

#### 4. Technical Specifications:

##### 1. General

- 1.1 All designs, equipment, materials and workmanship shall comply with and be tested in accordance with requirements of the specifications. Equipment or parts, which are not covered by the specifications, shall comply with rules, codes and regulations of PEP/NTDC.
- 1.2 The general intent of these specifications is to require the supply of equipment and materials equal or superior to those actually described herein. Unless otherwise stated, reference to the brand or manufacture, if made is only for the sake of comparison as to type, design, character or quality of the equipment and materials desired and shall not be interpreted as eliminating other equipment and materials of equal performance, quality and durability.

##### 2. Specifications and Drawing:

- 2.1 The contract shall be executed in strict conformity with the specifications and/or Drawings given or mentioned in this section and the supplier shall do no 'Work' without proper specifications, instructions and/or Drawings.
- 2.2 Specifications and/or drawings are intended to complement each other so that if anything is shown on the drawings as required but not mentioned in the specifications or vice versa. It shall be of like effect as if shown or mentioned in both. If any errors, omissions or discrepancies are found in the figures, specifications and/or drawings or, if any feature shall appear to the supplier to be indefinite or unclear, the same shall be referred to the Purchaser whose written explanation and/or clarification shall be obtained before proceeding with the work.
- 2.3 The Manufacturer / supplier shall submit to Purchaser, after **10-days** of the signing of the Contract Agreement for approval of the Purchaser, four (4) copies of all valid drawings technical literature, data, operation and maintenance instruction books and/or manuals required under the specifications and such other documents as per required in the Technical Specifications or other provisions of the bidding documents or, if Purchaser deems necessary, require changes or modifications to be made therein, Purchaser shall return two copies to the Manufacturer/Supplier marked, "**Approved**", "**Approved as Noted**" or "**Returned for Correction**".
- 2.4 For each drawing which is noted "Returned for Correction", the Manufacturer/Supplier after incorporating the desired changes in the drawing shall resubmit four (4) sets of the same to the Purchaser for approval. Two prints of which shall be stamped "APPROVED" by the Purchaser and returned to the Manufacturer/Supplier for his record.
- 2.5 On completion of the Contract the Manufacturer / Supplier shall deliver to the Purchaser four (4) prints of all approved drawings, technical literature, data which show the work in the final or "as built" condition. The said drawings and documents shall be permanent and non-fadable. In addition to above, two soft copies of above mentioned final drawings made on AutoCAD (latest version) on two separate CDs shall also be provided to the Purchaser.

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- 2.6 The Manufacturer/Supplier shall allow **10-days** for the Purchaser's approval of drawings in his schedule of work and in the time allowed for completion of the Contract. Extra time required for approval of drawings due to deficiencies in design or errors in submitted drawings shall be the responsibility of the Manufacturer/Supplier and no extension in time will be allowed on this account.
- 2.7 Approval by the Purchaser does not relieve the Manufacturer/Supplier of his responsibility to do the work in accordance with the Contract.
- 2.8 The Manufacturer/Supplier shall be responsible for any discrepancies, errors and omissions in any drawings or other particulars supplied by him whether the Purchaser has approved such drawings or particulars or not.
- 2.9 Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest current edition or revision of the relevant standards or codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relates to a particular country or regions, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

### 3 Language

- 3.1 All correspondence, literature, drawings, name plates, diagrams, applicable data, equipment details, instructions and maintenance books and manuals, spare parts, books and descriptive data shall be in the English language.

### 4 Tests

The ordered material shall be subject to tests as per relevant provisions of the specifications.

### 5 Type Test Reports

- 5.1 The bidder/contractor shall provide type test reports dully witnessed by NTDC/DISCO's inspectors with the bid as per NTDC Revised Type Testing Policy. However, Type test if performed in approved STL Lab / HV&SC lab Rawat and is valid, relevant / acceptable to purchaser prior to the issuance of NTDC revised type test policy (issued on 03.01.2019), then it is not mandatory to be witnessed by NTDC / DISCO's representative.
- 5.2 The bidder shall offer type tested equipment according to NTDC type test policy In case it does not possess the type test OR the type test reports furnished by the bidder/contractor are not from one of the laboratories mentioned in NTDC revised policy or HV&SC Lab Rawat OR are not relevant to the equipment offered OR do not meet or comply with the ratings and other requirements of the Purchaser's Specifications included in this bidding document OR are otherwise not to the satisfaction of the Purchaser in any respect, Bidder/contractor will arrange fresh

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type test as per NTDC type test policy under witness of NTDC/FESCO/DISCO inspectors. *The contractor / bidder shall submit schedule of type testing from approved STL Members Labs or HV&SC Lab Rawat as per NTDC type test policy within seven (07) working days from approval of technical data / drawings failing which L.O.I / N.O.A will be cancelled and action will be taken against the bidder as per rules and relevant clauses of bidding document and type test must be completed within 75 days of issuance date of L.O.I. and material would be delivered within delivery period. No extra time will be allowed in case of submission of undertaking for fresh type testing.*

- 5.3 The bidder shall submit an unconditional undertaking duly signed and stamped by bidder duly supported by manufacturer(s) in bid that in case of award of contract if submitted type test reports are not according to NTDC type test policy, he will carry out fresh type tests under witness of NTDC/DISCO's Inspectors as per NTDC revised type test policy within the quoted Bid price and without affecting the delivery /completion period as mentioned in the Bidding Documents.

**NOTE:-**

- I. In case of non-compliance of above, the bid will be rejected.
- II. Submission of undertaking for type test is only acceptable if submitted along with the bid after that it will not be accepted.
- III. If the bidder fails to complete the delivery of material with in delivery period due to delay / non performance of type test, FESCO reserves the right to cancel the contract agreement including encashment of performance guarantee and blacklisting of the bidder.
- IV. The bidder is required to submit all documents in English language and if any other language, these should be translated and vetted by embassy or foreign office, otherwise these will not be acceptable.

## 6. Technical Specifications

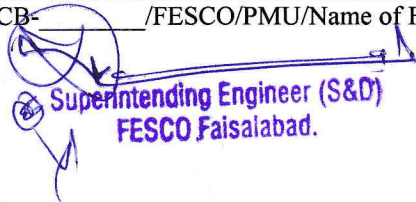
6.1 The following technical specifications (amendment to date) are appended hereto.

As per WAPDA/NTDC/PEPCO Specifications (amended to date) will be applicable.

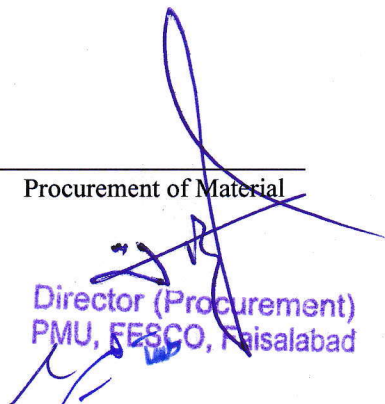
## 7. SCHEDULE OF TECHNICAL DATA

The bidder is required to fill the requisite schedule of technical data as per WAPDA/NTDC/PEPCO Specification (amended to date) as well as technical data as per Samples/Brochures submit the same with the bid. A bid without schedule of technical data (filled in) will be considered as non-responsive.

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