# **E- TENDERS DOCUMENT**

for

AOMC of 01 Nos 33/11kV PSS and 06 nos 11/0.433kV DSS (DSS-A, DSS-B, Vivekanand, IT-OLD, Dhanrajgiri, Food Science) & Centralized SCADA system (upto 11kV) of IIT(BHU), VARANASI.

Tender No.:-IIT(BHU)/IWD/ET/03/2018-19/879

Tender Date: 06.07.2018

Last Date of Submission of bids: 27.07.2018

Tender Opening date: 28.07.2018



Indian Institute of Technology (Banaras Hindu University) Varanasi-221005

E-mail: office.iwd@iitbhu.ac.in

# **ABSTRACT OF COST**

NAME OF WORK:-

AOMC of 01 Nos 33/11kV PSS and 06 nos 11/0.433kV DSS (DSS-A, DSS-B, Vivekanand, IT-OLD, Dhanrajgiri, Food Science) & Centralized SCADA system (upto 11kV) of IIT(BHU), VARANASI.

| Sl. No. | Details of Sub-Head    | Amount<br>(in ₹) |
|---------|------------------------|------------------|
| 1       | Electrical O & M works | 72,00,000.00     |
|         | Say <b>₹</b>           | 72,00,000.00     |

This NIT containing pages 47 as per Index amounting to Rs. 72,00,000.00 is hereby approved.

Sd-Member Secretary IWC, Indian Institute of Technology(BHU), Varanasi

# **TABLE OF CONTENTS**

| Section | Subject   | Page no. |
|---------|---|----------|
| 1.      | Notice inviting tender (invitation for bids)  | 1-2      |
| 2.      | Instructions for online bid submission  | 3-5      |
| 3.      | INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE | 6-7      |
| 4.      | Check list of document to be uploaded & submitted   | 8        |
| 5.      | IWD, IIT e-TENDER   | 9-12     |
| 6.      | ITEM RATE TENDER & CONTRACT FOR AOMC WORK   | 13-19    |
| 7.      | GENERAL RULES & DIRECTIONS:   | 20-23    |
| 8.      | Part-B QUALITY ASSURANCE OF THE WORK  | 24-46    |
| 9.      | Technical specification   | 47       |

It is certified that this document contains total 47 pages.

**Sd-**MEMBER SECRETARY, IWC, IIT(BHU)





# NOTICE INVITING TENDER (INVITATION FOR BIDS)

1. Online bids are invited from manufactures or their authorized dealers, who submit/letter /certificate in originals from the manufactures that they have been authorized to bid in response to this NIT for the following electrical O & M works:-

| S.  | Tender no.          | Specifications & quantity of the item            | Earnest Money          |
|-----|---------------------|--|------------------------|
| No. |                     |  | Deposit (EMD)          |
| 1.  | IIT(BHU)/IWD/ET/03/ | Name of the Project: - AOMC of 01 Nos 33/11kV    |                        |
|     | 2018-19/879         | PSS and 06 nos 11/0.433kV DSS (DSS-A, DSS-B,     |                        |
|     |                     | Vivekanand, IT-OLD, Dhanrajgiri, Food Science) & | Rs. <b>3,60,000.00</b> |
|     |                     | Centralized SCADA system (upto 11kV) of          |                        |
|     |                     | IIT(BHU), VARANASI.                              |                        |
|     |                     | Estimated Cost Rs. 72,00,000.00                  |                        |
|     |                     | 1. Eligibility & Technical Criteria (Cover-1)    |                        |
|     |                     | 2. Financial Bid (Cover-2)                       |                        |

- 1. Interested eligible Bidders may obtain further information from IIT(BHU) website: <a href="https://eprocure.gov.in/eprocure/app">www.iitbhu.ac.in/iitnotifications/purchase\_enquiries/</a> or from Central Public Procurement Portal (CPPP) <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.
- 2. Intending bidders advised visit IIT (BHU) website are to **CPPP** www.iitbhu.ac.in/iitnotifications/purchase\_enquiries/ and website https://eprocure.gov.in/eprocure/app regularly till closing date of BID submission of tender for any corrigendum / addendum/ amendment.
- Earnest Money Deposit is to be submitted in the form of DD/FDR as per details mentioned in the
  critical data sheet. Bidders are required to submit the scan copy of payment receipt details of Tender
  fees and EMD at the time of Bid uploading.

#### **CRITICAL DATA SHEET**

| Name of Organization   | Indian Institute of Technology(BHU), Varanasi |
|--|---|
| Tender Type<br>(Open/Limited/EOI/Auction/Single)   | Open  |
| Tender Category (Services/Goods/Works)   | Services                                      |
| Type/Form of Contract  | Electrical Operation & Maintenance            |
| Product Category (Civil Works/Electrical<br>Works/Fleet Management/ Computer<br>Systems) | Electrical works                              |
| Date of Issue/Publishing Original Tender   | 06.07.2018 (10:00 Hrs)                        |

| Document Download Start Date             | 07.07.2018 (10:00 Hrs)   |  |
|--|--|--|
| Document Download End Date               | 27.07.2018 (15:00 Hrs)   |  |
| Last Date and Time for Uploading of Bids | 27.07.2018 (15:00 Hrs)   |  |
| Date and Time of Opening of Bids         | 28.07.2018 (15:30 Hrs)   |  |
| Tender Processing Fee                    | Rs.1000/- (To be paid through RTGS/NEFT) as per the following details:  Name of Account - Registrar, IIT(BHU)  Name of the Bank - State Bank of India  Name of Branch - IT, BHU, Varanasi  Account No 32778803937  IFSC Code - SBIN0011445  (The proof of payment must be uploaded in cover-1) |  |
| EMD                                      | Rs. 3,60,000.00 to be paid in the form of DD/FDR in the name of Registrar, IIT(BHU), Varanasi, payable at VARANASI. ( <b>Scanned copy of DD/FDR to be uploaded in cover-1</b> ) (Original to be submitted in cover-1 alongwith eligibility criteria and technical documents)                   |  |
| No. of Covers (1/2/3/4)                  | 02   |  |
| Bid Validity days (180/120/90/60/30)     | 180 days (From last date of opening of tender)   |  |
| Address for Communication                | The Chairman (IWC), Institute Works Department, IIT(BHU), Varanasi - 221005, U.P.  |  |
| Email Address                            | office.iwd@iitbhu.ac.in  |  |

## INSTRUCTIONS FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (<u>URL:http://eprocure.gov.in/eprocure/app)</u>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: http://eprocure.gov.in/eprocure/app.

## 1. Registration

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/TCS/nCode/eMudhra etc.), with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC/eToken.

#### 2. Searching for Tender Documents

- 1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### 3. Preparation of Bids

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### 4. Submission of Bids

- Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD/Tender fees is sought, bidders need to pay the tender fee and EMD separately on-line through RTGS.
- A standard BoQ format has been provided with the tender document to be filled by all the bidders.
  - Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### 5. Assistance to Bidders

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315

#### 6. General Instructions to the Bidders

- The tenders will be received online through portal <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. In the Technical Bids, the bidders are required to upload all the eligibility criteria documents in .pdf format.
- 2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

# INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE

Online bids are invited from manufactures or their authorized dealers, who submit/letter /certificate in originals from the manufactures that they have been authorized to bid in response to this NIT for the following electrical O & M works:-

| S.NO | Description  |  |
|------|--|--|
| 1    | NIT No.  | IIT(BHU)/IWD/ET/03/2018-19/879<br>Dated 06.07.2018   |
| 2    | Name of Works & Location   | Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 06 Nos. 11KV/433V DSS & Centralized SCADA system at IIT(BHU) campus, Varanasi U.P. |
| 3    | Total Estimated cost put to tender                                   | Rs. 72,00,000.00 (Seventy Two Lacs only)   |
| 4    | Earnest Money  | Rs. 3,60,000.00  |
| 5    | Period of Completion   | One year   |
| 6    | Last Date & Time of<br>Submission of Technical<br>and Financial Bids | 27.07.2018 (15:00 PM)  |
| 7    | Date of opening of technical bid                                     | 28.07.2018 (15:30 PM)  |

- 1. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.

  (a) Should have satisfactorily completed the Operation & maintenance. Johns mentioned below.
  - (a) Should have satisfactorily completed the Operation & maintenance Job as mentioned below during the last eight years ending 31<sup>st</sup>March, 2018: -
- (i) Three similar works each costing not less than Rs. 28.80 lacs or two similar works each costing not less than Rs. 43.20 lacs or one similar work costing not less than Rs. 57.60 lacs. (Scanned copy of successful work completion certificate to be uploaded in cover-1)

And

- (ii) One completed job of similar nature (either part of (i) above or a separate one) costing not less than Rs. 28.80 lacs with some Central Govt. Department/ State Government Department / Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking /City development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/ State Gazette.
  - Similar job shall mean "Annual Operation & Maintenance Contract for round the clock services for 33KV/11KV &11KV/433V Primary & Secondary Distribution System in any organization". The value of executed job shall be brought to the current costing level by enhancing the actual value of job at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for bids.
- (iii) Bidder should be the manufacturer of GIS panels and should have expertise on operation of substations through SCADA system.
- (iv) Bidder should maintain recommended spares of GIS (As per attached list in Annexure -1) in his warehouse for trouble free services.
  - (b) Should have had average annual financial turnover of Rs. 144.00 Lacs on similar works during the last three consecutive financial years ending 31<sup>st</sup> March 2018 (scanned copy of certificate from CA to be uploaded in cover-1)
  - (c) Should not have incurred any loss in more than two years during the last five years ending 31st March, 2018. (scanned copy of certificate from CA to be uploaded in cover-1)
  - (d) Should have a solvency certificate of at least Rs. 72.00 Lacs issued by Bank during the last six months (Scanned copy of original solvency certificate to be uploaded in cover-1)
- 2. The intending bidder must read the terms and conditions carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
  - The agency should also enclose along with the documents a separate annexure showing the details of the works which he intends to be considered for deciding his fulfillment of eligibility criteria as per the requirements of the NIT provisions.
- 3. Information and Instructions for bidders posted on website shall form part of bid document.

- 4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <a href="www.eprocure.gov.in">www.eprocure.gov.in</a> or <a href="www.eiitbhu.ac.in">www.iitbhu.ac.in</a> free of cost.
- 5. But the bid can only be submitted after giving the details of the mandatory documents such as Demand-Draft or Fixed Deposit Receipts or Bank Guarantee of any Scheduled Bank towards EMD in favor of Registrar, IIT(BHU), Varanasi and other scanned documents as specified.
- 6. Those contractors not registered on <a href="www.eprocure.gov.in">www.eprocure.gov.in</a> website, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 7. The intending bidders must have valid Class-III digital signature to submit the bid.
- 8. On opening date of the financial bid, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 9. Contractor can upload documents in the form of PDF format.
- 10. Contractor must ensure to quote rate of each item.
  - In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0".
  - Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
- 11. The department reserves the right to reject any prospective bid application without assigning any reason whatsoever and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- 12. The EMD can be paid in the form of Demand Draft or Fixed Deposit Receipts or Bank Guarantee of any Scheduled Bank. The intending bidder has to fill all the details such as Banker's name, Demand Draft/Fixed Deposit Receipt/ Bank Guarantee, amount and date/ bank Guarantee.

List of Documents to be scanned and uploaded in cover-1up to date and time mentioned above:

- 1. Certificates of Work Experience.
- 2. Certificate of Financial Turnover from CA.
- 3. Certificate of Registration for GST/IT
- 4. Bank Solvency Certificate issued by any scheduled bank.
- 5. Affidavit as per provision of Clause-1.2.2 of IWD, IIT e-TENDER
- 6. Any Other document as specified in Eligibility Criteria and/or in IWD, IIT(BHU), Varanasi e-TENDER

Sd-INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY(BHU) VARANASI List of Documents to be scanned and uploaded under cover-1 on e-tendering website and submitted up to the last date and time mentioned above in sealed cover-1 in office of IWD, IIT(BHU):

- a) Self Certified copy of documents clearly stating the status of bidder to be uploaded. OEM need not upload any such certificate.
- b) Documents regarding legal status of firm and written power of attorney of the signatory.
- c) Self certified copy of work completion certificate as per eligibility criteria.
- d) Scanned copy of technical eligibility criteria as mentioned that 1 (a) (iii) and (iv) provided by OEM.
- e) Solvency certificate from bank and scanned copy of DD/FDR for EMD.
- f) Affidavit as per 1.2.2 and proof of submission of tender processing fee.
- g) No loss certificate, turnover from CA, GST registration certificate, PAN card ESI, EPF etc.

## List of document to be uploaded upto the last date & time mentioned above in cover-2 (Financial Bid):

- a) Duly filled in priced BoQ.
- b) Duly signed and scanned copy of priced BoQ in PDF format.

(Kindly note that no physical submission of duly filled in BoQ is required and it is to be uploaded only on etendering website).

> Sd-MEMBER SECRETARY INSTITUTE WORKS COMMITTEE INDIAN INSTITUTE OF TECHNOLOGY(BHU) VARANASI

- 1. Online bids are invited from manufactures or their authorized dealers, who submit/letter/certificate in originals from the manufactures that they have been authorized to bid in response to this NIT for the following electrical O & M works:-
  - "Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 06 Nos. 11KV/433V DSS & Centralized SCADA system at IIT (BHU) campus, Varanasi U.P."
- 1.1 The works is totally estimated to cost Rs. 72,00,000.00 per annum inclusive of taxes & duties. This estimate, however, is given merely as a rough guide.
- 1.1.1 The competent authority to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the tenders.
- 1.2 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar jobs of magnitude specified below:-
- 1.2.1 Criteria of eligibility for submission of bid documents:

## Joint ventures are not accepted.

- (a) Should have satisfactorily completed the jobs as mentioned below during last eight years ending 31<sup>th</sup>March, 2018:
- (i) Three similar works each costing not less than Rs. 28.80 lacs or two similar works each costing not less than Rs. 43.20 lacs or one similar work costing not less than Rs. 57.60 lacs. (Scanned copy of successful work completion certificate to be uploaded in cover-1)

#### and

- (ii) One completed work of any nature (either part of (i) above or a separate one) costing not less than Rs. 28.80 Lacs with some Central Govt. Department/ State Government Department / Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking/ City development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/ State Gazette.
- (iii) Bidder should be the manufacturer of GIS panels and should have experience on maintenance of SCADA system necessary purchase orders should be shared.
- (iv) Bidder should maintain necessary spares of GIS like closing coils trip coils and motors for trouble free services.
  - The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for tenders.
  - Similar job means "Annual Maintenance Contract for round the clock services for 33KV/11KV &11KV/433V Primary & Secondary Distribution System in any organization"
- (b) Should have had average annual financial turnover of Rs. 144.00 lacs on similar works during the last three consecutive financial years ending 31<sup>st</sup> March, 2018 (**Scanned copy of certificate from CA to be uploaded in cover-1**). This should be duly audited by a Chartered Accountant. The year in which no turnover is shown would also be considered for working out the average.
- (c) Should not have incurred any loss in more than two years during the last five years ending 31st March, 2018.
- (d) Should have a solvency certificate of `Rs. 72.00 Lacs issued by Bank during the last six months. (Scanned copy of original solvency certificate to be uploaded in cover-1).
- 1.2.2 To become eligible for issue of tender, the contractors shall have to furnish an affidavit as under:-

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in IIT (BHU)in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/ (Scanned copy to be uploaded at the time of submission of bid).

- 2. Award of work contract/ order shall be placed on the successful tenderer on prescribed Format.
- 3. The time allowed for carrying out the AMC will be 12 Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 4. The site for the work is available.
- 5. The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from website <a href="www.eprocure.gov.in">www.eprocure.gov.in</a> or <a href="www.eprocure.gov.in"
- 6. After submission of the tender the contractor can re-submit revised tender any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the bid price, but before last time & date of submission of tender as notified.
- 8. The quoted base price shall remain FIRM till the complication of work.
- 9. a) Earnest Money can be paid in the form of Demand Draft or Fixed Deposit Receipt (drawn in favor of Registrar, IWD, IIT (BHU), Varanasi, payable at Varanasi) or Bank Guarantee of any Scheduled Bank wherever applicable in accordance with the Form annexed hereto having validity for 6 months or more from the last date of receipt of tenders shall be scanned and uploaded to the e-tendering website within the period of tender submission.
  - b) Tender processing fee Rs. 1000.00 Demand Draft or FDR or Bank Guarantee against EMD shall be placed in single sealed envelope superscripted as "Earnest Money" with name of work/job and due date of opening of the tender also mentioned thereon.
- 10. Copy of certificate of work experience, copy of category/ enlistment order, Audited Balance Sheet, Bank Solvency Certificate and other documents mentioned in the PQ Document shall be scanned and uploaded to the etendering website within the period of tender submission and certified copy of each shall be deposited in a separate envelope marked as "Eligibility Documents"

Both the envelopes shall be placed in another envelope with due mention of Name of work/job and due date of opening of tenders and to be submitted in the office of Registrar, IWD, IIT (BHU), Varanasi before last date & time of submission of bid and up to the documents submitted shall be opened at *Online Bid Documents* submitted by intending bidders shall be opened only for those bidders, whose Earnest Money deposit and other documents placed in the envelope are found in order.

- 11. The bid submitted shall become invalid and cost of bid & e-Tender processing fee shall not be refunded if:
  - (i) The bidders is found ineligible.
  - (ii) The bidders does not upload all the documents (including service tax registration/ VAT registration/ Sales Tax registration/IT registration) as stipulated in the bid document.
  - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.
- 12. The Earnest Money of the successful bidder shall be retained as performance guarantee/ security deposit till the completion of work.
- 13. Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent upon any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 14. The competent authority on behalf of the Institute does not bind itself to accept the lowest tender or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason whatsoever. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.

- 15. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 16. The competent authority on behalf of Institute reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 17. The contractor shall not be permitted to tender for works/job in the IWD IIT (BHU), if his near relative is posted as an officer in any capacity between the grades of Registrar and Assistant Engineer (both inclusive).. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 18. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 19. The bid for the works shall remain open for acceptance for a period of (120) one hundred twenty days from the date of opening of financial bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the re-bidding process of the work.
- 20. This notice inviting bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign contract/ work order consisting of:
  - a) The Notice Inviting bid, all the documents including Special Conditions, General Specifications/ Particular Specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b) Standard IWD,IIT (BHU) Contract/ work order and/ or other Standard IWD,IIT (BHU) form.
- 21. The tenderers shall quote price for each item strictly as per price schedule (BOQ). Any discount to be considered by the tenderers shall be included in the basic price in the price schedule (BOQ). Hence basic price shall be determined by the tenderers after considering the discount if any.
- 22. For Composite Tenders
- 22.1.1 The Assistant Registrar will call bids for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
- 22.1.2 The bid document will include following four components:
- Part A:-IWD,IIT(BHU) e-TENDER, IWD,IIT(BHU) FORM-1 including schedule A to F for the major component of the work, Standard General Conditions of Contract for IWD,IIT(BHU) as amended upto date.
- Part B:- General / specific conditions, specifications
- Part C: Schedule A to F for minor component of the work. (Executive Engineer of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F for major components)
- Part D:- schedule of quantities applicable to AOMC work.
- 22.1.3 The bidders must associate with himself, agencies of the appropriate class worked with IWD,IIT(BHU) and eligible to bid for each of the minor component individually.
- 22.1.4 The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of the bid.
- 22.1.5 After acceptance of the bid by competent authority, the Assistant Registrar/ executive engineer shall issue the letter of intent/contract order on behalf of the Institute.

- 22.1.6 Entire work under the scope of composite tender including major and all minor components shall be executed under the contract order.
- 22.1.7 The Earnest Money of the successful bidder shall be retained as performance guarantee/ security deposit till the completion of work.
- 22.1.8 The main contractor has to associate agency(s) for minor component(s) conforming to eligibility criteria as defined in the tender document and has to submit detail of such agency(s) to Engineer-in-charge of minor component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-charge of minor component(s).
- 22.1.9 In case the main contractor intends to change any of the above agency/ agencies during the operation of the contract, he shall obtain prior approval of respective Engineer-in-charge/ DDH of the agreement. The new agency/ agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge of respective discipline is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 22.1.10 The composite work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by Engineer-in-charge of major component after record of completion certificate of all other components.
- 22.1.11 Final or running bill of the work / job shall be finalized by IWD, IIT (BHU). No advance payment shall be made in any form.

However, payment along with all applicable taxes shall be made on monthly running bill basis.

22.1.12 It will be obligatory on the part of the tenderer to sign the tender documents for all components before the first payment is released

Sd-INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY IIT(BHU) VARANASI

# Institute Works Department, IIT(BHU), Varanasi

### ITEM RATE TENDER & CONTRACT FOR AOMC WORK

#### (A) Tender for the work of:

Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 05 Nos. 11KV/433V DSS & Centralized SCADA system at IIT(BHU) campus, Varanasi U.P.

(Time) (Date)

- (i) To be submitted 27.07.2018 (15:00 hrs.) in the office of Assistant Registrar, IWD, IIT(BHU), Varanasi.
- (ii) To be opened in presence of tenderers who may be present at 15:30 hrs. on 28.07.2018 in the office of the Administrative Building, Ground Floor, Committee Room, IIT(BHU), Varanasi

#### **TENDER**

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work/job specified for the President of India within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for 120 (one hundred twenty) days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of Rs. **3,60,000.00** is hereby forwarded in fixed deposit receipt of scheduled bank/demand draft of a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the Institute has to right to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that the Institute has to right to forfeit the said performance guarantee absolutely. The said performance guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in IWD,IIT(BHU) in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit. I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

| Dated:               |                         |
|----------------------|-------------------------|
|                      | Signature of Contractor |
| Witness:             | Postal Address          |
| Address: Occupation: |                         |

# **ACCEPTANCE**

| The above tender (as modified by you as provided in the letters Registrar, IIT (BHU) for a sum of |  |
|---|--|
|   |  |
| The letters referred to below shall form part of this contract / wo (a)                           | ork order                              |
| (b)   |  |
| (c)   |  |
|   | For & on behalf of Registrar, IIT(BHU) |
|   |  |
| Dated:  | Designation                            |

## PROFORMA OF SCHEDULES

(Separate Performa for Civil, Elect. & Hort. Works in case of Composite Tenders) (Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of AOMC work.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor on returnable basis

| S.No. | Description of item | Quantity | Rates at which the material will be charged to the contractor in case of non-return. | Place of issue |
|-------|---------------------|----------|--|----------------|
| 1     | 2                   | 3        | 4  | 5              |
| 1     | Megger              | 02       | Rs. 5,00,000/-   | IWD,IIT Deptt. |
| 2     | Multimeter          | 02       | Rs. 40,000/-   | IWD,IIT Deptt. |
| 3     | Tong tester         | 02       | Rs. 36,000/-   | IWD,IIT Deptt. |

#### SCHEDULE'C'

Tools and plants to be hired to the contractor

| S. No. | Description | Hire charges per day | Place of Issue |  |
|--------|-------------|----------------------|----------------|--|
| 1      | 2           | 3                    | 4              |  |
| NIL    |             |                      |                |  |

## SCHEDULE 'D'

Extra schedule for specific requirements/ document for the work, if any. As attached in tender form any

### SCHEDULE'E'

Reference to General Conditions of contract.

| Name of Work:       | Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 06 Nos. 11KV/433V DSS & Centralized SCADA system at IIT(BHU) campus, Varanasi U.P. |  |     |
|---------------------|--|--|-----|
| Estimated cost of t | the work per annum   | 1:   | Rs. |
| Earnest money       |  | Rs. 3,60,000.00<br>(To be retained only for success<br>Completion of the work) |     |
|                     | ,  |  |     |

## SCHEDULE 'F'

### **GENERALRULES & DIRECTIONS:**

| Officer inviting tender   | Assistant Registrar, IIT(BHU), Varanasi |
|---|---|
| Maximum percentage of quantity of items of work to be executed beyond which | NA                                      |
| Rates are to be determined in accordance                                    |   |
| with Clause 12.2.&12.3  |   |

#### Definitions:

2(v) Engineer-in-Charge

For Electrical items of work Assistant Engineer

IWD, IIT(BHU), Varanasi.

2(vii) Accepting Authority Chairman, IWC, IIT(BHU)

2(x) Percentage on cost of materials & labor

NA

to cover all overheads and profits

2(xi) Standard Schedule of Rates:

Electrical Items of Work: As per previously executed contract order.

2(xii) Department: IWD,IIT, IIT (BHU)

Clause 1 Clause 2

 Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance

NA

Number of days from the date of issue of letter of acceptance for reckoning date of start

NA

## Milestone/Bar Chart(s)-

#### **AOMC Period**

Authority to decide

Extension of time Engineer-in-Charge

Rescheduling of mile stone Engineer-in-Charge 12 Months

Shifting of date of start in case of delay in handing over of site

Engineer-in-Charge

Clause 6, 6A Clause applicable

Clause6A

Clause7 Gross work to be done together with net payment/Adjustment

of advances for material collected, if any, since the last such

NA payment for being eligible to interim payment

List of testing equipment to be provided by the contractor at

site lab. Clause10A

Refer page No. 38 Whether clause 10-B (ii) shall be applicable.

No Clause 10B (ii) Component of labour expressed as 80%

Clause10C percentage of value of work

Materials covered Nearest material for which

Under this Clause10CA NA

clause. All IndiaWholesale Price

Index/ prevailing market rate is to be followed.

Clause 10 CC: Clause 10 CC to be applicable in contracts with stipulated period of completion NA exceeding the period shown in next column Schedule of component of other Materials, Labour, POL etc. for price escalation

## Clause11 Specification to be followed for execution of work:

For Electrical items of work Best practice of power corporation& power grid and other Indian electricity rule.

| Clause12   |  |     |
|------------|--|-----|
| 12.2 &12.3 | Deviation limit beyond which clause 12.2 &12.3 shall apply for AOMC work | 30% |
|            |  |     |

| Clause16 | Competent Authority for Deciding reduced rates:                              |                            |  |  |  |
|----------|--|----------------------------|--|--|--|
|          | For Electrical items of work  Chairman, IWC  IIT (BHU), Varanasi.            |                            |  |  |  |
| Clause18 | Mandatory machinery tools & plants to be deployed by the contractor at site. | As per standard practices. |  |  |  |

## Clause25

| Constitution of Dispute Redressal<br>Committee(DRC) | Competent Authority to appoint DRC |
|---|------------------------------------|
| DRC shall constitute one Chairman and two members   | The Director, IIT(BHU), Varanasi.  |

## Clause36(i) Requirement of Technical Representative(s) and Recovery Rate

| Sl. | Minimum                     |                        | Designation                        |            |           | Rate at wh   | nich recovery        |
|-----|-----------------------------|------------------------|------------------------------------|------------|-----------|--|----------------------|
| No. | Qualification of            | Discipline             | (Principal                         |            | number    | shall be made from the   |                      |
|     | Technical<br>Representative |                        | Technical/Technical representative |            |           | Contractor in the event of not fulfilling provision of Clause 36 (i) |                      |
|     |                             |                        |                                    |            |           | Figures  | Words                |
| 1   | Graduate                    | Electrical             | Site In-charge                     | 7          | 1         | 60,000/-   | Sixty Thousand       |
|     | Engineer                    | Engineering            |                                    | Years      | No.       | pm   |                      |
| 2   | Diploma                     |                        | Shift In-charge                    | 4          | 3         | 25,000/-   | Twenty Five Thousand |
| 2   | Engineer                    | Electrical Engineering | Shift in-charge                    | Years      | Nos.      | pm   | Twenty Five Thousand |
|     |                             |                        |                                    |            |           |  |                      |
| 3   | ITI holder                  |                        | Senior<br>Electrician              | 7<br>years | 4<br>Nos  | 18,000/-<br>pm   | Eighteen<br>Thousand |
|     |                             | ITI Elect.             |                                    |            |           |  |                      |
| 4   | ITI holder                  | ITI Fitter             | Fitter                             | 7<br>years | 2<br>Nos. | 18,000/-<br>pm   | Eighteen Thousand    |
| 5   | ITI holder                  | ITI Elect.             | Electrician<br>cum Helper          | 5<br>years | 4<br>Nos  | 15,000/-<br>pm   | Fifteen Thousand     |

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

### **GENERAL RULES & DIRECTIONS:**

- 1. All work proposed for execution by contract will be notified in a form of invitation to tender pasted in public places and signed by the officer inviting tender or by publication in News papers as the case may be.
  - This form will state the work to be carried out, as well as the date of submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.
- 2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power holding a power-of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
- 3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
- 4. Any person who submits a tender (applicable for item rate tender only) shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one.

In case the lowest tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.

In the revised tender amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE & the lowest contractors those have quoted equal amount of their tenders.

In case of any such lowest contractor in his revised offer quotes rate of any items more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited.

In case all the lowest contractors those have same tendered amount (as a result of their quoted rate individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors.

Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission on his bid shall not be allowed to participate in the re-tendering process of the work.

- 4A. In case of Percentage Rate Tenders, tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule- A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:
  - (i) The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.
  - (ii) The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.
  - (iii) The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender:

Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who

wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

In case the lowest tendered amount of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter but the revised offer value should not be higher than the tender value quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor. Contractor(s), whose earnest money is forfeited because of non- submission of revised offer, shall not be allowed to participate in the retendering process of the work.

- 5. The officer inviting tender or his duly authorized assistant will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule-I. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
- 6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
- 8. The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue-rates, shall be filled and completed in the office of the officer inviting tender/ Executive Engineer before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
- 9. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.
- 9A Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.
- 10. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
- 10A. In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.
- 11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
- 12. All rates shall be quoted on the price schedule in .xls form (BoQ).
  - The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figure and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.

- 12A. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.
- 13. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in- Charge shall be communicated in writing to the Engineer-in- Charge.
- 14. GST or any other tax applicable in respect of this contract shall be payable by the Contractor and Institute will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid to the contractor by the concerned department on demand.
- 15. The contractor shall give a list of both gazetted and non-gazetted Institute employees related to him.
- 16. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
- 17. The tender for composite work includes, all other works such as electric supply installations electrical work etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.
- 18. The contractor shall submit list of works which are in hand (progress) in the following form:-

| Name of | Name and       | Value of Work | Position of | Remarks |
|---------|----------------|---------------|-------------|---------|
| Work    | Particulars of |               | works in    |         |
|         | Divn. Where    |               | Progress    |         |
|         | work is being  |               |             |         |
|         | executed       |               |             |         |

- 19. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Registrar /Assistant Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
- 20. The contractor shall comply with the provisions of the U.P state construction and labor laws& Indian Electricity rule
- 21. The contractor shall have to submit, if required his valid labour license & employees provident fund registration documents before commencement of work
- 22. All the statutory deductions viz. Income Tax, GST etc. if required, shall be made from the contractor's bills as per rules/regulations/acts in force

## SALIENT/ MANDATORY REQUIREMENT FOR THE TENDER

Name of Work: Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 06 Nos. 11KV/433V DSS & Centralized SCADA system at IIT(BHU) campus, Varanasi U.P.

The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.

- 1. Separate schedule of quantity is included in this tender for AOMC for the round clock services. The contractor shall quote the item rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 2. Period of AOMC is 12 months.
- 3. The contractor(s) shall submit a detailed programme of activities of AOMC within fifteen days from the date of issue of award letter/order.
- 4. Quality of the AMC services is of utmost importance. This shall be adhered to in accordance with the provisions of IWD, IIT specifications and guidelines given in the relevant paras.
- 5. The contractor (s) shall make his own arrangements for Transportation required for providing the AMC services.
- 6. Contractor has to deploy required tools & Plants and machinery in the AMC work. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
- 7. The contractor shall submit the running bills on monthly basis in the standard format.
- 8. The contractor shall submit list of works which are in hand (progress) in the following form

| Name<br>work | of | Name<br>particulars<br>Divn.<br>work is<br>executed | and<br>of<br>where<br>being |   | Position of works in progress |        | Remarks |
|--------------|----|---|-----------------------------|---|-------------------------------|--------|---------|
|              |    |   |                             |   | Stipulated                    | Actual |         |
| 1            |    | 2   |                             | 3 | 4                             | 5      | 6       |
|              |    |   |                             |   |                               |        |         |

9. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Registrar/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

# PART-B

## QUALITY ASSURANCE OF THE WORK

- 1. The contractor shall ensure quality control measures on different aspects of AMC services including materials, workmanship and correct maintenance methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 2. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
  - The representatives of the department shall be at liberty to inspect the testing procedure at site and conduct testing at random in consultation with Engineer in charge. The contractor shall provide all necessary facilities for the purpose.

#### B) Other Laboratories:

- 1. The contractor shall arrange carrying out of all tests required under the contract order through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing.
- 2. However, no testing charges will be payable to the contractor for the tests.
- C) Sampling of Materials:
  - 1. Maintenance of register of tests and material at site registers-
  - (i) All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to IWD,IIT (BHU) field staff.
  - (ii) All the MAS Registers shall be maintained by contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to IWD,IIT (BHU)field staff.

#### ADDITIONAL TERMS AND CONDITIONS

- 1. Till the work is almost completed to the satisfaction of Engineer-in-Charge-
- (i) Contractor shall not divert any advance payments or part thereof for any purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and/required to be re-invested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
- (ii) All running account bills preferred by the contractor for advance payments shall be processed only if Engineer-in-charge is satisfied that upto date investments (excluding security deposit & performance guarantee, which are not considered as investments) made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of upto date payments received vis -à-vis upto date investments made on the work to enable Engineer-in-charge to check to his satisfaction that the payments made by Engineer-in-charge are properly utilized only on the work and nowhere else.
- 2. Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same.
- 3. The contractor shall make his own arrangement for obtaining electric connection(s) if r Required and make necessary payments directly to the department concerned.
- 4. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 5. Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 6. The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality by their rules and regulations and pay all fees and charges f r which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 7. The contractor shall give a performance reports of the entire installation(s) as p er standing specifications before the work is finally accepted by making his own arrangements for electricity AOMC for substations etc. and nothing extra whatsoever shall be payable for the same.
- 8. If as per local Municipal regulations, huts for labour are not to be erected at the site of work, the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
- 9. The control and power drawings shall at all times be properly co-related before executing any work.
- 10. It shall be ensured by the contractor that no electric live wire Bus is left exposed or unattended to avoid any accidents in this regard.
- 11. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the departments as to be safe against damage by sun, rain, dampness, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose, at his own cost. Materials to be charged directly to work and stipulated for issue free of cost shall also be issued to the contractor as soon as those are received at site or at the stipulated place of issue. The provision of this para shall apply equally and fully to those as well.
- 12. All materials obtained from the IWD,IIT (BHU) stores shall be got checked by the Engineer-in-charge of the work or his representatives before use.
- 13. Final bill of whole work shall be finalized and paid by Assistant Engineer.
- 14. Assistant Engineer (Electrical) will prepare and pass the final bill for AOMC work and will pass on the same to Executive Engineer for including in the final bill for composite work.

## **SPECIAL CONDITION FOR MATERIALS**

- 1. The contractor shall at his own expense procure and provide all consumable materials
- 2. The contractor shall procure all the materials in advance so that maintenance work could not get hampered.
- 3. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 4. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.

# MANDATORY LIST OF MACHINERY, TOOLS & PLANTS TO BE DEPLOYED BY THE CONTRACTOR AT SITE AS & WHEN REQUIRED

| Sl. No. | Name of Equipment   | Numbers     |
|---------|---|-------------|
| 1.      | Testing equipment as & when required  | Lot         |
| 2.      | Diagnostic kit for MV/LV breakers to identify deterioration Of insulating material / hot spots on various electrical equipment's to idensafety issues in advance. | tify<br>Lot |
| 3.      | Equipment for hoisting & lifting as & when required   | 2 Set       |
| 4.      | Drilling machine  | 3 Sets      |
| 5.      |   | 2 Set       |
| 6.      |   | 3 Sets      |
| 7.      | D-Spanner Set, Ring spanner Set, Slide wrench, Hammers, Chissels,   | 2 Sets      |
|         | Screw driver set, Crimping tools, Discharge rod & Cutting plier set   |             |
|         | etc   |             |

# Form of Earnest Money Deposit

## Bank Guarantee Bond

| WHEREA     | AS, contractor  | (Name of contractor) (hereinafter called "the contractor") has   |
|------------|---|--|
| submitted  | his tender dated                                      | (date) for the construction of   |
|            |   |  |
|            |   | (name of work) (hereinafter called "the Tender")   |
| KNOW A     | .LL PEOPLE by these p                                 | resents that we(name of  |
| bank) hav  | ing our registered office                             | at (hereinafter called "the Bank") are   |
| bound unt  | o   |  |
|            |   |  |
| (hereinaft | er called "the Engineer-i                             | n-Charge") in the sum of `.  |
|            | (` in words   | ) for which payment well   |
| and truly  | to be made to the said E                              | ngineer-in-Charge the Bank binds itself, his successors and  |
| assigns by | these presents.                                       |  |
| SEALED     | with the Common Seal                                  | of the said Bank this day of   |
| THE CON    | NDITIONS of this obliga                               | ation are:   |
| (1)        |   | g the Contractor withdraws, his tender during the period of validity of tender<br>validity of tender) specified in the Form of Tender; |
| (2)        | If the contractor having                              | ng been notified of the acceptance of his tender by the Engineer-in-Charge:  |
| (a)        | fails or refuses to execontractor, if required        | cute the Form of Agreement in accordance with the Instructions to ;  |
|            |   | OR   |
| (          | (b) fails or refuses to fur<br>document and Instru    | mish the Performance Guarantee, in accordance with the provisions of tender ctions to contractor,                                      |
|            |   | OR   |
| (          | (c) fails or refuses to sta<br>Instructions to contra | art the work, in accordance with the provisions of the contract and actor,   |
|            |   | OR   |
| (          |   | bmit fresh Bank Guarantee of an equal amount of this Bank Guarantee, posit after award of contract.                                    |

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

DATE ..... SIGNATURE OF THE BANK

WITNESS ..... SEAL

(SIGNATURE, NAME AND ADDRESS)

<sup>\*</sup>Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

## SCOPE OF WORK & SPECIFICATION FOR AOMC, IIT (BHU), VARANASI, U.P.

Scope of work for Annual Operation & Maintenance Contract for round the clock services for 01 No. 33KV PSS (with GIS Panels & AIS), 05 Nos. 11KV/433V DSS & Centralized SCADA system at IIT(BHU) campus, Varanasi U.P.

#### 1. SCOPE OF SERVICES

Operation & Maintenance services for 05 Nos. 11KV/433V DSS, 01 No. 33 PSS (with GIS Panels & AIS) & Centralized SCADA system as per the existing equipment details.

The work has to be carried out as per the best engineering practices and in accordance with the OEMs instruction manuals. The scope shall include annual operation & maintenance contract for scheduled/Preventive and breakdown Maintenance at 06 Nos. 11KV/433V DSS, 01 No. 33 PSS (with GIS Panels & AIS) & Centralized SCADA system covering the following equipments:

| Sl.No.    | Equipment Details                    | Make                  | Unit | Qty |  |  |
|-----------|--------------------------------------|-----------------------|------|-----|--|--|
| 33 KV PSS |                                      |                       |      |     |  |  |
| 1         | Transformer 6/7.5MVA                 | SEIL                  | Nos. | 2   |  |  |
| 2         | Transformer 1 MVA                    | SEIL                  | Nos. | 4   |  |  |
| 3         | 33KV GIS PANEL 6 PANEL BOARD         | SEIL                  | Nos. | 1   |  |  |
| 4         | 33KV Od Isolator with E/S            | SIEMENS               | Nos. | 2   |  |  |
| 5         | 33KV Od Isolator without E/S         | SIEMENS               | Nos. | 2   |  |  |
| 6         | 33KV Od LA                           | CGL                   | Nos. | 30  |  |  |
| 7         | 11KV VCB PANEL HWX 12 PANEL<br>BOARD | SEIL                  | Nos. | 1   |  |  |
| 8         | ALCP                                 | SEIL                  | Nos. | 1   |  |  |
| 9         | DCDB                                 | HBL                   | Nos. | 1   |  |  |
| 10        | ACDB                                 | SEIL                  | Nos. | 1   |  |  |
| 11        | BATTERY BANK                         | HBL                   | Nos. | 1   |  |  |
| 12        | LT PANEL BOARD                       | SEIL                  | Nos. | 1   |  |  |
| 13        | RTU PANEL                            | SEIL                  | Nos. | 1   |  |  |
| 14        | RCS PANEL                            | SEIL                  | Nos. | 2   |  |  |
|           | 11KV D                               | SS                    |      |     |  |  |
| 15        | 11KV VCB PANEL HWX 8 PANEL<br>BOARD  | SEIL                  | Nos. | 1   |  |  |
| 16        | 11KV VCB PANEL VMX 6 PANEL<br>BOARD  | SEIL/ALSTOM           | Nos. | 1   |  |  |
| 17        | 11KV VCB PANEL 7 PANEL BOARD         | SIEMENS               | Nos. | 2   |  |  |
| 18        | 11KV VCB PANEL 6 PANEL BOARD         | SIEMENS               | Nos. | 1   |  |  |
| 19        | Transformer 0.5MVA                   | ALSTOM                | Nos. | 12  |  |  |
| 20        | RCS PANEL                            | JASPER/KAYBEE/SEIMENS | Nos. | 5   |  |  |
| 21        | ALCP                                 | SEIL/JASPER/KAYBEE    | Nos. | 1   |  |  |
| 22        | DCDB                                 | HBL/DUBAS             | Nos. | 5   |  |  |
| 23        | ACDB                                 | SEIL/RECON/L&T/ESSAR  | Nos. | 5   |  |  |
| 24        | LT PANEL BOARD                       | SEIL/RECON/L&T/ESSAR  | Nos. | 10  |  |  |
| 25        | BATTERY BANK                         | HBL/DUBAS             | Nos. | 5   |  |  |
| 26        | RTU PANEL                            | SEIL                  | Nos. | 6   |  |  |
| 27        | Earthing station                     |                       | LOT  | LS  |  |  |
| 28        | SCADA System                         | SEIL                  | Nos. | 3   |  |  |

#### 2. DEFINING SCOPE OF WORK

The scope for maintenance is detailed as below, activity wise:

#### Daily Schedule

- 1. Monitoring of power transformer parameters such as a. Winding temperature
- b. Oil temperature c. Oil level and
- d. Checking of oil leakage, if any, and take immediate corrective action to stop leakage.
- 2. Cleaning of HT and LT panels externally as per schedule
- 3. Check auxiliary supply and control voltages.
- 4. Check condition of indication lamps provided on HT and LT panels.
- 5. Check the battery bank and battery chargers for proper functioning.
- 6. Test annunciation and reset, take corrective action whenever necessary.
- 7. Check incoming voltage of grid and take corrective action accordingly if needed.
- 8. Record all the operational parameters on log book or log sheet hourly.

#### Weekly Schedule

- 1. Carry out preventive maintenance as per the check-lists, equipment manuals and as per the instructions of IIT (BHU)'s designated representative.
- 2. Operate the battery charger in float and boost mode (CC & CV) as per schedule.
- 3. Rectify the faults / causes of faults.
- 4. Carry out battery and battery charger preventive maintenance as per schedule.
- 5. IIT(BHU) will arrange a common meeting at every fortnight and discuss the various problems/ issues.
- 6. Check the condition of Silica gel and replace it if needed.

#### Monthly Schedule

- 1. Checking the discharge devices and fuses.
- 2. Carry out preventive maintenance of battery charger and load test for chargers in both Float and Boost mode.
- 3. Prepare list of spares and material required for carrying maintenance work and submit it to IIT (BHU)'s designated representative in advance for better material management.
- 4. To advice IIT (BHU) for better spares planning and spares management.

#### Quarterly Schedule

- 1. Checking the overall condition of radiators and transformers.
- 2. To carry out mock drills.
- 3. Check earth pits for substations and water the earth pit of substations as per schedule of preventive maintenance or as and when deemed necessary and submit a report. (Water & watering facility shall be provided by IIT (BHU)).
- 4. Check the overall condition of circuit breakers, isolators and its contact, P.T., CTs' and other electrics.
- 5. Greece the isolators contacts and apply petroleum jelly on battery terminals.

#### Half Yearly Schedule

- 1. Testing of transformer safeties such as Buchholz relay, winding temperature, oil temperature indicator, oil gauges during routine preventive maintenance.
- 2. Earth resistance testing for earth pits, using own instruments and submit report for the same restricted to the area as covered in our scope.
- 3. Expert Engineers team from other unit shall visit to IIT (BHU) campus at least once during six months barring as & when required for testing of Relays, Switchgears & Transformers.
- 4. Test for detecting partial discharge inside GIS
  - Exclusions (For GIS):
  - i. Timing & HV Test –As this cannot be performed without uninstalling the cables
  - ii. Removal of mechanism or its parts for maintenance
  - iii. Removal of cables
  - iv. Drying of SF6 Gas
  - v. Rectification of any major problem found during health check up.
  - vi. Any Spares if required shall be extra & will be quoted at the time of Servicing only.

## IIT (BHU) should provide following, without any charges –

- i. Take necessary shutdown and provide switchgear in Dead condition
- ii. All standard tools & tackles
- iii. Vacuum Cleaner / Cleaning cloth/Industrial Alcohol/other consumables
- iv. SF6 Measurement Kit
- v. Dew Point measurement kit
- vi. Gate pass arrangement for our team with necessary tools & tackles
- vii. Engineer in charge as single point contact for shutdown coordination & planning
- viii. All drawings, manuals, SLD's & protection schemes etc, required for reference
- ix. Drinkable water at site.
- x. Medical Facility in case of any emergency

## **ANNEXURE-1**

## (Spare List of GIS)

- i) Closing coil
- ii) Tripping coil
- iii) Spring charge motor coil

# General

- 1. To carry out all such jobs to ensure proper health of installations and to ensure uninterrupted power supply.
- 2. To carry out switching ON/OFF as and when required and restoration of breakdown during power failures and emergency.
- 3. To attend all electrical complaints related to PSS, DSS & SCADA System.

#### Breakdown

Since ring main system has been provided it is possible that the alternate feed of power could be made in case of breakdown / tripping of one or a few breakers. It is of utmost importance that the affected loads are restored as soon as possible.

The following activities are envisaged for a prompt power recovery:-

- a) Maintain all switch board in ready condition (except those that have been taken under planned outage). The various maintenance schedules planned shall been executed and records of all such activity shall be maintained. This will ensure availability of the redundant system.
- b) Maintain the updated status of all the switchboards at the central control room and make the information available to IIT (BHU), so that a strategy can be planned in case of such an unscheduled outage. This information will be collected by the staff of IIT (BHU) during the daily condition monitoring of the equipment's.
- c) All no power complaints as per our battery limits (which is maintaining power to outgoing of LT panels) will be attended at the earliest possible and depending on the priorities at hand of the maintenance teams. No penalty clause shall be applicable for delayed attention to such complaints. Priorities shall be decided in consultant with IIT (BHU) officials, if required.
- d) The boundary of responsibility of all such complaint for no supply in the workshops shall be limited to the restoration of supply till the LT outgoing terminal in the DSS.
- e) All LT feeders including overhead bare conductors, Underground/OH LT cables shall be maintained by IIT (BHU).

Contractor will be responsible for maintaining the health of the equipment's to ensure reliability of power supply at all areas.

Break down maintenance & repairing for cable joints for 11KV& 33KV cable shall be done by contractor.

Required material, spares shall be supplied free of cost by IWD,IIT, IIT (BHU).

Restoration of Power after Breakdown

Every effort will be made by contractor to keep this time taken for change over to a minimum.

The following activities are envisaged for a prompt power recovery:

a. Maintain all switch board in ready condition (except those that have been taken under planned outage). The various maintenance schedules planned shall been executed and records of all such activity shall be maintained. This will ensure availability of the redundant system.

Maintain the updated status of all the switchboards at the central control room and make the information available to IIT (BHU), so that a strategy can be planned in case of such an unscheduled outage. This information will be

- b) Collected by the staff of IIT (BHU) during the daily condition monitoring of the equipments.
- c) All no power complaints as per battery limits (which is maintaining power to outgoing of LT panels) will be attended at the earliest possible and depending on the priorities at hand of the maintenance teams. Priorities shall be decided in consultation with IIT (BHU) officials, if required.
- d) The boundary of responsibility of all such complaint for no supply in the workshops shall be limited to the restoration of supply till the LT outgoing terminal in the DSS.
- All LT overhead bare conductors, Underground/OH LT cables shall be maintained by IIT (BHU).
   Contractor will be responsible for maintaining the health of the equipment's to ensure reliability of power supply at all areas.

#### Activity based service provision

This contract shall be an activity based service contract, vesting responsibility on contractor to complete the preventive/planned and breakdown maintenance activity on the equipments listed in Annexure1.

This AOMC incorporates the following elements and critical parameters:

- 1. Attending "no power supply" complaints.
- 2. Power management.
- 3. Conducting preventive maintenance as per checklist and schedule.
- 4. Cable fault finding limited to 11kV and 33kV.
- 5. Recommendations for spares.
- 6. Attending to complaints in HT/LT breakers.
- 7. Abiding to all safety rules and following safe practices.
- 8. Target zero accident.
- 9. Limiting personnel turnover.

#### Proposal for step wise responsibility sharing

- a. The vesting of responsibility for the maintenance and services activities with contractor with the associated necessary management freedom to implement changes and introduce innovation.
- b. A balanced sharing of technical and commercial risks.

# Planned resources and organization

- a. Contractor shall deploy the Maintenance team for three shifts on Round the Clock basis.
- b. Contractor shall also deploy personnel as required for breakdown and emergency services on listed Equipments as at Annex 1 at Central Control Room & all DSS.
- c. The Overall In-Charge shall be responsible for co-ordination, compilation and submission of Reports and MIS, co-ordination of all Logistics and Teams Movement as per planned schedule and unscheduled Services.

# 33/11KV 6MVA Power Transformer & 1000KVA/500KVA, 11KV/433V Distribution Transformer :-

- Routine, scheduled, preventive and Breakdown maintenance of Power/station transformers.
- Monitoring and recording of transformers parameters such as winding temperature, oil temperature and oil level.
- Checking of transformer tank, OLTC and other body parts for any rust or leakage.
- Checking for oil leakage, if any, and take immediate action to stop leakage. (If transformer is required to be sent outside for any modifications/repair/overhauling, the cost shall be borne by Customer).
- Oil tank to be topped up at regular interval (oil to be provided by IIT (BHU).
- Condition assessment of silica gel in breather and replacement of silica gel (Supplied by IIT (BHU) when required, checking and maintaining breather conditions and conservator oil levels.
- The transformer oil filtration to be done annually, testing of the oil for BDV once in six months, DGA & acidity & PPM testing for Power transformers once in a year, can be carried out by Contractor at extra cost.
- Checking & maintaining earth pits & earth connections. Water the earth pit as per schedule of preventive maintenance or as and when required.
- Quarterly checking of overall condition of radiators and transformer main tank and cleaning the same if required.
- Periodical inspection of cooling fans for its manual and automatic control, interlocks. Cleaning fan blades S& removing dust. Lubrication of fan motors if necessary.
- Testing of transformer safeties such as Buchholz relay, temperature indicators and oil gauges during routine
  preventive maintenance.

# CT and PT:-

- Routine, scheduled, preventive and Breakdown maintenance of 11KV Current transformers and potential transformers as per OEM manual.
- Measure IR Values as per schedule and maintain record.
- Checking earth connections of secondary circuits.
- Checking and tightening of secondary circuits.
- Cleaning of bushings and oil level indicators.
- Maintenance of CT JB/PT JB.
- Measurement of voltages at marshalling box & control room in case of CT/PT.

#### <u>Isolators</u>:-

- Cleaning of Contact S& Aux. Contact, Greasing in the control mechanism.
- Routine, scheduled, preventive and Breakdown maintenance of 33KV and 11KV Isolators as per OEM Manual.
- Checking of Earth switch copper flexible.
- Check earth connections of earth blade.
- Cleaning of insulators & checking for cracks in the insulators.
- Cleaning of main contacts, arching horns, earth blade.
- Changing of male/Female or moving/fixed arm, changing of connectors/hardware and attending all the incidental troubles to ensure smooth operation of the Isolators (Spares by IIT (BHU).
- Checking to ensure all the lamp are glowing (Spares by IIT (BHU).
- Necessary ckt checking & Motor checking & setting to put the remote operation in service.

# **Lighting Arrestors:**-

- Cleaning of LA stacks.
- Visual observation of any cracks.
- Check earth connections at LA and Electrode.
- Check Counter enclosure for any moisture ingress.
- Determine IR values and record it.
- Check for leakage current and surge counter.
- Record leakage value & counter value.

#### Switchgear Panels:-

All preventive, scheduled and break-down maintenance of 11KV switchgear panels (Breaker Panel) as per OEM manual.

- Cleaning of panels as per the agreed schedule.
- Schedule maintenance of 11KV Breaker trolley.
- Check auxiliary supply and control voltage, test and check breaker mechanical interlock.
- Understanding control circuits & various electrical interlocking.
- To carry out switching ON/OFF, load transfer operations as and when required.
- Isolation & Re-energization of feeders as per the demand of operation and taking prior work permit from IIT (BHU).
- Replacement of control and power fuses/indication lights/fixed and moving contacts/close & trip coil. (supplied from IIT (BHU)).
- Check tightness of circuit & earth connections. Test insulation resistance.
- Examination of auxiliary switches, indication devices and interlocks to ensure that they are in good order.
- Measuring load current & maintain transducers/ammeter/energy meter / relays/CTs/PTs/ Earthing Connections.

# Protection and Metering Systems:-

- To check the tightness of control circuits/auxiliary supply/signal and protective relays.
- Note the hourly reading as per the schedule.
- Note down energy meter readings for all outgoing feeders for analysis.
- And prepare report.
- Test annunciation and reset, take corrective action whenever necessary.
- Cleaning, checking of all the bi-metal & numeric relays of 33KV, 11KV, 0.415KV and Control Relays Panels.
- Relay testing (Primary & Secondary) for Control Relay Panel & 11KV Switchgear as per schedule.
- Energy meter calibration shall be carried out at extra cost.

# Battery and Battery Charger :-

- O & M of battery & charger, involves checking and recording of general, appearance and cleanliness of battery, charger output current & voltage, electrolyte levels, any crack/leakage in cells, evidence of corrosion at terminals/connectors and condition of ventilation, as per OEM manuals.
- Tightness of bolted connection.

#### Earth Pits and Lighting Protection:-

- Maintain firefighting equipment like fire extinguishers, fire fighting systems, smoke detectors, CO2/DA Cylinders
  etc. immediate replacement/recharge after the operation offire extinguishing equipments.
- Check earth pits water the earth pits as per schedule of preventive maintenance or as and when required. The values of each pit resistances of higher values are recorded and suitable action taken.
- Periodical inspection of earth electrode is conducted connection to ensure their rigidity and others signs of deterioration.
- Check/maintain all equipment earthing connections.
- Periodical inspection of all lightning protective system. Mechanical condition of all conductors, bonds, joints and earth electrode are checked and observations noted.

#### Busbar/ Conductor :-

- Check General Conditions of Busbar/conductors & insulators.
- Check for conductor damage or loose strands.
- Clean busbar/ conductor & insulators.
- Check tightness & condition of hardwares and fastners.
- Check condition of connectors & fittings for rusting & oxidation.

#### 3. EXCLUSIONS:

Exclusion (not covered) under the scope of the contract for maintenance of substations and other electrical at IIT (BHU) are as listed below:

- 1. Major repairs and overhauls which if at all be done shall be carried out by contractor at an extra cost to be mutually agreed upon.
- 2. Movement/Erection and commissioning, De-commissioning of any equipment.
- 3. Repair and Supply of any Furniture in Substation.
- 4. Cleaning of Toilets in control room/switchyards.
- 5. Repair of Roofs/Cracks.
- 6. Restoration of Water Drainage.
- 7. Restoration of Water supply to Substation.
- 8. General Building maintenance in such Substations.
- 9. Equipment painting including supply of paint.
- 10. Civil works and repairs.
- 11. Calibration of Energy meters at government approved labs.
- 12. Load testing of cranes and other lifting tackles.
- 13. Painting and distempering of walls, shutters and doors in the building and control rooms
- 14. Vermin/Pest Control.
- 15. Supply of spares.
- 16. Cranes, O/H hydraulic ladders, etc if required shall have to be arranged by IIT (BHU).
- 17. LT overhead network shall be maintained by IIT (BHU)
- 18. UPPCL metering and CT PT combined unit.
- 19. Any modification in existing install-base.

Contractor's scope shall be limited to providing power upto the outgoing feeder of LT terminal Board within the DSS & PSS. IIT (BHU)shall provide an enclosed secure office space in the central area for contractor for permanent service line (single point of contact) and storage/ archiving of all drawings and documents. IIT (BHU) shall provide the above office in a location having sufficient storage space for safe storage of testing Equipment / Consumables / records / documents / Reports / Emergency Spares.

The following meters and tools to be provided by IIT(BHU) to Contractors for routine, preventive and breakdown maintenance of PSS and DSS respectively:

- 1. Insulation Tester (Megger) 1 kV & 5 kV,
- 2. Digital Tong Tester & Multi meter (two nos.),
- 3. Earth Resistance Tester,
- 4. Phase Sequence Meter,
- 5. Hydro Meters (two nos.),
- 6. Battery Cell Testers (2 nos.),
- 7. Vacuum Cleaner & Electrical Blower etc

#### Consumables:-

All consumables required will have to be arranged by contractor at no extra cost.

# 4. KEY PERFORMANCE PARAMETERS

For the purpose of performance monitoring of the annual maintenance contract the following basis will be used and same will be taken as reference for future improvement / maintenance.

- a) Outage Hours due to breakdowns.
- b) Response time to attend breakdown.

While measuring the above parameters the Forced outages due to T&D Constraints /Planned Outages / Transco Constraints will be excluded for measurement of performance. Breakdown outages pending/not closed due to non-availability of spare/equipment which is to be arranged by IIT (BHU) as per the contract will be excluded for measurement of any of the above Indicators.

It may happen that there is not much visible improvement after a period of time, as Improvement due to maintenance is expected to saturate over a period of time and thereafter the improvement can only be achieved by carrying out Major Renovation &Modernization of Existing Sub-stations and the Equipments therein. It is expected that under such circumstances, performance levels will be considered as achieved even if contractor is able to maintain the above parameters within the existing levels.

#### 5.Extra Jobs

- 1. Any major overhaul/repair shall be extra at mutually agreed price and conditions.
- 2. For the above jobs or any kind of repairs at site, which need to be carried out during the normal maintenance or break-down, IIT (BHU) shall provide to the approved unit rates for such activities to contractor within one month of contract finalization.
- 3. The cost of cable jointing kit shall be on actual cost basis or IIT (BHU)shall provide cable jointing kit free of cost. The process of cable fault location shall be as per the current prevalent practice (though manual digging along with the route of cable which is hit and trial method) at no extra cost. In case the same is required through cable fault locator, the same shall be provided by IIT (BHU) at no extra cost.

# 7. Period of Contract

The period of contract shall be for one year and and after one year it can be extend with an increment of minimum 7% per annum for a period of 3 to 5 years.

# 8. Working Hours

The working hours shall be 8 hrs. per shift & three shifts& General Shift per day designated as 1<sup>st</sup>, 2<sup>nd</sup> 3<sup>rd</sup> Shift& General Shift.

# Clarification :-

| Sr. | Daint Dagaintian                               | Communit   |  |  |  |
|-----|--|--|--|--|--|
| No. | Point Description                              | Comment  |  |  |  |
| 1   | Requirement of Shutdown at Switchyard.         | The requirement of shutdown at switchyard shall be intimated by contractor in their operation & maintenance plan; same shall be provided and arranged by IIT (BHU).  |  |  |  |
| 2   | Penalties                                      | 01. Contractor shall exercise every effort to restore power after breakdown and smooth operation of the PSS and DSS; however penalty @ 1% per day of contract value shall be applicable in case of tripping or delay in restoration of power, in any circumstances.  |  |  |  |
|     |  | 02. Any tripping due to fault in UPPCL metering unit shall not be liable for penalty.  |  |  |  |
| 3   | Transformer Oil Filteration                    | Transformer Oil filtration if required shall be carried out at extra charges. Activity shall be executed after written confirmation from IIT (BHU) and transformer oil shall be supplied by IIT (BHU).   |  |  |  |
| 4   | Cable Fault Finding                            | No charges for cable fault finding shall be payable. Repairing of cable joints shall be in contractor scope no extra cost shall be paid. The process of cable fault location shall be as per the current prevalent practice (though manual digging alongwith the route of cable which is hit and trial method) in IIT (BHU). In case the same is required through cable fault locator, the same shall be provided by IIT (BHU) free of cost. |  |  |  |
| 5   | All spare Parts and maintenance plan and       | All spare parts required for maintenance plan and unscheduled maintenance shall be supplied by Customer.  For all equipments it is requested to contact the OEM's for specialized services. Bidder should maintain recommended spares of GIS as  |  |  |  |
|     | unscheduled maintenance.  Loading unloading of | given in Annexure-1 in his ware house.  Loading unloading of equipments /materials shall be in IIT(BHU)  |  |  |  |
| 6   | equipments/materials.                          | scope.   |  |  |  |
| 7   | Mobilization time.                             | 3 weeks mobilization time to start the activities at site from the date of LOI/ contract order.  |  |  |  |
| 8   | Engineer in-charge                             | IIT (BHU) shall appoint one engineer in-charge from their side, who shall be locally available to coordinate, authorize and certify various activities to be taken up at 33KV PSS and 11KV DSS.  |  |  |  |
| 9   | Bill certification.                            | The bill from contractor shall be certified by the respective  Engineer In-charge (EIC).   |  |  |  |
|     |  | <ul> <li>□ The electricity and water will be provided free of cost at all locations.</li> <li>□ Storage space and office space to be made available by IIT (BHU) to the contractor.</li> </ul>   |  |  |  |

| 10 | Facilities to be provided by IIT (BHU) at no cost to | ☐ Crane and Hydraulic ladders, etc. shall be arranged by IIT (BHU).    |  |  |  |
|----|--|--|--|--|--|
|    |  | IIT (BHU) shall provide an enclosed secure office space in the central |  |  |  |
|    | Contractor.  |  |  |  |  |
|    |  | area for permanent service line (single point of contact) and          |  |  |  |
|    |  | storage/archiving of all drawing and documents. IIT (BHU) shall        |  |  |  |
|    |  | provide the above office in a location having sufficient storage       |  |  |  |
|    |  | space for safe storage of testing Equipment/Consumables/               |  |  |  |
|    |  | records/documents/Reports/Emergency/Spares.                            |  |  |  |

#### 10. Commercial Terms & Condition

The estimated cost of annual operation & maintenance contract per annum is **Rs.** 72,00,000.00 including all taxes & duties.

Note: Oil Filtration charges shall not be included in the above price.

# Price for Unscheduled Services

Prices for unscheduled services not covered under the scope of AOMC will be at an extra cost. Extra charges will be as agreed mutually between contractor and IIT (BHU).

# Prices for Supply of Spares and Components

Prices for supply of spares and components that need to be supplied in case of non-availability at IIT (BHU) will be at an extra cost to IIT (BHU). The prices for such items shall be as agreed mutually between contractor and IIT (BHU).

The list of recommended spares will be submitted by contractor in due course of time. It is envisaged that IIT (BHU) must keep the recommended spares in their inventory as and when required for maintenance.

Payment shall be made to contractoras under:

# Payment for scheduled services:

100% payment along with taxes shall be paid on a pro-rata basis as monthly running bills. Certification for the bills shall be done by IIT (BHU)— In-charge designated for this work.

# Payment for unscheduled services:

100% payment along with all taxes for unscheduled services at mutually agreed rate will be made after submission of invoice along with job completion certificate.

# Payment for supply of spares and components:

100% payment along with all taxes for supply of spares and components will be made after submission of invoice.

#### Payment for services and facilities

No costs shall be payable by contractor on the use of the intercom facilities, photocopies & first aid medical facilities. Taxes, Duties, Levies

All Taxes and Duties such as Service Tax etc. and any variations in same shall be claimed extra, at actual, by contractor where applicable against submission of documentary evidence.

# 15. Limitation of Liability

- A. "Notwithstanding anything else contained in this contract, in no event, whether based in contract or tort (including negligence) or other legal theory shall either party, its officers, directors, affiliates or employees be liable for incidental, consequential, indirect, special or punitive damages of any kind, or for loss of revenue or profits, loss of business, loss of information or data, or other financial loss arising out of or in connection with this Agreement or any related contract. To the extent permitted by law and notwithstanding anything else contained in this Agreement, Contractor's maximum aggregate liability on any claim of any kind for any loss or damage arising out of or in connection with or resulting from this Agreement or from the performance or breach hereof will not exceed the amounts actually paid to Contractor for such Services."
- B. Force Majeure event: "acts of civil or military authority, governmental priorities, act of god, natural calamities, earthquake, flood, the elements (weather), fire, explosion, epidemic, quarantine, energy crisis, strike, labor trouble, war, riot, accident, act of terrorism, nation-wide bandh, shortage, delay in transportation, or any other causes beyond the reasonable control of the party

# 13. Insurance

- i. Without thereby limiting its responsibilities under this contract, contractor shall insure with a reputable insurance company against all loss and damage and injury to its persons arising out of or in consequence of its obligations under this contract.
- ii. When working with subcontractors, contractor shall ensure that the subcontractors procure a minimum of insurance cover proportioned to their respective performance of the Services.
- ii. Contractor shall also arrange insurance in respect to and /or theft of contractor's other property, including tools and equipments if they are insurable.
- iv. Contractor shall also obtain accident liability insurance at its own cost for its employees and pay compensation on account of injury, fatal or otherwise due to accident during service being rendered under scope of this contract.

# 14. Bankruptcy

If either Party becomes bankrupt or insolvent or makes any contract with its creditors compounding debts or if, being a limited company, any proceedings have started in respect of it applying for the appointment of a liquidator, administrator, receiver or similar official for it or all or any substantial part of its assets or seeking an order of relief against it as debtor or under any law relating to insolvency, readjustment of debt, reorganization, administration or liquidation, the other Party may at any time by written notice terminate this contract forthwith, in which event the provisions of the TERMINATION clause shall apply.

#### 15. General

IIT (BHU) may assist contractor in obtaining any and all signatures, permits, licenses which may be required for the performance of the operation & maintenance services and providing of spare parts.

Any and all notices or other communication pursuant to this contract to be given by either Party to the other Party shall be in writing and in English and shall be deemed duly served and given if personally delivered against acknowledgement of receipt or five (5) business days after the day of sending when sent by registered mail or courier, or on the date of acknowledgement of receipt when sent by fax addressed to be mentioned.

- 16. Warranty for third party maintenance services & equipments under warranty period
- 1. IIT (BHU) shall not itself perform or entrust any third party with any Maintenance Services or any other services at the Substation that could be performed by contractor without the prior written consent of contractor.
- 2. Contractor shall not repair IIT (BHU)'s equipment under OEM warranty without express approval of IIT (BHU). This does not replace the warranty offered by third party manufacturers with installed equipment during the warranty period. IIT (BHU) shall manage the third party manufacturer to comply with its warranty obligations and keep contractor informed.

# 17. Statutory Obligations

Contractor shall take all steps, necessary or otherwise, to comply with the various applicable laws/rules/regulations, including, but not limited to, the provisions of Contract Labour (Regulation & Abolition ACT) 1970 as amended, Minimum Wages Act, 1984, Workmen Compensation Act, ESI Act, PF Act, Bonus Act, and all other applicable laws and rules framed there under including any statutory approval required from the Central / State Governments, Ministry of Labour.

Contractor shall, prior to commencement of the jobs under this Contract, furnish to IIT (BHU) the permanent Provident Fund Code numbers and ESI of its employees and those employed by subcontractors, if applicable.

# 18. Workmen's Compensation

- 1. Contractor shall take out a comprehensive insurance policy under the Workmen's Compensation Act to cover such workers, who shall be engaged to undertake the jobs covered under this contract and a copy of this insurance policy shall be given to IIT (BHU) solely for its information, reference and records. Contractor shall ensure that such insurance policies are kept valid at all times.
- 2. IIT (BHU) shall be entitled to deduct from any money due to or to become due to contractor, money paid or payable by way of compensation as aforesaid or cost or expenses in connection with any claims there to and contractor shall abide by the decision of IIT (BHU) as to the sums payable by contractor under the provisions of this clause.
- 3. Nothing contained in this contract, shall establish any relationship of any kind between IIT (BHU) on the one hand and the employees, workmen and labourers, of any kind whatsoever of contractor on the other hand.

# 19. Safety Code

Contractor shall ensure adequate safe conditions and ensure safety precautions at site as required under applicable laws and shall be solely and entirely responsible for the complete safety of its workmen at site against any safety hazards arising out of the work done by contractor staff in the premises of IIT (BHU), Varanasi.

#### 20. Subletting/Assignment

a. Contractor may, with the prior consent of IIT (BHU) in writing assign or sublet whole or substantially the whole of the Contract. However any such consent shall not relieve contractor from any obligation, responsibility or duty under this contract.

#### 21. Governing Law and Arbitration

"If a dispute or controversy regarding any right or obligation under this Agreement arises between the parties which they are unable to resolve, each of the parties will, within a reasonable amount of time after any such dispute arises seek to resolve such dispute by good faith negotiation. If at the end of such thirty (30) day period, the dispute remains unresolved, any dispute, claim or matter arising from or in connection with this Agreement or the legal relationships established by the Agreement shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996 ("IAC") and any modifications thereto and re-enactments thereof from time to time, by sole arbitrator appointed with the mutual consent of the Parties. The seat of arbitration shall be New Delhi. The language to be used in the arbitration proceedings shall be English.

- 22. Representation, Warranties and Guarantees Contractor hereby represents warrants and guarantees that:
- i. It is a legally recognized entity under the laws of India;
- ii. The contract contains valid and binding obligations & is enforceable in accordance with the terms hereof;
- iii. It has apprised itself of all applicable rules and regulations, and shall at all times comply with such rules and regulations;
- iv. It shall engage vehicles, tools, test kits and manpower suitable for the purposes of this contract to render services as contemplated in this contract;
- v. The services would be conducted in a safe and efficient manner at the site and at all times in compliance with good industry practices and requirements of IIT (BHU).
- vi. It shall procure all consents, license, permits, approvals and certificates & authorizations as may be required from any governmental authority for the performance of services at the Site;
- vii. It shall duly pay, if applicable, the duties, taxes and levies as are set out in this contract, which are to be paid by contractor;
  - 23. Notice of Events of Force Majeure
    - If a force majeure event prevents a party from performing any obligations under this contract in part or in full, that party shall
  - i) Immediately notify the other party in writing of the Force Majeure events within 2 working days of the occurrence of the Force Majeure event.
  - ii) Be entitled to suspend performance of the obligations under the contract, which is affected by Force Majeure event for the
    - duration of the Force Majeure event.
  - iii) Use all reasonable efforts to resume full performance of the obligation as soon as practicable.
  - iv) Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis.
  - v) Provide prompt notice of the resumption of full performance or obligation to the other party.

Mitigation of Events of Force Majeure

Contractor or IIT (BHU), as the case may be, shall:

- (i) Make all reasonable efforts to prevent and reduce to a minimum & mitigate the effect of any delay occasioned by an event of Force Majeure, including applying other ways in which to perform the contract,
- (ii)Use its best efforts to ensure resumption of normal performance after the termination of any Event of Force Majeure and shall perform its obligations to the maximum extent practicable as agreed between the Parties;
- (iii) Keep the other party informed at regular intervals of the circumstances concerning the event of Force Majeure, with best estimates as to its likely continuation and what measure or contingency planning it is taking to mitigate and or terminate the Event of Force Majeure.

Burden of Proof

In the event that the Parties are unable in good faith to agree that a Force Majeure event has occurred to an affected party, the parties shall resolve their dispute in accordance with the provisions of this contract. The burden of proof as to whether or not a Force Majeure event has occurred shall be upon the party claming that the Force Majeure event has occurred and that it is the affected party.

#### Termination for Certain Events of Force Majeure

If a force majeure event prevents a party from performing any obligations under this contract in part or in full, that party shall

- ii) Immediately notify the other party in writing of the Force Majeure events within 2 working days of the occurrence of the Force Majeure event.
- ii) Be entitled to suspend performance of the obligations under the contract, which is affected by Force Majeure event for the duration of the Force Majeure event.
- iv) Use all reasonable efforts to resume full performance of the obligation as soon as practicable.
- vi) Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis.
- vii) Provide prompt notice of the resumption of full performance or obligation to the other party.
- viii) If any obligation of any Party under the contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a continuous period of more than 3 month during the Term of the contract, the contract may be terminated at the discretion of either party and it shall not be liable to the other for any consequences arising on account of such termination.
- 24. Confidentiality Intellectual Property
- 1. So as to enable contractor to perform its obligations under this contract and/or in fulfilling these obligations, IIT (BHU) shall disclose and contractor may gain access to information which is proprietary to IIT (BHU) and which is kept strictly confidential by contractor (hereinafter called "Confidential information").
- 2. Contractor undertakes to treat the confidential Information with at least the same degree of confidentiality as contractor uses
  - in maintaining the secrecy of its own information of similar importance. Except to the extent set forth, contractor consequently undertakes not to use or carry the confidential information, nor to disclose the same to any third party, except to such contractor employees who need to know such confidential information in order to respect contractor's obligations under this contract.
  - Contractor further undertakes not to derive directly or indirectly at any time from the possession or use of the confidential information any right, title or interest therein, nor to claim any intellectual property right on the same.
- 3. The obligations and restrictions hereunder shall not apply to any other information disclosed to contractor by IIT (BHU) or to which contractor may gain access, and which is not treated by IIT (BHU) as strictly confidential, nor to confidential information or parts thereof which:
  - at the time of disclosure or access was publicly known,
  - becomes publicly known otherwise than by an act or omission on the part of contractor or one of its employees, at the time of disclosure or access was already known to contractor,
  - has been received from a source (other than IIT (BHU)) lawfully having possession of such information
- 4. Technical information and other related documents forming part of this contract and the information obtained during the course of investigations under this contract shall be IIT (BHU) exclusive property and shall not be used for any other purpose except for the execution of the contract. The technical information drawing, records and other documents shall not be copied, transferred, or divulged and / or disclosed to third party in full/part, not misused in any form whatsoever except to the extent for the execution of this contract.
- 5. These technical information and other related documents shall be returned to IIT (BHU) with all approved copies and duplicates including all details as are prepared by contractor during the executions of this contract, if any, immediately after they have been used for agreed purposes.
- 6. Contractor shall not use the name of IIT (BHU) in any manner either for credit arrangement or otherwise and it is agreed that IIT (BHU) shall not in any way be responsible for the debts, liabilities or obligations of contractor and/or its employees.
- 7. These provisions of this Clause shall survive, for a period of 3 years, beyond the termination or expiration of this contract.

# 25. Indemnification

Each party shall indemnify at all times the Other and hold harmless all directors and employees of the other against any claims, law suits or damages occurring as a results of the award of this contract or due to the , maintenance and administration of this contract and against costs and expenses, if any incurred by either Party in connection therein and prejudice to make any recovery.

#### 26. Exclusivity

IIT (BHU) undertakes not to perform for itself, nor to negotiate or purchase services similar to the services undertaken by contractor from any third party or perform such services through a third party during the term of this contract. IIT (BHU) has the right to award the same order for similar work at same rates, or on any terms and conditions to another party or parties only if conditions as mentioned under the Termination Clause are applicable.

#### 27. Termination

"If IIT IIT (BHU) fails to pay any sum due under the Contract by the due date, Contractor may by notice, in addition to any other rights it may have, suspend supplying the products/services until all overdue amounts are paid. Contractor may terminate the Contract by providing prior written notice to IIT IIT (BHU), if IIT IIT (BHU) fails to remedy any breach of an essential obligation under the Contract (such as failure to meet its payment obligations or failure to comply with the software license terms) within thirty (30) days after receipt of written notice from Contractor of details of the breach.

#### 28. Suspension by Contractor

Contractor shall have the right to suspend the provision of Services, in part of whole, due to any of the following reasons not attributable to Contractor, without invalidating the other provisions of the Agreement. Contractor shall give a written notice of suspension to the IIT IIT (BHU) in case IIT IIT (BHU)

- (i) Delays or fails to fulfil its contractual obligations mentioned hereunder;
- (ii) The payments due to Schneider Electric are withheld /suspended beyond reasonable time limit;
- (iii) The occurrence of Force Majeure event mentioned in clause 23;
- (iv) A change in law or directive of any Government Authority, where performance of contractual obligations are not feasible or possible;
- (v) Any other reasons for which Contractor is not liable and it is not feasible to continue works unless issue is resolved.
  - If the suspension lasts more than 90 days, Contractor shall be entitled to terminate this Agreement. Post termination, Contractor shall be entitled to for all work done upto the date of termination.

# 29. Export Compliance

IIT IIT (BHU) to comply with related applicable US, E.U. and other national and international export control laws and/or regulations and agrees to sign the End User Certificate in this regard. Proposed wordings: "The deliverables provided by Vendor under this Contract contain or may contain components and/or technologies from the United States of America ("US"), the European Union ("EU") and/or other nations. IIT (BHU) acknowledges and agrees that the supply, assignment and/or usage of the products, software, services, information, other deliverables and/or the embedded technologies (hereinafter referred to as "Deliverables") under this Contract shall fully comply with related applicable US, EU and other national and international export control laws and/or regulations. Unless applicable export license/s has been obtained from the relevant authority and the Vendor has approved, the Deliverables shall not (i) be exported and/or re-exported to any destination and party (may include but not limited to an individual, group and/or legal entity) restricted by the applicable export control laws and/or regulations; or (ii) be used for those purposes and fields restricted by the applicable export control laws and/or regulations. Owner also agrees that the Deliverables will not be used either directly or indirectly in any rocket systems or unmanned air vehicles; nor be used in any nuclear weapons delivery systems; and will not be used in any design, development, production or use for any weapons which may include but not limited to chemical, biological or nuclear weapons. If any necessary or advisable licenses, authorizations or approvals are not obtained, whether arising from inaction by any relevant government authority or otherwise, or if any such licenses, authorizations or approvals are denied or revoked, or if the applicable export control laws and/or regulations would prohibit Contractor from fulfilling any order, or would in Contractor's judgment otherwise expose Contractor to a risk of liability under the applicable export control laws and/or regulations if it fulfilled the order, Vendor shall be excused from all obligations under such order and/or this Contract."

# Personal

If any of contractor's employees shall, in the opinion of IIT (BHU), be guilty of any misconduct or incompetence or negligence, then if so directed by IIT (BHU), contractor shall take necessary action and if the person is found guilty of repeated misconduct or incompetence, contractor shall at once remove such employee and replace him/her by a qualified and competent substitute

BILL OF QUANTITY

|          | DIEE OF COLUMN  |                       |      |             |  |  |  |
|----------|---|-----------------------|------|-------------|--|--|--|
| S.<br>No | Work Details  | Qty                   | Rate | Amount(Lac) |  |  |  |
| 1        | Annual Operation & Maintenance Contract for round the clock services for 01 No. 33/11kV PSS (with GIS Panels & AIS), 06 Nos. 11kV/433V DSS (DSS-A,DSS-B, Vivekanand , IT-OLD, Dhanrajgiri, Food Science) & Centralized SCADA system (upto 11kV) at IIT(BHU) campus, Varanasi U.P. | 1                     | Job  | 72          |  |  |  |
|          | Total   | 72,00,000.00          |      |             |  |  |  |
|          | Tota  | Seventy Two Lacs only |      |             |  |  |  |