

NATIONAL INSTITUTE OF EPIDEMIOLOGY  
(INDIAN COUNCIL OF MEDICAL RESEARCH)  
(AN AUTONOMOUS UNIT UNDER GOVT. OF INDIA  
MINISTRY OF HEALTH & FAMILY WELFARE)  
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ENQUIRY NO.NIE/S-92/2022-23/01

DATE: 01/06/2022

As per list Enclosed

**SUB: QUOTATION FOR 1000 KVA  
TRANSFORMER OIL FILTERATION  
& RELATED WORKS - REGARDING**

Dear Sirs,

Please quote your **LOWEST RATE** for the undermentioned service. Your sealed quotations must reach this office on or **before 22-06-2022 4.30 P.M.** The quotation must be posted in **SEALED ENVELOPE DULY SUPERSCRIBED AS:**

QUOTATION FOR:- **TRANSFORMER OIL FILTERATION, PAINTING, ACB'S RELAY  
TESTING - REGARDING.**

ENQUIRY NO.NIE/S-92/2022-23/TRANSFORMER OIL FILTERATION & RELATED WORKS

**DUE: 22-06-2022 4.30 P.M.**

The purchase of material is subject to the terms and conditions stated below. The offers are liable to be rejected if the supplier **FAILS** to comply with the conditions.

**DESCRIPTION OF WORK**

- **Work related specifications for 1000 KVA Transformer Oil Filtration & Other Works is attached in Annexure - I**
- **Price should be quoted in the format as per Annexure - I**
- **Terms and Conditions are mentioned in Annexure - II**
- **Scope of Work is mentioned in Annexure - III**

**"Only sealed quotations will be accepted. Quotations sent through open letter or email will not be entertained"**

Yours faithfully,

  
**ADMINISTRATIVE OFFICER**

Tender Id: 2022\_DoHR\_662702

**Annexure – I**

<b>S. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Total Amount (Inclusive of Tax)</b>
1.	Charges for filtration of Transformer Oil through streamline filter unit to improve the di-electric strength to the optimum value for 1000 KVA transformer with on Load Tap Changer and Replacement of Gascuts and fastners if necessary	No.	1	
2.	Testing and Issuing test reports for di-electric strength and acidity of transformer oil	Set	2	
3.	Charges for servicing of On Load Tap Changer			
	a) Removing the oil from the OLTC Tank			
	b) Flushing out carbon deposit from the tank			
	c) Removing the contacts carbon deposits from the fixed and moving contacts			
	d) Checking the connection and tightening of all the contacts			
	e) Checking the connection and tightening fasteners in the barrier board	No.	1	
	f) Checking the transient resistance			
	g) Filtration of OLTC Oil (Minimum three circulation)			
	h) Cleaning and lubricating the mechanism by molybdenum grease wherever necessary			
	i) Checking up the operation of OLTC electrically and manually and remote also. (Replacing the top cover gasket if necessary)			
4.	Servicing Maintenance and Testing of 415V(ACB) electrical work of rating 800A to 1600A			
	a) Cleaning if insulators and contracts by CRC			
	b) Lubricants of mechanisms by CRC			
	c) Checking of Electrical Operations	No.	5	
	d) Checking of Mechanical Operation			
	e) Checking of Auxiliary Circuit			
	f) Insulation Resistance Test			
	g) Contact Resistance Test			
	h) Tightness Checking for terminations			
	i) Providing Petroleum Jelly			
5	Charges for control wiring checking OLTC/RTCC panel functional checks and buchholz relay winding temperature indication and oil temperature indicator functional checks	L.S	1	
6	Testing of relays and issuing test reports for the following over current and earth fault relay, under voltage relay, over voltage relay, Auxiliary relay, master trip relay in 11KV HT VCB panel and earth fault relay in LT panel	L.S	1	

7	Charges for replacing of dehydrating silicagel for 1000 KVA transformer	No.	1	
8	Charges for topping up transformer oil	Ltrs	50	
9	Charges for cleaning & painting of transformer with enamel paint of same colour	L.S	1 Job	
10	Transport charges for transformer oil filter unit with oil testing equipments to site and return back	L.S	1	
11	Charges for testing and issue of test reports of earth pits and earthing system for Transformer DG, HT and LT Panel around sub-station(30 Nos)	L.S	1 Job	
12	Servicing Maintenance and Testing of HTVCB (12 KV) electrical work of rating 630A			
	a) Cleaning of insulators and contacts by CRC			
	b) Lubricants of mechanisms by CRC			
	c) Checking of Electrical Operations			
	d) Checking of Mechanical Operation	No.	1	
	e) Checking of Auxiliary Circuit			
	f) Insulation Resistance Test			
	g) Contact Resistance Test			
	h) Tightness Checking for terminations			
	i) Providing Petroleum Jelly			
13	Charges for replacement of spring charge handle, rack out handle of HT VCB	No	1	
14	Charges for replacement of rack out handle of LT ACB	Nos	2	
<b>Total (Inclusive of GST)</b>				

**Terms and Conditions:**

1. ICMR-NIE shall provide 3 phase/single phase supply for filtering / testing purpose.
2. Two samples of each of the oil should be tested before and after filtering and reports to be furnished.
3. Quotations are invited only from Chennai based Agencies / Firms nearby ICMR-NIE, Chennai Campus for repair and service of transformers, high voltage 11KV vacuum circuit breaker, low voltage 415V air circuit breaker.
4. The intending bidders must inspect and examine the site and satisfy himself before submitting his tender as to the nature of the site, the quantities and nature of works and material necessary for completion of the works. For this purpose, the Institute may be contacted with prior appointment on any working day between 9.00 AM – 5.30 PM
5. The bidder should submit the copy of the visitor pass after the inspection of the site along with the tender documents.
6. The bidder shall submit the tender after examining the tender documents, scope of work, specification, terms and conditions and visiting the institute personally. The tenders filed without inspection of the institute will be summarily rejected.
7. The rate quoted by the firm should be valid for **1 Year**.
8. The rate quoted should be inclusive of all taxes, other charges, etc., No additional cost will be paid.
9. Rate must be quoted in the format as given in Annexure – I.
10. It is mandatory to quote the rate for every individual item as given in the Annexure – I.
11. The materials replaced should be of good quality with ISI / Equivalent standards.
12. All the works are to be carried out with good workmanship as per the latest code of practice in accordance with the rules and regulations of the Electrical Inspectorate.
13. Payment Terms – 100% on completion of works, successfully charging back the transformer and submission of test certificates.

14. Warranty/Guarantee if any should be mentioned in the quotation itself.
15. Any financial loss caused i.e. damage arising at the time of service work should bear by the contractor.
16. It is under the discretion of the Institute to consider the Lowest rate quoted for individual items or the total sum of the rate quoted against all the items during the evaluation of Quotation.
17. The Director NIE, reserves the right to terminate the contract in the interest of the Institute, for any justifiable reasons, not mandatory to be communicated to the tenderer.
18. The bidder has to follow and observe the safety & statutory requirements.
19. Supervision of the work has to be carried out by the bidder.
20. Safety of the contractor's workmen will be entirely the responsibility of the contractor. In case of any work injury, major or minor, the contractor or his representative will have to provide the medical aid.
21. Necessary cables for filtering machines should be provided by contractors.
22. Precautions, electrical permission from Electricity Board should be solely the responsibility of the contractor.
23. The full particulars about company profile with current customer details are to be enclosed.
24. Certified copies of PAN, GST Registration Number and Bank Details with Account Number and IFSC code should be enclosed with the quotation
25. Quotations received after the due date will be summarily rejected.

**Scope of Work:**

1. Collecting oil sample and getting it tested at a reputed testing laboratory to ascertain the condition of oil prior to starting of the oil filtration work.
2. Cleaning the main transformer body and its associated parts properly with cotton waste and blower.
3. Ensuring that the protection circuits of the concerned transformer provided for tripping of other associated electrical equipments are disconnected.
4. Shifting of the transformer-oil Filtration machine near the transformer (whose oil filtration is to be carried out) cautiously taking all safety aspects into consideration.
5. Connecting the filter machine to the nearby power supply source as well as to an earthing point.
6. Ensuring that the sufficient numbers of fire extinguishers/ fire buckets filled up with sand are available at work site and there is free approach to a nearby fire tank.
7. Covering the transformer properly with an inflammable type tarpaulin sheet for effective filtration taking due protection against a possible fire hazard.
8. Connecting the hose-pipes between the oil filtration machine and the filter valves provided on the transformer properly.
9. No oil leakage should take place either at connection points of the hose-pipes or any other place.
10. Carrying-out oil filtration of a transformer means doing filtration of oil contained in main tank, headers, radiators bank, OLTC chamber, bushings and conservator etc in a proper sequence as per the recommended norms to meet the requirement.
11. Starting the filtration of oil slowly after completing all the preparatory works.
12. Increasing the filtration parameter gradually.
13. Measuring and recording the readings of winding insulation resistance, oil temperature and dielectric strength of the oil at regular intervals in a register exclusively meant for the subject work.
14. Replacing silica gel in the Breather-unit after doing its proper re-generation.
15. Replacing oil in OTI and WTI pockets and doing their calibration to ensure that they give correct readings during the oil filtration work.
16. Checking and setting right the oil level indicator to give reliable indications of oil level in the conservator.
17. Replacing old gaskets of covers etc by new ones if those covers are required to be removed for completing the oil filtration work properly.

18. Maintaining proper house-keeping and doing cleaning of the work area regularly including wiping off the spilled oil, if any, to ensure the work area look tidy and clean all the time
19. Time / Temperature~ IR graph shall be plotted to see the trend and also the final stabilized value of the Insulation Resistance attained by the transformer as a result of doing the filtration of the transformer oil.
20. Attending to oil-leakage immediately, if it develops in any part of the transformer due to the activities carried out during the oil filtration work.
21. Collecting oil sample and getting it tested at a reputed laboratory second time to ascertain improvement in the oil quality after completion of the oil filtration job.
22. Doing final cleaning of the area around the transformer and the adjacent vicinity to give a clean look.
23. Charging of the transformers and observing the improvement attained in its performance as a result of successful completion of the oil filtration work.
24. Preparation and submission of 'oil Filtration Report' including the time / Temperature~ IR graph Drying out graph and oil-test reports etc