4 slices with virtual MAC addresses.

Should have dual redundant 16Gbps FC switch with downlink ports for all blades and minimum 10 Uplink ports with 16Gbps SFP's populated per switch.

Chassis should support Intel, AMD & RISC/EPIC

Chassis should be the latest offering from OEM and roadmap to be submitted. It should support NAS Blade, Storage blades for future requirements.

Management modules in redundant configuration.

USB and KVM ports on the enclosure.

The chassis must have KVM or virtual KVM functionality.

	The enclosure must support the feature of virtual DVD to individual servers from remote systems
	Predictive failure alerts and LED diagnostics need to be provided for the blade enclosure
	Hot Swap and redundant efficient cooling modules fully populated.
	Fully populated redundant power supply with highest efficiency available in the enclosure model need to be quoted.
	Management software should have capability to create server profile which comprising firmware levels, BIOS settings, network connectivity, boot order configuration, iLO settings, and unique IDs. This will standardize and simplify server provisioning Must support creating groups, which helps to provision hundreds of servers quickly and consistently without requiring that experts take action for every server deployed.
	Should be able to collect and maintain CPU utilization information for all of the servers it manages. Should also collect port-level statistics for networking, including transmit, receive, and error counters. Must display all of this data using rich UIs and make the data available through the REST APIs Should be able to do agent-less monitoring for minimum fifteen parameters like CPU, Disk, Space, Memory, Events, Log files of Operating system, ping monitoring, Application resource monitoring, URL monitoring etc and consolidated report should be available and generated from GUI console. Should provide agent-less alerting capabilities, based on customizable thresholds for operating system and applications, so that problems can be fixed before end-users experience them and consolidated report should be available and generated from GUI console.
	Must have the capability of deploying Operating Systems on multiple servers simultaneously and also be able to schedule deployment as and when needed. Must have the capability to perform scripted installation of Windows, Linux, Hyper-V and ESX Operations Systems to reduce the time required in deployment. Must have the capability of capturing and deploying OS images. Must have the capability of configuring the hardware and changing system settings such as RAID level before the deployment of the Operating System. Must also have the capability of capturing the hardware settings and replicating it across servers.
	Must have the ability to use a single, consistent resource model embodied in a fast, modern, and scalable HTML5 user interface and industry-standard REST APIs for mobile, secure access and open integration with other management software
	All hardware and software should be from the same OEM for single ownership and support. OEM should take end to end ownership of the system proposed.
	Total support for 3 years for the blade enclosure need to be provide.

14. Blade Server – 12 No	
	Specification
	2 x Intel Xeon 8-Core E5-2600 V4 series CPU @ 2.1 GHz or Higher.
	64 GB DDR4 2400 MHz dual rank registered ECC RAM using 16GB or higher DIMMs, scalable to 512GB.
	Integrated PCIe 3.0 based 12G SAS Raid Controller with RAID 0, 1 with 1GB of Flash backed write cache onboard. It should support MIPS 32-bit Processor, Read ahead caching, Secure Encryption etc.
	2 x 300GB SAS 10K hot swap, front accessible disk drives

	GRIDCO DATA CENTRE REQUIREMENTS	
	Minimum of 1 * internal USB 3.0 port and 1* internal SDHC card slot. Minimum one free PCI expansion slot.	
	Must have dual port 10Gb Adapter connected to the two interconnect Ethernet modules of the enclosure. The adapter should support iSCSI, FCoE, NPAR, SRIOV, stateless TCP/IP, NVGRE, VxLAN, PXE etc. The server should support 20Gb network card also in case of future upgradation.	
	Must have 2 x 16Gbps FC ports	
	Fully compatible with Windows Server OS, RHEL OS and VM Ware. Hardware should be with 5 years of warranty	

15. Windows Server OS - 6 No.s

	Specification	
	Latest version of Windows Standard	

16. Linux Server OS - 8 No.s

	Specification	
	RHEL 2 Socket Standard	

17. RHEV - 14 No

	Specification	
	Red Hat Enterprise Virtualization 2 socket Standard	
	RHEV Manager	

18. IP KVM SWITCH 16PORT USB RACK MOUNT (KVM1116P) (For Both DC)

Sl No	Features	Description
	KVM Switch	The KVM should be IP based i.e able to control a remote computer over the Internet or LAN and to be supplied with 16nos. Of cable for connecting to Server and KVM.
	Rack Mount	It should be rack mountable with 1U housing
	Ports	It should have a minimum of 16 ports
	User	It should support 1 remote users and 1 local user
		It should support both IPv4 and IPv6
	display support	It should support upto high video resolution of 1600x1200 @ 60Hz
	Modem	It should have Modem port for out of band management
	USB Port	Should be provided with USB ports for connecting USB storage peripherals (CD/DVD, HD, flash drives, etc.).
		It should allow BIOS-level access at any location.
	OS support	Multiplatform client support (Windows, Mac, Linux, Solaris)
		It should have auto scan feature which permits automatic switching from port to port at user-specified intervals and can set values ranges from 1 to 255 seconds.

Sl No	Features	Description
		It should support Panel Array Mode which can display the video output of up to 42 servers at the same time
	Vertual Media	It should have Virtual media and serial device support
	Cascade	It should have 3 level dual bus cascade capability which allows up to 256 connected devices across multiple KVMs to be accessed from one primary device
		Should be capable of cascading with Analog KVM Switches
	Software	It should be bundled with Management Software and be upgradable as per requirement.
	Connectivity	The server connectivity should be through Cat5e or higher from KVM to servers interface modules and support vertual media.
		The KVM switch should support hot plugging i.e server components can be removed and added by unplugging and replugging cables from the ports without shutting the unit down.
		It should have Serial Module option for serial device support
		It should support CAC Reader for additional security
		It should support Switched rack PDUs, which associate an outlet with a server port to cycle power
		KVM Should be supplied with 17" LCD Consol
		It should support authentication and authorization for the KVM switch through LDAP, LDAPS, MS Active Directory, RADIUS or KVM Access Management Server authentication.

19. SPECIFICATION FOR ROUTER(For Both DC)

	Specification
	Should have multi-service architecture for delivering integrated data, voice and security services with IPv6 readiness from day 1.
	Should have 3 x 1G UTP plus 1 x 1G SFP Ethernet ports, minimum 8 x Expansion slots, 1 x Async port and 1 x Console port from day 1.
	Should have internal redundant power supplies, suitable console cable and rack mounting kit from day 1. A single power supply should have readiness from day 1 to meet the fully populated switch requirement.
	Should support minimum 128K route entries each on IPv4 & IPv6.
	Should support VRRP and VSS/equivalent feature for enhanced high availability
	Should have minimum packet forwarding throughput/rate of 2Mpps on IPv4 and IPv6 from day 1. There should not be any performance degradation after enabling IPv6. Should have support for BFD feature
	Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6. Should support GRE and VRRP from day 1.
	a) Should have a full-featured console with familiar CLI. b) Should support Telnet, SSH, RBAC, Multiple configuration files, configuration rollback functionality, SNMP, RMON, sFlow/equivalent.
	Should have MPLS readiness from day 1 (MPLS, LPLS L2 & L3 VPN).

Specification
Should have security features such as stateful firewall, 802.1x and NAT-T. Should support signature based IPS
Should have authentication features such as RADIUS, TACACS, MD5, PAP and CHAP
Should have VPN capabilities (DES, AES2 and 3DES encryption, minimum 500 IPSec tunnels, Hardware accelerated IPsec performance up to 1 Gbps and industry standard VPN client support).
Should have multicast routing protocols support (PIM-SM & DM, IGMP, IPv6 multicast, MLD and PIM6).
Should support WAN protocols (PPP & HDLC).
Should support IPv6 ND, SLAC, DHCPv6 and ICMPv6.
Should have hardware based encryption acceleration
Expansion slots should be able to accommodate large variety of interface (FE, GE, V.35, G.703, E1, Chn E1, PRI, 3G/4G, E3, OC3 etc.
Should support traffic distribution using powerful scheduling algorithms including Layer 4 to 7 services and monitor the health status of servers and firewalls.
Should have RoHS compliance. Should have EAL-2/NDPP/equivalent common criteria certification.
Should have 3-years warranty from OEM with onsite next-business-day hardware exchange.
OEM should be in leader's quadrant of Gartner's report for Enterprise LAN for last 2 years or should be from top 3 companies as per latest IDC report.

20.	UNISPLIT PRECISION AIR CONDITIONING UNIT: (For Both DC)
	Ceiling Suspended/Wallmount, Air Cooled DX type Precision Air conditioners of 14 kW total cooling capacity @ 3800 CMH (Capacity at return air temperature of 25deg C DB & 50% RH and Outdoor Ambient Condition @35 Deg C with R-407C Refrigerant Gas) **EVAPORATOING SECTION (INTERNAL UNIT)** **SELF-SUPPORTING PANELS** in galvanised sheet painted with epoxy powder,lined with self extinguishing and sound absorbing material. **FILTER** in self-extinguishing material with EU2 efficiency (doc.Eurovent 4-5) fitted in rigid metal frame. **Double inlet CENTRIFUGAL FANS** in galvanised steel with forward-curved blades keyed directly to the motor axis. **AIRFLOW SENSOR** for activating an insufficient airflow alarm **COOLING COIL** with large frontal area, in copper tubing mechanically expanded into aluminum fins; stainless steel condensate drain tray with flexible tube.

ELECTRICAL RE-HEAT with aluminium finned elements and safety thermostat for power supply cut off and alarm activation in the event of overheating

AIR DISTRIBUTION PLENUM complete with delivery grille with double row of slats.

ELECTRICAL PANEL conforming to norm 73/23/CEE and housed in a compartment isolated from the airflow:

• auxiliary 24V transformer;

• mains switch;

• magnetothermal protection;

• contactors.

REFRIGERANT CIRCUIT including:

• filter-dryer and liquid sight glass;

• thermostatic expansion valve;

• IN/OUT refrigerant shut-off valves

CONDENSER SECTION (EXTERNAL)

HOUSING entirely in painted galvanised steel which guarantees resistance to the elements. The Panels are painted with RAL9001 colour.

The paint used conforms to norm ASTM B 17 which includes resistance to saline mist; these units are able to withstand even the harshest of environments.

All external fastenings are in stainless steel and the closing mechanism gives IP44 protection.

HERMETIC SCROLL COMPRESSORS with high energy efficiency, low noise operation and built-in thermal protection.

AXIAL FANS, statically and dynamically balanced on two planes, with non-rusting blades, external rotor motor suitable.

HIGH AND LOW-PRESSURE PRESSOSTAT TRANSDUCER for reading of condensation pressure

REMOTE SIGNALLING OF ALARMS

The following potential-free clean contacts are available in the microprocessor control circuit for the remote signalling of alarms:

1. cumulative addressable: the alarms to be excluded can be selected from the keypad.

2. compressor

3. fan

4. dirty filters

5. electrical resistance

The **microprocessor** gives autonomous unit management. Controller to be provided for auto sequencing of the machine.

The control includes:

• microprocessor control circuit;

• user interface (optional);

	• room temperature sensor; • delivery air temperature sensor. The control system comprises a circuit board housed in the electrical panel and a user interface terminal. All the control algorithms and memorisation of function parameters are contained in the microprocessor. Once it has been programmed the circuit board can function without the user terminal, allowing the unit to be controlled by a remote terminal up to 200 m from the air conditioner. One terminal can be shared by several units. The control circuit provides the following functions: • control of room temperature • control of absolute humidity via an optional humidity sensor in the room; • de-humidification management; • management of optional electrical heater; • management of alarms; • management of stand-by if two units are connected; • alarm system with visual and acoustic indicators; • signal contacts for each type of alarm; • automatic re-start with restoration of minimum tension; • programmable delay of re-start for multiple installations; • control of compressor activation (limiting start-up frequency); • programmable control (remote control or supervision); • compressor start cycle with low external temperature; • password for two programming levels (for setting and for hardware/software configuration); • RS422 or RS485 serial output (optional); • time/Date circuit (optional); • main component run hour counter • maintenance programming with explicit indications of operations to be carried out; • memorization of the last 30 alarms (with date and time if optional time/date board is installed);

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