# **E-TENDER DOCUMENT**

for

Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P)

> Tender No.: IIT(BHU)/IWD/ET-02/2021-22/382 Tender Date: 05.08.2021 Last Date of Submission of bids: 26.08.2021 Tender Opening date: 27.08.2021



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

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

# **ABSTRACT OF COST**

Name of Work:- Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

Sl. No.	Details of Sub-Head	Total Amount(in Rupees)
1.0	Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).	Rs. 75,00,000.00 (Seventy Five Lac only) (Inclusive of GST)

Assistant Engineer (Electrical) IWD, IIT (BHU) Superintending Engineer IWD, IIT (BHU)

# INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI

Name of Work:- Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

#### S. No. Description PART-A 1 Information and instructions for contractors for e-tendering 2 IWD. IIT e-TENDER 3 Affidavit Format IWD, IIT from -1 4 5 Proforma of Schedules 6 General Rules & Directions 7 Salient/Mandatory requirement for tender **PART-B** 8 Quality Assurance of the work 9 Additional terms and conditions 10 Special Condition for Material 11 List of machinery, tools & plants to be deployed by the contractor at site. 12 Guarantee bonds: Form of Earnest Money (Bank Guarantee Bond) a) 13 Scope of work & specification

# **GENERAL INDEX**

NIT amounting to Rs-75, 00,000.00/- (Seventy-five Lakh only) Inclusive of GST is approved.

Certified that this N.I.T. contains 63 (Sixty-three pages only).

Superintending Engineer Institute Works Department, IIT (BHU), Varanasi

# INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI

Name of Work:- Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

# PART-A

# INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANAS

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

The Superintending Engineer, Institute Works Department, on behalf of IIT(BHU), Varanasi, India invites online, percentage rate Bids from OEM or authorized by OEM having similar type of work experience in reputed organization in **Two Bid system** (Bid-1 Technical cum Eligibility bid & Bid-2 Financial bid) for the following work:-

Sl.No	Description	Details
1.	NIT No.	IIT(BHU)/IWD/2021-22/ET-02/382 dt. 05.08.2021
	Name of Works & Location	Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).
3.	Total Estimated cost put to	Rs. 75,00,000.00
	tender	(Seventy-five Lakh only) Inclusive of GST
4.	Earnest Money Deposit (EMD)	<b>Rs. 2, 25,000.00</b> to be paid in the form of DD/FDR in the name of The Registrar, IIT(BHU), Varanasi, payable at VARANASI. (Scanned copy of DD/FDR to be uploaded in cover-1) (Original to be submitted in cover-1 alongwith eligibility criteria documents)
5.	Tender fee (Non-	Rs. 1000.00 + Rs. 180.00 (GST @ 18%) = Rs.1180.00
	refundable)	(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)
6.	Period of Completion	One Year
	Last Date & Time of Submission of Technical and Financial Bids	26.08.2021 (up to 3:00 PM)
	Period during which Tender Document-Tender Processing Fee and other Documents shall be submitted	26.08.2021 (up to 3:00 PM)
	Date & Time of opening of Tender	27.08.2021 (at 3:30 PM)
10.	No of Cover	2
11.	Address for Communication	The Superintending Engineer, Institute Works Department, IIT (BHU) Varanasi – 221005, U.P.
12.	Email Address	office.iwd@iitbhu.ac.in (all pre-bid queries shall be emailed on mentioned account)

# 1. Bidders who fulfill the following criteria shall be eligible to apply. Bids from joint ventures shall not be accepted at all.

- (a) Should have satisfactorily completed the Operation & maintenance Job as mentioned below during the last seven years on the date of submission of tender:-
  - (i) Three similar works each costing not less than 40% (30.00 lakh) of estimated cost.OR
  - (ii) Two similar works each costing not less than 60% (45.00 lakh) of estimated cost.OR
  - (iii) One similar works each costing not less than 80% (60.00 lakh) of estimated cost.

# AND

(b) At least one "similar work "in above mentioned categories must be completed with Central Govt. Department/ Central Autonomous Body/ Central 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 work shall mean

"Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 33/11kV PSS (with GIS Panels & AIS), 11kV/433V DSS, and all allied Substation installation systems"

- ✓ Bidder need to procure and maintain spared of GIS (As per attached list in Annnexure-1) in his warehouse for trouble free services.
- ✓ The value of the executed work shall be brought to the current costing level by enhancing the actual value of job at simple rate of 7% per annum; calculated of the date of completion to last date of receipt of applications for bids. Keeping in mind that the work should not be more than last eight years from date of receipt of application for bids.
- (c) Should have had average annual financial turnover of at least 50% of estimated cost during the last three consecutive financial years ending 31<sup>st</sup> March, 2021 (scanned copy of the audited certificate from Chartered Accountant (CA) to be uploaded).
- (d) OEM authorized contractors should have incurred no loss during the last five financial years ending 31<sup>st</sup> March, 2021.
- (e) Should have a solvency certificate of 40% of the estimated cost of the work issued by

Bank during the last three months (scanned copy of original solvency to be uploaded).

- (f) Bidder should be aware about GIS panels and should have expertise on operation of substations through SCADA system.
- 2. The intending bidder must read the terms and conditions carefully. He should submit his bid only if he satisfies the criteria at S. No. 1 of this tender document and is in possession of all the documents required.

The agency should also enclose all the documents as a separate annexure showing the details of the works that he intends to be considered for deciding his fulfillment of eligibility criteria as per the requirements of the NIT provisions.

- **3.** Information and Instructions to the bidders, posted on website, shall form of tender document.
- 4. 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 can be seen and downloaded from website <u>www.eprocure.gov.in</u> or <u>www.iitbhu.ac.in</u> for free of cost.
- 5. The bid can be submitted only 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 favour of The Registrar, IIT (BHU) Varanasi and other scanned documents as specified.
- 6. Those contractors not registered on <u>www.eprocure.gov.in</u> 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.** While selecting any of the cells, in case a warning appears or 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, it will be treated as "0" (ZERO) and the bid shall be rejected.

11. It shall be mandatory to sign the Affidavit by the bidder / contractor, failing which bidder

will stand disqualified from the tendering process and the bid of the contractor would be summarily rejected in case of manual tendering. However; where e-tendering is followed, Affidavit shall be signed by the successful bidder after acceptance of the bid.

- 12. The EMD can be paid in the form of Demand Draft or Fixed Deposit Receipts or Bank Guarantee from 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.
- **13.** Only online mode of tender document is acceptable. No need to submit hard copies of the tender document.

# List of Documents to be scanned and uploaded up to date and time mentioned above:

- a. The completion Certificates of the similar Work Experience.
- b. Certificate of Financial Turnover from CA.
- c. Certificate of Registration for GST/IT.
- d. Bank Solvency Certificate issued by any scheduled bank.
- e. Affidavit as per provision of IWD, IIT(BHU) e-TENDER.
- f. Any Other document as specified in Eligibility Criteria and/or in IWD, IIT (BHU) e-TENDER.
- g. OEM authorized contractors must have valid Electrical Safety Certificate issued by The D.G. Electrical Safety.
- h. Actual date of completion of the similar work.
- i. E.M.D.
- j. Copy of EPF & ESI No.
- k. Tender Fee.
- 1. OEM authorized contractors must provide registration certificate issued by the Central/State labor commissioner.

# SUPERINTENDING ENGINEER INSTITUTE WORKS DEPARTMENT INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI

The Superintending Engineer, Institute Works Department, on behalf of IIT(BHU), Varanasi, India invites online, percentage rate Bids from OEM/ or authorized by OEM having similar type of work experience in reputed organization in **Two Bid system** (Bid-1 Technical cum Eligibility bid & Bid-2 Financial bid) for the following work:-

"Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P)."

The works is totally estimated to cost **Rs 75, 00,000.00** per annum **inclusive of taxes & duties**. This estimate, however, is given merely as a rough guide.

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:-

Criteria of eligibility for submission of bid documents: Joint ventures are not accepted.

- (a) Should have satisfactorily completed the operation & maintenance Job as mentioned below during the last seven years on the date of submission of tender.
- (iv) Three similar works each costing not less than 40% (30.00 lakh) of estimated cost.OR
- (v) Two similar works each costing not less than 60% (45.00 lakh) of estimated cost.OR
- (vi) One similar works each costing not less than 80% (60.00 lakh) of estimated cost.

#### AND

(b) At least one "similar work "in above mentioned categories must be completed with Central Govt. Department/ Central Autonomous Body/ Central 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 work shall mean

"Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 33/11kV PSS (with GIS Panels & AIS), 11kV/433V DSS, and all allied Substation installation systems."

- ✓ Bidder need to procure and maintain spared of GIS (As per attached list in Annexure -1) in his warehouse for trouble free services.
- ✓ The value of the executed work shall be brought to the current costing level by enhancing the actual value of job at simple rate of 7% per annum; calculated of the date of completion to last date of receipt of applications for bids. Keeping in mind that the work should not be more than last seven years from date of receipt of application for bids.
- (c) Should have had average annual financial turnover of at least 50% of estimated cost during the last three consecutive financial years ending 31<sup>st</sup> March, 2021 (scanned copy of the audited certificate from CA to be uploaded).
- (d) Should have incurred no loss during the last five financial years ending 31<sup>st</sup> March, 2021.
- (e) Should have a solvency certificate of 40% of the estimated cost of the work issued by Bank during the last three months (scanned copy of original solvency to be uploaded).

To become eligible for issue of the 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 carried out through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, 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 the date of start of the work, the Superintending Engineer, IWD 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 bidder on prescribed Format.
- **3.** The time allowed for carrying out the AOMC will be 12 Months from the date of award 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 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 www.eprocure.gov.in or www.iitbhu.ac.in free of cost.
- 5. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 6. While submitting the revised bid, contractor can revise the bid price, but before last time & date of submission of tender as notified.
- 7. The quoted base price shall remain FIRM till the complication of work.
- 8. Earnest Money can be paid in the form of Demand Draft or Fixed Deposit Receipt (drawn in favor of **The Registrar, 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. It shall be scanned and uploaded on the e-tendering website within the period of tender submission.

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 be mentioned thereon.

**9.** Copy of certificate of work experience, copy of category/ enlistment order, Audited Balance Sheet, Bank Solvency Certificate and other documents mentioned in the tender Document shall be scanned and uploaded on the e-tendering website within the period of tender submission.

All the required documents, receipt of EMD and tender fee etc. should have uploaded on portal before last date & time of submission of bid and up to **3:00 PM on 26.08.2021** 

The tender documents submitted shall be opened at **3:30 PM on 27.08.2021** in the office of **The Superintending Engineer**, **IWD**, **IIT (BHU) Varanasi**.

Online Bid Documents submitted by intending bidders shall be opened only for those bidders, whose Earnest Money Deposit and other documents are found in order.

**10.** The bid submitted shall become invalid and cost of bid & e-Tender processing fee shall not be refunded if:

- (i) The bidder is found ineligible.
- (ii) The bidder does not upload all the documents (including service tax registration/ VAT registration/ Sales Tax registration/IT registration) as stipulated in the bid document.
- (iii) Any discrepancy is noticed between the documents as uploaded at the time of submission of bid.
- 11. The Earnest Money of the successful bidder shall be retained as performance guarantee/ security The Superintending Engineer, IWD on behalf of the Institute does not bind itself to accept the lowest bid or any other bid and reserves to itself the authority to reject any or all the bids 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 bidder shall be summarily rejected.
- 12. Canvassing whether directly or indirectly, in connection with tender is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- **13.** The Superintending Engineer, IWD on behalf of the 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.
- 14. The contractor shall not be permitted to bid for works/job in the IWD, IIT (BHU), if his near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). Any breach of this condition by the contractor would render him liable to be removed.
- 15. 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 tender 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 bid or engagement in the contractor's service.

- 16. The bid for the works shall remain open for acceptance for a period of (60) sixty 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 of the bidders shall not allow them to participate in the re-bidding process of the work.
- 17. 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. Standard IWD, IIT (BHU) Contract/ work order and/ or other Standard IWD, IIT (BHU) form.
- 18. 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.
- **19.** For Composite Tenders

The Superintending Engineer 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.

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. (Superintending Engineer of

major component shall 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.

The bidders must not associate themselves with agencies of the appropriate class worked with IWD, IIT(BHU) to bid for the work.

The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of the bid.

After acceptance of the bid by competent authority, the Superintending Engineer, IWD, IIT (BHU) shall issue the letter of intent/contract order on behalf of the Institute.

Entire work under the scope of composite tender including major and all minor components shall be executed under the contract order.

The Earnest Money of the successful bidder shall be retained as performance guarantee/ security deposit till the completion of work.

The qualified and lowest contractor is not entitled or permitted to associate any agency(ies) for minor component(s) conforming to eligibility criteria as defined in the tender document and has to execute all components the work i.e., minor/major component(s) within prescribed time.

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.

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

The bidder will submit an Affidavit at the time of award of contract and comply with the enumerated articles therein.

Superintending Engineer Institute Works Department IIT (BHU) Varanasi

# **AFFIDAVIT SUBMISSION**

#### To, The Superintending Engineer IWD, IIT (BHU), Varanasi.

#### Sub: Submission of Tender for the work of

Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc ) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

# Dear Sir,

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer AMC services on the condition that I/We will sign the Affidavit, which is given as part of the tender documents, failing which I/We will be disqualified from the tendering process. I/We acknowledge that THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND IT IS A PARAMOUNT CRITERIA FOR ABSOLUTE ACCEPTANCE of the condition of this NIT.

I/We confirm acceptance and compliance with the Affidavit in letter and spirit and further agree that execution of the said Affidavit shall be separate and distinct from the main contract, which will be signed and come into effect when lowest bidder is awarded contract by the S.E IWD, IIT (BHU).

I/We acknowledge that in the event of my/our failure to sign and accept the Affidavit, while being awarded the contract, IWD, IIT (BHU) shall have, absolute and unfettered right to disqualify the bidder and reject the bid with forfeit of EMD.

Yours faithfully

(Duly authorized signatory of the bidder)

# **AFFIDAVIT**

This Affidavit is made at Varanasi on this ......\*....day of ......\*.2021

# **Definition:**

"Tenderer/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

# Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.) (hereinafter referred to as "Tender/Tender") and intends to award, under laid down organizational procedure, AMC contract for

Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

Here in after referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with all its Bidders and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Affidavit Agreement (hereinafter referred to as "Affidavit"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Tender documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Affidavit, the parties hereby agree as follows and this Affidavit witnesses as under:

Article 1: Commitment of the Tenderer(s)/Contractor(s)

1) The Tenderer(s)/Contractor(s) commits himself to take all measures necessary

to prevent corruption. He commits himself to observe the following principles during his participation in the Contract execution:

- a) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the execution of the Contract.
- b) The Bidders/Contractors will not enter with other Bidders into any agreement or understanding at any stage, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, contract for minor works, submission or non-submission of tenders or any other actions to restrict competitiveness or to cartelize in the tendering process.
- c) The Bidders/Contractors will not commit any offence under the relevant IPC/PC Act. Further the Bidders/Contractors will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- The Bidder/Contractor of foreign origin shall disclose the names and d) addresses of agents/representatives in India, if any. Similarly, Bidder/Contractor of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly can bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of OEM, he shall not be allowed to quote on behalf of another OEM along with the first in a subsequent/parallel tender for the same item. However, OEM and his authorized OEM agents cannot bid together as per CVC guidelines.
- e) The Tenderer(s)/Contractor(s) will, when presenting his tender, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

- 3) The Tenderer(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Institute interests.
- 5) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

# **Article 2: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Affidavit by the Tenderer(s)/Contractor(s) and the Tenderer/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1) If the Tenderer(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 07 days' notice to the contractor shall have powers to terminate/determine the Contract, if already executed or exclude the Tenderer/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the S.E., IWD, IIT (BHU). Such exclusion may be forever or for a limited period as decided by the competent authority of the Institute.

- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has terminates the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the S.E. IWD, IIT (BHU), may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

# **Article 3: Previous Transgression**

- 1) The Tenderer declares that no previous transgressions and blacklisting occurred in the last 10 years with any other Company in any country or with Central/State Government Indian companies or any other Central/State Public Sector Enterprises in India that could have justified his exclusion from the Tendering process.
- 2) If the Tenderer makes incorrect statement on this subject, he will be terminated from the contract and action shall be taken for banning of business dealings/ holiday listing of the Bidder/Contractor with forfeit of entire deposits as decided by the Principal/ Owner.

### AFFIDAVIT

The Principal/Owner will disqualify the lowest Bidder, who will not bind itself with the duly signed Affidavit between the Principal/Owner and the bidder.

**Article 4-Other Provisions** 

- 1) This Affidavit is subject to Indian Law, place of operation and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership firm, this Affidavit must be signed by all the partners holding power of attorney. In case of a Company, the Affidavit must be signed by an authorized representative of the company/firm.
- 4) It is agreed term and conditions that any dispute or difference arising between the parties with regard to the terms of this Affidavit, any action taken by the Owner/Principal in accordance with this Affidavit.

# PERCENTAGE RATE TENDER & CONTRACT FOR AOMC WORK

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

- (i) Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).
- (ii) To be uploaded on tender portal.
- (iii) To be opened by TOEC at 03:30 PM on 27/08/2021 in the office of the Superintending Engineer, IWD, IIT (BHU), Varanasi

#### TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D & E 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 bid for the execution of the work/job specified for the IIT (BHU) within the time specified, schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in General Rules and Directions and Conditions of contract and with such materials as are provided for, by, and in respect of such conditions so far as applicable.

We agree to keep the bid valid 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. 2,25,000.00 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 right to forfeit the said earnest money completely. Further, if I/We fail to commence the work as specified, I/We agree that the Institute has right to forfeit the said earnest money completely. Further, if I/We fail to forfeit the said performance guarantee completely. 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 quoted rate. Further, I/We agree that in case of forfeit of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the future-tendering process for this work or any other similar works.

I/We undertake and confirm that eligible similar work(s) has/have not been sublet and executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, 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, S. E., IWD 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 the person to whom I/We authorize to use the information in any manner prejudiced to the safety of the Institute/State.

Dated:

**Signature of Contractor** 

Witness:

**Postal Address** 

Address:

# **PROFORMA OF SCHEDULES**

# Separate Performa for Civil, Elect. & Hort. Works

# SCHEDULE 'A'

Schedule of AOMC work.

#### SCHEDULE 'B'

Schedule of materials to be arranged by the contractor at his cost

S.No	Description of item	Quantity
•		
1	Megger	02
2	Multimeter	02
3	Tong Tester	02
4	All required T & P	

#### 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.** 

# **SCHEDULE F**

General Rules & Directions:

Officer inviting tender	Superintending Engineer, IWD, IIT (BHU) Varanasi
Maximum percentage of quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2 & 12.3	NA

Definitions:

Engineer-in-charge	
For Electrical items work	Assistant Engineer, IWD, IIT (BHU) Varanasi
Accepting Authority	Superintending Engineer, IWD
Percentage on cost of materials & labour to cover all overheads and profits	NA
Standard Schedule of rates	As per DSR
Electrical items of work	As per contract agreement
Department	IWD, IIT (BHU) Varanasi

Name of Work:	Annual Operation & Maintenance Contract for round the clock
	routine services, Preventive/Breakdown maintenance of 1 No.
	33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS,
	all allied Substation systems ( SCADA, Battery etc.) and HT/ LT
	service Lines at IIT (BHU) campus, Varanasi (U.P).
Estimated cost of the	Rs. 75,00,000.00
work per annum:	(Seventy-five Lakhs only)
Earnest money	Rs 2,25,000.00 (To be retained only for successful bidder until rendering of the AOMC services the Completion of the work)

# **<u>Requirement of Technical representatives/Staffs and recovery rates:</u>**

Only the qualified and experienced staff for operation & maintenance of 33 kV/11 kV/433 V equipments shall be engaged. The qualification & experience of technical staff shall be as under:-

Sl .No	Designation	Discipline	Minimum Qualification and Experience.	Number	Rate at which recovery shall be made
1	Manager/ Sr Engineer	Electrical Engineering	B. Tech/B.E./B.Sc. Engg. Regular from AICTE approved Institute and 6 Years' Experience in O&M of 33/11kV Substation.	01	60,000.00
2	Engineer / Supervisor	Electrical Engineering	B. Tech/B.E/B.Sc. Engg from AICTE approved Institute with 2 years' Experience or Diploma regular from State Board of Technical education approved Polytechnic Institute with 5 years' experience in O&M of 33/11KV substation	03	25,000.00
3	Electrician	Electrical	ITI in relevant trade with 3 Years Substation/relevant Experience	04	21,420.00
4	Electrician Helper	Electrical	ITI in relevant trade with 1 Years Relevant Experience	04	18,270.00
5	Lineman	Electrical	ITI in relevant trade with 2 Years overhead line /relevant Experience	04	21,420.00
-	Lineman Helper	Electrical	ITI in relevant trade with 1 Years overhead line /relevant Experience	04	18,270.00

# **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 duration for providing the services, 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 bidder 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 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 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 bid (applicable for item rate tender only) shall fill up the usual printed form, stating at what rate he is willing to undertake of the work. Bids, which propose any alteration in the work specified in the said 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 of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer for all sub sections/sub heads as the case may be, but the revised quoted rate 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, if applicable) 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 in 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 who have same tendered amount (as a result of their quoted rate individual items), refuse to submit revised offers, 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:

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 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.

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.

- 5. The tender opening and evaluation committee opens 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 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 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, if applicable given to them.
- 8. Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.
- 9. 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.
- 10. 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.
- 11. All rates shall be quoted on the price schedule in .xls form (BoQ).

Special care should be taken to write the rates in figures as well as in words. 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.

12. 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 manipulation is possible.

- 13. On acceptance of the tender, the name of the authorized representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the S.E., IWD, IIT (BHU).
- 14. GST/Sales-tax 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.
- 15. The contractor shall give a list of both gazetted and non-gazetted University employees related to him.
- 16. The tender for the work shall not be disclosed to any 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 tenderer, 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 not 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 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 Superintending 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.

- The contractor shall comply with the provisions of the U.P state and labor laws & Indian Electricity rules.
- 20. The contractor shall have to submit, if required his valid labor license & employees provident fund registration documents before commencement of work.
- 21. All the statutory deductions viz. Income Tax, Sales Tax on works contracts etc. if required, shall be made from the contractor's bills as per rules/regulations/acts in force

# SALIENT/ MANDATORY REOUIREMENT FOR THE TENDER

Name of Work:- Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc ) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

The bidder is advised to read and examine the tender documents for the work and the set of drawings, if applicable 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 percent rate 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, which can further be extended on satisfactory performance.
- 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 AOMC services is of utmost importance. This shall be adhered to in accordance with the provisions of IWD, IIT guidelines given in the relevant paras.
- 5. The contractor (s) shall make his own arrangements for transportation, stay and arrangement of other facility required for providing the AOMC services.
- 6. Contractor has to deploy required tools & Plants and machinery in the AOMC 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) with intimation to S.E., IWD 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 on pro rata basis in the standard format.
- 8. The contractor shall submit list of works which are in hand (progress) in the following form.

Name of Work	Name and particulars of division where work is being		Position of wo Progress	Remarks	
	executed		Stipulated	Actual	
1	2	3	4	5	6

9. AOMC Work include all required service & repair.

# PART-B

# **OUALITY ASSURANCE OF THE WORK**

- 1. The contractor shall ensure safety and quality control measures on different aspects of AOMC 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 S.E., IWD, IIT (BHU) Varanasi. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the S.E., IWD, IIT (BHU) Varanasi 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 S.E., IWD, IIT (BHU) Varanasi along with samples and once approved, he shall stick to it.
- 3. 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.
- 4. The contractor shall arrange carrying out of all tests required under the contract order through the laboratory as approved by the Engineer in charge, IWD and shall bear all charges in connection therewith including fee for testing.
- 5. However, no testing charges will be payable to the contractor for the tests.
- 6. 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- 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 of resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
- 2. The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 3. 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.
- 4. Some restrictions may be imposed by the security staff etc. on the working and for movement of labours, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 5. 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 for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 6. The contractor shall give a performance reports of the entire installation(s) as per standing instructions 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.
- 7. 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.
- 8. The control and power drawings shall at all times be properly co-related before

executing any work.

- 9. It shall be ensured by the contractor that no live electric wire is left exposed or unattended to avoid any accidents in this regard, if it happens so, the contractor shall fully be held responsible.
- 10. 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.
- 11. 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.
- 12. Final bill of whole work shall be finalized and paid by the Institute. Junior Engineer (Electrical) and Assistant Engineer (Electrical) will prepare, verify AOMC works as per scheduled plan and finalize the final bill of AOMC work and will send it to S.E., IWD through proper channel for payment processing.
- 13. The contractor shall at his own expense procure and provide all consumable materials
- 14. The contractor shall procure all the materials in advance so that maintenance work could not get hampered.
- 15. 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.
- 16. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.
- 17. Monthly duty chart of deputed staffs with their designation shall be provided by the contractor to Engineer in charge within first week of each month and attendance sheet of the same should be submitted along with monthly bills.
- 18. All safety precaution must have to follow by contractor staff at site and all safety appliances like Safety shoes, Safety gloves, Safety helmet, Safety belt, Safety goggles, raincoat etc. shall be arranged by contractor before starting the job. Contractor will be wholly responsible for man power accidental loss at site. No claim for any man power loss will be beard by the institute.

# 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
	Diagnostic kit for MV/LV breakers to identify deterioration	
2.	Of insulating material / hot spots on various electrical equipment's to identify safety issues in advance.	Lot
3.	Equipment for hoisting & lifting as & when required	2 Set
4.	Drilling machine	3 Sets
5.	Screw driver set, Crimping tools, Discharge rod & Cutting pliers set etc.	2 Set
6.	D-Spanner Set	3 Sets
7.	Ring spanner Set, Slide wrench, Hammers, Chisels,	2 Sets

# FORM OF EARNEST MONEY DEPOSIT

#### **Bank Guarantee Bond**

WHEREAS, contractor	(Name	e of	contractor	r) (hereinafter	called	"the
contractor") has Submitted	his ter	nder	dated		(Date)	for
	the c	onstru	ction/AOM	C of		•••••
			(	(name of work)	(here in	after
called "the Tender")						

KNOW ALL PEOPLE by these presents that we (name of Bank) having our registered office at (here in after called "the Bank") are Bound unto .....

(hereinafter called "Registrar, IIT (BHU)") in the sum of (in words ......) ......) for which payment well and truly to be made to the said S.E., IWD the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this ..... day of ...... 20......

THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the S.E., IWD:
- (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;

OR

fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,

(b) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,

#### OR

(c) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Registrar, IIT (BHU) either up to the above amount or part thereof upon receipt of his first written demand, without the Registrar, IIT (BHU) having to substantiates his demand, provided that in his demand the Registrar, IIT (BHU) 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.

This Guarantee will remain in force up to and including the date ......\*after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the S.E., IWD, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

## DATE ...... SIGNATURE OF THE BANK

WITNESS ..... SEAL

## (SIGNATURE, NAME AND ADDRESS)

\*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tend

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

Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).

# 1. <u>SCOPE OF SERVICES</u>

The work has to be carried out as per the best engineering practices and in accordance with the technical specification of the instruction manuals.

The scope shall include Annual Operation & Maintenance Contract for round the clock routine services, Preventive/Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA, Battery etc.) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P) covering the following **Annexure-I equipments :** 

SI.No	p.Equipment Details	Make	Unit	Qty			
	33 KV PSS						
1	Transformer 6/7.5MVA	SEIL	Nos.	2			
2	Transformer 1 MVA	SEIL	Nos.	5			
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 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 DSS	5		
15	11KV VCB PANEL HWX 8 PANEL BOARD	SEIL	Nos.	1
16	11KV VCB PANEL VMX 6 PANEL 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	11KV VCB PANEL SISO	SEIL	Nos.	1
20	Transformer 0.5MVA	ALSTOM	Nos.	12
21	RCS PANEL	JASPER/KAYBEE/SEIMENS	Nos.	5
22	ALCP	SEIL/JASPER/KAYBEE	Nos.	1
23	DCDB	HBL/DUBAS	Nos.	5
24	ACDB	SEIL/RECON/L&T/ESSAR	Nos.	6
25	LT PANEL BOARD	SEIL/RECON/L&T/ESSAR	Nos.	11
26	BATTERY BANK	HBL/DUBAS	Nos.	5
27	RTU PANEL	SEIL	Nos.	6
28	Earthing station		LOT	LS
29	SCADA System	SEIL	Nos.	3
30	ATS Panel	L&T	Nos.	1
31	RTPFC	L&T	Nos.	1
32	Transformer 1MVA	SEIL	Nos.	5
33	HT/LT Underground & Overhead service lines			

- 1. The installation shall be maintained in the existing original condition/position. The installation is running quite satisfactory at present. The contractor shall be solely responsible for maintenance and upkeep of the equipments in good conditions.
- 2. The supplying and topping up of transformer oil as and when required, filtration and centrifuging of oil once in a year changing of gasket as and when required and with required quantity of material for maintenance such as tools & instruments, CTC, cloth, sand paper, nut and bolts with washer (S.S.), petroleum jelly, lubricating oil greases, HRC fuses for control supply & indication lamps shall also be covered in scope of work.
- 3. The preventive maintenance schedule shall be prepared and submitted by the contractor in advance to AE concerned. The necessary shutdown may be taken with prior permission of the Superintending Engineer, IWD, IIT (BHU) Varanasi.
- 4. Performa for weekly, monthly, quarterly half yearly & yearly checking should be filled up after doing preventive maintenance of equipments. The maintenance records shall be checked & verified by the Engineer in charge. (Weekly, quarterly, half yearly and yearly maintenance & repair chart / Performa shall be maintained by contractor)
- 5. A suitable complete shutdown shall be given after the approval of the Superintending Engineer, IWD for preventive maintenance of the complete system. All the equipments

should be thoroughly checked & maintained for proper functioning/operations of the equipment. All relays have to be checked/tested and calibrated once a year.

- 6. All major structures, cable supports and steel frames shall be painted once in a year with approved color.
- Replacement of indicating lamp/ LED type lamp including supply of the same as and when found defective.
- 8. Cleaning of complete yard including painting of structure of complete yard along with fencing and screening of sand and screen concrete and spread the same once in a year and grass root removing four times in a year as required.
- 9. All the other repair works except given in the contract, will be carried out by the Institute on his own cost.
- 10. The payment against maintenance during the contact period shall be made against monthly on pro rata basis running bills documents of the accepted amount for AOMC subject to satisfactory maintenance of the installation and submission of all formats such as weekly, monthly, quarterly & yearly as maintained by the contractor filled and accepted by Engineer-in-charge of the work.
- 11. The adequate team of manpower shall be available at site as per quantum of the work. Also, it is responsibility of the contractor to provide the manpower within 2-3 hours on call by any representative of the Institute in case of breakdown.
- 12. There shall be a penalty in case of absent of the man power as per duty chart at the time of maintenance/breakdown. A penalty of Rs.1000/- shall be liable on first occasion and the same shall be increased to Rs.2000/- for second occasion further on wards. In case the situation does not improve, the contract shall be rescinded.

# 2. <u>DEFINING SCOPE OF WORK</u>

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.
- 9. Visual monitoring & recording of gas pressure inside busbar chamber daily.
- **10.** Manager will report to the A.E. IWD daily for any activity of same day and interruption of power supply.

## 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(s).
- 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) may 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. Silica gel procurement and replacement is in the scope of vendor, however, payment for the material shall be made by IIT (BHU).
- 7. Cleaning of PSS and all DSS

## **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 IWD, IIT (BHU) in advance for better material management and/or payment.
- 4. To advice IIT (BHU) for better spares planning and spares management.

## **Quarterly Schedule**

- 1. Preventive maintenance of all DSS and PSS. Contractor shall give prior schedule for maintenance and get the same approved by IWD, IIT (BHU).
- 2. Checking the overall condition of radiators and transformers.
- 3. To carry out mock drills.
- 4. 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).

- 5. Check the overall condition of circuit breakers, isolators and its contact, P.T., CTs' and other electrics.
- 6. Greece the isolators contacts and apply petroleum jelly on battery terminals.
- Collecting of oil samples of Transformer for testing BDV value of oil by BDV testing KIT provided by IWD, IIT (BHU) and submit the test report to IWD, IIT (BHU). If value found below standard value, centrifuging of oil shall be carried out by IWD, IIT (BHU).
- 8. Checking and measuring of earthing of PSS and DSS.

# 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.

1	Transformers	Weekly	Clean the transformer with cotton rags. Check that temperature rise is reasonable. Check the oil level of transformer. Check that air passages are free check colour of silica gel.
		Quarterly	HT and LT Bushing: Examine for crakes and dirt deposits clean or replace. Oil in Transformer: Check for dielectric strength and water content. Cooling fan bearings, motors and operating mechanism: Lubricate bearings, examine contacts, check manual control and interlocks.
		Half yearly	Oil cooler: Test for pressure, leakage Oiling and greasing of operating mechanism etc.

## **Schedule for Maintenance**

		Yearly	Oil in Transformer: Check for acidity and sludge, filter if required. Gasket joints: Tighten the bolts evenly to avoid uneven pressure. Cable boxes: Check for sealing arrangements for filling holes. Examine: compound for crakes. Replace the gasket if leaking. Relay, Alarms, their circuits etc.: Examine relay and alarm contacts, their operation, fuse: etc., check relay accuracy etc. Clean the components and: replace contacts and fuses if necessary. Earth resistance: Record the value of earth resistance of earth pits. Silica gel: Replacement of silica gel and cup oil. Buchholze relay magnetic oil gauge: Check its operation, control circuit and repair/replace required.
2	Outdoor type Isolators	Weekly Quarterly	Checking of Indicating lamps, gas pressure, earthing connection etc.Cleaning of metallic enclosure. Checking of operation.
			Checking of SF6 pressure checking. Cleaning of polycons of breaker.
		Half yearly	Cleaning of contacts of isolators, and inserting petroleum jelly in contacts ,Oiling and greasing of operating mechanism etc.
		Yearly	Checking of control circuits and its accessories i.e. aux contactors, coils, repair/ replace if required.
3	Lighting arrester	Weekly Quarterly	1. Visual check, leakage current counter reading to be recorded Cleaning of external insulations.
		Half yearly	checking and tightness of connections, checking earthing connections,
		yearly	Checking earthing connection up to earth pit and recording the earth pit value.
4	Overhead busbar	weekly	Visual checks for external damage of OH bus bar, connecting clamps, insulators etc.
		Quarterly	Damaged clamps, insulators and nut bolts etc. shall be replaced
		Half yearly	Checking of overhead structure earth connections and tighten them.
		yearly	<ol> <li>Sagging of overhead bus bar if required including tightening of clamps.</li> <li>Testing of earth pit value of structure earthing pits.3. Cleaning of insulator string.</li> </ol>
5	HT switch gear panel indoor type	weekly	<ol> <li>Cleaning of panel externally.</li> <li>Check for proper closing of panel so that no Space should be left which may allow to enter the lizard or insects.</li> </ol>
		Quarterly	1. Checking of indicating lamps, Ammeter, voltmeter along with selector switches i/c replacement of defective ones. Checking of Operation of breakers for trip/ close. Cleaning of panel internally.

			1
		Half yearly	Checking of interlocking.
			Checking of control circuit and its accessories (I.E. aux
			contacts, connections, coils etc.)
			Visual check of earth connections and tightening if reqd.
			2.
		Yearly	Checking, tightening and up keeping the insulation of main
		5	bus bar and cable connection.
			Oil and greasing of operating mechanism.
			Cleaning of contacts with CTC, indicating devices, voltmeter,
			a meter, selector switch etc. and replace if required.
			Checking of CT and PT's etc.
			e
			Checking of SF 6 gas pressure switch operation.
6		11	Checking and recording of earth resistance value.
6	Relay and control	weekly	Cleaning of panels externally
	panel		Checking and replacement of indicating lamps if required.
		Quarterly	1. Cleaning of panel internally with vacuum cleaner.
			2. Checking of Aux contractor.
			3. Check all fuses and contracts replace / repair if required.
		Half yearly	
			Check operation of auxiliary contractors.
			Checking CTs & PTs connections.
		yearly	Checking and tightening of all connections.
		5 5	Checking and servicing of all contactors and relays, repair/
			replace if required.
			Checking of earth resistance value.
			Checking calibrating and repairing of all meters/relays.
			To check contacts of fuses, repair / replace if required.
7	ACDB Panel	weekly	Cleaning of panel externally
ľ	ACDD I allel	WEEKIY	Visual check of panel meters.
		Overtarily	Checking indicating lamps replace/ repair if required.
		Quarterly	1. Cleaning of the panel internally with vacuum cleaner,
			2. Check of switch contacts
		TT 10 1	3. Checks all fuses and contacts replace / repair if required.
		Half yearly	1. Checking of Earth connection of panels.
			Checking and repairing of operating mechanism of SFU/
			MCCB etc.
		yearly	1. To check of all switches, contacts, tighten the connection,
			cleaning of contacts and insert petroleum jelly.
			2. Checking of earth resistance value.
8	Battery charger	weekly	1. Cleaning of battery charger and performing visual
-			inspection for any abnormality.
			<i>2.</i> Checking of batteries i.e. electrolyte levels, sulphasion of
			contracts.
<u> </u>		Quantanles	2. Checking indicating lamps, replace/ repair if required.
		Quarterly	1. To check Voltage of each battery and record.
			<i>3.</i> To check operation of charger (Boost + float.)
		Half yearly	1. To check value of specific gravity of electrolyte of each
			battery
			To remove sulphasion and insert petroleum jelly.
			2. Connection tighten of battery charger
L		Į	

	· 4	2.	Internally cleaning with vacuum cleaner. Tightening of all connections.
	2	2.	Checking of the operation of all switches.

## **Exclusions (For GIS):**

- i. Timing & HV Test –As this cannot be performed without uninstalling the cable
- ii. Removal of mechanism or its parts for maintenance
- iii. Removal of cables
- iv. Drying of SF6 Gas Rectification of any major problem found during system health checkup.
- v. Any Spares if required shall be extra & will be quoted at the time of Servicing only.

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

- Take necessary shutdown and provide switchgear in Dead condition all standard tools & tackles, if applicable.
- iii. Gate pass arrangement for our team with necessary tools & tackles
- iv. Engineer in charge as single point contact for shutdown coordination & planning
- v. All drawings, manuals, SLD's & protection schemes etc., required for reference
- vi. Drinkable water at site.

## 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, Overhead Lines and HT/LT underground cables.
- 4. Medical Facility in case of any emergency shall be liability of the vendor.

## 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 AE, IWD, IIT (BHU), so that a strategy can be planned in case of such an unscheduled outage. This information will be collected by the AE, IWD, 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 AE, IWD, IIT (BHU), 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 also be maintained by vendor/contractor.

Contractor will be responsible for maintaining the healthiness 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 IWD, IIT (BHU). In assistance of the vender/Contractor shall provide man and machinery for cable jointing work. **Restoration of Power after Breakdown** 

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

# 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 Annexure-I.

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. All manpower shall be deputed after duly verification of experience and qualification under instruction of A E, IWD, IIT (BHU).
- d. 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.

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

- 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 IWD, IIT (BHU)).
- Condition assessment of silica gel in breather and replacement of silica gel when required, checking and maintaining breather conditions and conservator oil levels.
- The transformer oil filtration to be done semi-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 & 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 IWD, IIT (BHU).
- Checking to ensure all the lamp are glowing (Spares by IIT (BHU).
- Necessary circuit 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 IWD, 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, firefighting systems, smoke detectors, CO2/DA Cylinders etc. immediate replacement/recharge after the operation of fire 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 vendor.
- 17. LT overhead network shall be maintained by vendor.
- 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. IWD, 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 procured/arranged by 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 with prior permission of

AE, IWD, IIT (BHU) for payment of items.

## 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.
- c) Recording & maintain of log book register to record power consumption load/outage/Tripping/breakdown etc.

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 IWD,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.<u>Extra Jobs</u>

- 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, IWD, IIT (BHU) shall provide approved unit rates for such activities to contractor within one month of contract finalization.

## 6. Period of Contract

The period of contract shall be for one year and after one year it can be extended with an increment of minimum 7% per annum for a period of not more than 2 years after the satisfactory AOMC performance report of Engineer in charge IWD.

## 7. 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.

Sr. 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 AE, IWD, IIT (BHU).			
2	Penalties	<ol> <li>Contractor shall exercise every effort to restore power after breakdown and smooth operation of the PSS and DSS; however, 1% per day of contract value shall be applicable in case of tripping or delay in restoration of power, in any circumstances.</li> <li>Any tripping due to fault in UPPCL metering unit shall not be liable for penalty.</li> </ol>			

## Clarification:-

3	Transformer Oil Filtration	Transformer Oil filtration if required shall be carried out at extra charges. Activity shall be executed after written confirmation from AE, IWD, IIT (BHU) and transformer oil shall be supplied by IWD, 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 along with 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 unscheduled Maintenance.	All spare parts required for maintenance plan and unscheduled maintenance shall be arranged by the vendor and shall be reimbursed by the Institute after the submission of Tax Invoice.
6	of	For all equipments it is requested to contact the OEM's for specialized services. Bidder should procure spares of GIS as given in Annexure-1 in his ware house, when needed. Loading/unloading of equipments/materials shall be in vendor's scope.
7	Mobilization time.	3 weeks mobilization time to start the activities at site from the date of LOI/ contract order.
8		AE (Electrical) IWD, IIT (BHU) will be engineer in-charge and shall be locally available to coordinate, authorize and certify various activities to be taken up at 33/11kV PSS and11KV/433V DSS.
9	Bill certification.	The bill along with all supporting documents for bill verification from contractor shall be forwarded by the JE and AE after satisfactory work performance of the vendor.
10	Contractor.	<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> <li>Crane and Hydraulic ladders, etc. shall be arranged by IIT (BHU).</li> <li>IIT (BHU) shall provide an enclosed secure office space in the central 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.</li> </ul>

# 7. <u>Commercial Terms & Condition:</u>

The estimated cost of annual operation & maintenance contract per annum is Rs.**75**, **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 IWD, 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 IWD, IIT (BHU) will be at an extra cost to IWD, IIT (BHU). The prices for such items shall be as agreed mutually between contractor and IWD, 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 contractors under:

## Payment for scheduled services:

100% payment along with taxes shall be paid on a pro-rata basis as monthly running bill. Certification for the bills shall be done by engineering wing 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.

## 8.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.

## 9. Limitation of Liability

A. "Not withstanding 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, 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.

## 10. Insurance

- 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.
- When working with subcontractors, contractor shall ensure that the subcontractors procure a minimum of insurance cover proportioned to their respective performance of the Services.
- iii. 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.

## **11.0 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.

# **12.0 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.

# **13.0 Warranty for third party maintenance services & equipments under warranty period**

- IWD, 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.
- Contractor shall not repair IWD, IIT (BHU)'s equipment under OEM warranty without express approval of S.E., IWD, IIT (BHU). This does not replace the warranty offered by third party manufacturers with installed equipment during the warranty period. IWD, IIT (BHU) shall manage the third party manufacturer to comply with its warranty obligations and keep contractor informed.

# **14.0 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 IWD, IIT (BHU) the permanent Provident Fund Code numbers and ESI of its employees and those

employed by subcontractors, if applicable.

## **15.0 Workmen's Compensation**

- 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.
- 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.
- 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.

## 16.0 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 IWD, IIT (BHU), Varanasi.

## 17.0 Subletting/ Assignment

Contractor may, with the prior consent of IWD, 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.

## **18.0 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 reenactments thereof from time to time, by sole arbitrator appointed with the mutual consent of the Parties. The seat of arbitration shall be Varanasi. The language to be used in the arbitration proceedings shall be English of Hindi.

## **19.0 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;

# 20.0 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:
  - 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,
  - 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.

## 21.0 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 claiming that the Force Majeure event has occurred and that it is the affected party.

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.

# 22.0 Confidentiality – Intellectual Property

- So as to enable contractor to perform its obligations under this contract and/or in fulfilling these obligations, IWD, IIT (BHU) shall disclose and contractor may gain access to information which is proprietary to IWD, 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.

- The obligations and restrictions hereunder shall not apply to any other information disclosed to contractor by IWD, IIT (BHU) or to which contractor may gain access, and which is not treated by IWD, 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 IWD, IIT (BHU)) lawfully having possession of such information
- 3. 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 IWD, 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.
- 4. These technical information and other related documents shall be returned to IWD, 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.
- 5. Contractor shall not use the name of IWD, IIT (BHU) in any manner either for credit arrangement or otherwise and it is agreed that IWD, IIT (BHU) shall not in any way be responsible for the debts, liabilities or obligations of contractor and/ or its employees.
- 6. These provisions of this Clause shall survive, for a period of 3 years, beyond the termination or expiration of this contract.

## 23.0 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.

## 24.0 Exclusivity

IWD, 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. IWD, 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.

## 25.0 Termination

"If IWD, 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 IWD, IIT (BHU), if IWD 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.

## **26.0 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 IWD, IIT (BHU) in case IWD, IIT (BHU)

- 1. Delays or fails to fulfill its contractual obligations mentioned hereunder;
- 2. The payments due to Vendor are withheld /suspended beyond reasonable time limit;
- 3. The occurrence of Force Majeure event mentioned in the tender
- 4. A change in law or directive of any Government Authority, where performance of

contractual obligations is not feasible or possible;

5. 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.

## 27.0. Export Compliance

IWD, 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. IWD, 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."

## 28.0 Personal

If any of contractor's employees shall, in the opinion of IWD, IIT (BHU), be guilty of any misconduct or incompetence or negligence, then if so, directed by the Engineer in-charge nominated by S.E., IWD, IIT (BHU) Varanasi, 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.

B	0	Q

SI. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT With Taxes
1	2	3	4	5	6
1	Annual Operation & Maintenance Contract for round the clock routine services, Preventive/ Breakdown maintenance of 1 No. 33/11kV PSS (with GIS Panels & AIS), 07 Nos. 11kV/433V DSS, all allied Substation systems (SCADA ,Battery etc ) and HT/ LT service Lines at IIT (BHU) campus, Varanasi (U.P).	1	Job	75000.00	75,00,000.0 0
Total in Figures					75,00,000.00