

KARNATAKA POWER TRANSMISSION CORPORATION LIMITED
(Tendering & Procurement, Kaveri Bhavan, Bangalore)

UPDATED TERMS AND CONDITIONS FOR VENDOR APPROVAL AND INSTRUCTIONS TO THE PROSPECTIVE VENDORS REGARDING ENLISTMENT OF VENDORS IN KPTCL SOLELY FOR THE PURPOSE OF SUPPLYING MATERIALS TO TOTAL TURNKEY/PARTIAL TURNKEY 'EPC' CONTRACTORS, EXECUTING PROJECTS OF K.P.T.C.L./AND FOR K.P.T.C.L

(For New Vendor approval and renewal of vendor approval)

A. VENDOR REGISTRATION APPLICATION CHARGES:

Interested Applicants are required to download the 'Vendor Registration Form' from KPTCL's website: www.kptcl.com, link: tendering& procurement wing. The 'Vendor Registration Form' shall be submitted as per KPTCL's format and will be considered for registration of vendor ONLY IF it is accompanied with the required application fee by way of Demand Draft drawn from the nationalized banks/Scheduled Commercial Banks in favour of **Financial Advisor, A&R, KPTCL payable at Bangalore**. The application fee is on category of equipment/material - wise basis. Therefore, in case a Vendor intends to get itself registered with KPTCL for more than one category of equipment/materials then EACH OF its 'Vendor Registration Forms' for various categories must be accompanied with required application fee for each of the categories. The application fee shall be paid for new Vendor approval as well as for renewal of vendor approval. The details of application fee prescribed for vendor registration are as below.

- i) Application fee of Rs.15,000/- + Applicable taxes(Prevailing VAT at 5.5%) for the vendors whose manufacturing units are established in Karnataka State and Rs.25,000/- + Applicable taxes(Prevailing VAT at 5.5%) for the vendors whose manufacturing units are established outside the state of Karnataka.
- ii) The Application Fee paid is valid for one manufacturing Unit for one category of equipment/materials irrespective of rating (Ex: Transformers of all MVA rating and voltage class as one category, CTs&PTs of all voltage class as one category, Hardwares of all types as one category, Cables of all sizes as one category, ACSR conductors of all sizes as one category etc.).
- iii) The Application fee paid is non-refundable and valid for 2 years from the date of payment.

Applicants are required to note that 'Minimum Eligibility Requirements' have been specified for the purpose of registration of vendors. Applicants must ascertain the specifications of the products / categories / items matching with the

requirement of KPTCL before forwarding their application. Vendor Registration Application Charges once paid shall not be refunded in case of non-acceptance of application for any reason at any stage of processing.

KPTCL reserves the exclusive right and absolute discretion to limit the vendor approval for type, rating, voltage class and size of equipment/materials based on Applicants' Technical Experience, testing facilities, performance, financial position and other relevant aspects, even though vendor meets Eligibility Requirement for higher type, rating, voltage class and size of equipment/materials.

Vendors enlistment is for supply of equipment/ materials to the turn key projects of KPTCL through turnkey contractors only and does not apply for direct procurement of equipment/materials by KPTCL.

KPTCL envisages Vendors enlistment only for the major equipment/materials required for construction of 66/110/220kV Transmission lines and Sub-stations. Therefore please refer approved vendors list of KPTCL available in KPTCL's website www.kptcl.com, link: tendering & procurement wing, for list of equipment/materials considered for vendor approval. Further, for time being, KPTCL may not consider vendor approval for some of the equipment/material (Ex: 11kV Switch gear). Therefore Vendors may contact KPTCL for further clarifications in this regard.

Vendors meeting the following mandatory/minimum Eligibility requirement only shall apply for vendor registration.

B) ELIGIBILITY REQUIREMENT FOR THE EQUIPMENT/MATERIALS (OTHER THAN POWER TRANSFORMERS):

Vendor enlistment is based on the type, rating, voltage class, size and specifications stipulated for the Equipment/Materials for the turnkey works of KPTCL. The minimum eligibility requirement for vendors' enrolment in KPTCL's Vendors list for supply of equipments/materials required for turnkey works of KPTCL are as below.

- a) The Vendor must be registered under Indian Company Act 1956 / The Indian Factories Act 1948/ Any relevant Indian Laws, whichever is applicable.
- b) The vendor shall be Original Equipment Manufacturer (OEM)/ authorized dealer of Original Equipment Manufacturer. The offered equipment/materials are designed, manufactured and tested as per relevant IS/IEC/KPTCL specifications with latest amendments. Request of authorized dealers for vendor approval will be considered only when Original Equipment Manufacturers do not have direct marketing for their products in India and sell their products through their dealers only.

- c) The minimum requirement of manufacturing experience for offered type, size and rating of equipment/material shall be for a minimum period of 05 (five) years. In support of the same vendors shall furnish P.O Copies/Performance certificates as a documentary evidence for ascertaining manufacturing experience of 5 years for the same/higher type, rating, voltage class and size of Equipment/Materials for which vendor approval is requested.
- d) Equipment offered shall be in service for a minimum period of 2 (Two) years. In support of the same vendors shall furnish performance certificates issued by the Power utilities (end users) for same/higher type, rating, voltage class and size of Equipment/Materials for which vendor approval is requested.

e) **Type test reports:**

Equipment offered shall have Type Test Certificates conducted as per the relevant IEC/IS /KPTCL technical specification & these certificates shall not be older than FIVE (05) years as on the date of submission of application for vendor approval. In support of the same, Vendors shall furnish Type Test reports of not older than five years, as on the date of submission of application for vendor approval, for having conducted successful type tests at the designated laboratories indicated against each of the equipment/Material in column (3) of Annexure-I, on same/higher type, rating, voltage class and size of Equipment/Materials for which vendor approval is requested.

However before supply of equipment/materials to KPTCL projects, through EPC Contractors, Vendors shall furnish, to the concerned KPTCL Authorities, the valid type test reports of not older than 5 years, issued by the designated laboratories indicated against each of the equipment/Material in column (4) of Annexure-I, for the same type, rating, voltage class and size of Equipment/Materials as specified in the technical specifications of KPTCL.

Note:

The details of laboratories from which the Type test reports are to be furnished are detailed in Annexure-I. Type tests shall be furnished for all the tests stipulated in the relevant IEC/IS/KPTCL technical specifications.

i) **Short Circuit test:**

Further, in addition to the type test reports stated above, for the following equipments/materials, Vendors shall also furnish Short Circuit test reports not older than five years, as on the date of submission of application for vendor approval, for having conducted successful short circuit test at designated

Laboratories indicated against each of the equipment/Material in column (3) of Annexure-I, on same/higher type, rating, voltage class and size of Equipment/Materials for which vendor approval is requested. However before supply of equipment/materials to KPTCL projects, through EPC Contractors, Vendors shall furnish, to the concerned KPTCL Authorities, the valid Short Circuit test reports of not older than 5 years, issued by the designated Laboratories indicated against each of the equipment/Material in column (4) of Annexure-I, for the same type, rating, voltage class and size of Equipment/Materials as specified in the technical specifications of KPTCL

1) Isolators, 2) Current Transformers, 3) Wave Traps, 4) Circuit Breakers, 5) Batteries, 6) Clamps and connectors.

ii) Note on type test reports for supply of materials/equipment to KPTCL projects:

For supply of materials/equipment to KPTCL projects, Vendors/EPC Contractors shall furnish the type test reports as detailed below:

- 1) At the time of drawing approvals and inspection of equipment/materials by KPTCL authorities, Vendors/EPC Contractors shall furnish, to the concerned KPTCL Authorities, the valid type test reports of not older than 5 years, issued by the designated Laboratories indicated against each of the equipment/Material in column (4) of Annexure-I, for the same type, rating, voltage class and size of Equipment/Materials as specified in the technical specifications of KPTCL project.
- 2) In case valid type test reports of not older than 5 years, issued by the designated Laboratories indicated against each of the equipment/Material in column (4) of Annexure-I, for the same type, rating, voltage class and size of Equipment/Materials are not available at the time of drawing approval, then the EPC contractor/vendor shall furnish an undertaking along with the drawings to the concerned KPTCL Authorities to the effect that type tests will be conducted at designated Laboratories indicated against each of the equipment/Material in column (4) of Annexure-I, on the same type, rating, voltage class and size of Equipment/Materials as specified in the technical specifications of KPTCL project at his cost and without affecting the delivery schedules and shall furnish the type test reports to the KPTCL authorities at the time of inspection of equipment/materials.

- 3) Vendor approvals shall be considered based on the type test reports for all the tests conducted as per IEC/IS/technical specifications prevailed at the time of conducting type tests on the equipment/materials.

Later, if any amendments are introduced to the IEC/IS/KPTCL Technical specifications, vendors shall furnish the type test reports for all the tests conducted as per the latest amendments if any, to the IEC/IS/KPTCL Technical specifications prevailing at the time of supply of equipment/materials to the KPTCL Projects.

f) Inspection of manufacturing facilities of vendors:

KPTCL may inspect the vendor's premises for on the spot assessment of manufacturing facilities, production capacity and Quality assurance plan of vendors and following aspects will be analyzed.

1. Production and technical competence.
2. Production capacity and ability to deliver the goods in time.
3. Quality control and testing assurance plan.
4. Testing facilities available to conduct tests as per the KPTCL specifications.
5. Research and Development programs
6. Financial capabilities
7. Experience, Performance.
8. Sourcing of raw materials.
9. Employment and Training.

g) Inspection/routine/Acceptance test on samples of equipment/materials drawn from site. (This is applicable for only for the works whose total work award cost is more than 5 crores) :

For the following equipment/materials, besides inspecting/testing the equipment/materials at manufacturers premises, random samples shall be drawn from the lots supplied at the Project site and the Vendor/EPC Contractor shall arrange for re-inspection/Acceptance tests at CPRI in presence of KPTCL Authorities and test reports for the same shall be furnished. **Applicable CPRI testing charges shall be paid by the EPC Contractor upfront (or by KPTCL) and the same is reimbursable by the KPTCL as per actual, on submission of bills along with proof of payment, on successful passing of tests. (In case KPTCL has paid the CPRI testing charges, if material fails in testing, the testing charges will be recovered from the bills of EPC Contractor)**

- I) For 66kV, 110kV and 220kV voltage class Stations and lines
 - i) Control cable, ii) ACSR Conductors, iii) Isolators, iv) Insulators, v) C.I Pipes.
- II) For 220kV voltage class Stations and lines
 - i) Hardware and Accessories

III) Earthing materials: For GI Flats and MS Flats, dimensional checks shall be carried out at site by the KPTCL officials in charge of the work. For CI Pipes, routine tests shall be carried out at CPRI as per the conditions stipulated above.

In case the material fails in testing, then testing charges will not be reimbursed and materials will not be accepted. The EPC Contractor shall supply the materials from any other approved vendor of KPTCL.

If the material fails in testing for second time, when tested subsequently for any other projects of KPTCL, then such vendor will be barred from supply of materials to KPTCL for a minimum period of 2 years and vendor approvals will be withdrawn.

Note:

In addition to the above, KPTCL at its discretion may insist for conducting routine/acceptance tests on any of the materials/equipment including Power Transformers, Circuit Breakers, Instrument Transformers etc., under the same terms and conditions as detailed above.

Following Acceptance tests shall be conducted for control cables on selected random sample for any one size to be drawn from the site:

- i) Conductor Resistance shall be measured for 1 meter only as per IS: 10810-5.
- ii) Nominal and one point minimum thickness of insulation and sheathing as per IS: 10810-6.
- iii) Armouring Coverage shall be minimum 90% together with resistivity and conductance test as per IS: 10810-42.
- iv) Tensile strength & Elongation at break of insulation & sheath as per IS: 10810-7.
- v) Insulation resistance as per IS: 10810-43.
- vi) To check Inner as well as outer sheaths color of the control cable which shall be grey or white.

For other equipment/materials, inspections/routine/Acceptance test as stipulated in the specifications of respective projects of KPTCL shall be followed.

- h) In addition to the eligibility criteria stipulated above for vendor approval, vendors shall also be required to meet additional qualifying requirements stipulated for some of the equipment/materials(Ex: Control and Relay Panels, etc.) as per the tender specifications of KPTCL. Therefore Vendors may contact KPTCL for further clarifications in this regard.

In addition to the eligibility criteria stipulated for vendor approval, vendors shall also be required to meet additional qualifying requirements for Control and Relay Panels.

- i) The Vendor of Control and Relay Panels shall be original manufacturer of Numerical type relays for main protection, differential protection, distance protection etc. for 220kV, 110kV, 66kV or higher voltage class Power Transformers and line protection.
- ii) Should have a minimum 5 years manufacturing experience in these type of Numerical relays.
- iii) If the vendor has made supplies to 400 kV and above stations of Central/State Transmission Utilities, the vendor is eligible for vendor approval/supply of C&R Panels up to 220kV class Substations of KPTCL.
- iv) If the vendor has made supplies to 220kV and above stations of Central/State Transmission Utilities, the vendor is eligible for vendor approval/supply of C&R Panels up to 110kV class Substations of KPTCL.
- v) C&R Panels shall be in service for a minimum period of 2 (Two) years. In support of the same vendors shall furnish performance certificates issued by the Central/State Transmission Utilities, for **same/higher** type, rating, voltage class C&R Panels for which vendor approval requested.
- i) Further even though vendors are approved by KPTCL based on the eligibility criteria stipulated for vendor approval, the approved vendors shall also meet the qualifying requirements stipulated if any for the respective equipment/materials in the tender specifications of respective KPTCL projects for supply of equipment/materials to KPTCL Projects.
- j) Vendors who have participated and found techno-commercially responsive in direct procurement tenders invited by the Chief Engineer, Electy., Tendering & Procurement, KPTCL, Bangalore for procurement of materials/equipments to KPTCL, shall qualify for vendor approval without further credential evaluation subject to compliance to other vendor approval formalities like submission of application for vendor approval, payment of requisite vendor registration fee, and inspection by KPTCL officials for assessing the manufacturing facilities, testing facilities and quality assurance plan adopted in the manufacturing units of vendors. Such vendors shall furnish their request for vendor registration with requisite registration fee within **2(Two) years** from the date of Purchase order placed by the Chief Engineer, Electy., Tendering & Procurement, KPTCL, Bangalore. Requests received after this period will not be considered for vendor approval under this category. The Vendor approval shall be given up to the rating and voltage class of equipment/material for which vendors are qualified in the KPTCL direct tenders. Further, other terms and conditions stipulated for vendor approval of KPTCL shall apply to these vendors.

Note: Such vendors can also be barred in case of failure of equipment/material within Guarantee period of particular contract.

k) Guarantee for satisfactory performance of equipment/materials:

For the following equipment/materials, the vendors/EPC Contractor shall stand guarantee for satisfactory performance for a period of **42 (Forty Two) months** from the date of satisfactory commissioning of equipment/ materials and for other materials, **1 (one) year** from the date of satisfactory commissioning of equipment/ materials. The equipment found defective/failed within the above guarantee period shall be replaced or repaired by the supplier free of cost within one month from receipt of intimation.

Further for the following equipment/materials, Vendors/EPC Contractor shall have to furnish 10% of the value of the equipment/materials as Performance Guarantee for the period of guarantee of **42 (Forty Two) months**, at the time of execution of Contract agreement by the successful bidder of turnkey project.

i) Control & Relay panels, ii) Isolators, iii) Battery set, iv) Circuit Breakers.

- l) For self-execution works, Vendor approval for EHV cables will be considered and processed at the O/o of Chief Engineer, Electy., Tendering & Procurement, KPTCL, Bangalore. The qualifying requirements for the same will be as stipulated for cable manufacturers in the UG cable tenders of KPTCL. Request for general vendor approval for EHV cables (66kV, 110kV, 220kV UG Cables) will not be considered.
- m) For self execution works, Vendor approval for power Transformer is processed at CEE, T&P, subject to terms specified for Power Transformer Vendor approvals.
- n) Project specific vendor approval will not be entertained. Only in cases where approved vendors are not available for any specific material/ equipment then project specific vendor approval will be considered.

**C) ELIGIBILITY REQUIREMENT FOR POWER TRANSFORMERS
VENDOR APPROVAL:**

Vendor enlistment is based on the type, rating, voltage class, size and specifications stipulated for the Power Transformers for the turnkey works of KPTCL. The minimum eligibility requirement for vendors' enrolment in KPTCL's Vendors list for supply of Power Transformers for turnkey works of KPTCL is as below.

- a) The Vendor must be registered under Indian Company Act 1956 / The Indian Factories Act 1948/ Any relevant Indian Laws, whichever is applicable.
- b) The Vendor shall be a Power Transformer Manufacturer and should have a minimum experience of 5 years, as on the date of application submitted for vendor registration, in Designing, Manufacturing, Testing, Supply and Commissioning of the

same capacity and voltage class as offered for vendor approval or higher capacity with same voltage class or same capacity with higher voltage class or higher capacity with higher voltage class power transformers. (Vendors shall furnish the supporting documents).

- c) The Vendor should have manufactured at least 5 Nos. of 220 kV class power transformers for vendor registration up to 220 kV class power transformers and should have manufactured at least 10 Nos. of 110 kV/66kV class power transformers for vendor registration up to 110 kV/66kV class power transformers. The supporting documents furnished can be for the :
- i. Same capacity and voltage class as offered for vendor approval.
 - ii. Higher capacity with same voltage class.
 - iii. Same capacity with higher voltage class.
 - iv. Higher capacity with higher voltage class.
 - v. 400 kV class single phase/3 Phase ICT's.
- d) The Vendor shall furnish performance certificates for at least 5 Nos. of 220 kV class power transformers for vendor registration up to 220 kV class power transformers and shall furnish performance certificates for at least 10 Nos. of 110 kV/66kV class power transformers for vendor registration up to 110 kV/66kV class power transformers. The performance certificates furnished can be for the:
- i. Same capacity and voltage class as offered for vendor approval.
 - ii. Higher capacity with same voltage class.
 - iii. Same capacity with higher voltage class.
 - iv. Higher capacity with higher voltage class
 - v. 400KV class single phase / 3 Phase ICT's.

The performance certificates of the Power transformers shall pertain only to the Power Transformers commissioned in State/Central Generating/ Transmission Utilities. The issuing officer shall not be below the rank of Executive Engineer or equivalent division head. The performance certificate shall indicate the rating of the Power Transformers in terms of both capacity, voltage and winding configuration, OLTC make, make of Transformer, name of the sub-station where it is installed, date of commissioning etc., in order to show that the Power Transformers were in successful operation for at least a minimum period of two years as on the date of application for vendor registration. (Vendors shall have to furnish the supporting documents).

- e) Vendors shall furnish Type Test reports not older than five years, as on the date of submission of application for vendor approval, for having conducted successful type tests at CPRI/ERDA/KEMA/CESI/ PEHLA/KERI laboratories on the capacity & voltage class Power Transformer offered for vendor approval or for higher capacity with same voltage class or same capacity with higher voltage class or higher capacity with higher voltage class power transformers.

- f) It is mandatory for Submission of type test certificates, not older than five years, for having conducted successful type tests at **CPRI/ERDA/KEMA/CESI/ PEHLA/KERI** for at least one of the types of power transformers i.e. for the capacity & voltage class offered for vendor approval or for higher capacity with same voltage class or same capacity with higher voltage class or higher capacity with higher voltage class power transformers for considering vendor approval.
- g) Power Transformers offered by the vendors/bidders shall be guaranteed for satisfactory performance for a period of **42 (Forty Two)** months from the date of satisfactory commissioning of equipment. The equipment found defective/failed within the above guarantee period shall be replaced or repaired by the supplier free of cost within one month from receipt of intimation. If the defective/failed equipments are not replaced/repaired as per the above guarantee clause, the KPTCL shall recover an equivalent amount plus 15% supervision charges from any of the supplier's bills.
- h) Even though vendors are approved by KPTCL based on the eligibility criteria stipulated for vendor approval, the approved vendors shall also meet the qualifying requirements, if any, stipulated for the Power Transformers in the tender specifications of respective KPTCL projects.

Terms & Conditions for supply of Power Transformer of Approved vendors to KPTCL projects, through EPC Contractors.

- i) For supply of Power Transformers of 220kV, 110k, 66kV voltage class as specified in respective KPTCL Projects, Vendors shall furnish Type Test reports not older than five years, before supply of Power Transformers to KPTCL projects for having conducted successful type tests at **CPRI/KEMA/CESI/PEHLA/KERI** for same capacity & same voltage class Power Transformer specified in the bid specifications of the KPTCL projects proposed to supply.

In the absence of such type test certificates from **CPRI/KEMA/CESI/PEHLA/KERI**, for same capacity & same voltage class Power Transformer specified in the bid specifications of the KPTCL project, the vendor/bidder shall give an undertaking at the time of submission of Power Transformer drawings for approval agreeing to furnish the type test reports not older than 5 years for having conducted successful type tests at **CPRI/KEMA/CESI/PEHLA/KERI** before supply of Power Transformer to KPTCL project or to conduct all type tests at **CPRI/KEMA/CESI/PEHLA/KERI** test house in presence of KPTCL representatives without affecting the Delivery Schedule and at no extra cost to KPTCL.

Note:

- 1) It is mandatory to conduct temperature rise test on each of the Power Transformer proposed to be supplied to all works of KPTCL. The tests shall be conducted at manufacturer's premises and witnessed by the representatives of CPRI and KPTCL. Applicable charges of CPRI Representative shall be paid by the EPC Contractor upfront and the same is reimbursable by the KPTCL as per actual, on submission of bills along with proof of payment, on successful passing of tests. In case the Power Transformer fails in testing, then testing charges payable to CPRI for having witnessed tests will not be reimbursed and Power Transformer will not be accepted. Then such vendor will be barred from supply of Power Transformer to KPTCL for a minimum period of 2 years and vendor approvals will be withdrawn. The EPC Contractor shall supply the Power Transformer from any other approved vendor of KPTCL.**
- 2) Lightning impulse chopped wave tests has to be carried out on each of the Power Transformer proposed to be supplied to KPTCL as a routine test for Power Transformers having voltage class above 72.5kV, in addition to other dielectric tests as per IS.2026 PART-3:2009 and its amendments.**

In case the Power Transformer fails in testing, Power Transformer will not be accepted. The EPC Contractor shall supply the Power Transformer from any other approved vendor of KPTCL.

- ii) For supply of Power Transformers of 110kV, 66kV class as specified in respective KPTCL Projects, in addition to type test reports as specified at clause(i) above, Vendors shall furnish special test reports (dynamic ability to withstand short circuit test), not older than five years, before supply of Power Transformers to KPTCL projects for having conducted successful special test at CPRI/KEMA/CESI/PEHLA/KERI for same capacity & same voltage class Power Transformer specified in the bid specifications of the KPTCL projects proposed to supply.**

In the absence of special test report (dynamic ability to withstand short circuit test) from CPRI/KEMA/CESI/PEHLA/KERI, for same capacity & same voltage class Power Transformers specified in the bid specifications of the KPTCL projects, the vendor/bidder shall give an undertaking at the time of submission of Power Transformer drawings for approval agreeing to furnish the special test report (dynamic ability to withstand short circuit test), not older than 5 years for having conducted successful special test (dynamic ability to withstand short circuit test) at CPRI/KEMA/CESI/PEHLA/KERI before supply of Power Transformer to KPTCL projects or to conduct special test (dynamic ability to withstand short circuit test) at CPRI/KEMA/CESI/PEHLA/KERI test house in presence of KPTCL representatives without affecting the delivery schedule and at no extra cost to KPTCL.

In case, when the Dynamic Short Circuit test is conducted on a particular make and if it fails at CPRI/KEMA/CESI/PEHLA/KERI, then the EPC Contractor shall supply other KPTCL approved makes & shall conduct Dynamic Short Circuit test at CPRI/KEMA/CESI/PEHLA/KERI without affecting the delivery schedule and at no extra cost to KPTCL.

Note:

- a) For supply of Power Transformers of 220kV, 110kV, 66kV voltage class as specified in respective KPTCL Projects, the thermal ability to withstand short circuit for duration of 3 secs. shall be demonstrated by theoretical evaluation of the ability to withstand a short circuit event by manufacturers experiences supported by IEC guidelines as per IEC 60076-5, 2006 (3rd edition or the latest version)/ IS 2026-5, 2011(or latest version). The calculation of dynamic ability to withstand short circuit shall be submitted before drawing approval along with thermal stability calculations. The short circuit temperature rise should not exceed the limits, fixed as per IS: 2026. The calculation towards the above for 220kV, 110kV, 66kV & 11kV windings shall be furnished before drawing approval.
 - b) In case the facility for conducting a particular type test at CPRI is not available, the type test report witnessed by CPRI Authorities at the manufacturers' facility will be accepted.
- i) Technical specifications for Power Transformer shall be as stipulated in procurement tenders, invited recently by KPTCL vide following bid enquiry Nos.
 - a) KPTCL/CEE/T&P/EEP/AEEP1/TR-375/2013-14 dtd 16.11.2013
 - b) KPTCL/CEE/T&P/EEP/AEEP1/TR-376/2013-14 dtd 16.11.2013
 - c) KPTCL/CEE/T&P/EEP/AEEP1/TR-377/2013-14 dtd 16.11.2013
 - d) KPTCL/CEE/T&P/EEP/AEEP1/TR-382/2013-14 dtd 19.11.2013

D) DOCUMENTS TO BE ENCLOSED:

- 1) Demand Draft towards application fee.
- 2) Partnership Deed/Articles of Association/Memorandum of Association etc., (Notarized) or Certificate of Incorporation/ Registration of Company /firm /Industry as applicable (Notarized).
- 3) Statement of Balance Sheets for the last preceding three financial years duly certified by the Auditors. (Notarized)
- 4) Copies of Vendor Registration with Govt. / PSU organizations (Notarized).
- 5) Copies of purchase orders (For minimum 5 years) and statement showing the list of orders executed in respect of the equipment requested for enrolment, with abstract details as per **FORMAT-A**

- 6) Performance certificate (For minimum 2 years) issued by a responsible Officer of Power utilities(end users) in respect of the equipment requested for enrolment, with abstract details as per **FORMAT-B**
- 7) Type Test certificates, Short Circuit test reports of not older than 5 years issued by the **designated Laboratories indicated against each of the equipment/Materials in column (3) of Annexure-I** Accredited laboratories, as the case may be, for the equipment requested for enrolment, with abstract details as per **FORMAT-C**
- 8) ISO Certificate.
- 9) Any other relevant documents/credentials.

Note:- Copies of documentary evidences should be counter-signed by a notary public for the documents mentioned for the same above (and original of any document/credentials for KPTCL's verification if necessary).

KPTCL reserves the right to verify the authenticity of the document. Hence vendors shall ensure that all the details are available in the certificates/documents furnished to ensure easy verification if required. Vendors are required to complete the formats and provide any information requested therein to the satisfaction of KPTCL.

Application without the above listed documents will be summarily rejected.

E) ADDITIONAL INFORMATION:-

- 1) VALIDITY OF REGISTRATION SHALL BE FOR A PERIOD OF TWO YEARS from the date of Official Memorandum provided the registration is not cancelled by KPTCL during that period and renewable on fresh application.
- 2) K.P.T.C.L reserves the right to reject any application for enrolment and withdraw enrolment of the Company's name from approved vendors list without assigning any reasons whatsoever.
- 3) K.P.T.C.L reserves the right to update/revise the eligibility criteria for vendors enlistment from time to time. In case the vendors do not meet the updated/revised eligibility criteria during the vendor approval process, such vendors applications will not be considered for vendor approval and fee paid by them will not be refunded. Further KPTCL reserves the right to relax/enhance the eligibility requirement at its discretion.
- 4) If space is inadequate in the Formats, enclose separate Annexures similar to the FORMATS and furnish the details
- 5) The incomplete applications not complying with instructions are liable for rejection and no further correspondence on the subject will be entertained. The fee paid is nonrefundable in such cases.
- 6) If there is any dispute in this regard, decision of the Chief Engineer Electy., (T & P) and Chairman Vendor approval committee shall be final.
- 7) The vendor shall submit the Request in the prescribed form. If an applicant requires registration for more than one 'Category of equipment/material', separate applications shall be submitted by them for each category along with processing fee and necessary documents and details.

- 8) The applications so received from the interested parties from time to time at the below mentioned address in KPTCL, shall be scrutinized. Vendors may note that incomplete applications are liable for rejection. Further communication soliciting additional information shall be made only in case of minor omissions of data/documents. However, in such cases, the registration process may get delayed. The Firms shall be registered as vendors only if they fulfill the specified requirements of equipment/materials for which registration of application has been made and for the equipment/materials required for execution of turnkey works of KPTCL (Vendors may refer approved vendors list of KPTCL available in KPTCL's website **www.kptcl.com**, **link: tendering & procurement wing** for list of equipment/materials consider for vendor approval or may contact KPTCL for clarifications).
- 9) The interested vendors while sending their applications should clearly mention their contact address, Telephone/Fax nos., e-mail id and other necessary details as sought in 'Vendor Registration Form'.
- 10) Based on the information/details/data provided by the Vendor in 'Vendor Registration Form' and documents furnished, KPTCL will commence vendor registration process. The registration process of vendors by KPTCL will also consist of analysis of data regarding manufacturing Experience, Technical expertise, performance, test reports, Financial position, Organizational structure, Capacity and Capability of organization set up, testing facility, QA/QC policy, certification by reputed bodies, ISO certification, qualified and experienced manpower etc. If required, KPTCL will also carry out verification of the credentials and assessment of capacity and capability of the Vendors. Based on this Vendor Registration Process, KPTCL reserves the right to limit the Vendor registration for the type, rating, voltage class and size of the equipment/materials.
- 11) However, it may also be noted that getting registered under the Vendor Registration process shall not be construed to mean that the vendor is deemed to meeting Qualification Requirements for the different Equipment/materials of KPTCL to be supplied to KPTCL projects. The equipment/material shall be considered suitable only if the equipment/materials are manufactured and tested as per the relevant IEC/IS/KPTCL Specifications and as per the terms and conditions stipulated for the respective turnkey projects and any additional terms and conditions which may be stipulated by KPTCL for the equipment/materials during the course of supply.
- 12) A Vendor is not permitted to seek registration in more than one name, including proprietorship/partnership firms, in a particular Category. However vendors may seek vendor approval in different names if they are different entities.
- 13) Please fill up the form neatly and clearly in BLOCK LETTERS.
- 14) Incomplete, partially complete, not clearly filled forms giving incorrect information are liable for rejection without any consideration.

- 15) Any information/clarification required by KPTCL during vendor registration process must be provided expeditiously.
- 16) Submission of this registration form does not automatically guarantee for registration in KPTCL. KPTCL does not take any responsibility for loss of any Request Form in transit.
- 17) KPTCL reserves the right to call for additional information and/or check, verify all the information furnished in the application. KPTCL also reserves the right to inspect all the Firms factory premises / facilities to confirm the authenticity of information furnished / capabilities mentioned in the application.
- 18) KPTCL reserves the right to reject applications on the basis of unsatisfactory performance or for furnishing false information/declaration in the application or incomplete information. KPTCL reserves the right to reject the application without assigning any reasons whatsoever.
- 19) KPTCL's decision shall be final on all matters.
- 20) After the expiry of normal validity period, all the vendors are required to reregister submitting all the necessary documents. Vendors should apply for Re-registration at least **3 months prior to expiry of validity with necessary application fee**. If Vendors fails to apply for Re-registration at least 3 months prior to expiry of validity with necessary application fee, then their applications will be treated as new vendor for all the purposes of vendor registration and accordingly their applications will be processed.
- 21) Vendors can apply for category enhancement by submitting necessary documents along with requisite enhancement fee/application fee as detailed in above paras. After scrutiny of documents and evaluation/site visits if necessary, vendors will be informed about enhancement and vendors list updated accordingly.
- 22) Scrutiny of applications shall **normally** commence in intervals of **three** months as per the following **schedule**:
- **April** of every year: For applications received from 1st January to 31st of March.
 - **July** of every year: For applications received from 1st April to 30th of June.
 - **October** of every year: For applications received from 1st July to 30th of September.
 - **January** of every year: For applications received from 1st October to 31st December.

23) KPTCL reserves the right to cancel the registration of any Vendor for reasons of the following:

- a) If they found to have submitted false particulars/fake documents for securing enlistment.
- b) If poor performance is reported by field officers.
- c) If after sales service/response time is not satisfactory.
- d) Deviations in specifications.
- e) Incomplete Information

Such Vendors, whose registration is cancelled due to any of the above reasons, will not be considered for subsequent registration for a period of three years. The reasons for cancellation shall be communicated to the concerned vendor. The application fee paid in such cases shall not be refunded.

- 24) KPTCL reserves the right to verify all statements of the applicants and inspect of applicant's establishment to evaluate their capacity to supply the equipment/materials. KPTCL reserves the right and absolute discretion to call for documents, even during the validity of the registration period.
- 25) The registration process may consist of a multiphase process with the possibility of Vendor's presentation, Factory / Site visit for inspection, verification of documents / information, assessment of design, manufacturing and testing facilities etc. After completion of document review and shop floor assessment, as applicable, the case shall be taken up for approval by competent authority and issue registration letters to all those vendors who fulfill the criteria required for registration and their name would be included in the Vendors list.
- 26) KPTCL reserves the right to reject any or all of the applications without assigning any reasons whatsoever. KPTCL also reserves the absolute right to reject any or all applicants and/or delete the name of any Vendor from the list of registered Vendors, based on the past unsatisfactory performance by the applicant(s) in KPTCL. The opinion/decision of KPTCL in this regard shall be final and conclusive. The application fee paid in such cases shall not be refunded.
- 27) The Vendor approval shall be conveyed based on the records/ credentials furnished by the Vendor. However Equipments/Materials shall be supplied as per KPTCL Technical specifications duly obtaining approval for relevant drawings, GTP & Type test reports, short circuit reports from the competent authorities of KPTCL before offering for inspection call.

- 28) After vendor registration and during the course of supply of equipment/materials, Vendors shall furnish, to the concerned KPTCL Authorities, the valid type test reports, Short Circuit reports of not older than 5 years, issued by **the designated Laboratories indicated against each of the equipment/Materials in column (4) of Annexure-I** laboratory, for the **same** type, rating and voltage class of Equipment/Materials, proposed to supply to the KPTCL projects, during drawing approvals, inspection of equipment/materials etc. The Type test Certificates, Short Circuit reports should be furnished for all the tests conducted as per the relevant IEC/IS/Technical specifications of KPTCL of the equipment/materials proposed to supply to KPTCL project.
- 29) After vendor registration and during the course of supply of equipment/materials, KPTCL reserves the right to call for any document/credentials for verification during drawing approvals/inspection of materials/equipment by KPTCL authorities, to ascertain the manufacturing experience/performance/technical suitability of the equipment/ materials. Further KPTCL reserves the right to withdraw/ cancel the vendor approval issued, in case vendor fails to furnish valid documents/credentials to KPTCL for verification, supply of poor-quality/defective materials/equipment to the KPTCL projects, poor performance, poor after sales service, deviations in the technical specifications of KPTCL, misleading to the Corporation etc., by the vendors, without prior notice and assigning any reason for such decision. The application fee paid in such cases shall not be refunded.
- 30) If the Vendor is unsuccessful and not registered, the vendor will be notified of the decision and informed of the reasons for non-acceptance. The application fee paid in such cases shall not be refunded.
- 31) Should a vendor fail in successful registration, then KPTCL reserves the right to refuse a re-application for registration within 6 months of the date of notification of failure.
- 32) KPTCL reserves the right to verify the authenticity of documents furnished with the concerned organizations during vendor approval process or after vendor approval. Any vendor providing false information or grossly inaccurate or forged documents will not be considered for this vendor registration and for a period of three years and KPTCL may initiate suitable action it deems fit against such vendor. Again, if such information comes to light after successful registration, KPTCL

reserves the right to remove the vendor from the Vendors list for that Category. The application fee paid in such cases shall not be refunded.

- 33) ~~KPTCL reserves the right to annul the Vendor Registration process any time and~~ may, at its discretion, without assigning any reason, and shall bear no liability whatsoever consequent upon such a decision.
- 34) Equipment Manufacturers desirous of registration with KPTCL are required to submit the 'Vendor registration Form' furnishing required documents for consideration along with Vendor Registration Application charges for each of the Category for which Registration is sought. Vendors shall ensure that all documents are in chronological order with separator sheets clearly identifying enclosed documents and flagging/annexing all the supporting documents as per the nomenclature mentioned in the index. Index page shall consist details of documents enclosed in the document file with page numbers.
- 35) Formats A, B and C shall be used for furnishing abstract details of credentials.
- 36) Enclose relevant supporting documents/Registration certificates etc. as called for in the application form. "KPTCL" will not be responsible for any delay in receipt /non-receipt of documents sent by post/couriers.
- 37) Vendors desirous of registration for more than one CATEGORY of equipment/materials shall ensure that separate applications are submitted for each category along with necessary documents as detailed above with registration fee.
- 38) **The above said Terms & Conditions will come into effect from 01-01-2014.**
- 39) **Address for submission of Application:**

**The Chief Engineer, Electy.,
Tendering and Procurement, KPTCL, III Floor,
Kaveri Bhavan, K.G Road,
Bangalore-560 009**

Prasad 19/9
**Chief Engineer, Electy.,
Tendering & Procurement, KPTCL**

No. CEE (T&P)/EET2/AEET-5/2014-15/ 5919-31

Date: 19 SEP 2014

Copy to:

1. All the Chief Engineers, Electricity, Transmission Zones, KPTCL.
2. The Chief Engineer, Electricity, (TA & QC), KPTCL, Kaveri Bhavan, Bangalore.
3. The Chief Engineer, Electricity, (P&C), KPTCL, Kaveri Bhavan, Bangalore.
4. The Chief Engineer, Electricity, (RT & R and D), KPTCL, Kaveri Bhavan, Bangalore.
5. All the Superintending Engineers (El.), W&M Circle, RT Circle, SEE (P&M), SEE (Tech)/ (Planning), KPTCL,.
6. All the Executive Engineers, Elec., Major works Divisions, KPTCL.
7. EA to Director (Transmission) with a request to place the same before the Director (Transmission) for kind perusal.
8. The Executive Engineers, Elec., T1/T2/P, T&P, Kaveri Bhavan, Bangalore.
9. All AEEs (Turnkey/Procurement), T&P, KPTCL, Kaveri Bhavan, Bangalore.
10. MF/OC.

STDS 442 2 1

KARNATAKA POWER TRANSMISSION CORPORATION LIMITED

Annexure-I

Type test Reports to be furnished for Vendor Approval

And

During supply of materials to KPTCL Turkey/Partial Turnkey Projects through EPC Contractor.

Equipment offered shall have Type Test Certificates conducted as per the relevant IEC/IS/KPTCL technical specifications & these certificates shall not be older than FIVE (05) years as on the date of submission of application for vendor approval. In support of the same, Vendors shall furnish Type Test reports of not older than five years, as on the date of submission of application for vendor approval, **issued by the designated laboratories indicated against each of the equipment/Material in column (3) of the table below**, for having conducted successful type tests, on **same/higher** type, rating, voltage class and size of Equipment/Materials for which vendor approval is requested.

However **before supply** of equipment/materials to KPTCL projects, through EPC Contractors, Vendors shall furnish, to the concerned KPTCL Authorities, the valid type test reports of not older than 5 years, **issued by the designated laboratories indicated against each of the equipment/Material in column (4) of the table below**, for having conducted successful type tests, on **same** type, rating, voltage class and size of Equipment/Materials as specified in the technical specifications of KPTCL.

Sl. No.	Details of Equipment/Material	For considering vendor approval type test reports issued by the following laboratories shall be furnished.	Before supplies to be made to KPTCL, type test reports issued by the following laboratories shall be furnished.	Test reports shall be furnished as per IS/IEC/KPTCL specifications
1	2	3	4	5
1	Power Transformers	CPRI/ERDA/KEMA/CESI/PEHLA/KERI	CPRI/KEMA/CESI/PEHLA/KERI	IS-2026, IEC-60076
		Type test reports shall be furnished for the following tests: 1) Lightning impulse chopped wave tests for all voltage class Power Transformers. 2) Temperature rise test for all voltage class Power Transformers. 3) Dynamic ability to withstand short circuit test for 66kV and 110kV voltage class Power Transformers. Note: 1) It is mandatory to conduct temperature rise test on each of the Power Transformer proposed to be supplied to all works of KPTCL. The tests shall be conducted at manufacturer's premises and witnessed by the representatives of CPRI and KPTCL. Applicable charges of CPRI Representative shall be paid by the EPC Contractor upfront		

Sl. No.	Details of Equipment/Material	For considering vendor approval type test reports issued by the following laboratories shall be furnished.	Before supplies to be made to KPTCL, type test reports issued by the following laboratories shall be furnished.	Test reports shall be furnished as per IS/IEC/KPTCL specifications
1	2	3	4	5
		<p>and the same is reimbursable by the KPTCL as per actual, on submission of bills along with proof of payment, on successful passing of tests. In case the Power Transformer fails in testing, then testing charges payable to CPRI for having witnessed tests will not be reimbursed and Power Transformer will not be accepted. Then such vendor will be barred from supply of Power Transformer to KPTCL for a minimum period of 2 years and vendor approvals will be withdrawn. The EPC Contractor shall supply the Power Transformer from any other approved vendor of KPTCL</p> <p>2) Lightning impulse chopped wave tests has to be carried out on each of the Power Transformer proposed to be supplied to KPTCL as a routine test for Power Transformers having voltage class above 72.5kV, in addition to other dielectric tests as per IS.2026 PART-3:2009 and its amendments. In case the Power Transformer fails in testing, Power Transformer will not be accepted. The EPC Contractor shall supply the Power Transformer from any other approved vendor of KPTCL.</p>		
2	On Load Tap Changer	CPRI/ERDA/Type Test reports for having witnessed by CPRI.	CPRI/ Type Test reports for having witnessed by CPRI.	IEC-60214-1
3	Control and Relay Panels	CPRI/ERDA/CESI/KEMA/PEHLA/KERI/Siemens AG/Global EMC INC Laboratory.	CPRI/CESI/KEMA/PEHLA /KERI/ Siemens AG/Global EMC INC Laboratory.	IEC-60255 IEC-61850 IS-13947 IEC-60870 IEC-60529
4	Circuit Breakers	CPRI/ERDA/CESI/KEMA/PEHLA /KERI/CERDA/ (Seismic withstand test conducted at IITs/IISc are acceptable).	CPRI/CESI/KEMA/PEHLA /KERI/CERDA/ (Seismic withstand test conducted at IITs/IISc are acceptable).	IEC-62271
5	11KV MCVCBs & PCVCBs	CPRI/ERDA	CPRI	
6	Tower Parts and all types of Station Structures with Bolts, Nuts and Washers	<p>During final inspection of materials at Factory premises Galvanising test shall be conducted by the inspecting officers of KPTCL, along with other tests as stipulated in tender specifications.</p> <p>In case, testing facility is not available at Factory premises, the Galvanising test shall be got conducted at NABL accredited Laboratory in presence of Inspecting officers of KPTCL.</p>		
7	I Beams & M.S Channels			

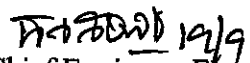
Sl. No.	Details of Equipment/Material	For considering vendor approval type test reports issued by the following laboratories shall be furnished.	Before supplies to be made to KPTCL, type test reports issued by the following laboratories shall be furnished.	Test reports shall be furnished as per IS/IEC/KPTCL specifications
1	2	3	4	5
8	Lightning Arrestors	CPRI/ERDA. (Seismic & Cantilever test conducted at IITs/IISc are acceptable). In addition to submission of type test reports as per the relevant IEC/IS/Technical specifications, type test reports for long duration impulse current withstand test shall be furnished.	CPRI (Seismic & Cantilever test conducted at IITs/IISc are acceptable). In addition to submission of type test reports as per the relevant IEC/IS/Technical specifications, type test reports for long duration impulse current withstand test shall be furnished.	IS-3070 IEC-60099-4
9	Isolators	CPRI/ERDA	CPRI	IS:9921 IEC-62271-102
10	Insulators	CPRI/ERDA	CPRI	IS: 731, IEC-575, IS:8263, IEC383, BS137, IS2544, IEC168, IEC815, IS5350
11	Instrument Transformers	CPRI/ERDA. (Seismic & Cantilever test conducted at IITs/IISc are acceptable)	CPRI. (Seismic & Cantilever test conducted at IITs/IISc are acceptable)	IS:2705 IS:3156 IEC-60044 IEC-60358 IS:9348 IEC-61869
12	Battery Sets	CPRI/ERDA	CPRI	IS 1652 & IEC 60896-11
13	Battery Charger	CPRI/ERDA/NABL Type test reports to be furnished from CPRI/NABL for: 1. Electromagnetic compatibility (EMC) Tests 2. Degree of protection test Test reports for the following tests conducted at CPRI/ERDA/NABL OR conducted at Manufacturer's premises and witnessed by KPTCL Officials for earlier KPTCL Projects shall be furnished. i. Voltage regulation test ii. Load limiter characteristic test iii. Efficiency Tests iv. High voltage tests v. Temperature rise test vi. Short circuit test at no load at rated voltage for sustained short-circuit vii. Measurement of ripple by Oscilloscope	CPRI/ERDA/NABL	IEC 61000-6-2, IEC 61000-6-4 IEC 61000-6-4-10 IEC 61000-6-4-18 (for Electromagnetic compatibility Tests)

Sl. No.	Details of Equipment/Material	For considering vendor approval type test reports issued by the following laboratories shall be furnished.	Before supplies to be made to KPTCL, type test reports issued by the following laboratories shall be furnished.	Test reports shall be furnished as per IS/IEC/KPTCL specifications
1	2	3	4	5
14	ACSR Conductors	CPRI/ERDA	CPRI	IS:398
15	Ground Wire	CPRI/ERDA/NABL	CPRI	IS:12776
16	11KV UG Cable	CPRI/ERDA	CPRI	IS 7098
17	1.1KV Copper Control Cables & LT Power Cables	CPRI/ERDA In addition to type test reports, smoke Density test report shall be furnished.		IS 1554
18	Capacitor Bank	CPRI/ERDA/NABL	CPRI	IS-13925 IEC-60871
19	Hardware for Insulator, Conductor and Ground wire: Tension & Suspension Clamps and connectors.	CPRI/ERDA	CPRI	IS:2486
20	Accessories for Conductor and Ground wire: P.G Clamps, M.S.C Joints, Pre-formed Rods, Repair sleeves, Vibration Damper etc.	CPRI/ERDA/NABL	CPRI/ERDA/NABL	IS:2121, IS:9708
21	C-Type Fire Wedge Connectors	CPRI/ERDA/NABL	CPRI/ERDA/NABL	ANSI C 119.4-2004
22	i)Grounding Materials (G.I Flat, M.S Flat etc.,)	Dimensional checks shall be carried out at site by the KPTCL officials in charge of the work.		
	ii)Grounding Materials (C.I Pipes)	CPRI/ERDA/NABL	CPRI/ERDA/NABL	
		Random sample of C.I Pipes supplied at the Project site of KPTCL shall be drawn and the Vendor/EPC Contractor shall arrange for re-inspection/Acceptance tests at CPRI in presence of KPTCL Authorities and test reports for the same shall be furnished.Applicable CPRI testing charges shall be paid by the EPC Contractor upfront and the same is reimbursable by the KPTCL as per actual, on submission of bills along with proof of		

Sl. No.	Details of Equipment/Material	For considering vendor approval type test reports issued by the following laboratories shall be furnished.	Before supplies to be made to KPTCL, type test reports issued by the following laboratories shall be furnished.	Test reports shall be furnished as per IS/IEC/KPTCL specifications
1	2	3	4	5
		payment, on successful passing of tests. In case C.I Pipes fails in testing, then testing charges will not be reimbursed and C.I Pipes will not be accepted. The EPC Contractor shall supply the C.I Pipes from any other approved vendor of KPTCL.		
23	LTAC & DCDB Panel	CPRI/ERDA/NABL	CPRI/ERDA/NABL	
24	11KV class Termination & Jointing Kits	CPRI/ERDA/NABL	CPRI/ERDA/NABL	IS:13573
25	Nitrogen Injection Fire Protection System	CPRI/ERDA/ETDC, GoI/NABL	CPRI/ERDA/ETDC, GoI/NABL	
26	Rigid Tubular Aluminium Bus Bars, Aluminium Clamps and Connectors.	CPRI/ERDA	CPRI/ERDA	IS:5561
27	Wave Traps/Line Traps	CPRI/ERDA/NABL/Zkratovna Laboratory.	CPRI/ERDA/NABL/Zkratovna Laboratory.	IS:8792 IS:8793
28	PLCC Equipment	CPRI/ERDA/NABL/KEMA Electronics Regional Test Laboratory, New Delhi/ Laboratoire Central DES Industries Electriques (LCIE), France.	CPRI/KEMA /Electronics Regional Test Laboratory, New Delhi/ Laboratoire Central DES Industries Electriques (LCIE), France.	

Note:

Type test reports shall be furnished as per the relevant IS/IEC/KPTCL Specifications. If any amendments are introduced to the IEC/IS/KPTCL Technical specifications, vendors shall furnish type test reports for all the tests conducted as per the latest amendments if any, to the IEC/IS/KPTCL Technical specifications prevailing at the time of vendor approval/supply of equipment/materials to the KPTCL Projects. Further KPTCL may insist for test reports on any other relevant type tests/special tests/additional tests, during vendor approvals and before supply of materials to KPTCL.


 Chief Engineer, Electy.,
 Tendering & Procurement, KPTCL