Pre-Bid Queries for 25 KVA and 63 Kva 3 Phase Distribution Transformers Tender TPCODL/P&S/NEW DT-UPTO 63/1000000011/20-21 (25 KVA and 63 KVA 3 Phase Transformers)

| SI. No. | Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|---------|-------------------------|--|--|---|
| | 1.7 (1) & (2) of tender | Bidder must be a BEE Certified OEM of | Valid BIS licence holder with type test reports shall also be | Under such circumstances Bidder need to furnish an |
| | Notice | Distribution Transformers | allowed to participate in the tender as the technical | Undertaking to furnish valid BEE Certification to use |
| | Qualification Criteria | The bidder should have valid BEE certification | guidelines of both the agencies are same. Bidders are | Star Level within 60 days of issue of RC. |
| 1 | | with successful type test reports | allowed to furnish BEE Certificate prior commencemnet of | Bidder shall furnish the challan copy (application |
| • | | | supply. | copy) for BEE certification. |
| | | | | This shall be applicable to Bidder who meet all other |
| | | | | qualification criteria as mentioned in Tender |
| | | | | Documents. |
| | 2.1 of Tender Notice | Prices shall remain Firm during the entire | Please allow Price Varaition instead of Firm price as the | Bidder shall comply as per clause NO. 2.1 of Tender |
| | Price Variation | contract period | present market condition where the prices of major raw | Doc |
| | | | materials like Aluminium, Copper, CRGO Steel, | Price Variation : Prices shall remain Firm during the |
| | | | Transformer Oil and Mild Steel are on ever time high and | entire contract period |
| 2 | | | the upward trend is going on. Besides, ther is shortage of | |
| - | | | CRGO Steel in the maket resulting unprecedented rise in | |
| | | | its price. Distribution companies of Tata Power at Delhi, | |
| | | | NESCO, WESCO and SOUTHCO adopted the IEEMA PV | |
| | | | formula to neutralize the market fluculation in the interest | |
| | | - | or both the buyer and supplier. | |
| | 3.3 of Tender Notice | The all inclusive prices offered shall be | Please confirm who will bear the cost of unloading of | Yes it must include cost of loading & unloading at |
| 3 | Bid Price | inclusive of all costs as well as duties, taxes | transformers at site | Customer Destination. |
| | 0.0 | and levies paid | | Didden shell submit EMD as non Olaura No. 4.0 |
| | 3.8 OF LENGER NOTICE | bidder shall luthish, as part of its bid, an EMD | CPC/A/C/960/20 21/296 deted 15 04 2021 of Odioba | stherwise stimulated in Tender Desuments |
| 4 | | anounting as specified in the tender. | CFC/A/C/000/20-21/300 dated 15.04.2021 of Odisha Power Transmission (conv enclosed) | However as per clause no. 1.6 Bids are liable for |
| 4 | | | rower transmission (copy enclosed) | rejection in absence of EMD of requisite value and |
| | | | | validity |
| | 7 1 of Tender Notice | PBG applicable shall 5% of Rate Contract | PBG may kindly be reduced to 3% as per Circular No | Bidder shall comply as per clause no. 7.1 of Special |
| | Special Condition of | value | CPC/A/C/860/20-21/386 dated 15 04 2021 of Odisha | Condition of Contract |
| 5 | Contract | | Power Transmission (copy enclosed). PBG shall be | PBG applicable shall 5% of Rate Contract value |
| | Contract | | furnsihed against Release Orders and not against Rate | |
| | | | contract | |
| | Page No. 14 | The format shows GST only as taxes and | TCS is also applicable which please incorporate in the | TCS shall be applicable. Bidder need to consider the |
| 6 | Annexure I - | duties | format | same while quoting the price. |
| | Schedule for items | | | |
| | 14.0 of GCC | The liquidated damage shall be charged @ | Please amend this clause to read as 0.5% per week | Bidder shall comply as per clause No. 14 of GCC. |
| | Liquidated Damage | 1% per week subject to maximum 10% of the | subject to maximum of 5% of the delayed quantity | Liquidated Damages. |
| 7 | | total PO value. | | The liquidated damage shall be charged @ 1% per |
| | | | | week subject to maximum 10% of the total PO value. |
| | | | | |
| | | | In view of Covid 19 outbreak due to which most of the | Bidder need to adhere the Calender as |
| 8 | | | states are partially / fully lockdown, we request you to | mentioned in Tender Document/ Corrigendum |
| | | | extend the submission of tender date by at least one | Time extension at this moment not permissible. |
| | | | month. | |

| SI. No. | Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|---------|---|---|---|--|
| 9 | 1.7.3 of Event Information (P.No.11) Qualification Criteria | The bidder should have valid BEE certification with successful Type Test Report (TTR) conducted from CPRI / ERDA/ International Accredited Laboratory and shall furnish the same as a part of the Technical Bid. The type tests should have been conducted on the equipment / material of the same design. The type tests should have been conducted within 5 years prior to the date of bid opening. Time period for type test can be extended by another 5 years as a special case, if there is no change in design / material of construction (MOC). In case the type test reports furnished are not for the quoted equipment / material but for the equipment / material with higher voltage class and/or different capacity, then type test shall be carried out for the offered equipment / material from CPRI/ERDA / International Accredited Lab without any cost implication to the owner and the Type Test reports and relevant drawings duly approved by the Type Testing agency shall be furnished within 3 months from the date issue of RC. | Will provide valid Type Test Reports within 4 months time period after receipt of LOA | The relevant Provision of Tender Specification shall prevail. |
| 10 | 1.7.4 of Event Information (P.No.11) Qualification Criteria | The bidder should have supplied distribution transformers of same or higher rating with specifications as mentioned above, minimum 50% of the quantity tendered, during any one of the financial year out of the immediate past three financial years. | It is requested to accept instead of Number of DTRs please consider in terms of KVA manufactured and supplied in last all 3 Years instead of 1 Year including consideration for supply of Power Transformers. | Bidder need to comply as per clause no. 1.7.4 of Event Information (P.No.11) Qualification Criteria |
| 11 | 2.0 Evaluation Criteria (P.No. 12) | Bidder has to mandatorily quote as per schedule of item [Annexure-I]. Failing to do so TPCODL may reject the bid. | Please give right to Bidder for quoting quantity and rating of Transformer for particular Tenders and compulsion on TPCODL for purchasing of minimum 50% of offered quantity in particular Rate Contract Year. | Bidder shall comply as per clause no. 2.0 Evaluation Criteria Bidder has to mandatorily quote as per schedule of item [Annexure-I]. Failing to do so TPCODL may reject the bid. |
| 12 | 1.0 of Event Information (P.No. 17) | Delivery period shall be 90 days from date of issue of release order/ CAT-A issuance. | Client/TPCODL must inform about the requirement of the DTRs to the manufacturer / supplierwell in advance i.e, before 90days of the scheduled delivery | Delivery period shall be 90 days from date of issue of release order/ CAT-A issuance. |
| 13 | 7.5 Payment Terms of Event Information (P.No. 18) | On delivery of the materials in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of Tata Power Central Odisha Distribution Limited to Invoice Desk. The payment shall be released within 45 days from the date of submission of certified bills/ invoices | Payments shall be assured and released to the Supplier within 45days from the date of supply of Materials. | 7.5 Payment Terms On delivery of the Tranformers in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of TP Central Odisha Distribution Limited to Invoice Desk. The payment shall be released within 45 days from the date of submission of certified bills/ invoices. |

| SI. No. | Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|---------|---|---|---|--|
| 14 | Annexure-1 Schedule for Terms NOTE 1st Point (P.No.20) | The overall period of the rate contract shall be for a period of 1 year and prices shall be "FIRM" till the validity of contract. Release order shall be issued as per requirement of TPCODL. | Price Variation must be applicable by considering the base date & base date should be the date of opening of the Tender | Bidder shall comply as per Clause No.Annexure-1 Schedule for Terms. The overall period of the rate contract shall be for a period of 1 year and prices shall be "FIRM" till the validity of contract. Release order shall be issued as per requirement of TPCODL. |
| 15 | 8.0 - Security cum Performance Deposit of GCC (P.No. 146) | Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPCODL for: (a) 5% of the PO value if purchase order value is more than Rs 5 Crores. (b) 10% of the PO value if purchase order value is less than Rs 5 Crores. This shall remain valid till the end of the Guarantee Period of contract, plus Three months. (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus Three months. | Requested for acceptance of Performance Bank Guarantee @5% of PO Value irrespective of order value. | 8.0 SECURITY CUM PERFORMANCE DEPOSIT Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPCODL for: (a) 5% of the PO value if purchase order value is more than Rs 5 Crores. (b) 10% of the PO value if purchase order value is less than Rs 5 Crores. This shall remain valid till the end of the Guarantee Period of contract, plus Three months. (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus Three months. For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPCODL while processing the invoice and shall be released after completion of Guarantee Period plus Three months. For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable. In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate shall have to submit SPBG. However, the Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the |

| SI. No. | Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|---------|---------------------------------------|--|--|--|
| | · · · · · · · · · · · · · · · · · · · | | | Material Dispatch Clearance Certificate Associate |
| | | | | shall deliver material/goods/equipment against |
| | | | | Supply Contracts or Supply Part of |
| | | | | Composite/Service Contracts only after receiving |
| | | | | Material Dispatch Clearance Certificate (hereafter |
| | | | Document Bidder's Queries TPCODL's Response Material Dispatch Clearance Certificate Associate shall deliver materialgods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate Associate thered as MDCC) issued by designated authority TPCODL. Material delivered at TPCODL shares or project site without a valid MDCC issued by designated authority TPCODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documente during pre-dispatch Inspection is waived at the discretion orres / Project The Manufacturer will supply the DTRs to the Divisional / District Stores of TPCODL The Contract as a spat facility. In case Pre-dispatch Inspection is waived at the discretion and fording them in order. The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, see, rail and road or any other means. All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall include by the associate for order against moisture during transit of all Plant and Equipment. Each Equipment or parts of Equipment Leach Equipment or parts of Equipment Leach Equipment or parts of Equipment Leach Equipment or parts of allow to the assembly drawings and corresponding part numbers. Each bale or packag with reference to the assembly drawings and corresponding part numbers. Each bale or packag with reference to the assembly drawings and corresponding part numbers. Each bale or packag with reference to the assembly drawings and corresponding part numbers. Each bale or packag of EMD value as per MSME unit on the state of odishe Bidder shall submit EMD as per Clause No. establised since 1988. we are eligible to submission 50% otherwise stip | |
| | | | | |
| | | | | project site without a valid MDCC issued by the |
| | | | | designated official of TPCODL shall be rejected. |
| | | | | MDCC shall be issued to associate furnishing |
| | | | | compliance report on the action points documented |
| | | | | during pre-dispatch inspection and testing at |
| | | | | Associate's/ Sub Associate's plant/ facility. In case |
| | 12.1 - Material | Delivery of Transformers at Starsa / Draiget | The Manufacturer will cumply the DTDs to the Divisional (| Pre-dispatch inspection is waived at the discretion of |
| 16 | Dispatch Clearance | Site | | all the test reports routine type from the Associate |
| | Certificate of GCC | one | | and finding them in order. The associate shall include |
| | | | | and provide for securely protecting and packing the |
| | | | | materials so as to avoid loss or damage during |
| | | | | handling and transport by air sea rail and road or |
| | | | | any other means. All such packing shall allow to the |
| | | | | extent possible for easy removal and checking at |
| | | | | Site. The associate shall take special precautions to |
| | | | | prevent rusting of steel and iron parts during transit |
| | | | | by sea. Gas seals or other materials shall be utilized |
| | | | | by the associate for protection against moisture |
| | | | | during transit of all Plant and Equipment. Each |
| | | | | Equipment or parts of Equipment shall be tagged |
| | | | | with reference to the assembly drawings and |
| | | Tandan Faa | | corresponding part numbers. Each bale or package |
| | 1.0 Event information | lender Fee | As we are under the MSME unit on the state of odisha | Bidder shall submit Tender Fee as per Clause No. |
| | Clause No 1.1 | | tender cost as per MSME development act 2006 & also it | However as per clause po 1.6 Rids are liable for |
| 17 | | | is our regular practice in case of all Distribution companies | rejection in absence of Tender fee of requisite value |
| | | | (CESU SOUTHCO WESCO & NESCO) and OPTCI | |
| | | | Kindly consider our case | |
| | 1.0 Event information | EMD Amount | As we are under the MSME unit on the state of odisha | Bidder shall submit EMD as per Clause No. 1.0 |
| | Clause No.1.1 | | establised since 1988, we are eligible to submission 50% | otherwise stipulated in Tender Documents. |
| | | | of EMD value as per MSME development act-2006 & also | However as per clause no. 1.6 Bids are liable for |
| | | | it is our regular practice in case of all Distribution | rejection in absence of EMD of requisite value and |
| 18 | | | companies (CESU,SOUTHCO,WESCO & NESCO) and | validity. |
| | | | OPTCL. Earlier you have allow 50% EMD deposit against | |
| | | | your Tender Notice No-TPCODM/VKD/O/23 of GCC | |
| | | | clause No-9.4 Kindly ammend the EMD value. | |

| SI. No. | Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|---------|-----------------------|---|---|--|
| | In GCC Clause No. | Security Performance B.G. 5% of P.O. Value | Geneal practice of (CESU,SOUTHCO,WESCO & | 8.0 SECURITY CUM PERFORMANCE DEPOSIT |
| | 8.0 | more than Rs.5.0 Crore or 10% of P.O. value | NESCO) and OPTCL accepting 5% PBG of ex works PO | Associates shall submit within 15 days from the |
| | | less that Rs. 5.0 Crore. | value for only SSI unit in the state of Odisha. Now Govt.of | effective date of issue of PO/RC, Security |
| | | | India reduced 3% instead of 5% & 10% Vide Notification | Performance Bank Guarantee (SPBG) in the format |
| | | | No> F-9/4/2020-PPD. Copy enclosed for ready | as per Annexure B of this document from banks |
| | | | refence.kindly ammend the clause. | acceptable to TPCODL for: |
| | | | | (a) 5% of the PO value if purchase order value is |
| | | | | more than Rs 5 Crores. (b) 10% of the PO value if |
| | | | | purchase order value is less than Rs 5 Crores. This |
| | | | | shall remain valid till the end of the Guarantee Period |
| | | | | of contract, plus Three months. |
| | | | | (c) 5% of the RC value in case of Rate Contract. This |
| | | | | shall remain valid till the Guarantee period plus |
| | | | | Three months. |
| 19 | | | | □ For PO/RC values less than Rs. 5 lacs, Associate |
| 13 | | | | may request for deduction of amount equivalent to |
| | | | | SPBG value from their first invoice. Such amount |
| | | | | shall be withheld by TPCODL while processing the |
| | | | | invoice and shall be released after completion of |
| | | | | Guarantee Period plus Three months. |
| | | | | □ For PO/RC values less than Rs. 3 lacs, the clause |
| | | | | (8.0) for Security cum Performance Bank Guarantee |
| | | | | (SPBG) shall not be applicable. |
| | | | | C validity Associate shall have to submit SPBC |
| | | | | However the Associate has the option to re-submit |
| | | | | the SPBG as per actual RO (Release Order) value |
| | | | | issued against the RC valid for Guarantee Period |
| | | | | plus one month. |
| | | | | The Guarantee Period shall be considered as per the |
| | In Technical | | In Technical Specification (Clasue No 11.0) Mentioned that | Bidder shall stand guarantee towards design, |
| | Specificatio Clause | | Guarantee Period 48 Months commissioning & 60 from | materials, workmanship & quality of process/ |
| 20 | No. 10.0 and In GCC | | the date of supply where as in GCC (Cl. 13.2) mentioned | manufacturing of items under the contract for due |
| 20 | clause No. 13.2 | | that 60 Months & 66 Months respectively. This is the | and intended performance of the same, as an |
| | | | contradictory which one is correct ? . Please clear our | integrated product delivered under this contract. In |
| | | | doubt. | the event any defect is found by the Purchaser up to |
| | | Guarantee Period | Geneal practice of (CESU,SOUTHCO,WESCO & | a period of 48 months from the date of |
| | | | NESCO) and OPTCL issue the PO with Gurantee Period | commissioning or 60 months from the date of last |
| | | | of 42 month from the date of supply / 36 month from the | supplies made under the contract, whichever is later. |
| 21 | | | date of commissioning whichever is earlier in case of | Bidder shall be liable to undertake to replace/rectify |
| | | | Distribution Transformer up to 500 KVA Transformer.PO | such defects at his own costs. Within mutually agreed |
| | | | Copy enclosed for ready referice kindly ammend the GC | umerrame, |
| | | | clause only for Distribution Transformers. | and to the entire satisfaction of the Purchaser, failing |
| | In Event Information | Payment Terms | Mention in your Scope of Work (Cl. 7.5) as 100% payment | 1.5 Payment Terms On delivery of the Tranformers in |
| | Clause No. 7.5 and In | | within 45 days where as in GCC (Cl. No.6) mentioned | good condition and certification of acceptance by |
| | GCC Clause No. 6.0 | | doubt | Invoices in original in the name of TP Central Odieba |
| 22 | | | | Distribution Limited to Invoice Dock. The neumont |
| | | | | shall be released within 45 days from the date of |
| | | | | submission of certified bills/ invoices |

| SI. No | . Clause description | Description as per Bid Document | Bidder's Queries | TPCODL's Response |
|--------|----------------------|---------------------------------|--|---|
| | In GCC Clause | Liquidated Damage | Geneal practice of (CESU,SOUTHCO,WESCO & | Bidder shall comply as clause no. 14 (a) and 14 (b) |
| | No.14.0 (a) | | NESCO) and OPTCL issue the PO with Imposed penalty | |
| | | | .5% to maximum to 5% only for SSI unit in the state of | |
| 23 | | | odisha.Some past supply PO Copy enclosed for ready | |
| | | | refence.kindly ammend the penality clause to sustaion | |
| | | | /survive a MSME/SSI unit like us. | |

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Pre-Bid Queries for 25 KVA and 63 Kva 3 Phase Distribution Transformers Tender N TPCODL/P&S/NEW DT-UPTO 63/1000000011/20-21 (25 KVA and 63 KVA 3 Phase Transformers)

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---|--|--|--|
| 1 | 5.2 (3) of Technical Specification Losses | The successful bidder shall guarantee the quted losses for at least five years. If at any point of time during opeation if it is found that the total losses at 50% and 100% load are more than the value given in specifications, then bidder shall be liable to pay a fine of Rs.250 per watt to the amount by which losses at 50% loading and 100% loading increae the values given in specification | Tolerance should be allowed on 50% and 100% guaranteed loss considering the transportation and handling factors | The successful bidder shall guarantee the quted losses for at least five years. If at any point of time during opeation if it is found that the total losses at 50% and 100% load are more than the value given in specifications, then bidder shall be liable to pay a fine of Rs.250 per watt to the amount by which losses at 50% loading and 100% loading increae the values given in specification |
| 2 | 5.2 (1) of Technical Specification Losses | The bidder shall guarantee individually the no load and load loss without any positive tolerance. | As per BIS / BEE guidelines , losses at 50% and 100% load shall be guranteed. Therefore please delete this clause | The bidder shall guarantee individually the no load and load loss without any positive tolerance. |
| 3 | 5.5 of Technical Specification Radiators | Radiators of pressed steel type conforming to the design requirement shall be provided | Please also allow Corrugated Wall Panels | Radiators of pressed steel type conforming to the design requirement shall be provided |
| 4 | | | In view of Covid 19 outbreak due to which most of the states are partially / fully lockdown, we request you to extend the submission of tender date by at least one month. | |
| 5 | As per clause No.1. Scope | Inis specification covers the technical requirements of design , manufacture testing at manufacturers works , packing , forwading , supply and unloading at site;store and performance of oil immersed,non sealed, naturally cooled,three phase 11kV/0.250kV,50Hz,Aluminium wounded,double wound outdoor type distribution transformers.The equipment covered by this specification shall unless otherwise stated,be designed,manufactured and tested in accordance with the latest editions of the following Indian,International Standards and shall conform to the regulations of the authorities. As per clause No:4.General technical requirements. | We wish to bring to your kind notice that, both these clauses are contradicting each other. We are presuming, your requirement as Single phase transformers. Kindly review and confirm your requirement. | The Transformer Primary shall be connected across two phase(11KV) & on the secondary winding is Single phase (Phase & Neutral) |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---|---|--|--|
| 6 | AS per clause 4.General Technical Requirements | 20.Short circuit Impedance voltage at 75DegC : 4.5% | Please note, as per Table 9 of IS:1180 (Part-I):2014, the Impedance is 4% for single pahse distribution transformers upto and including 25kVA. Hence, we request you to take note of the above and amend the this clause inline with IS 1180 (Part-I) : 2014 | Accepted for single phase Transformer as per IS |
| 7 | As per clause 5.3 Winding Connections | 1.Primary and secondary windings shall be constructed from high conductivity (Aluminium conductors), Double paper covered (DPC) Aluminium conductor. | We wish to bring to your kind notice that, option for Super enamel covering on conductor is also acceptable as per IS-1180 (Part-1)-2014 and it is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Hence,we request to reviiew the same and issue necessary amenedment to the specification by giving equal opportunity for both DPC and Enamel covering on the conductor. | Primary and secondary windings shall be constructed from high conductivity (Aluminium conductors), Double paper covered (DPC) Aluminium conductor. |
| 8 | As per clause 4.General Technical Requirements | The 100% & 50% Total losses are mentioned as Energy Efficiency Level - 2. | Please note, all the prospective distribuition companies, such as APEPDCL & APSPDCL of Andhra Pradesh and TSSPDCL &TSNPDCL of Telangana State adopted Energy Efficiency Level -3 (EEL-3) losses for procurement of transformers. Hence, we request to take note of the same amned the losses as per EEL-3 as against the losses of EEL-2 mentioned in the specification. | The 100% & 50% Total losses are mentioned as Energy Efficiency Level - 2. |
| 9 | As per Clause 5.2.Losses | The transformer shall be designed for minimum level of efficiency 99.05% for loading range in between 20% to 60% at unity P.F. Percentage of regulation should be less than 4% at 0.8 Power factor | We wish to bring to your kind notice that, Percentage regulation value will be arrived based on achieved No Load, Load Losses w.r.t. Energy Efficiency level losses. This cannot be a fixed value. The TATA Power Delhi also initially floated tender by fixing the Percentage of regulation value. However, looking at the increase in cost of manufactruing, they have deleted this clause at later stage Hence, we request to review and delete the clause from specification. | % of regulation to be given as per as per IS |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---|---|--|---|
| 10 | As per Clause 8.0 Type Test Certificates. | The bidder shall furnish the type test certificates of the Distribution Transformer for the tests as mentioned above as per the corresponding standards.All the tests shall be conducted at CPRI as per the relevant standards.Type Test should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.in the event of any discrepancy in the test reports,i.e. any test report not acceptance , same shall be carried out without any cost implication to TPCODL. | We during the tender submission stage shall submit the type & special test reprots, carried out at NABL accredited lab, of same or higher rating / voltage class trasformers for evaluation purpose. Upon, receipt of the order, we shall conduct the type & special tests, at CPRI, at our cost (i.e. with out any cost implication to TPCODCL). We request to allow us to proceed for bid submission as per above | Accepted |
| 11 | As per clause 5.3 Winding Connections | 1.Primary and secondary windings shall be constructed from high conductivity (Aluminium conductors), Double paper covered (DPC) Aluminium conductor. | We wish to bring to your kind notice that, option for Super enamel covering on conductor is also acceptable as per IS-1180 (Part-1)-2014 and it is also mentioned in the guidelines for energy efficient distribution transformers, issued by Central Electricity Authority(CEA). Hence,we request to reviiew the same and issue necessary amenedment to the specification by giving equal opportunity for both DPC and Enamel covering on the conductor. | 1.Primary and secondary windings shall be constructed from high conductivity (Aluminium conductors), Double paper covered (DPC) Aluminium conductor. |
| 12 | As per clause 4.General Technical Requirements | The 100% & 50% Total losses are mentioned as Energy Efficiency Level - 2. | Please note, all the prospective distribuition companies, such as APEPDCL & APSPDCL of Andhra Pradesh and TSSPDCL &TSNPDCL of Telangana State adopted Energy Efficiency Level -3 (EEL-3 / BEE Star 2) losses for procurement of transformers. Hence, we request to take note of the same amned the losses as per EEL-3 as against the losses of EEL-2 mntioned in the specification. | The 100% & 50% Total losses are mentioned as Energy Efficiency Level - 2. |
| 13 | As per Clause 8.0 Type Test Certificates. | The bidder shall furnish the type test certificates of the Distribution Transformer for the tests as mentioned above as per the corresponding standards.All the tests shall be conducted at CPRI as per the relevant standards.Type Test should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.in the event of any discrepancy in the test reports,i.e. any test report not acceptance , same shall be carried out without any cost implication to TPCODL. | We during the tender submission stage shall submit the type & special test reprots, carried out at NABL accredited lab, of same or higher rating / voltage class trasformers for evaluation purpose. Upon, receipt of the order, we shall conduct the type & special tests, at CPRI, at our cost (i.e. with out any cost implication to TPCODCL). We request to allow us to proceed for bid submission as per above | Accepted .Undertaking to be given in letter head. |
| 14 | For AL Wou | nd Distribution Transformers: 16kVA &25k | VA, 1-Phase and 63kVA, 3-Phase | |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---------------------------------|---|---|---|
| | | Windings shall be of Double Paper Covered | We request you to kindly give option for super | Windings shall be of Double Paper Covered |
| 15 | 5.3 of Technical specification. | Aluminium conductor | enamel covering also, as per CEA guidelines and | Aluminium conductor |
| | | | IS 1180(part-1):2014. | |
| | 5.1 of Technical | Transformer core shall be stack type, 2D, | We request you to kindly give option for | |
| | specification. | constructed from high grade cold rolled, non- | Amorphous core also based on the following | |
| | | ageing, grain oriented, silicon steel | advantages. | |
| | | lamination which shall be properly annealed | | |
| | | (under inert atmosphere, if required) to | Why Amorphous Metal for Transformers? | |
| | | relieve stresses. | The No-Load Losses in transformer are of the | |
| | | | utmost important since they occur throughout the | |
| | | | life of the transformer and if we can reduce these | |
| | | | losses by any method, then the savings to the | |
| | | | user are enormous. | |
| | | | A unique electrical steel known as Amorphous | |
| | | | Metal, which provides significant reduction in the | |
| | | | core losses that helped to make high energy | |
| | | | efficient distribution transformers. | |
| 16 | | | | Amorphous metal core is not accepted |
| | | | | |
| | | | CORE TRANSFORMERS: | |
| | | | • NO-load loss reduced to a fock bolloff low of | |
| | | | Lossos due to pop linear leading (i.e. Harmonic | |
| | | | distortion) is reduced typically by about 570 watts | |
| | | | for a 100 kva transformer | |
| | | | Less magnetizing current | |
| | | | Cumulative saving of energy cost | |
| | | | Total owning cost to customer is much less | |
| | | | Reduction in fossil fuel consumption | |
| | | | Better "demand side management". | |
| | | | Less temperature rise of core. | |
| | | | • The core design and clamping structure is | |
| | | | special and sturdy, and coils being progressively | |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|--------------------------------------|---|--|--|
| | 5.1 of Technical specification. | Core: Transformer core shall be stack type | We request you to kindly add option for wound core construction by considering the advantages of Wound core construction over Stacked core construction. | |
| | | | with CRGO silicon steel also wound cores features a step – lap joint will minimizing eddy current losses. Hence, the core destruction factors will be less compared to the core with stacked construction resulting in lower No-load loss. Wound core transformers are light weight and compact. | |
| 17 | | | Wound core certainly eliminates the possibility to use small pieces of lamination. This can avoid the use of scrap pieces of CRGO in distribution transformers. Hence in a way if wound core transformers are incorporated, it eliminates the use of scrap CRGO. Mechanically strong to resist short circuit forces. This aspect has been adopted by PGCIL for smaller distribution transformers. Thermally strong for higher load capability and longer life. Efficient, providing maximum output at minimum operating cost. Electrically strong to resist lightning and switching surges. | This is to be followed as per Specification Clause no- 5.1 |
| 18 | | For 63kVA, 3Phase AL Wound Distribut | tion Transformers | |
| 19 | 40(20) of Technical Specification | Normal flux density (at rated voltage and frequency) – 1.6T | We request you to kindly allow the Normal flux density (at rated voltage and frequency) up to 1.69T which is in limits, as the Max flux density(Increase of +12.5% combined voltage and frequency variation form the rated voltage and frequency) is 1.9T (i.e-1.9 Tesla Max/1.125%=1.6888 Tesla) | Normal flux density (at rated voltage and frequency) – 1.6T |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|------------------------------------|---|--|---|
| 20 | 5.6 of technical specification | Gasket: Nitrile/Neoprene rubber gaskets confirming to Type V as per IS 11149 shall be provided for bushing oil gaskets and tank cover. | As per Cl no. 15.4 of IIS 1180Part-1) gaskets shall confirm to type-III of 11149 or type-C of IS 4253 which refers to cork rubber gaskets. Accordingly we use cork gaskets. | Cork rubber gaskets conforming to Type C , grade RC70 as per IS 4253 (Part-2) shall be provided for all oil bearing & water ingress resistant requirements for components like HV & LV bushings bottom gasket, HV & LV terminal box, Top Cover, Conservator, Valves etc. Nitrile/Neoprene rubber gaskets conforming to Type IV – 4C (heat and oil resistant) as per IS 11149 shall be provided for bushing O ring (oil gaskets). Only Joint free Gasket to be used. Cork sheet, Nitrile/Neoprene rubber gaskets shall be free from cracks, pinholes and shall be capable of being cut or punched without crack or tearing. |
| 21 | 5.4 of Technical Specification | The thickness of tank should be as below: For top and bottom : 6 mm (min.) For Sides : 5 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852. | We will provide the thickness of tank as per IS:1852 with +/- Tolerance. Kindly confirm. | The thickness of tank should be as below: For top and bottom : 5 mm (min.) For Sides :3.15 mm (min.) Negative tolerance is not accepted in tank sheets and only positive tolerance shall be applicable as per IS 1852. |
| 22 | 5.16 of Technical Specification | The transformer shall be suitable for loading as per IS 6600. | As per BIS gazette dt:09/06/2015, IS 6600 has been replaced with IS 2026-7. Hence, transformer shall be suitable for overloading as per IS 2026-7 | The transformer shall be suitable for loading as per 2026 part-7. |
| 23 | 5.5 of Technical | | These two clauses are contradictory please | Thickness shall be 1 2mm |
| 24 | Profarma Radiators | Fin radiator of 1.25mm thick sheet | provide the required radiator thickness. | Thickness shall be 1.2mm |
| 25 | | 1. Top Filter Valve | As per IS 1180 the said fittings are not standard fittings. Hence we can remove the said fittings. Please confirm. | Top filter valve should be provided |
| 26 | 5.21 of Technical Specification | 2. An extended pipe connection on upper end with welded cover to enable use of a refilling/siphon connection. | | The conservator oil filling cap/hole shall be of 32mm diameter & female type cap to be provided. All caps/air plug to be fixed with Teflon tape such way that atmospheric air should not pass inside conservator, only filtered air from breather shall go in conservator tank |
| 27 | | 3.Drain cum sampling valve and filter with locking arrangement. | | .Drain cum Sampling Valve of brass metal wheel (0.75 inch nominal size thread, IS 554) with locking arrangement and a valve cover made of M.S.steel |
| 28 | | 4.Inspection cover | | Inspection cover is not required upto 100KVA |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---------------------------------------|---|--|--|
| 29 | 5.11 of Technical Specification | LV cable box shall be provided with tinned brass palm connector with aluminium bus bar and shall be fitted with brass glands for LV cable. | As the cable box is required with one run per phase we can eliminate aluminium bus bar and palm connector. We could place lug to the bushing and cable will be connected to the Lug. Please confirm the arrangement. | Tinned Brass palm connector (with current rating w.r.t Load current), and Aluminium busbar (current density: not more than1 A/mm²) shall be provided. Busbar shall be supported with insulator at the top portion of terminal box. |
| 30 | For 16kVA & 25kVA, 1 Pha | se AL Wound Distribution Transformers | | |
| 31 | 4(General Technical requirements) | LV Service Voltage is given as 250V for both 16,25kVA | As per Amended IS 1180-2014, Secondary Voltage(Service Voltage) of 250V not valid. Therefore Please allow us to proceed with 240V Secondary voltage which is as per Tata Power regular practice. | LV Service Voltage is given as 250V for both 16KVA & 25kVA, Single Phase Distribution Transformer |
| 32 | 4(General Technical requirements) | HV Service Voltage is given as 11kV for both 16,25kVA . | Please check and Confirm that the required HV voltage is 11kV or 11/√3kV. | The Transformer Primary shall be connected across two phase(11KV) & on the secondary winding is Single phase (Phase & Neutral) |
| 33 | 4(General Technical requirements) | Serial 19: Power frequency withstand voltage given as 28kV | As per IS 1180 clause 21.2(g), For Transformers with $11/\sqrt{3}kV$ Primary voltage, Power frequency test will be conducted at the test voltage of neutral i.e $3kV$. Kindly confirm. | Serial 19: Power frequency withstand voltage given as 28kV |
| 34 | 5.4 of Technical Specification | Serial 4:The thickness of tank shall be as below Top& Bottom Plate :2.5(min) For sides:2.25mm(Min) | Please allow us to proceed tank sheet thickness which are as below (Also executed the same for Tata Power, Delhi): Top& Bottom Plate thickness:2.5mm(min)(Sheet thickness tolerance applicable as per IS 1852) For sides :2.2mm(min)(Sheet thickness tolerance applicable as per IS 1852) Please allow us to proceed with above | The thickness of tank shall be as below Top& Bottom Plate :2.5(min) For sides:2.25mm(Min) |
| 35 | 5.4 of Technical Specification | Serial7: The tank cover shall be conical Shape(Slope of atleast 15 degree taking horizontal plane as reference) | As per our previous practice for Tata Power, Topcover will be of Dome Shaped. Please allow us to proceed with dome shaped topcover. | Dome shape is accepted |
| 36 | 5.4 of Technical Specification | Serial 13: Minimum Oil Level mark shall be embossed inside the tank (at 25 Deg.c) | As per Latest amended IS 1180-2014,Minimum position corresponds to an operating temperature of 30 Deg.c for sealed type transformers. Please allow us to proceed as per IS 1180-2014 Standard. | Minimum Oil Level mark shall be embossed inside the tank (at 25 Deg.c) |
| 37 | 5.5 of Technical Specification | Serial 15:The transformer shall be provided with two permanent lifting lugs (Enclosedtype) of MS Plate | Please clarify regarding the work "Enclosed type" | Lifting lug welded with body in circular shape |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|--|---|---|---|
| 38 | 5.7 of Technical Specification | Serial 1: HV Bushings:12kV/250A The bushing shall be two part | Generally HV Bushing will be of one part and LV Bushing will be of two part as per IS 3347. Please allow us to proceed as above | There will be two NO'S OF HV Bushing on Primary for Phase to phase connection & similarly for LV there will two bushing one for phase and second one is for Neutral |
| 39 | 5.9(MCCB with Box) | Serial4:Single phase MCCB box shall be provided with suitable size of Al Bus bar(Such that the minimum current density should be 1 A/Sq.mm) | We request you to amend the clause as below: maximum current density should be 1 A/Sq.mm | maximum current density should be 1 A/Sq.mm |
| 40 | 5.18(Fittings) | Serial k: Palm connector on LT Side | As per our experience with Tata Power, The connections from Bushing stem to corresponding Busbars & MCCB shall be done by using Suitable Lugs, Insulated Flexible wire equipment which will not damage corresponding Bushing stem. As there is MCCB box on LV Side, Palm connector is not applicable. Please confirm. | Palm connector is not required for Single phase 16KVA & 25KVA LT Distribution BOX. |
| 41 | 6.2(Marking) | Primary markings:1U&2u, neutral 2n | We will provide terminal markings as per IS 1180 Standard . please confirm | Primary markings:1U, 1V &2u, neutral 2n |
| 42 | MCCB Specification | Please provide MCCB& its Box Specification for both 16,25kVA | | The approved Make MCCB's are Havell, Schneider, ABB, L&T, EATON |
| 43 | 4(General Technical requirer | Serial 24b: Normal flux density at rated voltage and frequency 1.5T | As per IS 1180 Clause No 7.9.1, The maximum flux density in any part of the core and yoke at rated voltage and frequency shall be such that the flux density with + 12.5 percent combined voltage and frequency variation from rated voltage and frequency does not exceed 1.9 Tesla. Tesla (max 1.9)/1.125=1.69Tesla. Hence with respect to above clause could we proceed with 1.69T Max, Please Confirm. | Normal flux density at rated voltage and frequency 1.5T |
| 44 | 11.0 Guarantee, Technical Specifications (P.No. 53) | In the event any defect is found by the Purchaser up to a period of 48 months from the date of commissioning or 60 months from the date of last supplies made under the contract, whichever is later. | Request for considering defect liability period of 60months from the date of supply of Transformers. | In the event any defect is found by the Purchaser up to a period of 48 months from the date of commissioning or 60 months from the date of last supplies made under the contract, whichever is Earlier |
| 45 | 11.0 Guarantee, Technical Specifications (P.No. 53) | Bidder shall be liable to undertake to replace/rectify such defects at his own costs. | Yes, accepted But the Transformers sealed should not broken or opened and Manufacturer is not responsible for any Physical Damages. Manufacturer is only responsible for only those defects which will occurred due manufacturing fault. I.e, manufacturer will not be responsible for failure of DTR due to overload, theft or shortage of oil, lightening stroke etc | Accepted |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|--|---|---|---|
| 46 | 1.0 of Event Information (P.No. 17) | Delivery period shall be 90 days from date of issue of release order/ CAT-A issuance. | Client/TPCODL must inform about the requirement of the DTRs to the manufacturer / supplierwell in advance i.e, before 90days of the scheduled delivery | Once the Order placed / CAT-A drawing approved the bidder has to suply the Transformer within 90days |
| 47 | 11.0 Guarantee, Technical Specifications (P.No. 53) | In case of Distribution transformer fails within the guarantee period the purchaser will immediately inform the Bidder who shall take back the failed Distribution Transformer within 15 days from the date of intimation at his own cost and replace / repair the transformer within forty-five days of date of intimation with a roll over replaced shall not be counted for arriving at the guarantee period. | Will collect failed DTR from your Central Stores and will provide either replacement / repair at the same location only I.e, authroise stores of TPCODL within prescribed time period. | Accepted.However centralised Store locations list will be shared by TPCODL |
| 48 | 11.0 Guarantee, Technical Specifications (P.No. 53) | Bidder shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Purchaser guarantee. The outage period i.e. period from the date of failure till unit is repaired / | Guarantee period of DTR will be of 60 months counted from the date of delivery of DTR and if it will failed during defect liability failed then it will be repair / replace without extending additional liabiltiy period | Bidder shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Purchaser guarantee. The outage period i.e. period from the date of failure till unit is repaired / |
| 49 | Annexure-1 Proforma for Stage Inspection (P.No.66) & 9.5 - Pre Dispatch Inspection - Technical Specifications (P.No.106) | The stage inspection shall be carried out in accordance with Annexure-I. | Normally Stage Inspection carried out for Power Transformers i.e, 33kV or above Voltage level Transformers so requested for it is to be waived the Stage Inspection and conducted at the time of Final Inspection. | The stage inspection shall be carried out in accordance with Annexure-I.It is solely decision of TPCODL to do the inspection or waiver. |
| 50 | 12.1 - Material Dispatch Clearance Certificate of GCC | Delivery of Transformers at Stores / Project Site | The Manufacturer will supply the DTRs to the Divisional / District Stores of TPCODL | Delivery of Transformers at Stores / Project Site as per TPCODL requirement. |
| 51 | | Delay in Inspection | Delay of Inspection must be counted at TPCODL end while imposing any LD / Penalties due to delay of delivery thereof. | Accepted |
| 52 | 5.9 | HV Bushing Mounting | HV bushing to be mounted on Top cover . Kindly confirm | Accepted |
| 53 | 5.23.k | Stiffner angle | Kindly provide the size of stiffner angle. | To be provided by OEM as per size of Transformer |
| 54 | 5.11 | Cable Box | LV cable box shall be made suitable for 4R x 1C x 185sqmm cable or 1R x 4C x 185sqmm.Kindly clarify | 1) The clearance above bushing shall be 120mm and below busbar cable mounting bolt shall be 450mm up to gland plate. 2) LV Cable Boxes suitable for Single core 185Sqmm cable per phase for 100KVA TRF. 3) LV Cable Boxes suitable for four core 120Sqmm cable for 63KVA TRF. 4) LV Cable Boxes suitable for four core 35Sqmm cable for 25KVA TRF. |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|---|--|---|---|
| 55 | In event Information in Clause No. 1.4 (1.4.3) (d) | Type Test Report (TTR) | The type test specified in TPC should have been carried out within 5 years to date of opening of technical bid. If type test are not within 5 years to the date of bidding, the bidders will arrange to carry out type tests specified at his cost. The decision to accept/reject such bids rests with TPC - We have valid Typest ratings ratings & higher ratings TTR available with us except 16 KVA & 25 KVA 1 phase TTR. whethere undertaking for 16 & 25 KVA 1phase acceptable /not,accordingly we will submit our Bids. Kindly advice us.Also this the first time in odisha 25 KVA single phase tender has been floated,So we request you to kindly allow us | Undertaking accepted, however before Material Inspection Type Test report is required. |
| 56 | In technical Specification Clause No. 4 (6 &7) (Page No 4 of 49) | General Technical Requirement | For 16 KVA, 11/0.250 KV transformer (a)current mentioned for HV side = 2.519 Amp in place of 1.45 Amp. (b) For LV side = 66.66 Amp in place of 64 Amp. For 25 KVA, 11/0.250 KV transformer (a) Current mentioned fo HV side = 3.94 amp in place of 2.27 Amp. (b) For LV side = 104.17 amp in place of 100 amp. Kindly mentioned exact value of KVA and KV. | 1)For 16 KVA, 11/0.250 KV transformer the HV Current =1.45Amp &LV Current =64Amp 2)For 25 KVA, 11/0.250 KV transformer the HV Current =2.27Amp &LV Current =100Amp |
| 57 | In technical Specification Clause No. 4 (20) (Page No 5 of 49) | Short cicuit Impendance voltage at 75 Deg. C. | The value of impendance for 16 KVA, 1 Ph is mentioned 4.5% instead of 4.0% as per IS:1180. Kindly correct it. | The value of impendance for 16 KVA &2 5KVA, Single Transformer will be 4.0% as per IS:1180. |
| 58 | In technical Specification Clause No. 5.4 (Page No10 of 49) | Transformer Tank | The Plate thickness is mentioned as 2.5 mm thick for Top & bottom and 2.25 mm for site, whereas in cluase 28.3 (A& B) of General technical parameter the plate thicknees is 6 mm for Top & bottom and 5 mm for site. Please confirm . | The Plate thickness is mentioned as 2.5 mm thick for Top & bottom and 2.25 mm for side |
| 59 | In technical Specification Clause No. 5.10 (Page No15 of 49) | Make of Measure componet and meterial | The Winding material is mentioned as Copper whereas the desired Item is Aluminum wound as per specification. Kindly confirm. | The winding Material is Aluminium |
| 60 | In technical Specification Clause No. 5.19 (Page No18 of 49) | Fittings | In clause No (K) LT side Palm connector is required, but for termination of single cable 1 bi metalic connector is sufficient. Kindly accept thebi-metalic connector in place of Palm connector and bus bar. | Palm connector is not required for Single phase 16KVA & 25KVA LT Distribution BOX. |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|--|--|--|--|
| 61 | In technical Specification Clause No. 5.11 (For 3 Phase transformer) | Cable Boxes | As the Secondary connection is with 1 R and 4C x 1.85 Sq. mm Aluminum Cable, so in place of Palm Connector and bus bar only 1 terminal connector can be used, so that the number of joint is less as well as the contact resistance and heat generated. Please clarify. | 1) The clearance above bushing shall be 120mm and below busbar cable mounting bolt shall be 450mm up to gland plate. 2) LV Cable Boxes suitable for Single core 185Sqmm cable per phase for 100KVA TRF. 3) LV Cable Boxes suitable for four core 120Sqmm cable for 63KVA TRF. 4) LV Cable Boxes suitable for four core 35Sqmm cable for 25KVA TRF. |
| 62 | In technical Specification Clause No. 5.18 (For 3 Phase transformer) | Drain Valve | It is mentioned the valve is of mild steel gate valve (MS). Generally the valve availiable in market are of Cast Iron (CI) type and for small transformers wheel valve is better that gate valve. So kindly accept CI type wheel valve upto 100 KVA transformer as top filter valve and bottom drain cum sampling valve. | Drain cum Sampling Valve of brass metal wheel (0.75 inch nominal size thread, IS 554) with locking arrangement and a valve cover made of M.S.steel |
| 63 | Clause no. 5.3 , Windings | Primary and secondary windings shall be constructed from high- conductivity, Double Paper Covered (DPC) Aluminium conductor of Grade 2 (Al 99.6 %) as per IS 5484. The winding shall be designed for better voltage regulation and mechanical strength. LV winding shall be such that neutral formation will be at top. The coil shall be circular in shape and their construction shall be such that there is no possibility of any distortion under likely conditions of service. Proper bonding of inter layer insulation with the conductor shall be ensured. Test for bonding strength to be conducted. | Please clarify whether bidders can use SEM wires for primary windings instead of Double Paper covering (DPC) if the bidder has successfully type tested design and performance certificate of transformer having SEM wire in primary windings as per IS 13730. Further neither IS 1180:2014 part 1 nor BEE are against use of SEM wires in windings. Further being an experienced manufacturer we can confidently assure you that we have observed from our quality control records that the load loss at 75 drg. have more accurate result. Since SEM wire are less malleable when compared with DPC wires. It is more useful during elongation of AI. wires as insulation of DPC wire are likely to crack and causing the failure of transformer. Thus last but not least we strongly recommend you to permit bidders to use SEM wire in at least primary windings due to longevity factor of SEM. | Primary and secondary windings shall be constructed from high- conductivity, Double Paper Covered (DPC) Aluminium conductor of Grade 2 (Al 99.6 %) as per IS 5484. The winding shall be designed for better voltage regulation and mechanical strength. LV winding shall be such that neutral formation will be at top. The coil shall be circular in shape and their construction shall be such that there is no possibility of any distortion under likely conditions of service. Proper bonding of inter layer insulation with the conductor shall be ensured. Test for bonding strength to be conducted. |

| [| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---|---------|---------------------------------------|--|---|--|
| | 64 | CLAUSE NO. 5.4 TRANSFORMER TANK | The transformer tank shall be of robust construction, rectangular in shape and shall be built up of electrically tested welded mild steel plates of thickness 6 mm (minimum) for bottom and top and not less than 5 mm (minimum) for the sides. | I he thickness of MS plates used in construction sides 5 mm and bottom 6 mm of the rectangular tank body are on the higher side and partially detrimental towards heat dissipation through tank body which will cause higher temp. rise in windings and oil when the transformer is ONLOAD. From our vast experience in this filed of fabrication of transformer tank and its testing , we recommend to reduce thickness of mild steel plates used in 63 kVA & 100 kVA as per the following table Ratings Side Top & Bottom 63 kVA 3.15 mm 5 mm 100 kVA 3.15 mm 5 mm 100 kVA 3.15 mm 5 mm 11 is universally a known fact that higher thickness of plates used in oil filled transformer tank will caused lesser heat dissipation by transformer tank body. Lastly we have using the above mentioned thickness of MS plates for past more than 20 years and BIS, BEE & CBIP both recommend pressure and vaccum test for checking the defection / Contraction of tanks to ascertain the appropriate thickness of sheets. Even BIS, BEE and NABL labs like CPRI/ERDA have accepted and approved use of the above mention thickness of M.S. Last but not least it is obvious that the tank becomes heavies which may adversely affect during the pole mounted installation and also increases the cost of | Top & bottom Tank for 3phase 25KVA,63KVA & 100KV Transformer -5mm & side 3.15mm |
| | 65 | CLAUSE NO. 5.4 TRANSFORMER TANK | The transformer tank covers shall be bolted/clamped alternatively welded with tank rim so as to make a leak proof joint. | We have BIS licence for non - sealed transformer whereas in accordance to cl. No. 5.4 you required tank cover shall be bolted/clamped alternatively welded with tank rim so as to make a leak proof joint. How is it possible to weld the tank cover with a tank rim in non - sealed type transformer. Hence you are requested to may delete the words the alternatively welded. | |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|--|---|---|---|
| 66 | CLAUSE NO. 5.11 CABLE BOXES | Length of the LV bus bar shall be sufficient for terminating 4R1CX185sqmm and 4C x 185 sq mm, aluminium conductor, 1.1 kV class, XLPE cable. | As cross section of LT 1.1 kV class XLPE cable should not be the same for all ratings namely 25 kVA, 63 kVA & 100 kVA DTR because obviously full load current of 25 kVA will be 1/4 th of 100 kVA . Hence it is impossible to use 4R1CX185sqmm and 4C x 185 sq mm for 25 kVA & 63 kVA DTR. as it will be highly over rated costly and cumbersome during termination and will also lead to unnecessarily increasing the dimension of LV cable box . Hence we strongly recommend use of XLPE cable of different sizes as shown in below table. Ratings LT (Amp.) Full Load With 20 % overload in amp. Cable may Recommended with Gland 25 kVA 33.3 40 50-70 sq. mm 63 kVA 84 100.8 120- 150 sq. mm 100 kVA 133.33 160 185 sq. mm | 1) The clearance above bushing shall be 120mm and below busbar cable mounting bolt shall be 450mm up to gland plate. 2) LV Cable Boxes suitable for Single core 185Sqmm cable per phase for 100KVA TRF. 3) LV Cable Boxes suitable for four core 120Sqmm cable for 63KVA TRF. 4) LV Cable Boxes suitable for four core 35Sqmm cable for 25KVA TRF. |
| 67 | CLAUSE NO. 5.20 OIL TEMPERATUR E INDICATOR | Suitable Dial Type Oil temperature indicator shall be provided on the top cover of the transformer. Dial size shall be 4" of stainless steel, range 0- 120 deg C, accuracy + 2 deg C & suitable for outdoor mounting with maximum indicator pointer. Fixing union shall be of female thread. | Providing OTI in 63 kVA and 100 kVA pole mount transformer is impractical for mounting the temp. rise in oil because the 4 inch dial OTI will not be visible to the person from a height about 12 to 15 fit. Above ground level. Hence it is difficult to understand the utility of OTI indicator in pole mounted transformer. Hence cl. 5.20 may be removed. | Oil Temperature Indicator should be provided for 3phase 25KVA, 63KVA & 100KVA TRF |

| SI. No. | Clause description | Description as per Bid Document | Query | TPCODL Response |
|---------|------------------------------|--|---|--|
| 68 | CLAUSE NO. 5.23 FITTINGS, | w) Inspection Cover | Inspection cover are used in transformers having offload tap switch in order to monitor or rectify any defect in offload tap switch. However 63 kVA & 100 kVA transformer are without offload tap switch and pole mounted. Hence inspection cover should not be included in the list of standard fittings, secondly as HV bushing are to be mounted on top cover of the transformer tank of 63 kVA & 100 kVA ratings cutting and welding of MS of Top cover will reduce the HV Ph- E clearance and as the area of the top cover is quit small mounting of inspection cover will make the fabrication work cumbersome and will always be susceptible for sepage of oil through gasket. Lastly it will increase the cost of transformer tank without any practical use also it is not included in the list of std. fitting of IS 1180:2014 sub clause. 20.1 (r) Hence you may remove inspection cover from the list of fittings for below 200 kVA DTR. | Inspection Cover is not required for TRF upto 100KVA |
| 69 | CLAUSE NO. 5.23 FITTINGS, | q) Explosion Vent or Pressure relief device. | Due to small area of top cover of the of 63 kVA & 100 kVA transformer tank pressure relief device or explosion vent pipe may not be required for transformer rating below 200 kVA DTR. This is also established in cl. 20.1 (n) of IS 1180 : 2014 which recommends use of pressure relief device and explosion vent pipe only above 200 kVA . Hence cl. 5.23 (q) may be removed from the list of std. fittings | Explosion Vent is required for 3phase 25KVA, 63KVA & 100KVA |

NIT No.: TPCODL/P&S/NEW DT-UPTO 63/100000011/20-21

UNDERTAKING FOR SUBMISSION OF BEE CERTIFICATION

(Applicable for bidders who have CPRI/ERDA Type Test Report for offered materials from accredited testing laboratory)

Name of the Purchaser: -----

Tender Specification No: -----

Sir,

I/we, the undersigned do hereby undertake, that we shall submit BEE certification as OEM, provided to that we have meet all other qualification criteria, etc., for our offered materials within 60 days from the date of issue of Rate Contract by TPCODL, failing which TPCODL may cancel the RC issued in our favour forfeiting our E.M.D.

Yours faithfully,

Place -

Date -

Signature of the bidder

With seal

(This Annexure shall be duly filled-up and signed by the bidder & submitted along with the original copy of the Bid.)