

BY REGD. POST WITH ACK. DUE IN DUPLICATE-

TRANSMISSION CORPORATION OF TELANGANA LIMITED
VIDYUTSUDHA::HYDERABAD-500082.Off: PABX:040 -23396000
Website:Transco.telangana.gov.in CIN No:U40102TG2014SGC094248

From:

The Chief Engineer/Transmission
TSTRANSCO, Vidyut Soudha,
Hyderabad - 500 082

To:

M/s Shirdi Sai Electricals Ltd,
4/3, Chack Daud Nagar,
Naini Dadari,P.O-Naini,
Mirzapur Road,Dist:Prayagraj- 211008(U.P)

P.O.No.4800006262/CE(Tr)/SE(Tr)/DE(SS)/ADE1/F.315MVA Veltor ICT/MC- 20/ D.No:431/22,
Dt: 24.09.2022.

Sir,

Sub:- TSTRANSCO – Transmission – Repair of 1No.of 400/220KV, 315 MVA ICT, ABB make, Sl.No: 14001-02,YOM:2005 failed at 400 KV Veltor SS - Detailed Purchase Order - Issued.

Ref:- 1) Lr.No.SSEI/2022-23/TSTRANSCO/01,Dt.09.05.2022
2) Lr.No.SSEI/2022-23/TSTRANSCO/02,Dt.05.07.2022
3) Lr.No.SSEI/2022-23/TSTRANSCO/03,Dt.02.08.2022
4) Lr. No.CE(Tr)/SE(Tr)/DE(SS)ADE1/F.No. Repair 315 MVA Veltor /D.No. 344 /22,
Dt.19.08.2022.

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1. I, acting for and on behalf of and by the order and direction of the Transmission Corporation of Telangana Limited (hereinafter called the 'TSTRANSCO') hereby accept the rates offered by M/s. Shirdi Sai Electricals Ltd, Begumpet, Hyderabad (here in after called the Company or the Repairer or the Contractor) and as per the allotment of Sick ICT vide 4th cited letter for Repair of 1No.of 400/220KV, 315 MVA ICT, ABB make, Sl.No: 14001-02,YOM:2005 failed at 400 KV Veltor SS, with the Terms and Conditions, as stipulated in this Purchase order.

2. **SCOPE OF MATERIALS, WORKS & PRICES:** This contract relates to repair of 400/220KV, 315 MVA ICT, ABB make, Sl.No: 14001-02,YOM:2005 failed at 400 KV Veltor SS, Mahabubnagar OMC Circle for an amount of an amount of Rs. 3,84,21,449.00 inclusive of taxes

3. **SCHEDULE OF MATERIAL, WORKS, TRANSPORTATION**

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S.No.	Item Descripon	Qty.	Unit	Unit Price	Amount
Material Portion (A)					
1	HV Bushing 420 KV , 1500A OIP type	3	Nos.	1000000.00	3000000.00
2	IV Side Bushing 245 KV , 1250 OIP Type	3	Nos.	375000.00	1125000.00
3	LV Side Bushing 52 KV , 3150 A OIP Type	3	Nos.	150000.00	450000.00
4	R-Phase Turret	1	No.	150000.00	150000.00
5	OLTC Conse. Valve and Air Rel.Plug	1	Nos.	15000.00	15000.00
6	OLTC MOG	1	Nos.	8000.00	8000.00
7	OLTC Breather	1	Nos.	5000.00	5000.00
8	HV R-Phase Turret CT	1	No.	50000.00	50000.00
9	Neutral Earthig Insulator Porcelain	1	No.	5000.00	5000.00
10	HV R- Phase Turret Equalizing Pipeline Valve	1	Nos.	10000.00	10000.00
11	HV R-Phase 400 KV Line lead and shield ring	1	No.	300000.00	300000.00
12	Neutral Bushig 36 KV, 2000A	1	Nos.	25000.00	25000.00
13	EASUN MR BHL make OLTC with DM Box	1	Nos.	300000.00	300000.00
14	OSR	1	No.	8000.00	8000.00
15	Online Dryout System	1	No.	700000.00	700000.00
16	Transformer oil in Barrels	133210	Ltrs	95.00	12654950.00
Sub-Total(A)					18805950.00
Labour Portion (B)					
S.No.	Item Descripon	Qty.	Unit	Unit Price	Amount
1	Dragging ,loading, unloading, repair, transportation of ICT to and fro including Transit Insurance, complete ETC of ICT at allotted SS	1	Job	13754600.00	13754600.00
Sub-Total (B)					13754600.00
TOTAL REPAIRING CHARGES C=(A+B)					32560550.00
Add GST @18%(D)					5860899.00
Total Amount(E)					38421449.00
Amount In words :(Three Crores Eighty Four Lakh Twenty One Thousand Four Hundred and Forty Nine only)					

4. **PRICES:** The above prices are firm and inclusive of packing and forwarding charges, freight, Insurance and GST . The repairer shall not be eligible for any extra charges in respect of minor accessories even though they are not mentioned. Loading & unloading of the PTR has to be attended by the repairer, at their work shop without any extra cost.

5. **TAXES AND DUTIES:** The above prices are inclusive of:

- (a) GST @ 18%

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b) TAX RECOVERIES:

- i) Labour Cess @ 1% on total labour amount of the Purchase Order Schedule shall be collected from the repairer
- ii) GST-TDS @ 2 % on the amount of work exclusive of GST shall be collected from the repairer and the same shall be remitted to the concerned Tax department.

6. FREIGHT AND INSURANCE:

- i) The above prices are inclusive of Freight and Insurance charges for transporting of the material described at Material portion and ICT from site to the works (to & fro) of the repairer, for repair.
- ii) The above ICT including oil and all accessories are to be transported to the allotted Substation through Hydraulic trailer after repair
- iii) Arranging the insurance shall be responsibility of the repairer. The Insurance policy shall cover the period of repair and storage for 60 days after repairs at site. The policy taken should contain a provision for extension to cover further storage and erection at TSTRANSCO's cost.

7. TERMS OF PAYMENT:

- i. 100% payment shall be paid within 45 days after commissioning of the repaired ICT at allotted SS duly certified by the consignee at allotted sub-station subject to **Clause 10 i.e. PERFORMANCE GUARANTEE** of this purchase order.
- ii. Payments shall be made by the Cheque / by way of Electronic Fund Transfer / RTGS from TSTRANSCO funds.
Bank account details for payment through RTGS system:

Bank Account Name	:	Shirdi Sai Electricals Ltd.
Name of the Bank	:	State Bank of India
Name of the Branch	:	SME Branch Naini
City	:	Prayagraj
Account No.	:	41092991281
IFSC No.	:	SBIN0000139
MICR No.	:	211002020

- iii) The payment of the repair bill shall be admitted only on certifying the aspect of commissioning of the ICT.

8. GUARANTEE:

- i) The Company shall give performance guarantee for the materials replaced/rectified by you for a total period of **36 months from date of commissioning** of the repaired ICT
- ii) In case, the repaired ICT fails **within** guarantee period mentioned in clause (i) above, the repaired ICT should be guaranteed for a total period of **42 months** from the date of commissioning after repair and performance Bank Guarantee shall be extended accordingly.
- iii) The company shall rectify thermal faults, attend oil leakages, problems of high operating winding & oil temperatures, problem of increasing dissolved gases etc., if any observed in the repaired ICT up to **36 months (i.e. within guarantee period)** from the date of commissioning of the ICT, after repair works. The Repaired ICT should be guaranteed for a total period of **42 months** from the date of commissioning and performance Bank Guarantee shall be extended accordingly.
- iv) If the repairer fails to respond to the intimation of TSTRANSCO **within 1 week**, to attend the defects during Guarantee period, TSTRANSCO shall arrange for rectification of the defects through any other agency at the cost and risk of the repairer and recover the cost of rectification from pending Bills/ Bank Guarantees of the repairer.
- v) To & fro transportation and repair cost of failed ICT during guarantee period has to be borne by the repairer.

9. SECURITY DEPOSIT :

- i) The Security Deposit (SD) of Rs.7,68,429.00 in the form of Bank Guarantee has to be submitted by the repairer within 15 days from the date of receipt of Purchase Order for repair of ICT. This is in addition to the performance guarantee. The Bank Guarantee shall be valid for a period of **two years** and with a claim period of six months thereafter. The Bank Guarantee has to be extended in case of extension of completion period of repair. This will not be waived, in any case, under any circumstances. The amount shall be forfeited, if the repairer fails to fulfill the Terms of contract / order.
- ii) Manufactures registered as SSI Units with Industries Department, Government of Telangana State are not exempted from payment of SD, as the repair work is not considered as a supply item.

10. PERFORMANCE GUARANTEE: The Company shall furnish performance Bank Guarantee (PSBG) for 5% of Total value, including all taxes on Rs.100/-Non-judicial stamp paper covering the period of **36 months from date of commissioning** guarantee plus **six months** claim period over and above the guarantee period before payment becomes due. In absence of performance Bank Guarantee, only 95% of the bills shall be processed initially and balance 5% shall be paid after completion of the guarantee period i.e., 42 months from the date of commissioning of repaired ICT.

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11. INSPECTION of ICT: The Company have to intimate this office at least 15 days in advance, as and when propose to conduct the tests, for deputing TSTRANSCO's representative to witness the Tests. Final Inspection (Test) reports shall be submitted, duly entering Minutes of Meeting (MOM) indicating the tests conducted, comments on Test results and any balance works to be attended. Without the MOM by the inspecting officer, the Test reports shall not be considered for approval and issue of dispatch instructions. Three copies of the test certificates containing results of all tests carried out, shall be submitted to the Chief Engineer/Transmission, for approval, before the equipment is going to be dispatched. The final testing of the ICT after repair shall be conducted, duly assembling the radiators, conservator tank and filling the total quantity of Transformer oil.

12. INSPECTION OF OIL: The New Transformer oil to be supplied by the repairer shall be as per TSTRANSCO Standards and shall be offered for testing. The program of inspection is to be intimated to the TSTRANSCO within 15 days prior notice for acceptance tests. The Oil shall be in use until such inspection is conducted and utilization clearance issued in writing.

13. TEST AND TEST CERTIFICATES: All the routine tests in accordance with relevant ISS/BIS/IS-2026, **Oil DGA for all Parameters** shall be carried out on the equipment in the presence of TSTRANSCO's Engineer. Three copies of the test certificates shall be furnished to this office immediately, after the tests and get them approved before payment becomes due. The equipment shall not be dispatched without obtaining the approval for Test certificates.

14. COMPLETION PERIOD:

- i) The repair of the ICT shall be completed within **FIVE Months** from the date of receipt of the Purchase Order. However, the company is requested to advance the repairs and complete the same as early as possible in view of the urgent requirement of ICT.
- ii) In case, if the repaired ICT fails within guarantee period of **36 months** from the date of its commissioning, the failed ICT shall be repaired / rectified and delivered to allotted site by the Repairer at free of cost **within 3 months** from the date of written intimation of such failure, failing which the cost of the repairs incurred will be deducted from the bills.

15. PACKING: The Supplier/Manufacturer/Repairer shall provide such packing for the material/ equipment as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, humidity etc. during transit and open storage.

16. DESPATCH INSTRUCTIONS:- The dispatch instructions shall be communicated separately, after completion of repair works and successful completion of Testing and approval of Test certificates.

17. UNDERTAKING: The Repairer should furnish an undertaking for the following.

- i. Butt welding at winding section and gas welding at assembling section will be done.
- ii. During transformer oil filtration for the ICT, Temperature will be maintained at 60°C and fresh filter pads will be used.
- iii. Thermal faults, oil leakages, problem of high operating winding & oil temperatures, problem of increasing dissolved gases if any observed in the repaired ICT will be rectified including all connected works to the satisfaction of TSTRANSCO upto 3 years from the date of commissioning of the repaired ICT.

18. ADDITIONAL NAME PLATE: Immediately after completion of repair works and test, the repairer shall affix on the ICT, just below the manufacturers name plate (Metallic) / any suitable place of suitable size with the following details punched on it:

- (i) Name of the Repairer:-
- (ii) Tested on:
- (iii) Delivered on:
- (iv) Purchase Order No:

19. PENALTY FOR LATE DELIVERY: The time for and the dates for delivery mentioned in the ICT order shall be deemed to be the essence of the contract. In case of delay, in delivery of equipment/repair of ICT/Transport of ICT to destination, whatever be the reason, the TSTRANSCO may at its option, demand and recover from the Repairer an amount equivalent to **half percent of the value of the contract for every week of delay or part thereof, subject to a maximum of 5% of the total value of the contract (Net value).** This right under the law including the right to cancel the contract, forfeit the deposit and /or recover damages for breach of the Contract.

- i) The date of receipt of the repaired ICT at the destination in good condition will be taken as the date of delivery.
- ii) For penalty, the number of days of delay would be rounded off to the nearest week and calculated accordingly.
- iii) Materials/ Equipment, which are not of acceptable quality would be deemed to be not delivered.
- iv) The date of receipt of the last component of the ICT shall be reckoned as the date of delivery for the purpose of calculation of penalty for delay in delivery.

20. FORCE MAJEURE: The Repairer shall not be liable for delay or for failing to supply the material / equipment for reasons of 'Force Majeure' such as acts of God, acts of Public enemy, acts of Government, fires, floods, strikes, lockouts strikes and etc., in works of manufacturers of items as specified by the TSTRANSCO.

The repairer shall within 10 days from the beginning of such delay notify to the TSTRANSCO in writing the cause of delay. The TSTRANSCO shall verify the facts and grant such as extension of time as facts justify.

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21. LOSS (or) DAMAGE: The Repairer is responsible for the safe custody of ICT during the repair and delivery of the repaired ICT, in good condition, at the destination. The Repairer should acquaint themselves of the conditions, for handling the ICT during repair and transporting of the ICT to the destination. The company shall include and provide the security and protective packing of the goods, so as to avoid damage in transit.

External damages or shortages that are prima-facie the results of rough handling in transit or due to defective packing will be intimated within a fortnight of the receipt of the equipment/materials. Internal defects, damages or shortages of any integral parts which cannot ordinarily be detected on a superficial visual examination though due to bad handling during repair, as well as in transit or defective packing will be intimated within 2 months from the date of receipt of the equipment/materials.

In either case, the defective or damaged equipment/ materials should be replaced by the repairer free of cost to the TSTRANSCO.

If no steps are taken within 15 days of receipt of intimation of defects or such other reasonable time, as the TSTRANSCO may deem proper to afford, the TSTRANSCO may without prejudice to its other rights and remedies cause to be repaired or rectified the defective material or replace the same and recover the expenditure incurred therefore from the deposit such as Security and Performance or other amounts available with TSTRANSCO or by resorting to legal action.

22. PAYING AUTHORITY: The repairer shall submit the bills to the Superintending Engineer/OMC to whom the ICT would be allotted is the Paying Officer for the subject ICT after commissioning of the repaired ICT at the allotted substation.

23. JURISDICTION: All the disputes arising out of this order shall be decided by a panel of arbitrators as follows.

Sl. No.	Value of claim	Panel of Arbitrators
i	Disputes involving amount up to Rs.10,000/- and below	Superintending Engineer of TSTRANSCO, Other than the circle to which dispute arises.
ii	Disputes involving amounts from Rs.10,000/- to Rs.50,00/- .	Any Chief Engineer of TSTRANSCO.
iii	There shall not be any reference of disputes for the value exceeding Rs.50,000.00 to arbitration. The parties shall approach the competent Civil Court having jurisdiction, if any such disputes arises.	

24. PRESENCE OF YOUR ENGINEER AT THE TIME OF ERECTION: The Company has to depute company's authorized Person/Engineer at the time of erection, to ascertain any shortages of oil or any short supply of materials or unattended works, which are to be rectified at the place of allotment SS, within one week of intimation.

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25. GENERAL: All correspondence of general and Technical nature shall be addressed to this office.

26. ACKNOWLEDGEMENT: Please acknowledge the receipt of this order with your confirmation of acceptance by you. The additional copy enclosed may please be returned with your signature in token of your acceptance.

Encl: 1.As above

2. GTP for supply of unused Uninhibited Transformer oil

**Your's faithfully,
Sd/-
Chief Engineer/Transmission**

WE ACCEPT THE TERMS AND CONDITIONS

Signature of the Repairer with
date and seal of the company

Copy to the:

The Executive Director (Finance)/TSTRANSCO/Vidyut Soudha/Hyderabad.

The Chief Engineer/Rural Zone/Hyderabad.

The FA&CCA(Accounts)/ Vidyut Soudha/Hyderabad.

The Superintending Engineer/OMC Circle /Mahabubnagar.

The Divisional Engineer/MRT & Transformers/Mahabubnagar

The SAO(P&A) /TSTRANSCO/Vidyut Soudha/Hyderabad

The SAO/Budget & Balance Sheet/ Vidyut Soudha/Hyderabad

Note: These orders are also available on TSTRANSCO website and can be accessed at the address www.transco.telangana.gov.in

UNUSED UNINHIBITED INSULATING OIL PARAMETERS

Confirming to IEC-60396-2020 and IS 335:2018

Sl.No.	Property	Test Method	Limits
A	Function		
1a.	Kinematic Viscosity at 40°C	IS 1448 Part 25 or ISO 3104 or ASTM D7042	12 mm ² /s (Max.)
1b.	Kinematic Viscosity at -30°C		1800 mm ² /s (Max.)
2.	Appearance	A representative sample of the oil shall be examined in a 100 mm thick layer, at ambient temperature	The oil shall be clear and bright, transparent and free from suspected matter or sediment
3.	Pour point	IS 1448 Part 10/Sec 2 or ISO 3016	-40°C (Max.)
4.	Water content a) for bulk supply b) for delivery in drums	IEC 60814	30 mg/kg (Max.) 40 mg/kg (Max.)
5.	Electric Strength (breakdown voltage)	IS 6792 or IEC 60156	Minimum 30 kV (new unfiltered oil)/70 kV (after treatment)
6.	Density at 20°C	IS 1448 Part 16 or ISO 12185 or ISO 3675 or ASTM D7042	895 Kg/m ³ (Max.)
7.	Dielectric dissipation factor (tan delta) at 90°C	IS 16086 or IEC 60247 or IEC 61620	0.0025 (Max)
8.	Negative impulse testing KVp @25°C	ASTM D3300	145 (Min.)
B	Refining/Stability		
1.	Colour	ISO 2049	Max.1.5
2.	Appearance	-	Clear, free from sediment and suspended matter
3.	Neutralization value (Total Acidity)	IEC 62021-1 or IEC 62021-2	0.01 mg KOH/g (Max.)
4.	Interfacial tension at 27°C	IEC 62961 or ASTM D971	0.04N/m (Min.)
5.	Corrosive sulphur	DIN51353	Non-Corrosive on copper and paper
6.	Potentially corrosive sulphur	IEC 62535	Non-Corrosive
7.	Presence of oxidation inhibitor	IS 13631 or IEC 60666	Not detectable (<0.01%)
8.	DBDS	IEC 62697-1	Not detectable (<5mg/kg)

9.	Metal passivator additives	IEC 60666	Not detectable (<5mg/kg)
10.	2-Furfural and related compound content	IS 15668 or IEC 61198	Not detectable (<0.05mg/kg) for each individual compound
C	Performance		
1.	Oxidation stability	IEC 61125 (method c) test duration:164 hours	
	-Total acidity*	4.8.4 of IEC 61125:2018	1.2 mg KOH/g (Max.)
	-Sludge*	4.8.1 of IEC 61125:2018	0.8% (Max.)
	-Dielectric* Dissipation factor* (tan delta) at 90 ⁰ C	4.8.5 of IEC 61125:2018	0.5 (Max.)
	*values at the end of oxidation stability test		
D	Health, safety and environment (HSE)		
1.	Flash point	IS 1448 Part 21 or ISO 2719	135 ⁰ C(Min.)
2.	Poly Cyclic Aromatic (PCA) content	IP 346	<3%
3.	Poly Chlorinated Biphenyl (PCB) content	IS 16082 or IEC 61619	Not detectable (<2 mg/kg)
E.	Resistivity at 27⁰C and 90⁰C shall be as per IEC 60247		

Note: Supplier shall declare the chemical family and function of all additives and the concentrations in the cases of inhibitors, antioxidants and passivators.

Sd/-
Chief Engineer/Transmission