**FORMAT B.2**

**Format for Technical and Commercial Pre-Bid Queries**

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|---|---|
| **Tender No** | **TPNODL / OT / 2021-22 / 070 dated 15.09.2021** |
| **Package Name** | **Supply of 33/0.433 KV, 100 KVA Station Transformer** |

| Sr. No. | Detailed Reference to Tata Power Tender Document. Please specify Document No / Clause No / Page No | Description as per Bid Document | Remarks - Query / Clarification | TPNODL RESPONSES |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 1 | 2.1 event of information | Price Variation | 33 KV Station Transformer,now all the major raw material prices are increased very abornamal. due price flactuation in time to time you are request allow for Variable price instead of FIRM price. | Ok Noted. Price variation formula as per IEEMA shall be applicable for this Contract. |
| 2 | 14.0.a (Liquidated Damages) | L.D. shall be considered separately for delay or each work and part thereof, from the delivery schedule for the lot, 1% of the contract value corresponding to the undelivered quantity of the lot subject to a maximm of 10% of the total contract value of the subject lot. | Geneal practice of OPTCL, CESU, SOUTHCO, WESCO & NESCO issue the PO with Imposed penalty @.5% to maximum to 5% only for SSI unit in the state of odisha.but in your tender specification mentioned that penality imposed minimum@1% to maximum 10%. Kindly ammend for the same. | Not accepatble. It would be firm as per NIT |
| 3 | Gurantee Period (GCC Clause No. 13.2 & Technical Spec Clause No 12) | Gurantee Period | As per Tender Specification GCC clause No. 13.02 Guarantee period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier. But in Technical Specification clause No. 7 mentioned that 48 Months from the Date of Commissioning or 60 months from the date of delivery of final lot of supplies made, whichever is earlier. which one is correct ? | As per speciifcation, The warranty period would be 48 months from date of supply. |
| 4 | Clause No.8 of GCC | Security Deposit:5% of the PO value if purchase order value is more than Rs5 Cr.<br>(b) 10% of the PO value if purchase order value is less than Rs 5 Crores.<br>This shall remain valid till the end of the Guarantee Period of contract, plus one month. | Kindly consider @ 5% CPBG of Purchase order value till cover the Guarantee Period as normal practice og OPTCL,GRIDCO,JUSNL Ranchi. | As this is the Rate Contract Clause NO. 8.0 (C), 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month |
| 5 | Clause No-1.3 Event of Information | As per event information clause No1.3 Calender of Events € mentioned that Last Date &Time of Receipt of BID on 11.10.2021 up to 15.00 Hours | We have purchase the Tender cost on 04.10.2021 for getting the link for uploading pre- Bid Query. Your Bid query last date was 05.10.2021 & last date of posting consoliadated replies 07.10.2021 but sorry to say that we have receive your link on yesterday (08.10.2021) so due to delay in your link we have not send pre- Bid query in time & it will be taking time for up-loading our Bid-query & submit the tener through on line.All the officials will be closed for 7 days on occassion of Durga Puja.so request for Tender due date extention up to 20.10.2021 | Last date of bid submission extended up to dtd.22.10.2021 |
| 6 | Page No 18 Clause 8.2 Payment Terms | 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 TP NORTHERN ODISHA DISTRIBUTION LIMITED to AGM (Elect.) / Executive Engineer (Elect.), Central Store, TPNODL, Balasore. The payment shall be released within 45 days from the date of submission of certified bills / invoices.<br>The payment shall be released within 45 days from the date of submission of certified bills / invoices | We request you to kindly accept payment terms as 100% Payment shall be paid through irrevocable Letter of Credit (LC) with 45 days usance period from the date of invoice. | It would remain firm as per tender |
| 7 | Page 34 Clause 7.0 MODE OF PAYMENT | Payment shall be made through crossed RTGS/ NEFT/ Online Net banking mode whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPNODL records, on whose name Contract has been issued. Those Associates opting for the RTGS mode shall submit the details of Bank Account and other details as per annexure G. Further, for any payments made, TPNODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate. | We request you to kindly accept payment terms as 100% Payment shall be paid through irrevocable Letter of Credit (LC) with 45 days usance period from the date of invoice. | It would remain firm as per tender |
| 8 | Page No 34 Clause 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 TPNODL | We request you to kindly accept that Associates shall submit within 30 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B | SPBG can be submitted within 21 days from date of issuance of RC/ PO |
| 9 | Page No 41 Clause 14.0 LIQUIDATED DAMAGES | For supplies which are of standalone use, multiple in quantities and having a single final delivery schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPNODL, as described below:<br>For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPNODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value. | We request you to kindly accept LD should be 0.5% to Maximum 5% of undelivered portion without taxes and duties | Not accepatble. It would be firm as per NIT |
| 10 | Page No 7 Clause 1.7(b) Qualification Criteria | Bidder must be a BEE Certified OEM of Transformer of same or Higher Ratings with manufacturing facility / assembly in India. The bidder should have oil filling machine under vacuum. TPNODL reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter. The bidder has to furnish the Self-undertaking in this regard. | As per BEE guide line, 33 KV Transformer not required for BEE approval. | Bidder must be a BEE Certified OEM of Distribution Transformer of same or Higher Ratings with manufacturing facility / assembly in India. |

| Sr. No. | Detailed Reference to Tata Power Tender Document. Please specify Document No / Clause No / Page No | Description as per Bid Document | Remarks - Query / Clarification | TPNODL RESPONSES |
|---|---|---|---|---|
| 11 | Page No 40 Clause 13.2 Guarantee Period & Page No 77 Clause 7 Guarantee | In page no 40 Mentioned Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.<br>In page No 77 mentioned In the event any defect is found by the Company 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 | Guarantee period mentioned different in page no 40 and pageno 70, Request you to kindly confirm guarantee period. | Already mentioned above |
| 12 | Page No 9 Clause 2.1 Price variation Clause | The prices shall remain firm during the entire contract period. | As raw material prices are increasing day by day as per the current trend, there is a steep increase in copper, Core and other materials also. Hence we request you to accept our offer with IEEMA price variation without ceiling | Already mentioned above |
| 13 | Document no.TPNODL/ENGG/SPEC/010/2021 Page no. 10 of 28 Standard Technical Specification,<br>Clause no. 4. System Condition.<br>Page no. 13 of 28 | As per Document Title:<br>Station Transformer Specifications 33/0.433kV_100kVA<br><br>As Per Clause No:4. System Condition:<br>3. Rated Voltage LV: 0.400kV | We bring to your kind notice that, these secondary (LV) voltage clauses are contradicting with each other.<br><br>We request you to confirm the Rated voltage on LV Side. | 33/0.433kV |
| 14 | - | Total Losses @ 50% and 100% Loading | We wish to bring to your Kind Notice that as per Technical Specification Total Losses @ 50% and 100% Loading is Not Mentioned.<br>Kindly confirm the Total Losses @ 50% and 100% Loading. | For 100KVA DTR<br>Total Losses (No Load + Load Loss) @ 50% Loading: 475W(Max).<br>Total Losses (No Load + Load Loss) @ 100% Loading:1650W(Max). |
| 15 | - | Current Density For HV & LV Conductor<br>Fittings & Accessories For Transformer<br>OIL Specification<br>Core Material<br>Flux Density<br>Tank Construction<br>Internal Clearances | We Wish to bring to your kind notice that as per Technical Specification Current Density For HV & LV Conductor, Fittings & Accessories For Transformer, OIL Specification<br>Core Material, Flux Density, Tank Construction & Internal Clearances are not specified.<br>Kindly Provide the Complete Technical Specification for above Mentioned. | Bidder has to submit the specific values for these particulars during evalution.<br>**Current Density** For HV & LV Conductor : 2.6 A/mm2 **Fittings & Accessories For Transformer: Annexure-l attached**<br>**OIL Specification** : The insulating oil shall comply with the requirements of IS 335. **( Annexure-II attached ) Core Material** : CRGO steel (Grade M3 or better)<br>**Flux Density :** for 100% rated voltage at 50 Hz - 1.69T for 112.5% rated voltage at 50 Hz- 1.9T Thickness of stamping (in mm)- 0.23mm to 0.27 mm Type of insulation between core lamination- caralyte Core bolt withsatnd insulation- 2.5 KV/ 1 min **Tank Construction :** The transformer tank shall be of robust construction rectangular in shape and shall be built up of tested MS sheets. **Internal Clerances:**<br>HV : As per standard ( 85 -100 mm)<br>LV : as per standard ( 25-50 mm)<br>Core to LV : Minimum 10 mm LV to HV<br>: Minimum 21 mm HV Phase to phase<br>: Minimum 21 mm Between yoke and inside of tank to cover : Minimum 100 mm<br>Any point of winding to tank : Minimum 41 mm |
| 16 | 1.0. Event Information,<br>Clause no. 2.1 Price Variation Clause,<br>Page no. 9 | The prices shall remain firm during the entire contract period. | Please note, prices of all the major raw materials and components, required for manufacturing of transformers, are increasing abnormally and have reached levels, beyond the imagination of the industry. It would be very difficult to predict the price movement of material for the contractual period mentioned by your company. It would be mutually beneficial, if Price Variation, as per IEEMA formulae, is adopted for this tender as against the "FIRM Price" basis. As the prices of Raw materials increasing Abnormally. The TATA POWER, Delhi is also floating the tenders with prices on variable basis. Hence, we request to consider our request for revision of the clause as "The Prices shall be "VARIABLE" with base date as 01.09.2021 as per IEEMA formulae" as against "FIRM" basis. | Already mentioned above |

**Annexure-I**

## Fittings & Accessories for Transformer:

The following fittings shall be provided with the Transformers.

i) Name, rating & terminal marking plates
ii) Two nos. earthing terminals on the tank body with lugs at suitable location with marking of earthing.
iii) Two nos. lifting Lugs at two diagonally opposite corners of the tank.
iv) Pole/plinth mounting arrangement.
v) Silica gel breather.
vi) H.V. Bushing with arcing horn.
vii) L.V. Bushing for phases & neutrals.
viii) One no. oil level gauge of prismatic type with Minimum, Normal & Maximum Temperature Markings on the conservator.
ix) Conservator with drain plug and oil filling hole with threaded cover.
x) Top & Bottom Filter Valve of proper size
xi) Explosion Vent placed on tank top cover with Air release plug.
xii) Air release plug & lifting handle on the top of Inspection cover, Bushing turrets.
Xiii) Inspection Cover placed on Turret on top cover with Air Release plug & lifting handle.
Xiv) Dial Type Thermometer for OTI preferably of Precimeasure or Perfiect Control make.
Xv) Marshalling Box for accommodating OTI and terminal connector.
Xvi) Pocket for placing OTI probe on top cover. The pocket should be placed on an elevated base from top cover
Xvii) Thermometer pocket with suitable cap as near to the centre of the top cover as possible.
Xviii) Shutt of valve at suitable location in between Bouchholz Relay and the conservator
Xix) Air Release Plug on Top of HV bushing Turret.
Xx) Liftng Lugs spaced suitably on top of tank top cover.
Xxi) One thermometer pocket on tank top cover placed as near to the centre of core yoke as possible with suitable threaded cap in addition to the pocket for OTI.
Xxii) Oil level gauge in the conservator as specified.
Xxiii) Dehydrating Breather as specified to be fitted in the breather pipe of conservator.
Xxiv) Terminal connectors at HV & LV terminals as specified.
Xxv) Lifting handle for tank top cover.

**ANNEXURE-Il**

**Specification for insulating oil:**

a) Oil for first filling together with 10% extra shall be supplied with each transformer. The oil shall comply in all respects with the provisions of IS 335, IEC No.60296. Particular attention shall be paid to deliver the oil free from moisture having uniform quality throughout in nonreturnable steel drums.
b) The oil shall be of EHV grade and shall have the following main characteristics or equivalent (the requirements indicated are determined in accordance with the test methods as per IS: 335). The oil in the transformer shall be filled up to 'Transport filled level' before dispatch of the transformer.
c) The maker of the oil shall be subject to approval by the Purchaser.
d) Also refer below GTP table for insulating oil

| Sr. No. | Characteristics | Requirement as per IS:335 | Method of Test |
|---|---|---|---|
| 1 | Appearance | The oil shall be clear and transparent and free from suspended matter or sediment temperature. | A sample of Oil shall be examined in 100mm thick layer at 27deg C |
| 2 | Density at 29.5° C (max) | 0.89 g/cm3 | IS 1448 (P:16):1990 |
| 3 | Kinematic Viscosity @ 27° C. (Max.) | 27 cSt. | IS 1448 (P:25):1976 |
| 4 | Interfacial tension Min | 0.04 N/m | IS:6104:1971 |
| 5 | Flash Point (Closed CUP) | 140° C | IS 1448 [P : 21] : 1992 |
| 6 | Pour Point (max) | -6° C | S 1448 [P : 10] : 1970 |
| 7 | Neutralization Value (total acidity) max. | 0.03 mg/KOH/g | IS 1448 [P : 2] : 1967 |
| 8 | Corrosive sulphur (In terms of classification of copper strip) | Non Corrosive | IS 1448 (PartI)/Annex B of IS :335 |
| 9 | Electric Strength (Breakdown voltage) | The sampling shall be done in accordance with the procedure laid down in IS 6855: 1973 | IS 6792 : 1992 |
| | I ) New untreated oil | 30 kV (r.m.s.) | |
| | If the above value is not attained, the oil shall be filtered | | |
| | ii) After Filtration Min | 60 kV (r.m.s.) | |
| 10 | Dielectric Dissipation Factor (tan-delta) at 90°C, max. | 0.002 | IS:6103-1971 |
| 11 | Specific resistance (resistivity) ohm/cm/min | | IS:6103-1971 |

| | | | |
|---|---|---|---|
| | a) At 90° C, Min | 35 X 1012 ohm-cm | |
| | b) At 27° C, Min | 1500X 1012 ohm-cm | |
| 12 | Water content, max. per million | 30 (avg. 20 ppm) | Karl Fischer Method |
| 13 | Oxidation Stability | | |
| | (i) Neutralization value after oxidation Max.<br>(ii) Total sludge, after oxidation, max | 0.40 mg. KOH/g<br><br>0.1 percent by weight | Appendix C of IS:335 |
| 14 | Tan delta at 90° C after ageing test (max) | 0.20 | IS 6262:1971 |
| 15 | Saponification Value | Max. 1.0 mg. KOH/g | Appendix E IS-335 |
| 16 | Presence of oxidation inhibitor | The oil shall contain anti-oxidant additives | IS 13631: 1992 |