



पावर ट्रांसमिशन कारपोरेशन ऑफ उत्तराखण्ड लि०
(उत्तराखण्ड सरकार का उपक्रम)

मुख्य अभियन्ता (परिचालन एवं अनुरक्षण) कार्यालय

गढ़वाल क्षेत्र, 26-सिविल लाईन्स, रुड़की - 247667

दूरभाष नं० 01332-272256 फ़ैक्स नं० 01332-272315

Email: ce_oandmg@ptcul.org, chiefengineergarhwal@gmail.com

No. 1608 /CE(O&M)/GZR/Advt.

Dated: 16.06.2022

Subject: Uploading the NIT on Power Transmission Corporation of Uttarakhand Ltd.
Website www.ptcul.org.

M/s. Weblines Infosoft Pvt. Ltd.,
18-19, Abhishek Tower, 1st Floor,
14-Subhash Road,
Dehradun -248 001

E-Mail: Weblineservices@Yahoo.co.in.

Dear Sir,

Kindly refer to letter No. 306/AE (IT)/PTCUL/Web-3 Dated 19.07.2011 from PTCUL, Dehradun regarding uploading the Tender documents. In this connection, kindly find enclosed herewith the NIT for uploading the same on Power Transmission Corporation of Uttarakhand Ltd. Website www.ptcul.org immediately.

Kindly acknowledge the receipt of this letter.

Encl: As above.

Yours sincerely,

(KAMAL KANT)
CHIEF ENGINEER (O&M)

POWER TRANSMISSION CORPORATION OF UTTARAKHAND LTD.
(A Govt. of Uttarakhand Enterprise)
CHIEF ENGINEER, OPERATION & MAINTENANCE
GARHWAL ZONE, PTCUL
26 - CIVIL LINES, ROORKEE - 247667

E- Tender for “Augmentation of 33KV Isoators connected to 2x80MVA Transformers at 220KV Substation Jhahhra, Dehradun”.

DOWNLOADED BY: -

M/s / Shri _____

Sr. No.	DESCRIPTION	
1.	Tender No.	CE/GZR-08/2022-23
2.	Name of Work	“Augmentation of 33KV Isoators connected to 2x80MVA Transformers at 220KV Substation Jhahhra, Dehradun”.
3.	Completion Time	120 Days
4.	Route Length in Kms.	--
5.	Tender issuing office	Office of Chief Engineer (O&M) Garhwal Zone, Power Transmission Corporation of Uttarakhand Ltd. " 26-Civil Lines, Roorkee-247667
6.	Tender Fees	Rs. 1,000.00+ 180.00 (GST@18%) =Rs. 1,180.00 (Non refundable)
7.	EMD/Bid Security	Rs. 51,000.00
8.	Starting date of issue of Bid documents. The tender document is to be downloaded through website- www.uktenders.gov.in against payment of tender fees as above. The non refundable tender fees as specified above should be sent along with the bids as specified in the bid documents.	16.06.2022
9.	Last date of Request of Bid Documents.	As per tender notice / corrigendum if any
10.	Last date of issue of Bid Documents.	As per tender notice / corrigendum if any
11.	Closing Date of receipt of Bid through E-tendering	As per tender notice / corrigendum if any
12.	Address & Place of Submission of Bid supporting documents.	Chief Engineer (O&M), Garhwal Zone, PTCUL, 26-Civil Lines Roorkee-247667.
13.	Date and Time of Opening of Technical Bid	As per tender notice / corrigendum if any
14.	Address & place of Technical bid(Part-1) opening	Chief Engineer (O&M), Garhwal Zone, PTCUL, 26-Civil Lines Roorkee-247667.
15.	Type of Tender	Open Tender
16.	Validity of Bid	180 days after the date of opening of technical bid (Part-I)
17.	Contact & Telephone No. of the Tender issuing office	Phone No.:- 01332-272256 Fax No. : 01332-2722315
18.	E-mail address of the tender issuing office	ce_oandmg@ptcul.org chiefengineergarhwal@gmail.com

CHIEF ENGINEER (O&M) GARHWAL ZONE, ROORKEE

पावर ट्रान्समिशन कारपोरेशन ऑफ उत्तराखण्ड लि०
मुख्य अभियन्ता (परिचालन एवं अनुरक्षण) कार्यालय,
गढवाल क्षेत्र, 26- सिविल लाईन्स, रूड़की
ई-निविदा सूचना

पावर ट्रान्समिशन कारपोरेशन ऑफ उत्तराखण्ड लि० द्वारा “Augmentation of 33KV Isolators connected to 2x80MVA Transformers at 220KV Substation Jhajhra Dehradun” against Tender specification No. CE/GZR-08/2022-23 के तहत ई-निविदाएं आमन्त्रित की जाती हैं। ई-निविदा ऑनलाईन/ऑफ लाईन जमा करने की अन्तिम तिथि 14.07.2022 को समय 15.00 बजे तक हैं, जो दिनांक 15.07.2022 को 15.00 बजे खोली जायेगी। ई-निविदा सम्बन्धित अन्य विस्तृत विवरण ई-निविदा वेबसाईट www.uktenders.gov.in (Tender ID: [2022_PTCUX_45674_1](#)) एवं ई-निविदा सूचना पिटकुल की वेबसाईट www.ptcul.org से प्राप्त की जा सकती हैं। ई-निविदा से सम्बन्धित जानकारी हेतु मो०न० +91-8899890000 पर सम्पर्क करें।

मुख्य अभियन्ता (परि०एवं अनु०)

“राष्ट्र हित में बिजली बचायें”

**POWER TRANSMISSION CORPORATION OF UTTARAKHAND LTD.
OFFICE OF THE CHIEF ENGINEER (OPERATION & MAINTENANCE)
GARHWAL ZONE, 26-CIVIL LINES, ROORKEE
E-TENDER NOTICE**

Power Transmission Corporation of Uttarakhand Ltd. invites e-tender for “Augmentation of 33KV Isolators connected to 2x80MVA Transformers at 220KV Substation Jhajhra Dehradun” against Tender specification No. CE/GZR-08/2022-23. Last date of submission of online/offline e-tender is 14.07.2022 upto 15.00 Hours which shall be opened on 15.07.2022 at 15.00Hrs. Details of E-tender can be obtained from E-tender website www.uktenders.gov.in (Tender ID: [2022_PTCUX_45674_1](#)) and information of E-tender can be seen from PTCUL website www.ptcul.org. For any assistance on e-tendering, please contact on Mb. No. +91-8899890000.

CHIEF ENGINEER (O&M)

“SAVE ELECTRICITY IN THE INTEREST OF NATION”

Scope Of Work:

1. Supply & installation and commissioning of 33KV, 1600A Isolators and dismantling of existing 33KV, 800A Isolators at 220KV Substation, Jhajhra Dehradun.

TECHNICAL-QUALIFYING REQUIREMENTS

1. The bidder should have successfully completed supply & installation and commissioning of 33KV, 1600A Isolators or above voltage within last seven years
2. The Bidder/Collaborator/JV Partner must have executed similar nature of work successfully. Certificate of completion, Agreement no./PO, Amount of work done and schedule time completion versus actual time of completion work, not less the rank of Executive Engineer of similar work should be submitted.
3. Copies of Supply/Work Orders (as per above criteria) from the Govt. Power Utilities/PSUs/Govt. Organizations/Other Govt. Department for similar work is required to be submitted along with the bid.

MSME rules will be applicable as per Uttarakhand Government. The contractor should submit valid certificate.

FINANCIAL-QUALIFYING REQUIREMENTS

1. **Minimum Average Annual Turnover (MAAT):-** The minimum annual average turnover for the preceding best three years (36 months) out of last five financial years should not be less than **Rs. 25.70 Lac.** (Balance sheet / Documentary proof for last five years should be enclosed). The balance sheet and all other financial documents attested/ certified by CAs to substantiate fulfillment of FQR should be with UDIN.
2. For Financial Qualification Criteria, lead partner of JV Firms should meet minimum 50% of Financial Qualification Requirement (FQR) and collectively meet total FQR. All partners of JV Firms should have the experience for activities of construction/ manufacturing of items or equipments/work of items or equipments or products, meant for transmission utilities only.
3. Experience of having successfully completed similar Work's during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following;
 - a) Three similar completed work costing not less than the amount Rs. 06.85 Lac.
Or
 - b) Two similar completed work costing not less than the amount Rs. 08.57 Lac.
Or
 - c) One similar completed work costing not less than the amount Rs. 13.71 Lac.
4. The bidder have to submit affidavit of all ongoing projects which are not completed and Net worth of the ongoing project which are not completed at the time of bidding. (Not completed project means project in Government, Government undertaking or Private sector also include the LOA/Agreement which are allotted/ executed but Work has not started at the time of bidding)
5. The bidder has to submit the latest Balance sheet and CA Certificate (along with the UDIN no.) for the Net Worth at the time of bidding.
6. Experience certificate should be issued by an officer not below the rank of Executive Engineer mentioning nature of Work, Agreement No., Amount of Work, Scheduled time of completion of Work and Actual time of completion etc. Completion certificate from officer shall be enclosed by contractor.

Additional Documents

- (a) Copy of PAN no. of the firm/ Company or PAN no. of all its partner's in case of partnership firm or PAN no. of the individual, in case of proprietorship.
- (b) The Tenderers should have submitted copy of Goods & Service Tax (GST) Registration.
- (c) The Employee Provident Fund (EPF) Registration Number shall be a mandatory PQR. (Documentary proof of the same shall be enclosed with tender document).
- (d) RTGS/ NEFT Details of the bidder are to be submitted.
- (e) Latest Solvency certificate not more than 3 months old issued by bank (20% of bid value) should be submitted.
- (f) The balance sheet and all other financial documents attested/certified by CAs to substantiate fulfillment of FQR should be with UDIN, failing which the tender will be summarily rejected without any further reference.
- (g) Registration. No. under Shops & Estt. Act/issuing authority.
- (h) Details of Partners/Directors of the Firm/Company.
- (i) Experience record and details of orders pending/executed for various utilities.
- (j) Detail of Manufacturing/Fabrication facilities.
- (k) Factory Registration/license details.

TECHNICAL SPECIFICATION OF 33KV, 1600 AMP. MOTOR OPERATED ISOLATORS

PRINCIPAL PARAMETERS:

1 The equipment covered in this specification shall meet the technical requirements listed below:

S.No.	Particulars	33KV,1600A. Isolators.
A) PARTICULARS OF SYSTEM:		
i)	Nominal system voltage	33 KV rms
ii)	Highest system voltage	36 KV rms
iii)	Rated frequency.	50 Hz
iv)	No. of phases.	3 Nos.
v)	System Neutral Earthing	Effectively Earthed

B) Characteristics of a Isolator

The values of the Parameters/Particulars mentioned below shall not be less than the specified against each.

1. Number of poles. : 03 Nos.
2. Class : Out door
3. Rated voltage : 36 KV rms
4. Operating mechanism : Motor operation
5. Type of Isolator : Triple pole, gang operated, double break, central post rotating.
6. Rated insulation level
 - a) Lightning impulse withstand voltage
 - i) To earth & between poles : 170 KV Peak
 - ii) Across the isolating distance : 195 KV Peak
 - b) One minute P.F. withstand voltage
 - i) To earth & between poles. : 70 KV rms
 - ii) Across the isolating distance : 80 KV rms
7. Rated normal current : 1600 AMP.
8. i) Rated short time : 25 KA rms for 3 second.
 - ii) Rated peak withstand : 75 KA rms current.

2 SPECIFIC TECHNICAL REQUIREMENTS:

1. Phase to Phase separation : 1500 mm Min. (Centre to Centre)
2. Minimum centre to centre : 400 mm distance between two
3. Size of base channel on : 100x50 mm on which insulators are to be mounted.
4. Size of vertical operating : Pipe (Down pipe) i) Length : 2 Meter ii) Nominal bore : 25 mm
5. Minimum length of : 500 mm operating handle.
6. Min. nominal bore of : 20 mm phase coupling pipe.
7. Creepage Distance : 900 mm.
7. Minimum cross-sectional : For 1600A ISO: 800 Sq.mm area of terminal pad
8. Minimum Nos. of fingers : 4 pairs. in a fixed contact.
9. Diameter of Arcing Horn : 8 mm
10. Top & bottom pitch circle : 76 mm diameter of Post Insulator stack.

(to be procured separately) for which isolator hardware shall be suitable).

BASE CHANNELS: The isolator shall be mounted on a base fabricated from steel channel section of adequate size not less than 100 mm x 50 mm (ISMC 100) to withstand total weight of isolator and insulators and also all the forces that may be encountered by the isolator during service. The strengthening /jointing of base channels should be made by same size channels, to eliminate any vibrations during operations conforming to IS/IEC:62271-102

MAIN CONTACTS : All isolators shall conforming to IS/ IEC: 62271-102 comprising heavy duty self aligning, high pressure type fixed contact of modern design and made of hard drawn electrolytic copper. The fixed female contact should be of complete reverse loop type. Broken loop type contacts will not be acceptable. The various parts shall be accordingly finished to ensure inter-changeability of similar components. The fingers of fixed contacts shall form the reverse loops to hold moving contacts. For 1600 Amp. Isolator, female contacts shall have **four jaws**. Stopper provided in the fixed contact shall overlap inside reverse loop assembly strips to stop over travel of moving contact pipe. It should be made of Teflon material to withstand high temperatures. The pad for connection of terminal connector shall be of Aluminum Alloy. The minimum size of isolator pad available for fixing of terminal connector shall be 100 mm with thickness not less than 16 mm, to suit terminal connector included in scope of supply. Bimetallic strips of 1 mm thickness should be provided between the reverse loop strips and the Aluminum Alloy pad conforming to IS/ IEC: 62271-102

The switch blades forming the moving contacts shall be made from tubular section of hard drawn electrolytic copper having outer diameter not less than 50 mm and thickness of 6 mm. These contacts shall be liberally dimensioned so as to withstand safely the highest short-circuit and over voltages that may be encountered during service. The surfaces of contacts shall be rendered smooth and silver plated. The thickness of silver plating shall not be less than 25 microns.

Material of Earthing blades and contacts shall be same as those of main blades and contacts. Cross sectional area of Earthing blades and contacts shall not be less than 50% of cross sectional area of main blades and contacts. The Earthing blades shall have the same short time current rating (thermal and dynamic) as that of main blades. The current density in the current carrying parts of the Isolator shall in no case exceeds the following values:

Density for Copper : 2A/sq.mm
Density for Aluminium : 1A/sq.mm