

CLARIFICATION II RELATED TO ICB-PMD-MCTLP-016/17-01					Design Supply Installation and Commissioning of Udupur - Markichowk - Bharatpur 220 kV Transmission Line	
Sl.	Clause Ref.	Vol	Sec	Cl.	Bidders Request	NEA Response
1	Volume-II, Section I Clause No. 1.1.7	VOL-II	Sec 1	Cl. No. 1.1.7	<p>From the above clauses and subsequent NEA's clarification, we kindly request you to confirm / provide followings.</p> <p>i. 220 kV DC Damuali – Bharatpur line stringing scope is with Bison Conductor??? Please confirm.</p> <p>ii. 220 kV DC Damuali – Bharatpur line stringing is with Twin Conductor or Single Conductor per phase??? Please confirm.</p> <p>iii. There is not any provision given in the Price Schedule No. 4 for quoting the rate for this stringing work. Kindly request you to include the item in the price schedule for quoting the rate for this DC line stringing work.</p> <p>iv. There is no line length given for this line for stringing work. We kindly request you to provide us at least approximate line length, so, that the bidder can estimate approximate financial implication along with required resources and consider the same in their working.</p> <p>v. We understand that, the conductor and tower need to be supply by the successful contractor whereas, there is no clarity given on the payment of such items. However, we understand followings for payment purpose.</p> <p>a. The tower and conductor payment will be made as per the quoted rate in the price schedule. Please confirm.</p> <p>b. The Multi Circuit tower given in the price schedule will be utilized for this line. Please confirm</p>	<p>i) & ii) 220 kV D/C Damuali – Bharatpur line & Udupur-Markichowk-Bharatpur 220 kV line are two separate transmission line. However, near new Bharatpur substation, maximum 8 km of Twin bison double circuit of 220 kV D/C Damuali – Bharatpur line is in the scope of this project which will be accommodated in multi-circuit towers for maximum of 8 km length .</p> <p>iii) & iv) Please quote as per quantity given in Bid Price Schedule</p> <p>v)The Multi Circuit tower given in the price schedule will be utilized for maximum 8 km for multi circuit section with both D/C lines with Twin Bison conductor and Twin HTLS conductor.</p>
2	Volume-II, Section 4 Clause No. 1.10.2	VOL-II	Sec 4	Cl. No. 1.10.2	<p>As per the Cl. No. 1.10.2 of Section-4, the tower weights should be inclusive of weight of Anticlimbing devices.</p> <p>Also, the description under Item No. 1.1 of Price Schedule No. 1 & 2 and Item No. 5 of Price Schedule No. 4 (a) for Towers is given as “.....tower accessories such as danger plates, number plates, phase plates, anti-climbing devices”</p> <p>Whereas the separate item of Anti climbing device is given under Item No. 3.v of Price Schedule No. 1 & 2 and Item No. 7.v of Price Schedule No. 4 (a).</p> <p>Looking to the above, the rate of anti-climbing device will be repeated.</p> <p>Hence, we request you to delete the inclusion of Anticlimbing device from Cl. No. 10.10.2 of Section-4 and from the description given under Item No. 1.1 of Price Schedule No. 1 & 2 & Item No. 5 of Price Schedule No. 4 (a) and issue the amendment accordingly.</p>	<p>Please refer item no. 1.1 of price schedule-1 &2.</p> <p>Please refer item no. 1.1 of price schedule-1 &2.</p> <p>As per the provision of Bid Document.</p> <p>No, your understanding is not correct.</p> <p>No amendment is required after clarification on this topic. clarified. Please quote according to Bid Price Schedule</p>
3	General Loading tree of tower Design	General		Loading tree of tower Design	<p>The load values given in load trees for TT 'MA' & 'MD' are working loads or ultimate loads? If the loads are working loads, please mention the factor of safety to be considered.</p>	<p>The load values given in load trees are ultimate loads.</p>
4	Volume-II, Section 4 Clause No. 2.8.7	Vol-II	Sec 4	Cl. No. 2.8.7	<p>Reinforcement shall conform to IS: 432:1966 for M.S. bars and hard drawn steel wires and to IS: 1138-1966 and IS:1786:1966 for deformed.</p> <p>Grade of steel for foundation is not mentioned in document.</p>	<p>Reinforcement shall conform to IS:1786 for deformed and cold twisted bars (Fe 500)</p>
5	Vol-III Price schedule-4(a) Item No. 5.7	Vol-III	Price schedule-4(a)	Item No. 5.7	<p>Discrepancies in quantities of Tension Tower MD in Supply Price Schedule (i.e. Price Schedule No. 1 & 2) and Erection Price Schedule (i.e. Price Schedule No. 4)</p> <p>Looking to this, we understand that there is typographical error in quantities furnished in the price schedule for Tension Tower MD.</p> <p>Hence, we kindly request you to revise this quantity for Tension Tower MD and amend the price schedule suitably.</p>	<p>Please refer Amendment-II.</p>

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6	Vol-II Section-5A Clause 1.3	Vol-II	Section-5A	Clause 1.3	Technical Particulars of HTLS Conductor Approximate mass of complete conductor (kg/km) - Equals to 1621 ± 5% (kg/km)	This is as per specific technical requirement of Bid Document of this Project. There is no connection between bid of this Project and any other projects and therefore cannot be compared.
7	Vol-II Section-5A Clause 1.10	Vol-II	Section-5A	Clause 1.10	Evaluation of Ohmic Losses and Differential Price Loading Average Ohmic loss (kW) = Total Running Conductor length X (Continuous operating current under normal condition) ² X AC Resistance corresponding to continuous operating current For 832 km conductor length, continuous operating current of 615 Amp;	Please refer Response no. 66 of Clarification-I. There is no connection between bid of this Project and any other projects and therefore cannot be compared. Please note that this is project under EIB financing and Bid Document has been prepared as per EIB guidelines and requirements.
8	Vol-II Section-5A Different Clauses	Vol-II	Section-5A	Different Clauses	Clause 2.1.2 Type tests specified under Clause 2.1.1 shall not be required to be carried out if a valid test certificate is available for the offered design, i.e., tests conducted earlier should have been conducted in accredited laboratory (accredited based on ISO/IEC guide 25/17025 or EN 45001 by the National Accreditation body of the country where laboratory is located) or witnessed by the representative (s) of POWERGRID or Utility. Clause 2.2 – Acceptance Test Note: All the above tests except (m) shall be carried out on Aluminium Alloy and core / core strands after stranding only. Annexure – A Clause 1.6 – High Temperature Endurance and Creep test (ii) On other conductor sample, the conductor temperature shall be increased to designed maximum temperature in steps of 20 deg. C and thermal elongation of the conductor sample shall be measured & recorded at each step. The temperature shall be held at each step for sufficient duration for stabilisation of temperature. Further, the temperature of the conductor shall be maintained at designed maximum temperature (+10 Deg. C) for 1000 hours. The elongation/creep strain of the conductor during this period shall be measured and recorded at end of 1 hour, 10 hour, 100 hour and subsequently every 100 hour up to 1000 hours time period. After completion of the above, the core of the conductor sample shall be subjected to UTS test as mentioned above at clause 1.1 of Annexure-A. The conductor core shall withstand a load equivalent to 95 % of UTS. In case of carbon-fibre-composite core conductor, the flexural strength & glass transition temperature of the core shall also be evaluated and the same shall not be degraded by more than 10 % over the initial value. The supplier shall plot the thermal elongation with temperature Clause 1.31 – Glass Transition Temperature test (for Carbon – Fiber composite core only) Test method shall be as per ASTM D7028, A Standard Test Method for Glass Transition Temperature of Polymer Matrix Composites by Dynamic Mechanical Analysis. The glass transition temperature shall be greater than the designed maximum temperature of the offered HTLS conductor +35 ° C. Annexure – A Please add following method of in Annexure A, Clause 1.35	As per the provision of Bid Document.
9	Volume-II, Section III Clause No. 1.9 Clearance from Ground, Building Trees etc	Volume II	Section III,	Clause No.1.9	Kindly clarify that Tree Enumeration, measurement of Girth at 1m height, height of trees, and name of species is in the scope of contractor however cutting, stacking & Clearance/Compensation shall be done by NEA themselves.	Tree Enumeration, measurement of Girth at 1m height, height of trees, and name of species is in the scope of contractor however cutting, stacking, transportation designated yard and disposal of tree is in the Employer's scope for the trees to be cleared under the ROW. However, tree cutting during survey is in the scope of Contractor.
10	Volume II Section III, Clause no. 1.11.4	Volume II	Section III,	Clause No.1.11.4	It is mentioned that the Identification of land parcel no. from local authorities (Land revenue office and Survey division) is in the scope of contractor and contractor has to hire Land Surveyors (Amin) for identification land within the right of way and access to site.	Yes, your understanding is correct.

