INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE

TENDER NOTICE [Advt. No. CE/HPC/02/2010]

The Director, Indian Institute of Tropical Meteorology, Pune-411008 (India) invites Sealed tenders under **TWO BID SYSTEM**, i.e., separate sealed tenders (Part-I –Technical Bid, Part-II Commercial Bid) from reputed Indian/foreign manufacturers/ authorized dealers OR their authorized Indian agents for supply, installation, commissioning and Demonstration of following items:

Sl. No	Tender Reference No	Description of Items		EMD IN(Rs)	Cost of Tender in(Rs.)
1	CE/HPC/HTBP 01/2010/	22 kV HT Breaker Panels,	JOB	1,00,000	1,000
2	CE/HPC/TF/ 02/2010	22/0.433 kV, 1600 kVA Outdoor ONAN Transformer .	(2nos.)	90,000	1,000
3	CE/HPC/UPS/ 03/2010	1) 200kVA UPS (n+1) configuration	(4nos.)	3,50,000	2,000
		2) 200kVA UPS(n+1) configuration compatible with Existing UPS 2 No.	(2nos.)		
		3) 60kVA UPS	(1nos.)		
4	CE/HPC//DG/ 04/2010	Minimum rating 600 kVA DGSET	(3nos.)	3,30,000	2,000
		600 kVA Synchronizing Panel For 4 X 600 KVA DG set	(1 nos)		
		HSD Buffer Tank & Fuel Transfer system for 4 x 600 kVA DG sets & 1 x 250 kVA DG set	JOB		
5	CE/HPC/EE/ 05/2010	External Electrical Work	JOB	5,00,000	5,000

Last Date of Issue of Tender :22.04.2010,
Due Date for Receipt of Tender : 28/04/2010 up to 1500hrs,
Date of Opening of Technical Bid : 28/04/2010 16.00 hrs .

For details, please visit our website **http://www.tropmet.res.in .** Tender documents can be either obtained on payment in the form of Demand Draft from Nationalized Bank Drawn in favour of Director IITM payable at pune, from the Administrative Officer, or may be downloaded from our website. IITM will not be responsible for postal or any delay and reserves the right to reject any or all tenders without assigning any reasons.

Administrative Officer

TENDER DOCUMENTS

FOR

(TECHNICAL SPECIFICATIONS – PART 1)

FOR

UPS SYSTEM

AT

INDIAN INSTITUTE OF TROPICAL METEOROLOGY,PASHAN, PUNE.

TENDER NOTICE

1 Sealed item rate quotations are invited from reputed U.P.S. Vendors

Name of Owner	:	M/S INDIAN INSTITUTE OF TROPICAL METEOROLOGY PUNE
Name of Work	:	SUPPLY OF 4 X 200 KVA U.P.S.(n+1) Configuration & 2x 200 kVA UPS (n+1) Configuration compatible with Existing 2x200 kVA UPS +1 X 60 KVA U.P.S.
Cost of Tender documents	:	Rs. 2000/– (Non Refundable) in the form of Demand Draft from Nationalized Bank drawn in favour of "Director Indian Institute Of Tropical Meteorology, Pune".
Earnest Money Deposit	:	Rs 3,50,000/ (Three Lakhs Fifty Thousand only) in form Demand Draft/Bank Guarantee from Nationalized Bank drawn in favour of "Director Indian Institute Of Tropical Meteorology, Pune".

2 The tender forms will be issued upto **22.04.2010** office hrs on payment of cost of tender document in the form of Demand Draft from Nationalized Bank at the address given below.

Administrative Officer's Office,
Indian Institute of Tropical Meteorology,
Dr Homi Bhabha Road,
Pashan, Pune- 411 008.

3 Pre-Bid meeting on – **23.04. 2010 (1100 hrs.)**

4 Duly completed tenders shall be submitted in sealed envelopes at the office of owner on address given below on **28.04. 2010 (1500 hrs.)** and opened on **28.04.2010 (1600 hrs.)**

Indian Institute of Tropical Meteorology,
Dr. Homi Bhabha Road,,Pashan,Pune-411 008
Tel No 020-25904200

Contact Person : A . K . Saxena.
Civil Engineer.
Tel No – 020-25904335

5 The owner reserves right to accept or reject any or all the quotations without assigning any reasons shall not be bound to accept lowest quotation.

Instructions To Bidders

1 The tender is to be filled properly and all relevant information asked for shall be provided for in due format.

2 **The schedule of Rates shall be given in two sets.**

3 **All total amounts shall be written in words as well as in figures.**

4 Bidders are requested to give deviations / comments / assumptions clearly in deviation pages based on the site observations.

5 **Bidders are requested to specify the makes of materials to be considered.**

6 Duly completed tender shall be submitted to following address given below in sealed envelopes

INDIAN INSTITUTE OF TROPICAL METEOROLOGY
PASHAN, PUNE

Due Date and Time: 28.04.2010 – 1500 hrs

7 The soft copy of technical bid duly filled tenders shall be submitted to IITM in the form of CD

I. PROJECT INFORMATION :

OWNER	:	Indian Institute of Tropical Meteorology, Pune
PROJECT	:	HPC BUILDING (HPC UPGRADATION)
AVG. RAIN FALL	:	60 Cms.
TEMPERATURES	:	40°
INCOMING SUPPLY	:	22000V 3 Phase, 3 Wire.
DISTRIBUTION		415 Volts, 3 Phases, 4 Wire.

SCOPE:

1) Design, Manufacturing, Assembly Shop testing of 2 No. x200 kVA UPS & associated System compatible to synchronize with existing 2 No. x200 kVA UPS system in (n+1) configuration. For HPC racks (Including computer, switches, storage racks etc.)

2) Design, manufacturing, assembly, shop testing of 4 No.x 200 kVA UPS system in (n+1) configuration & associated system for HPC racks (Including computer, switches, storage racks etc.)
3) Design, manufacturing, Assembly shop testing of 1x 60 kVA UPS & associated system for workstation, emergency lighting, 3x1.5 kW chiller motors (1 Ph) etc.

TECHNICAL SPECIFICATIONS FOR UNINTERRUPTABLE POWER SUPPLY SYSTEM:

1. GENERAL:

This section includes specifications and description of requirements of 3 phase uninterruptable supply (UPS) for providing high quality A.C. power for HPC Racks, server rack, workstation & lighting loads.

2. SCOPE: –

The scope shall include design, supply, installation, testing and commissioning of the complete UPS system and related accessories including

i) Supply of complete 6 Nos.UPS system as per specifications out of which 2 Nos. of UPS units should be compatible to work in parallel & Synchronization with the existing UPS system.
ii) Supply of Load and Battery sharing panels / Battery circuit breakers as required.
iii) Supply of sealed maintenance free Batteries with Battery racks for 15 minutes Backup for HPC and 30 min back up for workstation & Emergency Lighting.
iv) Complete shop testing of all systems including harmonic analysis, UPS operation under linear and non-linear load condition etc.
v) Delivery at site, handling, installation of complete system including
interconnection from the UPS system to batteries and to input / output panels switches. All interconnections shall be done using multistrand Flexible Cu. conductor cables of appropriate sizes. Outgoing neutral cables shall be of double capacity.
vi) Complete testing of system on load.
vii) Supply, installation, testing and commissioning of incoming switchgear box for UPS as per detail and SLD.
viii) Supply, laying, testing and commissioning of incoming and outgoing cables of UPS as per attached SLD & detail specifications.
ix) Service backup by engineer till system is fully operational as and when required.
x) Supply & installation of cable trays with supports for battery to UPS Cables.

3. FUNCTIONAL & STATUTORY REQUIREMENTS :

a) The system shall be 3 phase Input / 3 phase Output, static ON LINE configuration UPS with all lat est functional facilities.
b) The system shall confirm all IEC regulation minimum for installation and relevant IS standards, statutory requirements.
c) Complete Electronic and switching assemblies shall be mounted in one single metal cabinet 14SWG CRCA sheet fabricated and powder coated (RAL 7032) finish with due ventilation. The degree of protection unless otherwise specified shall be IP 52.
d) The operating height for UPS should not be more than 1800 mm from finished floor level.

4. SYSTEM SPECIFICATION :

a) The system requirement are as follows:

System: –1

2 No. X 200 kVA UPS must be compatible to work in parallel & Synchronization with the existing 2 x 200 kVA UPS system (n+1) configuration, (3+1). 3 phase input - 3 phase output with 15 Minutes Battery backup for HPC racks

System: –2

4 No. x 200 kVA UPS must be compatible to work in parallel & synchronize each other with (n+1) configuration. 3 phase input- 3 phase output with 15 Minutes battery backup for HPC racks.

System: –3

60 kVA UPS for workstation and Chiller Motor 3 No. 1.5 kW, server and emergency lighting load (for HPC building & Incubation Centre) with battery back up of 30min.

HPC UPS systems shall be IGBT based with latest facilities and RS 232 interface card with potential free contacts for attaching it to BMS system for central monitoring and should have dial out facility with GSM model. Necessary software shall be provided for central BMS system. The system should have tuned inbuilt isolation transformer at output.

b) Configuration: The system shall have following operation features.

- Normal Condition: Supply the load with power flowing from the normal A.C. source through rectifier and inverter with battery-connected parallel with rectifier output.
- Abnormal Condition: Whenever supply deviates on voltage, frequency or waveform beyond the specific limits, the battery bank supplies constant output for load through inverter.

i) The output supplied to the loads shall be constant without switching or disturbance, when the main A.C. Supply fails.
ii) The same way when normal supply returns the inverter is synchronized with external source and load is transferred.
iii) The rectifier shall also charge the discharged batteries on return of normal supply and shall automatically shift to float charge whenbatteries are fully charged.
iv) When any UPS element fails and normal supply is available the static by pass switch shall switch the load directly.
v) The bypass switch operates in same way as above in case of UPS system fault and returns load to UPS system once fault is cleared.

c) SYSTEM FOR BOTH HPC AND SERVER UPS

i) Service Conditions: System should be able to operate in following environmental conditions without derating or damage.
Ambient temperature : O ^{0}C to 50^{0}C
Humidity : O to 95% relative.
Altitude : Upto 1000 mtr above mean sea level.

ii) Characteristics for

(1) Input voltage shall be 415 V 4 wire + Earth, 50 Hz .

(2) Output voltage 415 V 3 phase, 4 wire + Earth, 50 Hz.

iii) The system performance under steady state and transient load conditions shall remain within specified limits for entire backup period when supplied through batteries.

iv) The system performance under steady state and transient load conditions shall remain within specified limit for steady AC input voltage and frequency variations of ±10% and 5% respectively of rated values and harmonic contents upto 5% (max.) for nonlinear loads.

d) LOADS COMPATIBILITY

The UPS system shall be compatible with following loads and load characteristics.
Rack Load: For HPC (8.4 TF) existing there is only one rack of 124.1 KW and proposed of (60TF) of 686 KW load. Workstation and server rack will remain same. There will be around 100 users and 10 KW server rack, & Lighting; High intensity discharge and fluorescent Emergency lighting consisting 10% of total load, on 60 KVA UP S System . Computer & electronic Load with high harmonics upto 15% individual harmonics 5% of fundamental with aggregate load consisting 90% of UPS capacity.

e) PERFORMANCE:

i) Overall system efficiency shall be as follows.
At 100% Load : 93% or more
At 75% Load : 92.5% or more
At 50% Load : 92.5% or more

ii) Noise level: The normal noise level emanating from machine when measured at 1.2 mtrs under normal conditions shall be less than 60 Db

iii) Maximum inrush: Maximum inrush charging current shall be 6 times full load current.

iv) Output voltage & frequency should be 400V 2% and 50Hz 0.5% respectively with an option to select 380/400/415 Volts as the nominal output voltage. This voltage & frequency tolerance should not be exceeded over the full range of load (balanced or unbalanced) and full range of battery voltage.

v) Maximum Harmonic contents shall be 3% of RMS total and 2% of RMS for single Harmonic on input of UPS.

vi) Overload Capacity: 125% of full load for 10 minutes and 150% for 30 seconds.

vii) Transition Response Time (TRT):- 15ms.

f) SYSTEM COMPONENTS

i) The device shall include solid-state rectifier / Battery Charger, Inverter, Static bypass, system controls with hermetically sealed components. These components shall have suitable independent housing in cabinet.

ii) All assemblies shall be arranged for easy maintenance & plug-in modules & shall have adequate supports.

iii) Transient voltage surge suppressors shall be provided for protection of components from transient & switching surges.

g) RECTIFIER CHARGER:

i) The rectifier shall be of adequate capacity to supply inverter under full loadconditions & simultaneously charge the batteries from full discharged state.
ii) Inherent harmonics suppressions in the Rectifier design shall reduce the harmonic to less than 10% under all load conditions.
iii) Float charging requirements for battery bank as per manufacturer's recommendations for voltage & charging current shall be fulfilled.
iv) 3 phase self-cooled double winding dry type transformer with grounded electrostatic insulated shield between the windings shall be provided at output (tuned isolation transformer).
v) Input power factor: Unity

h) BATTERY:

Batteries shall be sealed maintenance free Lead-Calcium or NI-CD unit with life expectancy of minimum 8 Years, mounted on racks with battery disconnect & intercell connectors. Scope includes battery bank connections and providing safety Barriers for all busbars and cable connection leads on battery racks. Battery MCCB should be provided with reverse polarity protection. Time required for charging the battery when batteries are fully discharged is 15 Hrs without interruptions.

i) INVERTER:

Pulse - width modulated with sinusoidal output.
i) Static bypass switch shall be full rated continuous duty rated switch.
ii) Maintenance bypass: The switch shall be located behind lockable door. Key interlock shall be provided for the bypass with the static bypass such that it can be operated only when SBS is in service.

j) INDICATIONS & CONTROL:

All displays, indications, & basic system controls shall be provided on common control panel on front UPS cabinet, as listed bellow & shall be supported by sensors, transducers, Relays, wiring terminals as required. All indications shall be labeled with LED displays or plain language / LCD displays.

5. Quantity Indications:

a. Input voltage phase & line.
b. Input current phase & line.
c. Bypass input Voltage & frequency.
d. System output voltage phase & line.
e. System output current phase & frequency.
f. D.C. Bus voltage.
g. Battery current & direction.
h. Battery discharge elapsed time.

6. Visual Indications :

a) Normal operation.
b) Load on battery.
c) Inverter OFF.
d) Alarm condition.

7. Alarm Indications:

Alarm system should have audio (Hooter, with a manual alarm silence option), Visual indications (LED) for following failures and reporting over digital Interface.
a)Input & Bypass A/C under voltage, over voltage, under frequency & over frequency.
b)Input / bypass input & inverter out of Synchronization.
c)Input & Bypass single phasing.
d)Input & Bypass reverse phase sequence.
e)Battery system alarm.
f) Control power failure.
g)Fan failure. h) UPS overload. I) Battery Operation end. j) Battery under voltage shut down. k) Battery charging control fault. l) Isolation Transformer overheat. m) Inverter overload. n) Static bypass overheat.

a. Inverter fuse blow.
b. Inverter power supply fault.
c. Inverter O/P under voltage / over voltage.
d. Inverter contactor open.
e. Inverter sensor fault.

8. Control on front board.

a) Inverter ON - OFF.
b) UPS start.
c) Battery test - On line.
d) Alarm accepts / reset.
e) Output voltage adjustment.

9. Complete mimic including single line diagram of UPS shall be provided on front board.

10. The metering instruments used shall be digital with 0.5 class accuracy.

11. On line battery-testing facility shall be provided as a feature when UPS is operating on normal mode. If the battery bank fails on test the load shall be automatically transferred to static bypass with alarm.

12. REMOTE MONITORING & CONTROL :

Facility & interface with modem & connectors for data transmission via RS 232 or equivalent link upto computer & BMS. Any software required for this shall be also is in scope along with training to clients system Engineers.

Interface card with potential free card shall also be provided as part of supply.

Dial out facility with GSM model shall be provided.

13. MECHANICAL FEATURES :

The enclosures shall be 14 SWG CRCA sheet treated & powder coated pertaing to IS 8623 and the colour shall be RAL 7032 unless otherwise specified.

Also redundant fans & blowers shall be provided such that fresh air is drawn from bottom & let out from top rear.

14. QUALITY TESTS :

Entire system shall be completely checked & tested for all functions, displays including;

a. Full load test.
b. Transient Analysis.
c. Over voltage test.
d. Power failure test.
e. Efficiency at 25%, 50%, 75% & 100% loads.

15. EXECUTION :–

a. INSTALLATION :

i. The entire system shall be installed as per manufacturer's recommendations & instructions including all interconnections for supply & control circuits.
ii. A minimum working space shall be maintained around the equipment as per shop drawings, Consultant's reference drawings & relevant standards
iii. All components shall be clearly identified using labels including battery cells individually.
iv. Services of authorized representative or manufacturer for supervision of installation, connections, testing, & adjustments shall be provided.
v. All cables shall be properly routed through cable trays and connected using proper lugs. All battery terminals need to be shrouded.

b. TESTING & COMMISSIONING :

i. Under supervision of manufacturer's representative all system functions, operations, protective features shall be checked & preset to ensure compliance or specifications.

ii. Test the system as per recommendations & test listed bellow using precalibarated instruments preferably by third party inspection agency.

1. Load simulation.
2. Simulation of malfunctions to verify protective device operations.
3. Duration of supply on emergency. Low battery voltage alarm & shutdown, transfer & restoration of normal supply.
4. Harmonic contents of input & output current under all load conditions.
5. Remote status & alarm tests.

In case of test any shortfalls / faults, the same shall be rectified & test procedure shall be again repeated to establish satisfactory performance.

iii. Record individual cell voltage & equalize the charging of the cells as per manufacture's recommendations.

c. CLEANING :–

On completion of installation, testing of the system all components, cabinets etc. shall be cleaned & unwanted material, debris shall be removed from site. Scratches dents if any shall be cleaned & touched up to match the original finish.

d. DRAWINGS & MANUALS :

Following drawings & manuals / information shall be submitted in at least THREE copies at appropriate stages & for handing over the system.

i. Manufacturer's data for product, features, components & performance along with the offer.
ii. Operation & maintenance manual with;
    1. List of recommended spares & replacement components.
    2. Detail operating instructions covering operations in normal & abnormal conditions.
    3. Shop drawings showing detail fabrication, assembly of components, internal & interconnecting wiring, dimensions, plans & views, installation details access & clearance etc for approval.
    4. Product certificates for Brought out items.
    5. Factory test certificates & Inspection report.
    6. Field test reports.
    7. List of recommended spares & replacement components.
    8. Detail operating instructions covering operations in normal & abnormal conditions.
    9. Shop drawings showing detail fabrication, assembly of components, internal & interconnecting wiring, dimensions, plans & views, installation details access & clearance etc for approval.
    10. Product certificates for Brought out items.
    11. Factory test certificates & Inspection report.
    12. Field test reports.
    13. List of recommended spares & replacement components.
    14. Detail operating instructions covering operations in normal & abnormal conditions.
    15. Shop drawings showing detail fabrication, assembly of components, internal & interconnecting wiring, dimensions, plans & views, installation details access & clearance etc for approval.
    16. Product certificates for Brought out items.
    17. Factory test certificates & Inspection report.
    18. Field test reports.

16. AFTER SALES SERVICE :–

a) Round the clock Service shall be guaranteed by supplier during defect liability period / guarantee period.
   A certain minimum stock of spares shall be maintained by supplier at site.
b) Supplier shall also quote for 24 x 7 services through their authorized service engineer for a period of at least 3 years after guarantee period.

17. Supplier shall offer an unconditional guarantee of equipment for a Period of 24 months against any failure.

APPROVED LIST OF MATERIALS

Contactors, OL Relays	:	Siemens / Schneider (MG) / L&T
Meters (Analog)	:	Rishabh (L&T) / AE. / SECURE.
CTS'	:	AE / Kappa / C & S
Indicating Lamps (LED only)	:	Altos / RASS / Teknik
Relays (Protections)	:	EE / AVKSEGC / ESSUN. / ABB / L & T
MCCB & Accessories	:	GROUP SCHNEIDER (MG) / ABB. / SIEMENS / L&T
Wires (HRFR)	:	Finolex / LAPP / RR
Connectors (Color coded)	:	Wago Control / Connectwell / ELMEX
Selector switches	:	Kaycee / Sulzer / Teknik
Insulators	:	Vinayak or equiv.
Batteries	:	Exide / Amaron / National Panasonic
Cables Cu Conductor	:	FINOLEX / RR / LAPP / GEMSCAB / POLYCAB

TERMS & CONDITIONS

ENQUIRY NO: **CE/HPC/UPS/2010/03**

1) The Tenderers are requested to give detailed sealed tender in two Bids i.e.
Part – I Technical Bid.
Part - II Commercial Bid, both the bids addressed to the Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL Post, Pashan, Pune – 411 008, INDIA.

2) This tender is not transferable.

3) If a request is made to IITM for Tender Documents a sum of Rs.2000 (Rs. Two Thousand only) (Non-refundable) has to be paid in the form of Demand Draft from nationalized bank drawn in favour of "The Director, Indian Institute of Tropical Meteorology, Pune". In case the bidders download the Tender Documents from the website of the Institute, the document fee Rs. 2000 (Rs. Two Thousand only) in the form of Demand Draft is required to be enclosed while submitting the tender. Otherwise tender will not be considered.

4) Tenders addressed to the Director, Indian Institute of Tropical Meteorology, Pune 411008 are to be submitted for each item in duplicate in two separate cover, under two bids system. Superscribed with Tender No. **CE/HPC/UPS/2010/03** for purchase of **"UPS SYSTEM" – Qty 07 No.** due on **28.04.2010.(1500Hrs.)**

5) You have to submit two separate bids in two separate envelopes and you may keep both the bid envelopes in an envelope for sending to us.

One envelope will contain only the TECHNICAL SPECIFICATIONS of the indented equipment.

Another envelope will contain only the financial bid in which price and any other information, which has financial implications, will only be given.

6) The main envelope, which will contain both the bids, should be super scribed with our tender enquiry No.**CE/HPC/UPS/2010/03** due on **28.04.2010.(1500Hrs.)**

6) Please indicate page nos. on your quotation ex. If the quotation is containing 25 Pages, please indicate as 1/25, 2/25, 3/25 ---- 25/25.

7) Cost of the items should be mentioned clearly in the Commercial Offer (Part-II) only. The optional and any other essential items / accessories required for the maintenance of the equipment for the next three years should also be specified in the offer separately.

8) Last date for the receipt of completed tender is up to **15:00 hrs**. on **28.04.2010.** Tenders will be opened at **(1600Hrs.)** on **28.04 2010** in the presence of the representatives of the vendors present.

9) The tender must be valid for a period of at least 90 days from the date of opening.

10) The purpose of certain specific conditions is to get or procure best Equipment / service etc.

for IITM. The opinion of Technical Committee shall be guiding factor for Technical short listing.

11) Supplier shall finally warrant that all the stores, equipment and components supplied under the SUPPLY ORDER shall be new and of the first Quality according to the specifications and shall be free from all the defects (even concealed fault, deficiency in the design material and workmanship).

12) Tender must clearly indicate the features offered, unit price, VAT tax, transport, transit-insurance, installation charges. Institute cannot furnish any certificate for exemption or reduction in VAT tax or any other duty/tax. The vendor should mention the price of the equipment and the duties/taxes to be paid such as customs duty/excise duty/VAT taxes etc. separately.

13) The complete equipment including operational manuals should be supplied within stipulated period mentioned in the supply order and the vendor should install and commission the equipment within **fifteen days** after the delivery of the UPS.

14) i) As this Institute is exempted from payment of Custom Duty and Excise Duty, exemption certificate will be issued on request.

ii) The Institute is exempted from payment of Octroi Duty. Necessary certificate will be issued on request, if required.

15) The equipment must carry comprehensive on-site warranty for **One Year** from the date of commissioning of the equipment after the acceptance tests. Warranty period will stand extended
for a period of total downtime of the UPS System.

Further, optional quotation should be quoted separately for extendable warranty by two more years i.e. 1+1 year.

16) The vendor has to furnish a Bank Guarantee to the extent of 10% of the order value from a nationalized bank in the prescribed format valid for the entire period of warranty including extension if any.

17) No advance will be paid.

18) The prices shall be quoted as per the annexure.

19) The payment terms shall be as follows:

i) 70% payment against delivery.

ii) 20% payment after satisfactory installation, commissioning and successful completion of acceptance tests and training.

iii) 10% payment after execution of Bank Guarantee from a Nationalized Bank and successful completion of acceptance test. The Bank Guarantee will remain valid until the expiry of warranty period including the extensions if any.

20) The prices quoted should be firm and irrevocable and not subject to any change whatsoever, even due to increase in cost of raw material components and fluctuation in the foreign exchange rates and excise duty.

21) Vendor should arrange appropriate training to the users free of charge.

22) Indicate the names of the Indian reputed Organizations where you have supplied the similar equipment and may attach the satisfactory performance report of the equipment from user Organization.

23) a) If you have supplied identical or similar equipment to other Institutes under Ministry of Earth Sciences and Ministry of Science & Technology, the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid.

b) Based on the above information IITM will have its option to obtain details of the equipment, their performance, after sales services etc. for evaluation of the tender, directly from the concerned Labs. /Scientists etc.

24) The Institute is autonomous scientific research organization under the Ministry of Earth Sciences and is a recognized center for studies leading to M.Sc. and Ph.D. of the University of Pune and various other Universities. As such, all possible concessions / discounts / rebates applicable for educational Institutions may be given.

25) The vendor should have appropriate facilities and trained personnel for supply, installation, commissioning and warranty-maintenance of the equipment to be supplied. Detailed information in this regard may be furnished.

26) Kindly attach a of copy of your latest DGS&D, New Delhi registration Certificate under the compulsory Scheme of Ministry of Finance regarding the registration of Indian Agent of foreign supplier wherever it is applicable.

27) The Tenderer is required to furnish the Permanent Account Number (PAN) & Service Tax Number Allotted by the Income Tax Department.& other concern department. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration' etc. should also be provided in Technical Bid for Indian Agents.

28) Vendor should clearly mention the following:

- **Make and model of every item quoted.**
- Delivery period.
- Company profile with a list of those institutes/users should be attached where vendor has supplied the equipments in question in past.
- A letter of AUTHORISED REPRESENTATIVE from the Principal should invariably be attached with quotation
- A copy of latest Income Tax clearance Certificate from Income Tax Department (INDIA)

29) Discount offered should be mentioned clearly in the commercial bid only.

30) The Tenderers are requested to quote for Educational Institutional Price for Equipment and Software, since we are eligible for the same.

31) Acceptance tests to be prescribed later will be carried out after installation and the items will be taken over only after successful completion of the acceptance tests.

32) The Equipments are required to be installed at **IITM**, **Pune** and subsequently Training is to be provided to the concerned persons of the Institute.

33) The item should be supplied with manuals and the manuals including technical / Electronic drawings / circuit diagrams should be complete in all respects to operate the system without any problem.

34) The Tenderer has to state in detail the Electrical Power is needed to house the system and to run the tests. i.e. pre-installation facilities required for installation may please be intimated in the technical bid.

35) Goods should not be dispatched until the Vendor receives a firm order.

36) The Date and Time of opening for Part-II (Commercial Bid) will be intimated only to pre-qualified and technically acceptable Tenderers for the item at a later date.

37) **Earnest Money Deposit:**

a) The Earnest Money Deposit of Rs. 3,50,000/ (Three Lakhs Fifty Thousand only) must be paid / sent along with your technical bid in the form of a Demand Draft, Banker cheque or Bank Guarantee (from a Nationalized Bank only) drawn in favour of The Director, Indian Institute of Tropical Meteorology, Pune payable at Pune, otherwise your bids will not be considered. The Earnest Money of successful bidder will be returned only after installation, commissioning, satisfactory demonstration and on acceptance of the equipment by the user Scientist / HOD as per the terms of our purchase order. If the successful bidder fails to fulfill the contractual obligations before the due date, he will forfeit the EMD.
The Earnest Money of the unsuccessful bidder whose technical bid has not been found suitable will be returned within 20 days after receipt of Technical Committee recommendations.

b) Those who are registered with Central Purchase Organization (e.g. DGS&D), National Small Industries Corporation or the concerned Ministry / Department need not to furnish EMD along with their bids.

38) Part and incomplete tenders are liable to be rejected.

39) Conditional Offers will not be considered.

40) The tenders must be clearly written or typed without any cancellations / corrections or overwriting.

41) **Fax /E-mail /Telegraphic /Telex tenders will not be considered.**

42) IITM will not be responsible:

a) For delayed / late quotations submitted / sent by Post / Courier etc.

b) For submission / delivery of quotations at wrong places other than the Office of Director, IITM, Pune

43) If the supplier fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of one percent value of the Purchase Order awarded, per every week delay subject to a maximum of 10% for every week beyond the due date and such money will be deducted from any money due or which may become due to the supplier.

44) In case of any dispute regarding part-shipment, non-compliance of any feature etc., the Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the vendor.

45) Last Date and Time for receipt of Tenders: **Upto –15 00 –hrs. on 28/04 /2010.**

46) Date and Time of opening of Tenders:**At 16 00 –hrs. on 28/ 04 /2010.** (Part - I Technical Bid only)

47) **ACCESS TO WORK :**
Owner / Engineer or their authorized representative shall have access to works being carried out at all reasonable times. No person, not authorized by owner/engineer except representatives of public authorities shall be allowed at work site at any time.

48) **SUB-CONTRACT :**
The complete work included in the contract shall be executed by the contractor and the contractor shall not sub-contract/sub-let work or part thereof without prior written consent from owner/engineer. However, contractor shall not be relieved from the responsibility of execution of works as per contract under any circumstances.

49) **COMPLETION CERTIFICATE:**

The work shall be deemed to have been completed on written certificate by Engineer that they have been virtually completed. The "Defect Liability Period" shall commence from the date of such certificate.

Contractor shall be responsible for injury to person animal or things for all damages caused to property from operations or neglect of himself or his employees / subcontractors. The contractor shall indemnify owner / Engineer and their employees and hold them harmless in respect of any and all expenses arising from such injury or damage and claims arising there of.

50) **INSURANCE & INDEMNITY**
Contractor shall have valid PF, ESI registration. All laws related to Labour, PF, ESI, Medical insurance etc, shall be adhered to by contractor. No child Labour

shall employ by contractor.

51) **EXTENSION OF TIME:**

If in the opinion of owner/engineer the work is delayed (a) by force majored, (b) by reasons beyond control of contractor, extension of time for carrying out the works can be sanctioned by owner/engineer on written request from contractor with due reasoning / supporting.

Force Majored shall mean & include compliance with statutory laws & regulation, Government order or change in orders, war & war like conditions acts of civil & military authorities, fires, floods, earthquakes and other acts of God, sabotage, revolt, Strikes & lockout of more than 2 weeks. How ever contractor & owner in such case should devise means of expediting the progress for performance as per contract.

52) **TECHNICAL SCRUTINY OF FINAL BILL:**

The owner shall have right to get works and bills technically scrutinized at the time of payment of final bill. Owner shall be entitled to recover any money found to be over paid or over certified during such scrutiny.

53) **PERFORMANCE GUARANTEE:**

The contractor shall guarantee performance of plant and equipment and workmanship against fault for a period of 12 months called as "Defect Liability Period".

54) Director reserves the right to reject any or all tenders without assigning any reason.

(Venkatachalam.G)
Administrative Officer
For Director
Email: venkat@tropmet.res.in
Tel: 020-25904203

ANNEXURE –'A'

BID SECURITY FORM

Whereas 1 (hereinafter called " the Bidder") has submitted its bid dated (date of submission of bid) for the supply of _____ (name
and/or description of the goods)(hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that WE ___ _____ (name of bank) of (name of the country), having our registered office at (address of bank)(hereinafter called "the Bank"), are bound unto (name of Purchaser)
(hereinafter called "the Purchaser") in the sum of _____ for which
payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with .the Common Seal of the said
Bank this ___ day of 20___ THE CONDITIONS of this obligation are:

1. If the Bidder withdraws it's bid during the period of bid validity specified by the Bidder on the Bid Form; or

2. If the Bidder, having been notified of the acceptance of it's bid by the Purchaser during the period of bid validity:
   a) fails or refuses to execute the; Contract Form if required; or
   b) fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, Without· the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee shall remain in force up to one year after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank) Name of Bidder.

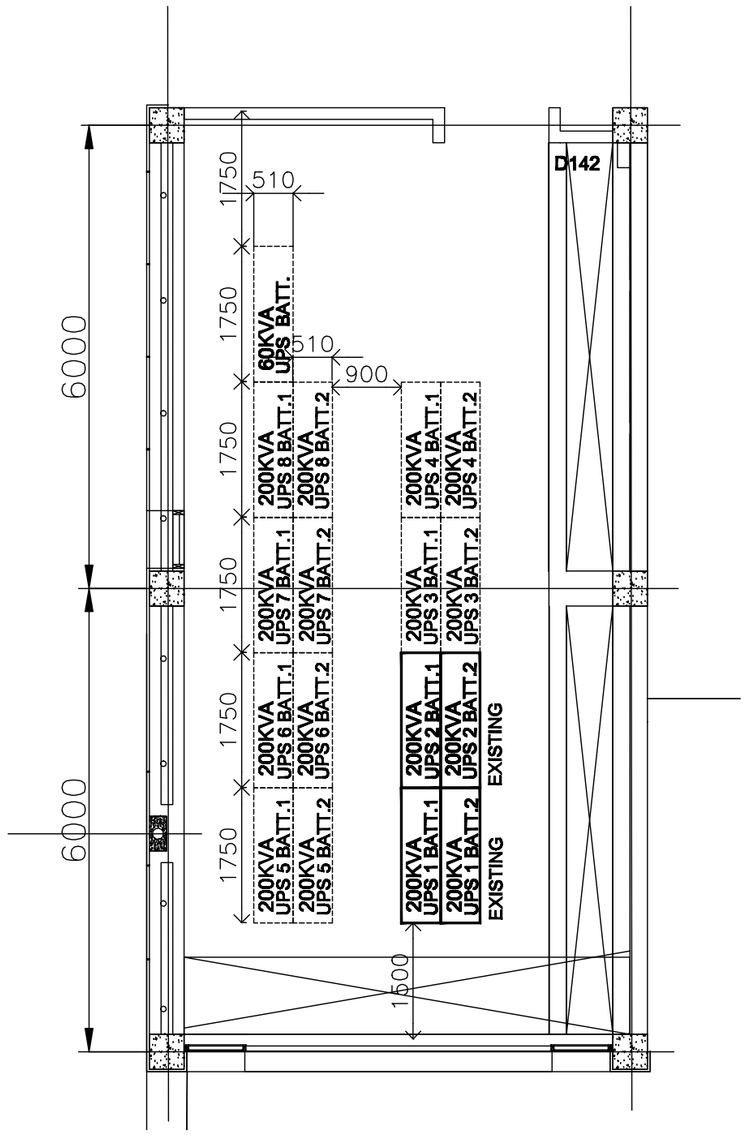
Bill of Quantity

Project : –HPC Building.(HPC UPGRADATION)

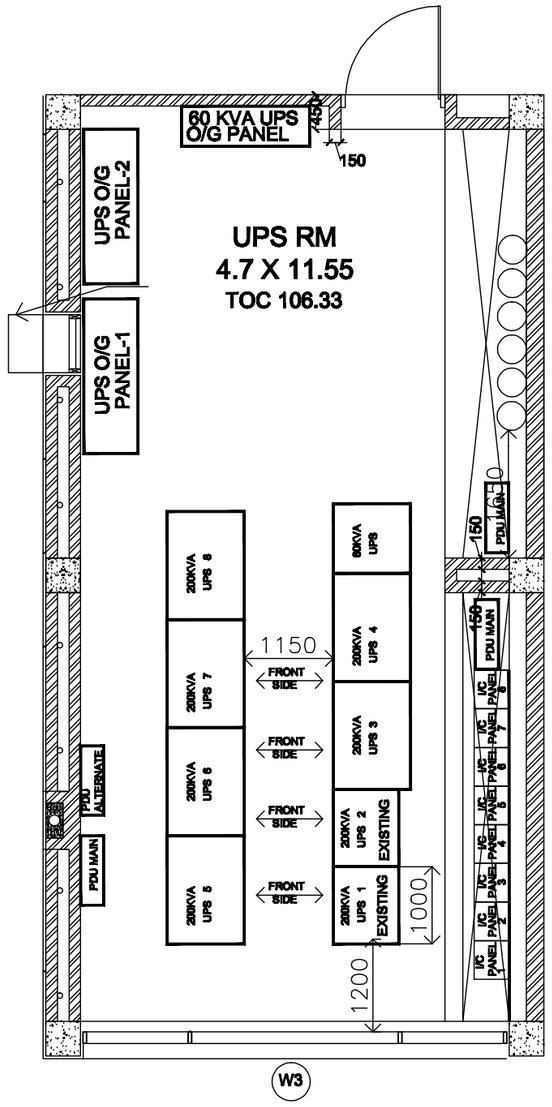
Client : –Indian Institute of Tropical Meteorology, Pune.

Requirement : –HPC and Server UPS.

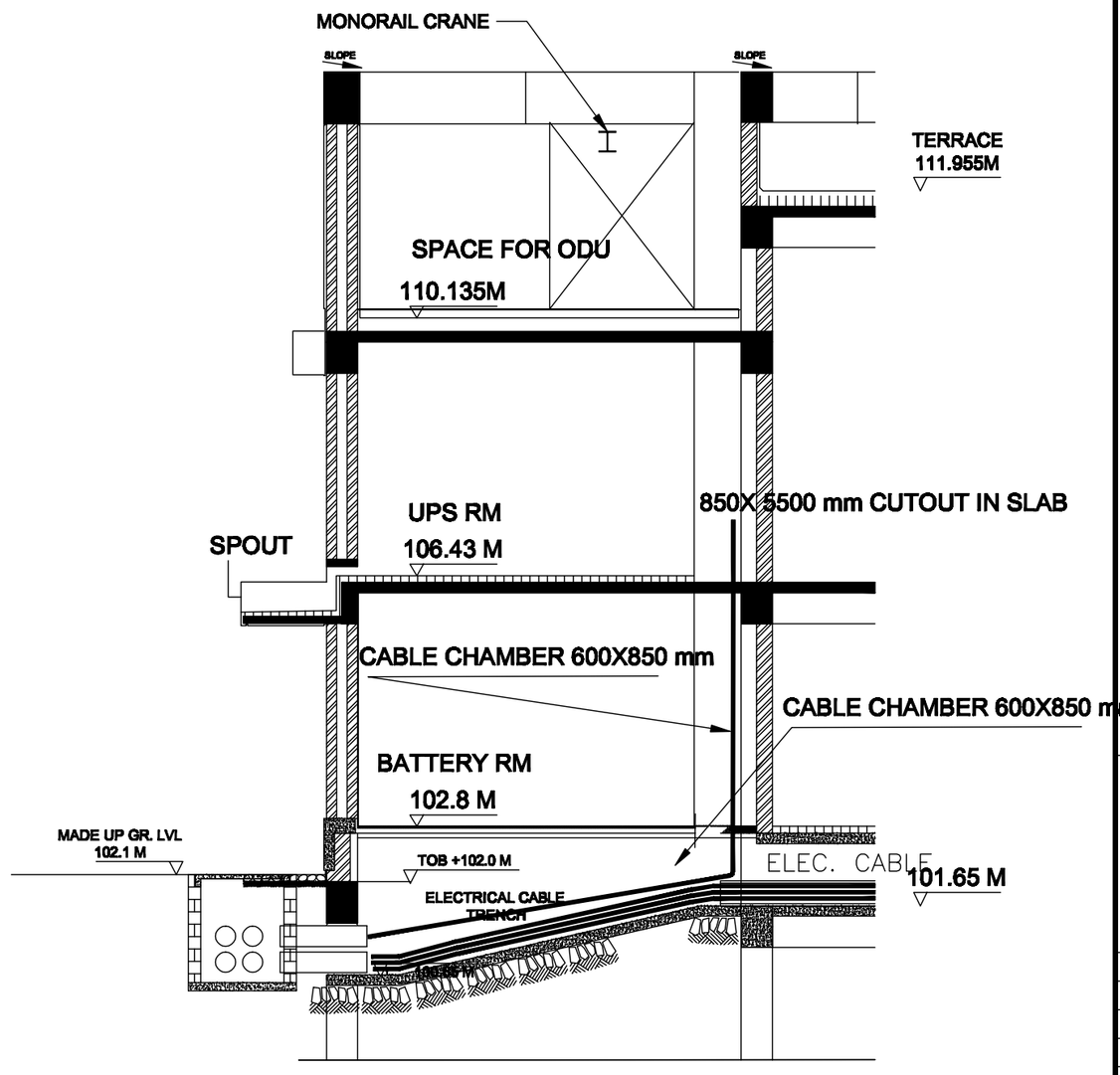
				Supply		Installation	
No.	**Description**	**Unit**	**Qty.**	**Rate**	**Amount In Rs.**	**Rate**	**Amount In Rs.**
1.0	Supply, installation, testing & commissioning of HPC & server UPS with having 15 minutes Battery back up for HPC UPS system and 30 Min back up for Workstation & Emergency Lighting UPS with 3PH INPUT & 3PH Combined and shared OUTPUT with sealed maintenance free lead acid maintained in battery racks complete with interconnections. Cu Battery cables, Battery Breakers. The rack shall be sturdy M.S. section fabricated with powder coating (Paint Shed - RAL 7032). The scope shall include compatiblity and synchronisation with existing 2 X 200kVA UPS System & terminals,busbar shrouding for Battery terminals & connections.						
1.1	Supply & Installation of 1No. X 200 KVA UPS (n+1) configuration for HPC racks as per given specifications & details.	Nos.	4				
1.2	Supply installation of 1 No. x 200 kVA UPS compatible to synchronise and parallel to existing UPS (2 No. 200 kVA) system in (n+1) configuration	Nos.	2				
1.3	60KVA UPS arrangement for server, workstation and Emergency lighting & Chiller motor 1.5 kW 3 No.s as per given specifications and details.	No.	1				
2.0	Supply & Installation of Batteries (with reverse polarity protection MCCB) as per specifications complete suitable for following UPS sizes (Bidder should furnish the battery calculations for 15 minutes & 30 minutes backup along with the BOQ).						
2.1	200 KVA UPS (15 minutes).	Set	6				
2.2	60 KVA UPS (30 minutes).	Set	1				
3.0	Supply and Installation of battery rack floor mounting as per specifications with necessary fabrication complete for following sizes.						
3.1	200 KVA.	Set	6				
3.2	60 KVA.	Set	1				
	TOTAL AMOUNT						
	Packing and Forwarding Charges.						
	Excise Duty						
	Sales Tax						
	Service Tax						
	Effective Total						



BATT. ROOM



UPS ROOM



SECTION OF UPS ROOM & BATT.ROOM

NOTE :- VENDOR SHALL CONFIRM ON THE SIZES OF UPS & BATTERIES & VISIT SITE FOR THE SAME

NORTH

KEY PLAN

LEGEND

NOTE :

SUFFIX	DATE	REVISIONS

DWG ISSUED FOR

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ARCHITECT :

ELECTRICAL CONSULTANTS:

abhiyanta
ELECTRICAL CONSULTANTS & ENGINEERS
AN ISO 9001:2008 Company
Shree Swami Krupa, Plot No.-6, Neelkamal Housing Society,
Karve nagar, Pune - 411052 . Tel/Fax.- 25462173, 25410691.
design@abhiyantaconsultants.com,
www.abhiyantaconsultants.com

CLIENT

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE

PROJECT

IITM HPC UPGRADATION

TITLE

UPS & BATTERY ROOM

SCALE : NTS	DATE : 24/3/2010	DRAWN NILESH
DWG.NO. 810A/EL/04	SUFFIX 0	CHECKED S.D.
		APPROVED V.A.V

REF. DWG

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TENDER DOCUMENTS

FOR

(PRICE BID – PART 2)

FOR

UPS SYSTEM

AT

INDIAN INSTITUTE OF TROPICAL METEOROLOGY,PASHAN, PUNE.

Bill of Quantity

Project : –HPC Building.(HPC UPGRADATION)

Client : –Indian Institute of Tropical Meteorology, Pune.

Requirement : –HPC and Server UPS.

				Supply		Installation	
No.	**Description**	**Unit**	**Qty.**	**Rate**	**Amount In Rs.**	**Rate**	**Amount In Rs.**
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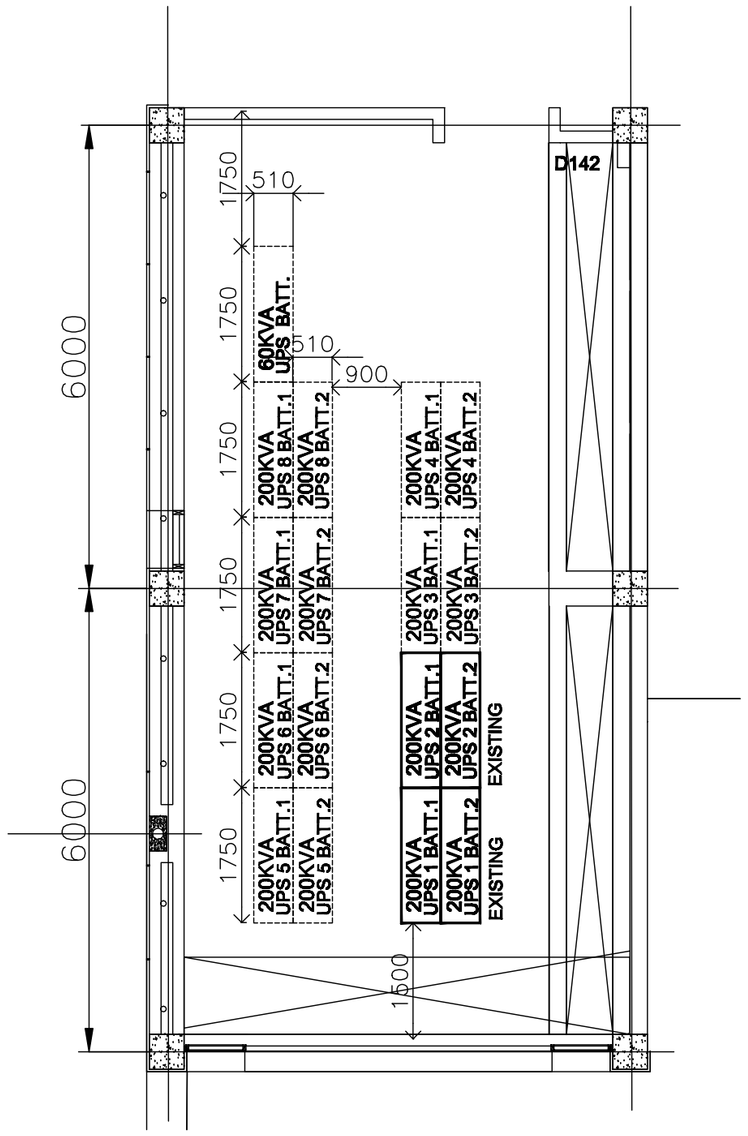
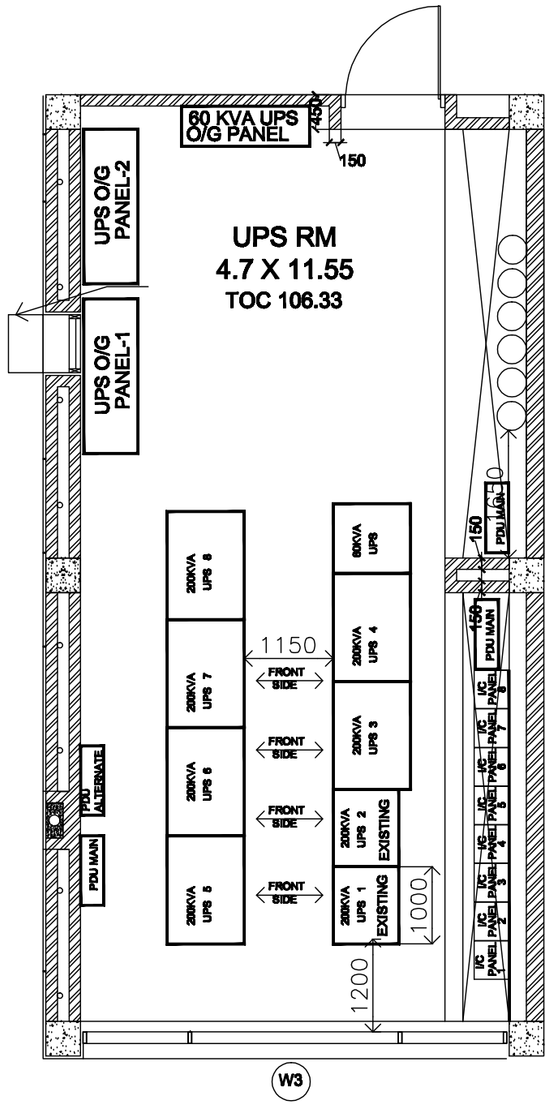
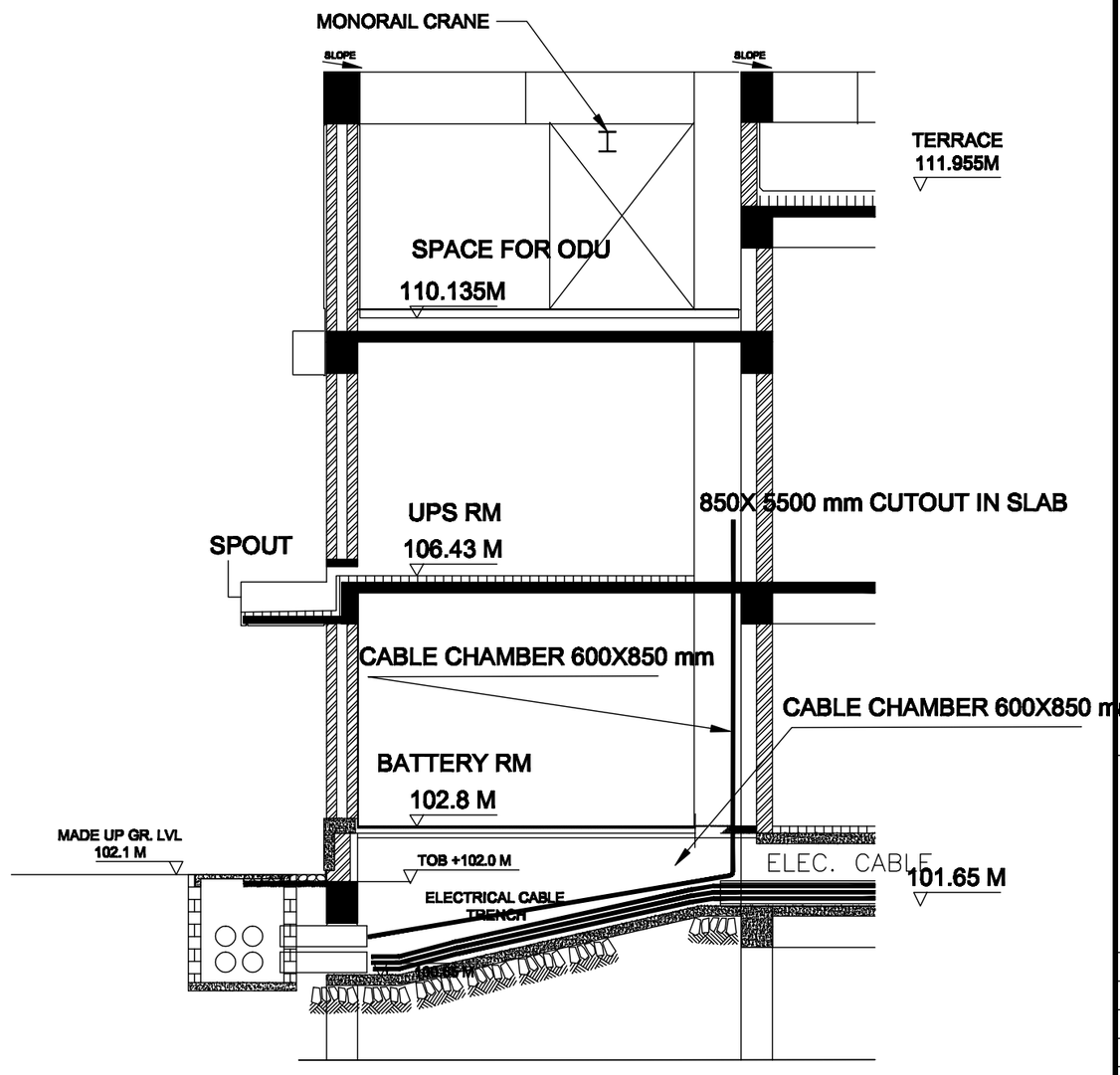


BATT. ROOM



UPS ROOM



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NOTE :- VENDOR SHALL CONFIRM ON THE SIZES OF UPS & BATTERIES & VISIT SITE FOR THE SAME

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abhiyanta
ELECTRICAL CONSULTANTS & ENGINEERS
AN ISO 9001:2008 Company
Shree Swami Krupa, Plot No.-6, Neelkamal Housing Society,
Karve nagar, Pune - 411052 . Tel/Fax.- 25462173, 25410691.
design@abhiyantaconsultants.com,
www.abhiyantaconsultants.com

CLIENT

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE

PROJECT

IITM HPC UPGRADATION

TITLE

UPS & BATTERY ROOM

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