

**:TAMIL NADU TRANSMISSION CORPORATION:**

**From**  
**Er.M.Asokan BE(Hon's),**  
**Chief Engineer / Transmission,**  
**6th Floor, NPKRR Maaligai,**  
**144, Anna Salai,**  
**Chennai-2.**

**To**  
**M/s TBEA Energy India Pvt. Ltd,**  
**"TBEA GREEN ENERGY PARK"**  
**National Highway No.8,**  
**Miyagam Village,Karjan Taluka,**  
**Vadodara Dist., Gujarat-391240.**

Lr. No.CE/TR/SE/TRI/EE/TSM/A2/F.T-2075/LOA.3044/D.163/'19,dt.11.10.2019.

Dear Sir/s,

Sub : T- 2075 - Design, Manufacture, Supply, Erection, Testing and Commissioning of 2x80MVAR Shunt Reactors along with accessories at Kamudhi 400KV Substation and 1x125MVAR Shunt Reactors along with accessories each at Kayathar, Alamathy & MTPS Stage III Switchyard 400KV Substations under Turnkey Contract in Tamilnadu **under PSDF** - Letter of Award – Regarding.

Ref : 1. This office tender specification No. T-2075.  
2. Your offer against the above tender specification opened on 30.04.2019.  
3. Your Price bid opened on 05.08.2019.  
4. Lr. No. CE/TR/SE/TR.I/EE/TSM/A2/F.T-2075/D.125/19.Dt.08.08.2019.  
5. Lr. No. CE/TR/SE/TR.I/EE/TSM/A2/F.T-2075/D.137/19.Dt.27.08.2019.  
6. Your Lr. No. EQEPC-18195/TANTRANSCO/006 Dt.13.09.2019.

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**1.0. ACCEPTANCE:**

With reference to your offer and other correspondences cited, I acting for and on behalf and by the order and direction of the TANTRANSCO, accept your offer for Design, Manufacture, Supply, Erection, Testing and Commissioning of 2x80MVAR at Kamudhi and 1x125MVAR each at Kayathar, Alamathy & MTPS Stage III Switchyard 400KV Substations under Turnkey Contract in Tamilnadu under PSDF as per the specification No.T-2075 and its amendments and clarifications thereon. The schedule of prices is as per clause 2.0 of this Letter of Award (LOA).

## 2.0. SCHEDULE OF PRICES:

Sl. No.	Description	Per Set in Rs.	Total Amount in Rupees
1.	Design, Manufacture, Supply, Erection, Testing and Commissioning of 2 Nos. 80MVAR & 3 Nos. 125MVAR, 400KV Shunt Reactors along with accessories under Turnkey Contract in various substations in Tamilnadu		
	Kamuthi (2x80MVAR)	7,25,39,771.00	14,50,79,542.00
	Kayathar (1x125MVAR)	8,37,02,446.00	8,37,02,446.00
	Alamathy (1x125MVAR)	9,38,48,322.46	9,38,48,322.46
	MTPS SWYD (1x125MVAR)	6,50,04,308.00	6,50,04,308.00
	Subtotal		38,76,34,618.46
	GST @ 18%	--	6,97,74,231.32
	<b>Total cost of the project</b>		45,74,08,849.78

Or Say **Rs.45,74,08,850/-**

(Rupees Forty five Crores, Seventy four Lakhs, Eight Thousand, Eight Hundred and Fifty only)

The detailed price schedules are furnished in the **Annexure-I**.

## 3.0 Scope of Work:

The scope covered in this Acceptance letter consists of supply of materials, civil and erection works in respect of the works of Design, Manufacture, Supply, Erection, Testing and Commissioning of 2 Nos. 80MVAR & 3 Nos. 125MVAR, 400KV Shunt Reactors along with accessories in Kamudhi, Kayathar, Alamathy and MTPS Stage III switchyard 400KV substations in Tamilnadu under Turnkey Contract under PSDF, as follows and as per the specification No.T-2075, its amendments and clarifications thereof.

### I) Kamudhi 400KV SS:

- (i) 400KV Bay – 2 nos., 2 x 80 MVAR Bus Reactors and Nitrogen Injection Fire Protection System.

- (ii) 400KV Circuit Breakers, Isolators, Current Transformers and Surge Arrestors with support structures.
- (iii) 400KV Bus reactor relay panel (with Control Switching Device) applicable for substation with Automation, various sizes of control cables along with complete accessories
- (iv) All equipment support structure shall be as per manufacturer's design.
- (v) Solid core insulators, insulator strings and hardware clamps and connectors, Aluminium bus bar, earthing materials, bay marshalling box, spacers, cable supporting angles / channels, cable trays, junction box, buried cable trench etc.
- (vi) Design and laying of earth mat. All the equipments, cable trays, etc. shall be earthed by connecting them to the main earth mat by the contractor.
- (vii) Civil works connected with erection of all equipments.
- (viii) Any other equipment / materials required to complete the specified the scope.

## **II) Kayathar 400KV SS:**

- (i) 400KV Bay – 1 no., 1 x 125 MVAR Bus Reactors and Nitrogen Injection Fire Protection System.
- (ii) 400KV Circuit Breakers, Isolators, Current Transformers and Surge Arrestors with support structures.
- (iii) Relay panel, SAS, Moose conductor and various sizes of control cables along with complete accessories.
- (iv) All equipment support structure shall be as per manufacturer's design.
- (v) Solid core insulators, insulator strings and hardware clamps and connectors, Aluminium bus bar, earthing materials, bay marshalling box, spacers, cable supporting angles / channels, cable trays, junction box, buried cable trench etc.
- (vi) Design and laying of earth mat. All the equipments, cable trays, etc. shall be earthed by connecting them to the main earth mat by the contractor.
- (vii) Civil works connected with erection of all equipments.

- (viii) Any other equipment / materials required to complete the specified scope.

### **III) Alamathy 400KV SS:**

- (i) 400KV Bay – 1 no., 1 x 125 MVAR Bus Reactors and with Nitrogen Injection Fire Protection System.
- (ii) 400KV Circuit Breakers, Isolators, Current Transformers and Surge Arrestors with support structures.
- (iii) 400KV Bus reactor relay panel applicable for substation with Automation, various sizes of control cables along with complete accessories.
- (iv) All equipment support structure shall be as per manufacturer's design.
- (v) Solid core insulators, insulator strings and hardware clamps and connectors, Aluminium bus bar, earthing materials, bay marshalling box, spacers, cable supporting angles / channels, cable trays, junction box, buried cable trench etc.
- (vi) Design and laying of earth mat. All the equipments, cable trays, etc. shall be earthed by connecting them to the main earth mat by the contractor.
- (vii) Civil works connected with erection of all equipments.
- (viii) Any other equipment / materials required to complete the specified the scope.

### **IV) MTPS Stage-III Switchyard:**

- (i) 400KV Bay – 1 no., 1 x 125 MVAR Bus Reactor and Nitrogen Injection Fire Protection system.
- (ii) Moose Conductor and various sizes of control cables along with complete accessories.
- (iii) All equipment support structure shall be as per manufacturer's design.
- (iv) Solid core insulators, insulator strings and hardware clamps and connectors, Aluminium bus bar, earthing materials, bay marshalling box, spacers, cable supporting angles / channels, cable trays, junction box, buried cable trench etc.
- (v) Civil works connected with erection of all equipments.

- (vi) Any other equipment / materials required to complete the specified scope of works.

#### **4.0 SECURITY DEPOSIT:**

4.1. You have to furnish security deposit for 5% of the total value of the Contract, in the form of DD/Banker's Cheque/ Irrevocable Bank Guarantee from any Nationalized/Scheduled Bank in non-judicial stamp paper of value Rs.80/-. The Security Deposit will include the Earnest Money Deposit. The security deposit shall have to be furnished within 15 days of receipt of letter of acceptance. For the belated submission of Security Deposit, interest rate at 22% for the delayed period shall be levied and recovered from your first bill. Failure to remit Security Deposit within stipulated time may lead to forfeiture of EMD and cancellation of LOA.

#### **5.0 RELEASING OF SECURITY DEPOSIT:**

5.1. The Security deposit will be released only after satisfactory completion of the subject turnkey contract and Performance Guarantee mentioned in Para 6.0 has been furnished. If the purchaser incurs any loss or damages on account of breach of any of the clauses or any other amount arising out of the Contract becomes payable by the Supplier to the purchaser, then the purchaser will in addition to such other rights that he shall have under the law, appropriate the Security Deposit and such amount that is appropriated will not be refunded to the Contractor.

5.2. The combined Security Deposit cum Performance Guarantee for 5% of the contract value is acceptable.

#### **6.0 PERFORMANCE GUARANTEE:**

You have to furnish a performance guarantee for 5% of the value of the Contract valid for the entire guarantee period immediately after dispatch of last consignment of materials or before the scheduled completion period or extension thereof whichever is earlier in the form of Bank Guarantee on non-judicial stamp paper of value Rs.80/- (Rupees Eighty only).

This performance guarantee for goods and works shall remain **valid for 36 months** for the specified works from the date of commissioning of works in all respects and taking over by the TANTRANSCO.

The combined security deposit cum performance guarantee for 5% of the contract value is also acceptable for a period as mentioned above and shall have to be furnished within 15 days of receipt of Letter of Award.

The above deposit will not bear any interest.

## **7.0 PRICE:**

The prices are firm for the entire duration of the contract as per clause No.19.0, Section - VI of the Commercial Terms of the specification. The prices above are inclusive of freight, insurance, P&F and GST.

## **8.0 PAYMENT (Funding by PSDF):**

8.1. The works shall be executed with the supply of equipments/materials required in an orderly manner of requirement as per erection schedule. The bills will also be arranged to be cleared only as per the approved orderly sequential schedule of erection. The successful Contractor shall furnish well in advance the equipments/materials required for arranging funds. Payment will not be made for the unscheduled delivery of materials/equipments.

8.2. The following payments shall apply.

### **I A) FOR SUPPLY PORTION OF ELECTRICAL ITEMS (within schedule period of completion):**

- i) 70% payment will be made for the materials / equipments received in good condition at site and on physical verification by the purchaser.
- ii) 20% Payment after satisfactory completion of erection of the supplies materials/equipments.
- iii) 10% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the Utility.

### **I B) FOR SUPPLY PORTION OF ELECTRICAL ITEMS (beyond schedule period of completion):**

- i) 70% payment will be made for the materials / equipments received in good condition at site and on physical verification by the purchaser, after deducting LD calculated @ half percent (0.5%) per completed week of delay of the value of the undelivered equipments/ materials subject to a maximum 10 % of the total contract price of the equipments/ materials so delayed.
- ii) 20% payment after satisfactory completion of erection of the materials/ equipments.
- iii) 10% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the utility and closure of contract on submission of bills with required documents after adjusting the total leviable LD, as per LD clause.

## **II A) FOR ERECTION PORTION OF ELECTRICAL ITEMS**

### **(within schedule period of completion):**

- i) 80% progressive payment after satisfactory completion of erection against certification by the Engineer/Representative of TANTRANSCO.
- ii) 20% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the Utility.

## **II B) FOR ERECTION PORTION OF ELECTRICAL ITEMS**

### **(beyond schedule period of completion):**

- i) 80% progressive payment after satisfactory completion of erection against certification by the Engineer/Representative of TANTRANSCO after deducting LD calculated @ half percent (0.5 %) per completed week of delay of the value of the unfinished portion of work subject to a maximum 10 % of the total contract value of the works so delayed.
- ii) 20% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the utility and closure of contract on submission of bills with required documents after adjusting the total leviable LD as per LD clause.

## **III A) FOR CIVIL WORKS (within schedule period of completion):**

- i) 80% payment against certification by the Engineer/Representative of TANTRANSCO.

- ii) 10% on completion of entire civil works, electrification of buildings, yard, pump room.
- iii) Balance 10% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the utility.

**III B) FOR CIVIL WORKS (beyond schedule period of completion):**

- i) 80% payment against certification by the Engineer/Representative of TANTRANSCO after deducting LD calculated @ half percent (0.5 %) per completed week of delay of the value of the unfinished portion of work subject to a maximum 10 % of the total contract value of the works so delayed.
- ii) 10% on completion of entire civil works, electrification of buildings, yard, pump room.
- iii) Balance 10% after completion of successful testing and commissioning and handing over of the project in complete shape to the satisfaction of the utility and closure of contract on submission of bills with required documents after adjusting the total leviable LD, as per LD clause.

8.3. The payment for works shall be made within reasonable time in accordance with the conditions set out herein.

The payments will be made by the concerned Superintending Engineer / General Construction Circle. The following documents shall be furnished for arranging payment by the Purchaser.

- i. Copies of the supplier's invoice showing goods description, quantity, unit price and total amount in quadruplicate.
- ii. Delivery note/Railway receipt/Truck receipt in original.
- iii. Manufacturer's/supplier's guarantee certificate covering the guarantee period of 36 months from the date of commissioning and taking over of the entire works.
- iv. Inspection certificate issued by the nominated inspection agency and the report, if stipulated.
- v. Certificate of Origin.
- vi. Proof of having taken joint insurance.



vii. Copy of latest Sales Tax Clearance Certificate duly attested by gazetted officer.

## **9.0 GOODS AND SERVICES TAX:**

9.1 The TANTRANSCO has been registered as a dealer under GST Act 2017 (Registration No. **33AADCT4780AFZA**).

9.2 In case of delayed delivery, the GST prevailing on the date of despatch or on the last day of the contractual delivery period whichever is LESS will be admitted. For both the cases, the supplier shall furnish documentary evidence while submitting the bills for payment.

9.3 Any Variation in GST due to statutory Variation within the contract delivery date shall be considered by the TANTRANSCO Ltd. for reduction/increase in GST rates as the case may be.

9.4 The benefit of Input Tax Credit (ITC) if any availed by the Contractor shall be passed on to TANTRANSCO. An undertaking to be submitted by the Contractor for passing Input Tax Credit benefit available under GST to TANTRANSCO.

## **10.0 LIQUIDATED DAMAGES:**

10.1 If the handing over of the work fully completed in all respects, is delayed beyond the scheduled date or extension thereof for commissioning as given under the Contract, the Contractor shall pay to the TANTRANSCO an amount calculated at the rate of half percent (0.5%) per completed week of delay of the value of the undelivered equipments /Materials / Unfinished portion of work as liquidated damages subject to a maximum 10% of the total contract price of the units/materials/works so delayed.

10.2 In respect of contracts where supply effected in part or works executed in part, could not be beneficially used by the TANTRANSCO due to such incomplete execution, liquidated damages shall be worked out on the basis of entire contract price (i.e. total

actual value of work executed as per final bill) only and not on the value of delayed portion and maximum LD is 10% of the total contract value.

10.3 The defaulting Contractors should be made liable to pay to the TANTRANSCO, in addition to Liquidated Damages for delay, the actual difference in price, wherever TANTRANSCO orders the delayed quantity to be supplied/executed by other agencies at a higher rate.

## **11.0 INSURANCE:**

### **11.1 STORAGE CUM-WORKS INSURANCE**

11.1.1. The Contractor shall take necessary insurance against loss, damage, theft, pilferage, fire accidents and damages during storage/transit from his stores to site for all the materials/goods for the purpose or incorporating in the work.

11.1.2 The contractor shall also take necessary insurance for transporting, Storage at site and erection of the equipments before commencement of work/Transporting.

11.1.3 The insurance shall also cover any loss, damages, accidents etc., caused due to the negligence of the Contractor in the course of operations (Transportation, Erection, testing and commissioning) carried out for the purpose of complying with the contractual obligations thereof. The entire cost of such insurance shall be borne by the Contractor at no extra cost to TANTRANSCO. The insurance shall cover the materials, erection and commissioning portions comprehensively during the entire period of Contract.

11.1.4. The insurance as per claims shall be in joint names of the TANTRANSCO and the Contractor so that the TANTRANSCO and the Contractor are covered for the entire period of Contract from the commencement of the Contract till handing over of all the works, completed in all respects to the Engineer. It is the responsibility of Contractor to insure as above and at his own cost. TANTRANSCO will not bear any amount towards insurance premium etc.

11.1.5. The insurance shall be effected with the nationalized insurer / IRDA approved Insurer and in the terms approved by the TANTRANSCO. The contractor, whenever required, shall produce/deposit to the Engineer the policies of insurance and the receipts for payments of the current premia.

## **11.2 THIRD PARTY INSURANCE:**

11.2.1. The contractor shall except in and so far as the Contract provides indemnify the TANTRANSCO against all losses and claims in respect of injuries or damage to any property whatsoever while they arise out of or in consequence of the execution or works and against all claims, proceedings, damages, costs, charges, expenses whatsoever in respect of or in relation thereto. Accordingly, the contractor shall before commencement of execution of the works, insure against his liability for any material or physical damage, loss or injury which may occur to property Including that of the TANTRANSCO or to any person, including any employee of the TANTRANSCO, by or arising out of the execution of the works or in carrying out the Contract. The insurance shall be affected and maintained as in Clause 20.3.

11.2.2. The terms of the insurance shall include a provision whereby in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the TANTRANSCO, the insurer will indemnify the TANTRANSCO against such claims and any costs.

## **11.3 INSURANCE AGAINST ACCIDENTS, ETC. TO WORKMEN:**

11.3.1. The TANTRANSCO shall not be liable in respect of any damages or compensation payable by law in respect of or in consequence of an accident of injury to any workman or other person in the employment of the Contractor or sub-contractor, save and except an accident or injury resulting from any act or default of the TANTRANSCO, its agent or servant. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, against all claims, proceedings, costs, charges and expense whatsoever in respect thereof or in relation thereto.

11.3.2. The Contractor shall insure against such liability with a Nationalized Insurer approved by the TANTRANSCO and shall continue such insurance during the whole of the time that any persons are employed by him on the works and shall when required produce/deposit to the Engineer, such policy of insurance and the receipt for payment of the current premium provided always that, in respect of any persons employed by any sub-contractor, the contractor's obligation to ensure as aforesaid under this sub clause shall be satisfied, if the sub contractor shall have insured against the liability in respect of such person in such manner that the TANTRANSCO is indemnified under the policy, then the contractor shall require such sub-contractor to produce / deposit to the Engineer, when required, such policy of insurance and the receipt of payment of the current premium. TANTRANSCO will not bear any cost towards insurance premium.

#### **11.4 REMEDY ON CONTRACTOR'S FAILURE TO INSURE:**

11.4.1 If the Contractor shall fail to effect and keep in force the insurance referred to in clauses 24.0., 25.0., 26.0., hereof, or any other insurance which may be required to effect under terms of contract, then the TANTRANSCO may effect and keep in force any such insurance and pay such premium/premia as may be necessary for that purpose and from time to time and to deduct the amount so paid by the TANTRANSCO, as aforesaid from any money due or which may become due to the Contractor or recover the same as a debt from the Contractor.

#### **12.0 INCOME TAX RECOVERY:**

As per the standing instruction of the Government of India on the deduction of Income Tax at source, recovery towards Income Tax of the values of the work done will be made from relevant bills.

#### **13.0 LABOUR WELFARE FUND:**

An amount of 1% of the gross value of the contractor's running bill will be recovered towards the contribution to the Manual Workers General Welfare Fund and remitted to T.N Construction Workers Welfare Board, Chennai – 18.

#### **14.0 ESI and EPF:**

All the statutory liabilities towards ESI and EPF are to the contractor's account and such liabilities are not to TANTRANSCO's account.

#### **15.0 QUANTITIES:**

The quantities set out in the bill of quantities are only tentative and estimated quantities of work. They are not to be taken as the actual and correct quantities of the work to be executed by the contractor in fulfillment of his obligations under the Contract. Any other item if found essentially required for the completion of the works, it may be included and arrived at separately.

#### **16.0 CEMENT:**

Cement for the entire work shall be procured by the CONTRACTOR. The Cement shall be ORDINARY PORTLAND CEMENT (OPC) conforming to IS – 8112. The quoted rates will be inclusive of cement cost. The usage of cement shall be in accordance with IS 456 - 2000 and in accordance with specification mentioned in the Construction Drawings and Schedules.

- a) The Contractor has to make his own arrangements for the procurements of cement of required specifications for the works subject to the followings: -
- b) The Contractor shall procure cement required for the works only from reputed cement factories (main producer or their authorized agents, manufacturing cement to BIS Standard) acceptable to the Engineer-in-charge. The Contractor shall be required to furnish to the Engineer-in-charge bills of payment and cost certificate issued to the manufacturers or their authorized agents to authenticate procurement of quality cement from the approved cement factory.
- c) The Contractor shall procure in standard packing of 50 Kg. per bag bearing manufacturers name and ISI making from the authorized manufacturers. The Contractor shall make necessary arrangement at his own cost to the satisfaction of

Engineer-in-charge for actual weighment of random sample from the available stock and shall conform with the specification laid down by the Indian Standards Institution as the case may be. Cement shall be got tested for all the tests at his cost including through destructive and non-destructive test materials etc., as directed by the Engineer-in-charge in advance before the use of cement bags. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant Code, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost within a day's time of written order from the Engineer-in-charge to do so.

d) The employer will furnish air entraining agents and admixtures required to the Contractor free of cost at the employer stores. The use of such admixtures and agents shall be made as per the instructions of the Engineer-in-charge. The cost of cartage/storage, handling, batching mixing shall be borne by the contractor and shall be included by him to unit rate tendered for concrete.

e) The cement shall be brought at site as decided by the Engineer-in-charge for works.

f) The cement Godown of suitable capacity as decided by the Engineer-in-charge to store shall be constructed by the contractor at site of work, for which no extra payment shall be made. The Contractor shall facilitate inspection of the cement Godown by the Engineer-in-charge at any time.

g) The Contractor shall further at all times satisfy the Engineer-in-charge on demand by production of records and test book or by submission of returns and other proofs as directed that the cement is being used as tasted and approved by the Engineer-in-charge for the purpose and the contractor shall at all times, keeps his records up to date and enable the Engineer-in-charge to apply such checks as he may desire.

h) Cement, which has been unduly long in storage with the contractor or alternatively has deteriorated due to inadequate storage and this become unfit for use on the works will be rejected by the Department and no claim will be entertained. The

contractor shall forthwith remove from the work area any moment the Engineer-in-charge may disallow for use of work and replace it by cement complying with the relevant Indian Standards.

i) The Contractor will not be allowed to store the cement before proper storage sheds are erected by him in advance at site for safe custody.

j) The Contractor has to bear the cost towards supply of cement used in excess for first batch mix and for slurry and rich mix when warranted without any extra cost and as per the direction of the Engineer.

#### **17.0 STEEL:**

All the steel required for the works shall be procured by the CONTRACTOR as indicated in the drawing and Specification. The Steel shall be delivered at site and shall confirm to the relevant IS.

Payment will be made only on "LENGTH" basis as measured at site and converted to weight by multiplying the length measured at site by the Standard Weights per meter length as per ISS table. TANTRANSCO will not accept the cut bits available at site and to Contractor need not return them to TANTRANSCO.

#### **18.0 SUB – LETTING OF CONTRACT:**

As per clause 4.0, Section –VI, of the Commercial terms of the Specification, the Contractor shall not, without the consent in writing of the TANTRANSCO, assign or sublet his contract including supply of material or any substantial part thereof, provided that any such consent shall not relieve him from any obligation, duty or responsibility, liability under the Contract.

#### **19.0 ARBITRATION:**

As per clause 11.0, Section –VI, of the Commercial terms of the Specification, Arbitration is not applicable to this contract.

## **20.0 JURISDICTION FOR LEGAL PROCEEDINGS:**

No suit or any proceedings in regard to any matter arising in any respect under this Contract shall be instituted in any Court, save in the High Court of Madras or the Court of Small Causes at Chennai or District Court or Sub-Court / Munsiff Court. It is agreed that no other court shall have jurisdiction to entertain any suit or proceedings, even though, part of the cause of action might arise within their jurisdiction. In case, any part of cause of action arises within the jurisdiction of any of the courts in Tamil Nadu and not in the Courts in Chennai City, then it is agreed to between parties that such suits or proceedings shall be instituted in a Court within Tamil Nadu and no other Court outside Tamil Nadu shall have jurisdiction, even though any part of the cause of action might arise within the jurisdiction of such courts.

## **21.0 SUBMISSION OF PERT CHART:**

- i) Within 15 (Fifteen) days from the date of taking over of site, the CONTRACTOR should furnish to the ENGINEER a PERT CHART/BAR CHART which in addition to indicating the overall completion time of the CONTRACT should also indicate the time for completion of each individual activity of the CONTRACT. Failure to submit the PERT chart in time will attract a penalty of Rs. 10,000/- (Rupees ten thousand only).
- ii) The CONTRACTOR should also mention in his schedule the required dates for any significant point of communication or transfer of responsibility between the CONTRACTOR and other participants in the PROJECT, i.e. the required date for supply of design and loading date with reference to plant and equipment from the manufacturers, the assistance required from the TANTRANSOCO with reference to purchase/ hire of construction equipment, date of supply of design and drawings, approval to the CONTRACTOR 's drawings etc. The CONTRACTOR should also furnish on the first of every month status review report of his work together with the above PERT network updated to the ENGINEER, whenever there is any likelihood of a change in his construction schedule, the CONTRACTOR should inform the same to the ENGINEER forthwith.



## **22.0 WASTE MATERIALS:**

All waste materials as decided by the site ENGINEER should be let out off the compound at CONTRACTOR's cost and the CONTRACTOR should keep the site always clean during progress of work.

## **23.0 RECOVERY OF MONEY FROM CONTRACTOR IN CERTAIN CASES**

In every case in which provision is made for recovery of money from the CONTRACTOR, TANTRANSCO shall be entitled to retain or deduct the amount thereof from any money that may be due or become due to the CONTRACTOR under these presents and /or under other CONTRACT or CONTRACTS or any other account whatsoever.

## **24.0 COMPLETION PERIOD:**

**You are requested to take over the site and commence the works within two weeks from the date of receipt of Letter of Award.**

**The works covered in the scope of this Contract, shall be completed and handed over to the purchaser within a maximum period of 12 (TWELVE) months from the date of receipt of Letter of Award. Any delay in completion of works would attract Liquidated damages as specified in the Specification. However the period for completion will be reckoned from the date of receipt of Letter of Award only.**

## **25.0 TECHNICAL REQUIREMENT FOR PROCUREMENT OF REACTOR AND OTHER ELECTRICAL EQUIPMENTS:**

This is a Turnkey contract for installation of 400KV, 80/ 125MVAR Bus Reactors including supply of equipments like 400KV Breakers, CT, PT, LAS, Isolators, SAS etc. To ensure that the equipments are procured by the contractor from qualified Manufacturers/Suppliers, the following minimum experience requirement is proposed in the Technical specification.

- i. Regarding supply of 400KV, 80/125MVAR Reactors, the qualified manufacturer should have manufactured atleast two nos. 400KV, 80MVAR Reactor or higher capacity/higher voltage and supplied to any of the State Electricity Boards/Govt.

Power Utilities/Govt. Generating Companies/Private Power Utilities in India during the last TEN years and one no. 400KV, 80MVAR Reactor should be in satisfactory operation for a period of atleast two years as on the date of Techno-Commercial bid opening.

- ii. Further, they should have type tested 1 no. 400KV, 80MVAR Reactor or higher capacity/rating Bus Reactors in a Government / Government recognized laboratory as per relevant IS/IEC within 10 (TEN) years on the date of Techno-Commercial bid opening.
- iii. The Contractor shall furnish backup guarantee for satisfactory operation free of defects for a period of 36 months from the date of receipt of the 400KV, 80/125 MVAR Reactor with all its associated equipments in good condition at site.
- iv. Regarding, the supply of C&R Panels and Substation Automation system, the qualified manufacturer should have atleast three years experience in the design, manufacture and supply of Control and Relay Panel and SAS based on IEC 61850 protocol to any State Electricity Boards / Public Undertaking/ Power Utilities for application in 220KV/230KV or higher Voltage rated Substations in India. Necessary proof for compliance for the above shall be furnished at the time of sub vendor approval which shall include ISO certificate, Certificate of registration, Memorandum of association, End User certification/ letter to prove the aforementioned experience etc.,
- v. Further, they should also have tested and commissioned the Substation Automation system based on IEC 61850 protocol for atleast one number 220KV/230KV or higher Voltage rated Substation of State Electricity Boards / Public Undertaking/ Power Utilities in India.
- vi. The SAS should have been supplied and should be in satisfactory performance for atleast one year. Necessary proof in this regard should be furnished with authentication of the end user at the time of sub vendor approval.
- vii. The contractor shall furnish backup guarantee for satisfactory operation of SAS for the entire guarantee period of 3 years and necessary proof in this regard should be furnished with authentication of the end user.

- viii. Regarding the supply of other electrical equipment/materials, the qualified manufacturers should have manufactured, tested and supplied the entire quantity of tendered electrical equipments/materials as per the Tender Specification or higher capacity or higher rating put together to Electricity Boards/Power Utilities in India during the last TEN years. The same should have been in satisfactory operation for a minimum period of two years and necessary proof in this regard should be furnished with authentication of the end user.
- ix. Further the qualified manufacturer should also have Type tested the equipments/materials within 10 years (except for CT & PT) as on date of technical bid opening or after opening of tender i.e. at the time of sub vendor approval from Government / Govt. recognized laboratories conforming to latest IS/ IEC only. In case of CTs & PTs, the following type tests should have been conducted within 5 (FIVE) years, at the time of sub-vendor approval from Govt./Govt. recognized laboratories conforming to latest IS/IEC only.
- (i) Lightning Impulse test
  - (ii) Switching Impulse test
  - (iii) Multiple chopped Impulse test
- x. Also the contractor shall furnish backup guarantee for the above electrical equipments/materials from the qualified manufacturers for satisfactory operation of the equipments for the entire guarantee period of 36 (Thirty six) months.

"All the equipments /materials to be supplied should be in accordance with relevant latest / amended ISS /IEC, whether it has been specifically mentioned in the specification, LOA or not".

**In addition to the above, the materials/works needed for completing the successful commissioning of the 400KV, 80 & 125MVAR Reactor shall be provided by the contractor.**

## **26.0 GUARANTEE:**

26.1. The supplier shall guarantee that the goods under the Contract are new, unused of the most recent or current models and incorporated all recent improvements in design and materials unless provided otherwise in the Contract. The supplier shall further guarantee that the goods supplied under this Contract shall have no defects arising from design, materials or workmanship, installation and erection, if that may develop under normal use of the supplied goods. The supplier shall also guarantee the performance of the works executed by him including the performance of all the materials/goods supplied by him.

26.2. This guarantee for goods and works shall remain **valid for 36 months** for the specified works from the date of commissioning of works in all respects and taking over by the TANTRANSCO.

26.3. The purchaser shall promptly notify supplier/Contractor in writing of any claims arising under this guarantee in respect of goods. Upon receipt of such notice, the Contractor shall, with all reasonable speed, repair or replace the defective works or parts thereof, free of cost at site. All the expenses towards transportation of defective parts to Contractor's works and of repaired/replaced parts to site shall be borne by the Contractor.

26.4. If the Contractor, having been notified, fails to remedy the defects within 14 days, the Contractor will proceed to take such remedial action as may be necessary, at the Contractor's risk and expenses and without prejudice to any other rights which the Contractor may have against the Supplier under Contract. All expenses in this regard will be recovered from Contractor.

## **27.0 CONTRACT AGREEMENT:**

You have to enter in to a contract agreement with TANTRANSCO as per the proforma within thirty (30) days from the date of issue of the Letter of Award.

## **28.0 ACKNOWLEDGEMENT:**

Acknowledgement for the receipt of the LOA and all general and technical correspondences may be addressed to the Chief Engineer/Transmission, NPKRR Maaligai, 6<sup>th</sup> Floor, Western Wing, 144, Anna Salai, Chennai-600 002.

Correspondence regarding bills, payments, etc. shall be addressed to consignee Superintending Engineers/General Construction Circles.

Yours Sincerely,

Sd/-Dt.11.10.2019  
CHIEF ENGINEER/TRANSMISSION.

Encl: Annexure – I - Detailed Price schedules Abstract and  
Supply, Erection and Civil works in respect of I- Kamudhi,  
II-Kayathar, III- Alamathy & IV- MTPS Stage III Switchyard)

Annexure – II - SD cum PBG format

Copy to the Chief Engineers/Transmission Project/I & II/Chennai & Trichy.

Copy to the Executive Director /NLDC (PSDF)/New Delhi.

Copy to: Superintending Engineers/ General Construction Circles/ Chennai- I,  
Madurai, Salem.

Copy to: Stores Officers/ General Construction Circles/ Chennai- I,  
Madurai, Salem.

Copy to: The Chief Internal Audit Officer/Chennai-2.

Copy to: Resident Audit Officer/ Chennai-2.

Copy to: Chief Financial Controller/TANTRANSCO/ Chennai-2.

Copy to: Deputy Financial Controller/ Central Payment / Chennai-2.

**PRICE SCHEDULE - ABSTRACT**

<b>Sl. No.</b>	<b>Item Description</b>	<b>Total Amount in Rs.</b>
I	Supply, erection, testing and commissioning of 2 nos. of 400KV, 80MVAR Bus Reactors with associated equipments for 400/230-110KV AIS Substation at Kamudhi including civil and electrical works	<b>145,079,542.00</b>
II	Supply, erection, testing and commissioning of 1 no. of 400KV, 125MVAR Bus Reactors with associated equipments for 400/230-110KV Substation at Kayathar including civil and electrical works	<b>83,702,446.00</b>
II	Supply, erection, testing and commissioning of 1 no. of 400KV, 125MVAR Bus Reactor with associated equipments for 400/230-110KV Substation at ALAMATHY including civil and electrical works	<b>93,848,322.46</b>
IV	Supply, erection, testing and commissioning of 1 no. of 400KV, 125MVAR Bus Reactor with associated equipments at MTPS Stage III GIS switchyard, including civil and electrical works	<b>65,004,308.00</b>
	Subtotal	<b>387,634,618.46</b>
	GST 18 %	<b>69,774,231.32</b>
	Total	<b>457,408,849.78</b>

**or Say Rs. 45,74,08,850/-**

**(Rupees Forty five Crores, Seventy four Lakhs, Eight Thousand, Eight Hundred and Fifty only)**

Sd/- Dt.11.10.2019  
**CE/Transmission**

**PRICE SCHEDULE I**

Design, Manufacture, Supply, Erection, Testing and Commissioning of 2x80MVAR Shunt Reactors along with accessories at Kamudhi 400KV Substation

Sl. No.	Item Description	Quantity	Unit	BASIC RATE Rs. P	Frieght & Insurance Charges (Firm)	All Inculsive Unit F.O.R(D) Price	Total Amount in Rs.
<b>1</b>	<b>Supply</b>						
1	400KV, 80 MVAR Three phase Bus Reactor with accessories including	2	Nos	49156982.00	1716000.00	50872982.00	101745964.00
2	Control & Protection panel with CSD for 400 KV Bus Reactor including integration	2	Nos	3577805.00	10000.00	3587805.00	7175610.00
3	420 KV, 3150 A, 63KA SF6 Breaker with all accessories without pre-insertion	2	Nos	3423097.00	35000.00	3458097.00	6916194.00
4	420 KV, 3150 A, 63 KA 5 Core Single Phase Current Transformers ( 2000-1000-500/1A) ( 1 No. Junction box for 3 CTs) with structure	6	Nos	658406.00	15000.00	673406.00	4040436.00
5	390 KV, 40 KA Station type LAS with structure	6	Nos	169980.00	5000.00	174980.00	1049880.00
6	420 KV, 3150A ,63KA Horizontal Center break disconnector with single earth with structure and insulator	4	Nos	993183.00	30000.00	1023183.00	4092732.00
7	11 KV, 160 KN, AF Disc Insulators	150	Nos	1017.00	250.00	1267.00	190050.00
8	Moose Conductor	0.5	Kms	362946.00	9603.00	372549.00	186274.50
9	Earthmat,Auxiliarymat and Earth electrode for equipment and vertical earthing	9	MT	70015.00	1853.00	71868.00	646812.00
10	Bolted type Suspension fitting suitable for 400 KV Quad Moose ACSR Conductor	6	Nos	24136.00	639.00	24775.00	148650.00
11	SE clamp for Quad Moose conductor	12	Nos	1926.00	51.00	1977.00	23724.00
12	T Clamp for single Moose to single Moose Conductor	24	Nos	1946.00	51.00	1997.00	47928.00
13	400 KV Spacer rigid type with 450 mm spacing for Quad Moose.	40	Nos	1430.00	38.00	1468.00	58720.00
14	AC Junction Box (FRP)	2	Nos	27496.00	728.00	28224.00	56448.00
15	DC Interlock Junction box (FRP)	2	Nos	43993.00	1164.00	45157.00	90314.00
16	DCDB	2	Nos	412455.00	10913.00	423368.00	846736.00
17	ACDB	1	No	301130.00	7967.00	309097.00	309097.00
18	8 Mtr height stepped tubular pole with double bracket	15	Nos	9227.00	244.00	9471.00	142065.00
19	1x70 Watts LED lamp with fitting and accessories	30	Nos	4345.00	115.00	4460.00	133800.00
20	0.6 Mtr width cable tray	70	Mtr	668.00	18.00	686.00	48020.00
21	20 X 2.5 Sq. mm. Ar. Cu. Control cable	3	Kms.	462551.00	12238.00	474789.00	1424367.00
22	14 X 2.5 Sq. mm. Ar. Cu. Control cable	2.5	Kms.	349988.00	9260.00	359248.00	898120.00
23	8 x 2.5 Sq. mm Ar. Cu. Control cable	2	Kms.	221534.00	5861.00	227395.00	454790.00
24	4 X 2.5 Sq. mm. Ar. Cu. Control cable	1	Km.	124840.00	3303.00	128143.00	128143.00
25	2 X 2.5 Sq. mm. Ar. Cu. Control cable	1	Km.	79378.00	2100.00	81478.00	81478.00
26	8 x 4 Sq.mm Ar. Cu. Control cable	1.5	Kms.	340605.00	9012.00	349617.00	524425.50
27	4 x 4 Sq.mm Ar. Cu. Control cable	1	Km.	170303.00	4506.00	174809.00	174809.00

28	Manufacturing and supply of the fire bucket of 10 Litre capacity made out of 26 (0.46mm) SWG MS sheet; Painted with white and red enamel paint inside and out side respectively; Bottom of bucket shall be 'U' shaped; outside of the bucket shall be written as FIRE in english/Tamil in white enamel paint including cost of all materials.	10	Nos.	1595.00	42.00	1637.00	16370.00
29	Manufacturing and supply of sand drum made out of oil drum of size 580 mm dia and 420 mm height with conical cover made out of tin sheet provided with handle including the cost barrel, sand and consumables as directed by the field engineer	4	Nos.	8249.00	218.00	8467.00	33868.00
2	<b>Erection</b>						
1	400 KV, 80 MVAR Bus Reactor with accessories including Nitrogen injection Fire protection system.	2	Nos.	1103237.00			2206474.00
2	420 KV, 3150A ,63KA Outdoor SF6 Breaker with support structure	2	Sets	56693.00			113386.00
3	420 KV,3150A, 63 KA, 5 core single phase current Transformer with support structure , accessories and Junction box. ( 1 No Junction box for 3CTs)	6	Nos	11339.00			68034.00
4	390 KV Lightning arrester with support structure	6	Nos	6803.00			40818.00
5	420 KV, 3150 A, 63 KA Isolator with single earth with Insulator with support structure.	4	Sets	39685.00			158740.00
6	Labour machineries consumables for fabrication of Earth electrode	2	MT	28346.00			56692.00
7	Labour machineries consumables for fabrication of Earth Mats and Earth Raisers	7	MT	28346.00			198422.00
8	Providing 140/150 mm dia bore including labour lead lift etc., in all types of soils and erection of earth electrodes, supply and providing of A4 Grade bentonite powder with 5 % common salt mixed with available site clay soil 5 KG/Mtr depth in earth bore as directed by the Field Engineer	200	RM	485.00			97000.00
9	Supply and providing of 600mm mean dia, 300mm height , 36 mm thick cement collar for identification of earth electrode location including 1 primer and 2 coat of colour wash directed by the Field Engineer	20	Nos	12926.00			258520.00
10	Erection of suspension arrangement for 400 KV with 25 Disc Insulators, Corona ring where ever necessary with fittings & accessories	6	Nos	8079.00			48474.00
11	Provision of 400KV jumpers & droppers with Quad moose	40	Nos	1077.00			43080.00



12	Erection, testing and commissioning of Control & Protection panel with CSD for 400 KV Bus Reactor including integration with SAS	2	Nos	12926.00			25852.00
13	Laying, termination of Control cables, AUX AC & DC Power cables etc.,	1	LS	226770.00			226770.00
14	Laying of Armoured copper Control cables various sizes in duct / trunch /Clamping in structure including the cost of Alu. Tag for identification of both ends, providing glands, Lugs for termination identification Ferules etc and ADSS Cable	12	Kms	48472.00			581664.00
15	Erection of DC Interlock box & AC Junction boxes	4	Nos	5386.00			21544.00
16	Erection of 1x70W LED Lamps with fitting fixture, of reputed make providing two core copper cable from fitting to main switch including cost of main switch, cable all and other consumables testing for burning condition suitable for all switch yard towers and as directed by the engineer	30	Nos.	539.00			16170.00
17	Erection of 8 Mtrs Stepped tubular light poles with double fitting	15	Nos.	8079.00			121185.00
18	Erection of the fire bucket of 10 Litre capacity made out of 26 (0.46mm) SWG MS sheet; Painted with white and red enamel paint inside and out side respectively; Bottom of bucket shall be 'U' shaped; outside of the bucket shall be written as FIRE in english/Tamil in white enamel paint including cost of all materials.	10	Nos.	539.00			5390.00
19	Erection of sand drum made out of oil drum of size 580 mm dia and 420 mm height with conical cover made out of tin sheet provided with handle including the cost barrel, sand and consumables as directed by the field engineer	4	Nos.	539.00			2156.00
20	GI Cable tray - 0.6 m width tray - Unit RM	70	Mtr	135.00			9450.00
	<b>Civil</b>						
1	Earth work excavation in stiff clay, stiff black cotton, red earth ,shales, murrum gravel, stoney earth and earth mixed with small size boulders and hard gravel soil and depositing on bank with initial lead of 10m and lift of 2m etc. complete.	887	M3	511.00			453257.00
2	Supplying and filling sand including cost of materials, labour, lead lift etc. complete.	76	M3	2056.00			156256.00

3	Providing and laying plain cement concrete in 1:4:8,using 40mm HBG metal for foundation including cost of materials,labour,lead,lift etc.complete.	76	M3	6966.00			529416.00
4	RCC 1:1.5:3 ,M25 with Ready mixed concrete using 12 to 20mm down graded HBG metal for foundation including cost of maerials,labour lead,lift form work etc.excluding cost of reinforcement for Raft	122	M3	9669.00			1179618.00
5	PCC 1:2:4 using 12 to 20mm down graded HBG metal for foundation including cost of materials,labour lead,lift form work etc.	321	M3	7716.00			2476836.00
6	RCC 1:1.5:3 ,M25 with Ready mixed concrete using 12 to 20mm down graded HBG metal for foundation including cost of maerials,labour lead,lift form work etc.excluding cost of reinforcement for pedestal with form work	151	M3	9669.00			1460019.00
7	Assembling of template an position for fixing the foundaion bolts in position aligning making arrangements to hold the bolts without any hake till the completion of concrete etc.complete.						
8	For other equipments	20	Nos	556.00			11120.00
9	Supplying,Fabricating,galvanising of foundation bolts of various size with 2 Nos GI nuts including welding a plate of size 100x100x12mm thick at the bottom of bolt including cost of materials,labour,lead lift etc.complete						
10	M20-600mm long	84	Nos	500.00			42000.00
11	M28-900mm long	48	Nos	667.00			32016.00
12	Erection of bolts of various size wit GI nuts including all labour,T&P,binding wire,lead etc complete.						0.00
13	For ISO,CT,LAS,CVT,WT and Support	132	Nos	200.00			26400.00
14	Plastering with CM 1:3, 12mm thick to the exposed faces of under side of RCC slabs, sides for reactor plinth	302	m2	389.00			117478.00
15	Supplying,fabricating and placing in posiiion of steel reinforcement including cost of steel,binding wire,labour for cutting,bending and tying in position etc. complete.	30	MT	70725.00			2121750.00

16	Supply and fixing of M.S. rail for transformer plinth cutting to required length of 4.20m and welding of grip rods etc., including cost of rail , transport , cost of grip rod etc., complete.	8	Sets	46109.00			368872.00
17	Disposing the excess earth to low lying area in site and make the site in good level and shape including all lead, lift etc. complete.	887	M3	134.00			118858.00
<b>Total</b>							<b>145079542.00</b>

Sd/- Dt.11.10.2019

**CE/Transmission**

**PRICE SCHEDULE II**

Design, Manufacture, Supply, Erection, Testing and Commissioning of 1x125 MVAR Shunt Reactors along with accessories at Kayathar 400KV Substation

Sl. No.	Item Description	Quantity	Units	BASIC RATE Rs. P	Frieght & Insurance Charges (Firm)	All Inculsive Unit F.O.R(D) Price	TOTAL AMOUNT in Rs.
1	<b>Supply</b>						
1	400KV, 125 MVAR Three phase Bus Reactor with accessories including Nitrogen injection Fire protection system.	1	No	58358184.00	2625000.00	60983184.00	60983184.00
2	Control & Protection panel with CSD for 400 KV Bus Reactor including integration with SAS	1	No	3049423.00	10000.00	3059423.00	3059423.00
3	420 KV, 3150 A, 63KA SF6 Breaker with all accessories without pre-insertion resistor with CSD	1	No	3423097.00	35000.00	3458097.00	3458097.00
4	420 KV, 3150 A, 63 KA 5 Core Single Phase Current Transformers (2000-1000-500/1A) (1 No. Junction box for 3 CTs)	3	Nos	658406.00	15000.00	673406.00	2020218.00
5	390 KV, 40 KA Station type LAS	3	Nos	145234.00	5000.00	150234.00	450702.00
6	420 KV, 3150A ,63KA Horizontal Center break disconnector with single earth with structure and insulator	2	Nos	993183.00	30000.00	1023183.00	2046366.00
7	11 KV, 160 KN, AF Disc Insulators	150	Nos	1017.00	250.00	1267.00	190050.00
8	Moose Conductor	0.5	.	362946.00	9603.00	372549.00	186274.50
9	Structure for 390 KV LAS	3	Nos	24746.00	655.00	25401.00	76203.00
10	Earth mat, Auxiliary mat and Earth electrode for equipment and vertical earthing	9	MT	70015.00	1853.00	71868.00	646812.00
11	Bolted type Suspension fitting suitable for 400 KV Quad Moose ACSR Conductor	6	Nos	24136.00	639.00	24775.00	148650.00
12	SE clamp for Quad Moose conductor	12	Nos	1926.00	51.00	1977.00	23724.00
13	T Clamp for single Moose to single Moose Conductor	24	Nos	1946.00	51.00	1997.00	47928.00

14	400 KV Spacer rigid type with 450 mm spacing for Quad Moose.	40	Nos	1430.00	38.00	1468.00	58720.00
15	AC Junction Box (FRP)	2	Nos	27496.00	728.00	28224.00	56448.00
16	DC Interlock Junction box (FRP)	2	Nos	43993.00	1164.00	45157.00	90314.00
17	8 Mtr height stepped tubular pole with double bracket	15	Nos	9227.00	244.00	9471.00	142065.00
18	1x70 Watts LED lamp with fitting and accessories	30	Nos	4345.00	115.00	4460.00	133800.00
19	0.6 Mtr width cable tray	70	Mtrs	668.00	18.00	686.00	48020.00
20	20 X 2.5 Sq. mm. Ar. Cu.Control cable	3	Kms .	462551.00	12238.00	474789.00	1424367.00
21	14 X 2.5 Sq. mm. Ar. Cu.Control cable	2.5	Kms .	349988.00	9260.00	359248.00	898120.00
22	8 x 2.5 Sq. mm Ar. Cu. Control cable	2	Kms .	221534.00	5861.00	227395.00	454790.00
23	4 X 2.5 Sq. mm. Ar. Cu.Control cable	1	Km.	124840.00	3303.00	128143.00	128143.00
24	2 X 2.5 Sq. mm. Ar. Cu.Control cable	1	Km.	79378.00	2100.00	81478.00	81478.00
25	8 x 4 Sq.mm Ar. Cu. Control cable	1.5	Kms .	340605.00	9012.00	349617.00	524425.50
26	4 x 4 Sq.mm Ar. Cu. Control cable	1	Km.	170303.00	4506.00	174809.00	174809.00
2	<b>Erection</b>						
1	400 KV, 125 MVAR Bus Reactor with accessories including Nitrogen injection Fire protection system.	1	No	1103237.00			1103237.00
2	420 KV, 3150A ,63KA Outdoor SF6 Breaker with support structure	1	Set	56693.00			56693.00
3	420 KV,3150A, 63 KA, 5 core single phase current Transformer with support structure , accessories and Junction box.( 1 No Junction box for 3CTs)	3	Nos.	11339.00			34017.00
4	390 KV Lightning arrester with support structure	3	Nos.	6803.00			20409.00
5	420 KV, 3150 A, 63 KA Isolator with single earth with Insulator with support structure.	1	Set	39685.00			39685.00

6	Labour machineries consumables for fabrication of Earth electrode	1	MT	<b>28346.00</b>			<b>28346.00</b>
7	Labour machineries consumables for fabrication of Earth Mats and Earth Raisers	4	MT	<b>28346.00</b>			<b>113384.00</b>
8	Providing 140/150 mm dia bore including labour lead lift etc.,in all types of soils and erection of earth electrodes, supply and providing of A4 Grade bentonite powder with 5% common salt mixed with available site clay soil 5Kg/m depth in earth bore as directed by the field Engineer	100	RM	<b>485.00</b>			<b>48500.00</b>
9	Supply and providing of 600mm mean dia, 300mm height , 36 mm thick cement collar for identification of earth electrode location including 1 primer and 2 coat of colour wash as directed by the field Engineer	10	Nos	<b>12926.00</b>			<b>129260.00</b>
10	Erection of suspension arrangement for 400 KV with 25 Disc Insulators, Corona ring where ever necessary with fittings & accessories	3	Nos	<b>8079.00</b>			<b>24237.00</b>
11	Provision of 400KV jumpers & droppers with Quad moose	20	Nos	<b>1077.00</b>			<b>21540.00</b>
12	Erection, testing and commissioning of Control & Protection panel with CSD for 400 KV Bus Reactor including integration with SAS	1	No	<b>12926.00</b>			<b>12926.00</b>
13	Laying of Armoured copper Control cables various sizes in duct / trunch / Clamping in structure including the cost of Alu. Tag for identification of both ends, providing glands, Lugs for termination identification Ferules etc and ADSS Cable	6	Kms	<b>48472.00</b>			<b>290832.00</b>

14	Erection of DC Interlock box & AC Junction boxes	2	Nos	5386.00			10772.00
15	Erection of 1x70W LED Lamps with fitting fixture, of reputed make providing two core copper cable from fitting to main switch including cost of main switch, cable all and other consumables testing for burning condition suitable for all switch yard towers as directed by the field Engineer	15	Nos.	539.00			8085.00
16	Erection of 8 Mtrs Stepped tubular light poles with double fitting	8	Nos.	8079.00			64632.00
17	Manufacturing and supply of the fire bucket of 10 Litre capacity made out of 26 (0.46mm) SWG MS sheet; Painted with white and red enamel paint inside and out side respectively bottom of bucket shall be 'U' shaped; outside of the bucket shall be written as FIRE in English/Tamil in white enamel paint including cost of all materials	5	Nos.	539.00			2695.00
18	Manufacturing and supply of sand drum made out of oil drum of size 580 mm dia and 420 mm height with conical cover made out of tin sheet provided with handle including the cost barrel, sand and consumables as directed by the field Engineer	2	Nos.	539.00			1078.00
19	GI Cable tray -0.6 m width tray - Unit RM	35	Mtrs	135.00			4725.00
3	<b>Civil</b>						
1	Earth work excavation in stiff clay, stiff black cotton, hard red earth, shales, murram gravel, stony earth and earth mixed with small size boulders and hard gravel soil and depositing on bank with initial lead of 10m and lift of 2m etc. complete.	444	m <sup>3</sup>	511.00			226884.00

2	Supplying and filling sand including cost of materials,labour,lead, lift etc., complete.	38	m <sup>3</sup>	2056.00			78128.00
3	Providing and laying PCC in 1:4:8,using 40mm HBG metal for foundation including cost of materials, labour, lead, lift, curing etc., complete.	38	m <sup>3</sup>	6966.00			264708.00
4	RCC 1:1.5:3, M20 with Ready mixed concrete using 12 to 20 mm down graded HBG metal for raft foundation without form work including cost of materials, labour, lead, lift, curing etc., complete but excluding cost of reinforcement.	42	m <sup>3</sup>	9669.00			406098.00
5	PCC 1:2:4 using 12 to 20 mm down graded HBG metal for foundation including cost of materials, labour, lead, lift, form work, curing etc., complete.	161	m <sup>3</sup>	7716.00			1242276.00
6	RCC 1:1.5:3, M20 with Ready mixed concrete using 12 to 20mm down graded HBG metal for foundation pedestal with form work including cost of materials, labour, lead, lift, etc., complete but excluding cost of reinforcement	76	m <sup>3</sup>	9669.00			734844.00
7	Assembling of template and position for fixing the foundation bolts in position with proper alignment including cost of all materials, lead, lift etc., complete.						
8	For other equipments	10	Nos.	556.00			5560.00
9	Supplying, Fabricating, galvanising of foundation bolts of various size with 2 Nos. GI nuts including welding a plate of size 100 x 100 x 12mm thick at the bottom of bolt including cost of materials, labour, lead, lift etc., complete						
10	M20-600mm long	48	Nos	500.00			24000.00
11	M28-900mm long	24	Nos	667.00			16008.00



12	Erection of bolts of various size with GI nuts including all labour,T&P, binding wire, lead etc complete.						
13	For ISO,CT,LAS,CVT,WT and Support	72	Nos	200.00			14400.00
14	Plastering with CM 1:3, 12mm thick to the exposed faces of RCC works including cost of all materials, lead, lift, curing etc., complete.	220	m <sup>2</sup>	278.00			61160.00
15	Supplying, fabricating and placing in position RTS / MS steel reinforcement including cost of binding wire, labour for cutting, bending and tying in position etc. complete.	14	MT	70725.00			1001466.00
16	Supply and fixing of M.S. rail (90 lbs) for transformer plinth cutting to required length of 4.20m and welding of grip rods etc., including cost of rail , transport, cost of grip rod and labour for fixing etc., complete.	2	Sets	23335.00			46670.00
17	Disposing the excess excavated earth to low lying area in site and make the site in good shape including all lead ,lift etc. complete.	90	m <sup>3</sup>	134.00			12060.00
Total							83702446.00

Sd/- Dt.11.10.2019

**CE/Transmission**

**PRICE SCHEDULE III**

Design, Manufacture, Supply, Erection, Testing and Commissioning of 1x125 MVAR Shunt Reactors along with accessories at Alamathy 400KV Substation

Sl. No.	Item Description	Quantity	Units	BASIC RATE Rs. P	Freight & Insurance Charges (Firm)	All Inclusive Unit F.O.R(D) Price	TOTAL AMOUNT in Rs.
1	<b>Supply</b>						
1	400KV, 125 MVAR Three phase Bus Reactor with accessories including Nitrogen injection Fire protection system.	1	No	58358184.00	2108000.00	60466184.00	60466184.00
2	420 KV, 3150A ,63KA Outdoor SF6 Breaker with all accessories without pre-insertion resistor and supporting structure with CSD	1	No	3423097.00	35000.00	3458097.00	3458097.00
3	420 KV,3150A, 63 KA, 5 core single phase current Transformers(3000-2000-1000-500/1A) (1No. Junction box for 3CT's)with support structure.	6	Nos	658406.00	15000.00	673406.00	4040436.00
4	390 KV,40KA Station type Lightning arrester with support structure	3	Nos	169980.00	5000.00	174980.00	524940.00
5	420 KV,3150 Amps,63KA with double earth with structure and solid insulators.	2	Nos	1321484.00	30000.00	1351484.00	2702968.00
6	11KV, 160KN, AF Disc Insulators	375	Nos	1017.00	250.00	1267.00	475125.00
7	Augmentation of existing Control panel for one 400KV Reactor	1	LS	209247.00	10000.00	219247.00	219247.00
8	Protection Panel with CSD for 400KV Bus Reactor (without SAS)	1	No	1511495.00	10000.00	1521495.00	1521495.00
9	Moose Conductor	1	Kms.	362946.00	9603.00	372549.00	372549.00
10	Earth mat, Auxilary mat and earth electrode for equipments and vertical earthing(40mm rod for earth mat, 75x12mm/65 x10mm for earth... )	12	MT	70015.00	1853.00	71868.00	848042.40
11	ACDB	1	No	301130.00	7967.00	309097.00	309097.00
12	AC junction box (FRP)	1	No	27496.00	728.00	28224.00	28224.00
13	DC interlock junction box (FRP)	1	No	43993.00	1164.00	45157.00	45157.00
14	8 Mtr height steeped tublur pole with double bracket	5	Nos	9227.00	244.00	9471.00	47355.00
15	1 X 70W LED lamp with fitting and accessories	10	Nos	4345.00	115.00	4460.00	44600.00
16	0.6 Mtr width Cable tray	200	Mtr	668.00	18.00	686.00	137200.00
17	2 x2.5 sq.mm Ar. Cu. Control cable	3	Kms.	79378.00	2100.00	81478.00	244434.00
18	14 x2.5 sq.mm Ar. Cu. Control cable	3	Kms.	349988.00	9260.00	359248.00	1077744.00
19	8 x2.5 sq.mm Ar. Cu. Control cable	3	Kms.	221534.00	5861.00	227395.00	682185.00
20	4 x2.5 sq.mm Ar. Cu. Control cable	2	Kms.	124840.00	3303.00	128143.00	256286.00
21	2 x2.5 sq.mm Ar. Cu. Control cable	1	Km.	79378.00	2100.00	81478.00	81478.00
22	8 x 4 sq.mm Ar. Cu. Control cable	4	Kms.	340605.00	9012.00	349617.00	1398468.00
23	4 x 4 sq.mm Ar. Cu. Control cable	5	Kms.	170303.00	4506.00	174809.00	874045.00
24	Free end clamp for 4" Al. Bus	12	Nos	8959.00	237.00	9196.00	110352.00
25	Corona bell for 4" Al. Bus for 400KV	12	Nos	827.00	22.00	849.00	10188.00

26	T-Clamp for double moose to single moose 450mm spacing	12	Nos	3657.00	97.00	3754.00	45048.00
27	T-Clamp for Single moose to single moose	60	Nos	1946.00	51.00	1997.00	119820.00
28	T-Clamp for Double moose to 4" Al. Bus	15	Nos	2250.00	60.00	2310.00	34650.00
29	T-Clamp for Single moose to 4" Al. Bus	6	Nos	1777.00	47.00	1824.00	10944.00
30	400KV spacer for twin moose rigid type 450mm spacing	30	Nos	1430.00	38.00	1468.00	44040.00
31	Bolted type double tension fitting with double anchoring points suitable for 400KV twin moose 450mm spacing	6	Sets	24136.00	639.00	24775.00	148650.00
32	Bolted type suspension fitting suitable for 400KV twin moose	3	Sets	24136.00	639.00	24775.00	74325.00
33	Switch end clamp for 4" Al. Bus	28	Nos	1106.00	29.00	1135.00	31780.00
34	Switch end clamp for double Zebra	8	Nos	964.00	26.00	990.00	7920.00
35	4" Seating block	6	Nos	27496.00	728.00	28224.00	169344.00
2	<b>Erection</b>						
1	Erection of <b>400 KV strung bus</b> using Twin moose conductor, fixing Bolted type Tension fitting with Corona ring, (adjustable plate & spring on one side & fixed on another side), yoke plate (Top - adjustable, Bottom - fixed), double anchoring with fittings including the cost of all labour lead, lift etc., as directed by the site engineer at site.	1	Span	226770.00			226770.00
2	Erection of 400 KV, <b>4" Aluminum bus</b> with or without bend as per field condition including the cost of all labour lead, lift etc., as directed by the site engineer at site.	30	Nos.	3402.00			102060.00
3	Dismantling of 400 KV 4" Aluminum bus with or without bend as per field condition including the cost of all labour lead, lift etc., as directed by the site engineer at site.(Under LC Condition)	30	Nos.	3231.00			96930.00
4	Providing joints for Al. Bus bar 4" where ever necessary as per field condition by suitable Al. Welding including the cost of all labour lead, lift etc., as directed by the site engineer at site.	15	Nos.	5924.00			88860.00
5	Erection of Support insulators for 400 KV with corona ring including the cost of all labour lead, lift etc., as directed by the site engineer at site.	20	Nos.	3231.00			64620.00
6	Dismantling of Support insulator for 400 KV with corona ring including the cost of all labour lead, lift etc., as directed by the site engineer at site.(Under LC Condition)	20	Nos.	1077.00			21540.00

7	Erection of 420 KV,3150A,63KA outdoor SF6 circuit breakers with support structure	1	Sets	56693.00			56693.00
8	Erection of 420 KV,3150A,63KA,5 Core single phase Current Transformer with support structure, accessories and Junction box. (1No Junction Box for 3CTs)	6	Nos.	11339.00			68034.00
9	Erection of 390 KV,40KA LAS with support structure	3	Nos	6803.00			20409.00
10	420 KV,3150 Amps,63KA, Isolator with double earth blades with insulator with support structure.	2	Sets	39685.00			79370.00
11	Labour machneries consumables for fabrication of Earth electrode.	0.7	MT	28346.00			20409.12
12	Labour machneries consumables for fabrication of Earth Mats and Earth Raisers	11	MT	28346.00			314357.14
13	Labour charges for erection of light section structure. (Sectional weight below 14Kg/m)	5.2	MT	5924.00			30804.80
14	Providing 140/150 mm dia bore including labour lead lift etc.,in all types of soils and erection of earth electrodes, supply and providing of A4 Grade bentonite powder with 5 % common salt mixed with available site clay soil 5 KG/Mtr depth in earth bore as directed by the site engineer	120	RM	485.00			58200.00
15	Labour for excavation and refilling of trunch of average width 0.3 m & Avg, depth 0.8m for Earth mat below fixed yard level and 0.4m for cable and of any size as required	300	M <sup>3</sup>	270.00			81000.00
16	Labour for painting green enamel paint on earth raisers and wherever required including the cost of paint and consumables. (Dulex, Asian, Berger preferred ) including the cost of all labour lead, lift etc., as directed by the site engineer at site.	250	RM	81.00			20250.00
17	Supply and providing of 600mm mean dia,300mm height,36mm thick cement collar for identification of earth electrode location including 1 primer and 2 coat of colour wash as directed by the site engineer	20	Nos.	12926.00			258520.00
18	Erection of suspension arrangement for 400 KV with 25 Disc Insulators, Corona ring wherever neccessary with fittings & accessories	3	Nos.	8079.00			24237.00
19	Provision of 400 KV Jumpers & Droppers with Twin Moose including the cost of all labour lead, lift etc.,	30	Nos.	1077.00			32310.00
20	Erection, testing and commissioning of Augmentation of existing Control Panel for one 400KV diameter.	1	LS	113385.00			113385.00

21	Erection, testing and commissioning of Protection Panel with CSD for 400KV Bus Reactor (without SAS)	1	No	14173.00			14173.00
22	Laying of armoured copper control cables various sizes in duct / trench/clamping in structure including the cost of Alu. Tag for identification of both ends, providing glands, lugs for termination identification Ferrules etc and ADSS cables	21	Kms.	48472.00			1017912.00
23	Erection of 1X 70W LED lamp with fitting fixture, of reputed make providing 2 Core copper cable from fitting to main switch including the cost of main switch, cable all and other consumables testing for burning condition suitable for all switch yard towers and as directed by the Engineer.	10	Nos.	539.00			5390.00
24	Erection of 8m stepped tubular light poles with double fitting	5	Nos.	8079.00			40395.00
25	Erection of DC Interlock box & A.C. Junction Boxes	2	Nos.	5386.00			10772.00
26	Fabrication, supply and fixing of earth electrode identification board of size 300 x 250mm out of 14 SWG(2mm) M.S. Sheet and 12mm dia MS round as per drawing including cost of all materials including the cost of all labour lead, lift etc., as directed by the Dept. engineer at site.	100	KG	1616.00			161600.00
27	GI cable tray - 0.6 m width tray unit RM	200	Mtrs	135.00			27000.00
28	Laying of L.T U.G 4 X 16 sq.mm Alu. Cable of reputed make	1	Kms.	204660.00			204660.00
29	Supply and fixing of <b>flexible copper tape/rope</b> for interlinking panel earthing and for any other purpose, on any size, including the cost of copper lugs at both ends as directed by field engineer.	5	KG	13464.00			67320.00
3	<b>Civil</b>						0.00
1	Earth work excavation and depositing on bank with initial lead of 10m and lift of 2m in hard stiff clay, stiff black cotton hard red earth shales, murram, gravel, stoney earth and earth mixed with small size boulder including cost of all materials, labour lead lift etc., complete	951	m³	200.00			190200.00
2	Providing and laying <b>sand filling</b> including cost of sand, filling charges, watering and consolidation, transport, labour, lead, lift, etc., complete as per standard specification and as directed by the Dept. Engineer at site.	44	m³	4445.00			195580.00

3	Providing and laying PCC <b>1:3:6</b> using 40mm HBG metal for foundation ,including cost of materials,curing, labour lead lift,labour for laying concrete etc., complete as per standard specification and as directed by the Dept. Engineer at site.	53	m³	<b>7228.00</b>			<b>383084.00</b>
4	Providing RCC 1:1½:3 using 12mm to 20mm HBG metal for raft without form work including cost of all materials, transport, curing, labour lead lift etc., complete, as per standard specification and as directed by the Dept. Engineer at site. <b>(Raft Concrete)</b>	123	m³	<b>8456.00</b>			<b>1040088.00</b>
5	Providing RCC 1:1½:3 using 12mm to 20mm HBG metal for without form work including cost of all materials, transport, curing, labour lead lift etc., complete as per standard specification and as directed by the Dept. Engineer at site complete. <b>(Without form box)</b>	351	m³	<b>8456.00</b>			<b>2968056.00</b>
6	Providing RCC 1:1½:3 using 12mm to 20mm HBG metal for without form work including cost of all materials, transport, curing, labour lead lift etc., complete as per standard specification and as directed by the Dept. Engineer at site complete (wall concrete) <b>With form box</b>	157	m³	<b>9671.00</b>			<b>1518347.00</b>
7	Supplying and fixing in position of <b>steel</b> reinforcement including cost of materials labour lead lift etc., compete	20	MT	<b>70725.00</b>			<b>1414500.00</b>
8	Labour charges for <b>assembling of template</b> and fixing stub and cleat correct position including cost of all materials, labour, lead lift etc complete in all respect as per standard specification and as directed by the Dept. Engineer at site. (Template will be arranged by the Contractor)	26	Nos	<b>500.00</b>			<b>13000.00</b>
9	Supplying for tower parts transformer gantry and LV Breaker gantrys including cost of materials, galvanizing labour lead lift etc., complete.	8.5	MT	<b>83338.00</b>			<b>708373.00</b>
10	Supply of various size of Bolts and Nuts and washer etc., including cost of all materials galvanizing, labour, lead, lift, etc complete.	1.5	MT	<b>94450.00</b>			<b>141675.00</b>
11	Transporting and erection of tower for transformer gantry and LV Breaker gantry including cost of all materials, labour, lead, lift etc., complete	10	MT	<b>11112.00</b>			<b>111120.00</b>

12	Supplying and fixing of <b>Rail</b> , various size GI angle's and base Plates and flats including transporting cutting, painting, cost of all material,labour, lead, lift etc., complete	3	MT	88894.00			266682.00
13	Supplying and fixing of <b>40mm dia bolt</b> to a length of 0.75 m including washers and two nuts and hot dip galvanising, threading etc complete.	176	Nos	1667.00			293392.00
14	Supplying and filling with 40mm to 60mm size <b>pebbles</b> including cost of all materials lead, lift etc., complete.	131	m³	1711.00			224141.00
15	Providing <b>suitable pocket holes</b> in necessary plinths including cost of all materials lead, lift etc., complete	54	Nos	222.00			11988.00
16	<b>Plastering</b> with c.m.1:3, 12 mm thick including cost of all materials, labour, lead, lift, etc complete as per standard specificationand as directed by the Dept. Engineer at site.	341	m²	333.00			113553.00
17	<b>Colour washing</b> with two coats over one coat of primer using shell lime including cost of all materials, scaffolding, labour with all leads and lifts etc., complete as per specification and as directed and approved by the Dept. Engineer at site.	341	m²	222.00			75702.00
18	Supplying and filling with <b>gravel</b> for road work including cost of all materials lead, lift etc., complete	18	m³	1667.00			30006.00
19	Supplying and filling with <b>granular sub-base</b> for road work including cost of all materials lead, lift etc., complete	27	m³	2000.00			54000.00
20	Supplying and filling with Wet mix mecadam( <b>WMM</b> ) for road work including cost of all materials lead, lift etc., complete	27	m³	2667.00			72009.00
21	Removal of <b>surplus earth</b> from the site and putting into low lying area outside the yard including cost of all materials, labour, lead, lift, etc complete.	242	m³	134.00			32428.00
Total							93848322.46

Sd/- Dt.11.10.2019  
CE/Transmission

PRICE SCHEDULE -IV							
Design, Manufacture, Supply, Erection, Testing and Commissioning of 1x125 MVAR Shunt Reactors along with accessories at MTPS Stage-III Switchyard							
Sl. No.	Item Description	Quantity	Unit	BASIC RATE Rs. P	Freight & Insurance Charges (Firm)	All Inclusive Unit F.O.R(D) Price	TOTAL AMOUNT in Rs.
1	<b>Supply</b>						
1	400 KV,125 MVAR Bus Reactor with accessories including Nitrogen injection Fire protection system.	1	Set	57156027.00	2086000.00	59242027.00	59242027.00
2	Supply of Protection Panel with CSD for 400KV Bus Reactor	1	No	2410707.00	10000.00	2420707.00	2420707.00
3	M.S flat 65 x10 mm	500	Kg	60.00	2.00	62.00	31000.00
4	Copper ar. Cable 20x2 Sq.mm	750	Mtr	463.00	12.00	475.00	356250.00
5	Copper ar. Cable 14x2.5 Sq.mm	1000	Mtr	350.00	9.00	359.00	359000.00
6	Copper ar. Cable 8x2.5 Sq.mm	500	Mtr	221.00	6.00	227.00	113500.00
7	Copper ar. Cable 8x 4 Sq.mm	1500	Mtr	340.00	9.00	349.00	523500.00
8	Copper ar. Cable 4 x 4 Sq.mm	500	Mtr	170.00	5.00	175.00	87500.00
9	Zebra conductor	45	Mtr	270.00	7.00	277.00	12465.00
10	Terminal paint cotton waste etc.,	1	LS	566926.00	15000.00	581926.00	581926.00
2	<b>Erection</b>						
1	Erection,Testing and commissioning of 400 KV,125 MVAR Bus Reactor with accessories including Nitrogen injection Fire protection system	1	No	1048075.00			1048075.00
2	Erection,Testing and commissioning of Control & Protection Panel with CSD for 400KV Bus Reactor including integration with SAS	1	No	12926.00			12926.00
3	Laying and termination Control cables, Aux AC &DC Power cables etc.	1	LS	215432.00			215432.00
Total							65004308.00

Sd/- Dt.11.10.2019

**CE/Transmission**



## **ANNEXURE - II**

### **BANK GUARANTEE IN LIEU OF SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE**

(To be furnished in non-judicial stamp paper of value not less than Rs.80/-)

THIS DEED OF GUARANTEE made on this.....day of .....Two thousand and nineteen by the ..... Bank of.....(hereinafter called 'the Bank') to and in favour of the Tamil Nadu Transmission Corporation Limited, having its office at, 144, Anna Salai, NPKRR Maaligai, Chennai – 2. Represented by the Chief Engineer/.....(hereinafter called 'the purchaser').

WHEREAS Messrs .....(hereinafter called the contractor) have by virtue of the contract entered into with the purchaser as per the P.O. / Letter of Award No....., dt.....agreed with the purchaser to supply .....in accordance with the terms and conditions of the contract.

AND WHEREAS in accordance with the terms of the contract in P.O.....Dated.....the contractor has to pay a sum of Rs.....(Rupees.....0 nly) as security deposit cum performance guarantee from a nationalized bank.

AND WHEREAS the contractor has requested the purchaser to accept bank guarantee in lieu of security deposit / performance guarantee for a sum equivalent to.....percent of the value of the contract for the satisfactory performance of the contract.

AND WHEREAS the bank has at the request of the contractor, agreed to guarantee the payment of the said sum in case the contract is not performed in accordance with the specifications indicated in the terms and conditions in Letter of Award No.....dated.....or in the letter dated the.....

### **NOW THIS DEED WITNESSES AS FOLLOWS:**

In consideration of the purchaser having agreed to accept the Bank guarantee from a Nationalized Bank toward security deposit / performance guarantee for a sum equivalent to Rs.....(Rupees.....

.....only) the Bank do hereby guarantee that if the contractor fails to perform the contract in accordance with the specifications and conditions of the contract as subsequently amended, the Bank shall pay forthwith merely on demand without any demur to the purchaser such amount or amounts, as the Bank may be called upon to pay by the purchaser.

PROVIDED that the liability of the Bank under this deed shall not at any time exceed the said amount of Rs.....(Rupees..... only)

PROVIDED further that the guarantee hereunder furnished shall be released as soon as the contractor has performed his part of the contract in accordance with the terms of the contract and the period of performance guarantee is over and a certificate to that effect is issued by the Purchaser.

2. The Bank further undertakes to indemnify the purchaser against any loss or damage that may be caused or suffered by the purchaser by reason of any breach of the terms and conditions in the said Letter of Award No.....dated.....

3. The guarantee herein contained shall remain in force till the terms and conditions of the P.O.....Dated.....have been fully and properly carried out by the said contractor and in any case, the guarantee shall not hold good after.....

4. The Bank further agrees with the purchaser that the purchaser shall have the fullest liberty (without the consent of the Bank and without affecting in any manner the obligations of the Bank hereunder) to vary any of the terms and conditions of the contract or to extend the time of performance of the contract by the said contractor for time to time or to postpone from time to time any of the powers exercisable by the purchaser against the said contractor and to forbear or to enforce any of the terms and conditions relating to the said contract and the Bank shall not be relieved of its liability by reason of any such variation, or extension being granted to the said contractor or by reason of any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said contractor or by any such matter, or thing whatsoever which under the law relating to sureties would but for these provisions have effect of so relieving the Bank.

5. Any account settled between the purchaser and the contractor shall be the conclusive evidence against the Bank for the amount due and shall not be questioned by the Bank.

6. The expressions Bank', 'Purchaser' and 'Contractor' hereinbefore used shall include their respective successors and assigns.

IN WITNESS WHEREOF THIRU.....

For and on behalf of the Bank has signed this Deed on the day, month and year first above written.

Signature

With the seal of the Bank

(Name in Block letters)

IN THE PRESENCE OF WITNESS,

1.

2.

(Name in Capital with address)

(Name in Capital to be superscribed with designation  
office address or Residential address)

### **ANNEXURE-III**

### **UNDERTAKING**

(The undertaking should be submitted by the contractors in 80 rupees stamp paper for the respective works while claiming the part/final bills)

Nature of the work:

Order No:

- 1) I/We hereby state that, the EPF &ESI employee and employer contribution has been remitted for all the workers engaged for execution of the respective contracts.
- 2) I/We hereby state that, there are no EPF & ESI dues to be remitted in respect of the period of execution of the respective contracts, and in case, if there is any shortfall of discharging the EPF &ESI obligations on our part (contractor) a later date, TANTRANSCO shall not be responsible for the consequent Legal/Financial obligations.

Date:

Place:

Authorised Signatory  
(Contractor)  
With Seal