

Consolidated Response to Bidder's Queries

Reference:

- 1) Tender Enquiry Document for 400 kV Transmission Lines of 2375 MW Solar/Wind/Hybrid RE Park at Great Rann of Kutch area, Gujarat. (TED No: GIPCL/RE Park/TL dtd.: 03rd April, 2023)
- 2) Pre-bid queries received during Pre-Bid Meeting on 25.05.2023 and also through various email(s).

Sr. No	Vol. No. & Section No.	Main Clause	Clause No.	Page No.	As per EPC Tender (GIPCL/RE Park/TL)	Bidder's Queries	GIPCL reply / clarification to Pre Bid Queries
1	Vol I Sec 1 NIT_TL_R2	Definitions	1.1.22	14 of 19	"Effective Date" for this Contract shall mean the date of issuance of Letter of Intent (LOI) by the Company.	We request to include Effective date from the date of section 68 & section 164 inhand.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
2	Vol I Sec 2 ITB_TL_R2	PRE-QUALIFYING REQUIREMENTS (PQRS) ELIGIBILITY CONDITIONS	2.2.1	5 of 11	Technical Experience: The Bidder must have executed on Turnkey basis including Supplied, Erected & Commissioned minimum 12 km (Route length) of 400 kV or above voltage class transmission lines in any financial year during the last seven years as on the date of bid submission. The WO / PO / LOA / certificate for transmission line executed which is connected to state transmission utilities / central transmission utilities / Joint Venture Company of Central utility shall be considered.	Request to include experience of carrying out Piling work in the pre qualification requirement since piling is the major work in the given scope of work and therefore experience of the same must be required for this kind of Project.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
3	Vol I Sec 2 ITB_TL_R2	PRE-QUALIFYING REQUIREMENTS (PQRS) ELIGIBILITY CONDITIONS	2.2.1	5 of 11	Technical Experience: The Bidder must have executed on Turnkey basis including Supplied, Erected & Commissioned minimum 12 km (Route length) of 400 kV or above voltage class transmission lines in any financial year during the last seven years as on the date of bid submission. The WO / PO / LOA / certificate for transmission line executed which is connected to state transmission utilities / central transmission utilities / Joint Venture Company of Central utility shall be considered.	We request you to kindly amend the above Clause as mentioned below: The Bidder must have executed on Turnkey basis including Supplied, Erected & Commissioned minimum 5 km (Route length) of 400 kV or above voltage class transmission lines in any financial year during the last seven years as on the date of bid submission.	Please refer Amendment-1
4	Vol I Sec 2 ITB_TL_R2	PRE-QUALIFYING REQUIREMENTS (PQRS) ELIGIBILITY CONDITIONS	2.3 (i)	5 of 11	FINANCIAL (i) Minimum Average Annual Turnover (MAAT) of the Bidder for last three (3) financial years shall be at least Rs. 35 Crores	Request to amend the MAAT of the Bidder shall be at least Rs.30Cr for last three (3) financial years out of past seven (7) years	Please refer Amendment-1
5	Vol I Sec 2 ITB_TL_R2	PRE-QUALIFYING REQUIREMENTS (PQRS) ELIGIBILITY CONDITIONS	2.3 (i)	5 of 11	FINANCIAL (i) Minimum Average Annual Turnover (MAAT) of the Bidder for last three (3) financial years shall be at least Rs. 35 Crores	Request to amend the MAAT of the Bidder for last three (3) financial years shall be at least Rs.100Cr to get a quality and capable bidders.	Please refer Amendment-1
6	Vol I Sec 4 GCC_TL_R2	PRICE ESCALATION	80.1	40 of 46	The rate(s) quoted against the work shall remain firm during the entire Contract period.	We request to consider Price variation on Conductor and Tower Parts as per IEEMA with base date 1month prior to Bid Submission	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
7	Vol I Sec 5 SCC_TL_R2	FINAL ACCEPTANCE	33.1	15 of 16	In case of Commissioning cannot be carried out, after Mechanical Completion and Pre-Commissioning test, at specified time due to reasons attributable to Owner, the 400 kV Transmission Lines package shall be taken over 6 months after the intimation from the Contractor provided the Owner is satisfied about his readiness of the Transmission Lines. In such case, the Owner shall give an adhoc final acceptance certificate for the purpose of triggering the Defect Liability period. In such an eventuality, the Owner shall give a notice to the Contractor of his readiness to give necessary inputs to enable the Contractor to do the Pre-Commissioning Test, in which case the Contractor shall arrange the Pre-Commissioning Test within 30 days on receipt of such notice without any additional financial implication to the Owner.	We request to release the retention payment against physical completion incase of delay in commissioning of PSS-2/2nd circuit transmission line for the reason not attributable to TL Bidder	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
8	Vol I Sec 7 List of Appendices_TL_R2	APPENDIX-23: BID EVALUATION CRITERIA	B (8)	41 of 62	B. EVALUATION CRITERIA: 8. Lowest Five (5) eligible bidders or 50% out of total eligible Bidders (rounded to the next higher whole number), whichever is higher shall be invited for participation in e-Reverse Auction.	We request to remove Reverse Auction clause from the tender as this being a very small package.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
9	Vol I Sec 8 Price Schedule_TL_R0	SCHEDULE -2 SUMMARY OF TOTAL EPC PRICE PROPOSAL INCLUDING TAXES & DUTIES	Sr. No.1	4 of 11	Lumpsum price for Survey, Soil Investigations, Design & Engineering, Manufacturing, Supply, ocean / road / rail transportation/freight & insurance (up to project site), loading, unloading, internal handling & storage of 400kV Transmission Lines for 2375MW Solar/Wind/Hybrid Renewable energy park at Great Rann of Kutch, Gujarat including spare parts for startup and testing for the complete plant, Statutory.....	As per price schedule, soil investigation is in the scope of EPC Contractor, We request to provide quantities and Depth for soil investigation.	Depth of Soil Investigation shall be considered minimum 25 m, However any increase in depth of the borehole shall be decided during detail engineering and there shall be No Cost implication to GIPCL for the same. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
10	Vol II SEC-1-GTS_TL	INTENT OF SPECIFICATION	1.6.0	4 of 33	The transmission system shall be designed for AL-59 and ACSR conductor (whichever is stringent. Other developer lines are of ACSR Quad Moose Conductor.	Kindly allow bidder to Select the type of conductor and configuration meeting the minimum requirement of 2500MW per Circuit. Please confirm.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
11	Vol II SEC-1-GTS_TL	ANNEXURE-A: PROJECT INFORMATION	2.1.0	20 of 33	Ambient temperature Extreme high : 50°C Extreme low : 9°C	As per IS, Minimum temp. for sag tension calculation to be considered is 0 deg. C. Please confirm min. temp.?	Bidder shall refer Cl.No.3.2.0 pg.4 of 19, Vol II SEC-2.3-DTS_Conductors. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.

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12	Vol II SEC-1-GTS_TL	SCOPE OF SUPPLY AND SERVICES	2.2.0 (c)	5 of 33	(c) Design, Engineering, Fabrication, Proto Testing, Manufacturing, Supply & Delivery of all types of 400kV D/C, 400kV M/C transmission line towers and 400kV Gantry tower(s) with beam/girder (at PSS-1) fully hot dip galvanized considering the high saline zone with minimum zinc deposition of 910 g/m2(minimum 126 microns at any point of the structure and Averaging shall not be allowed),with stubs, stub setting templates for each type of tower under this package, with all types of tower accessories like phase plate, circuit plate, number plate, danger plate, anti-climbing device, bird guard, earth pipe and counterpoise type earthing as per GIPCL approved design / drawings (prepared & submitted for approval by bidder / contractor for Wind Zone-IV, Seismic zone-V, high saline corrosion zone), including various types of bolts, nuts, fasteners, anti-theft fasteners, step bolt, hangers, D-shackles etc.	As per Wind Zone map, coastal area falls in wind zone V i.e. wind speed of 50m/s. Please confirm the wind zone and also please share the route map of TL?	For Wind Zone Please refer Amendment-1. For Indicative Transmission line route corridor, Bidder shall refer Drawing No.FCE-1721125-TD-DWG-LAY-1920-061
13	Vol II SEC-1-GTS_TL	SCOPE OF SUPPLY AND SERVICES	2.2.0 (f)	6 of 33	f) Proto Fabrication, Assembly and Type Testing (non-destructive type) of 400kV Double Circuit towers, 400kV Multi Circuit towers, 400kV Gantry tower with beam / girder shall be in scope of Bidder/Contractor. The design for 400kV D/C towers, 400kV M/C towers, 400kV D/C tower (near PSS-1 take-off) with Auxiliary cross arm shall be either type tested or, shall be of PGCIL / CTUIL approved for Wind Zone-IV & Seismic Zone-V and considering requirements of high saline climatic condition (corrosion zone C5-M).	We understand that design rights for Tower and Foundation Design IPR shall remain with Contractor without any liability to employer.	Confirmed. The design shall be only used for the specific project. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
14	Vol II SEC-1-GTS_TL	SCOPE OF SUPPLY AND SERVICES	2.2.0 (h)	6 of 33	The scope of work includes the following: h) Access roads / routes to the land and locations of towers for erection or, any other purpose shall be arranged by the bidder / contractor without any extra cost to owner.	We understand that the approach road is in GIPCL Scope.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
15	Vol II SEC-1-GTS_TL	SCOPE OF SUPPLY AND SERVICES	2.3.0 Sr. No. 37	8 of 33	The following 400kV Towers & Materials shall be included in the scope of the Contractor.37. Bird Flight diverter (if applicable/Required)	We understand that the proposed project site is outside the GIB area. So Bird diverter is not required. Please confirm	No change in Tender Conditions. Bidder shall Comply with Tender Conditions. Bidder to consider Bird flight diverter if required/ applicable.
16	Vol II SEC-1-GTS_TL	GENERAL REQUIREMENTS	6.18.0	14 of 33	All statutory clearances / approvals are in scope of Contractor including required registration process and cost associated with all this work shall be borne by the contractor. • • Approval under Section 68	We request to keep the scope of Approval under Section 68 & Section 164 in GIPLC Scope. Since these approval are required prior to starting the construction work and this is inline with CTU/PGCIL/NTPC/Industry standards.	Survey of the line is in the scope of bidder, thus applications for all the statutory clearances / approvals shall be submitted along with the survey report. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
17	Vol II SEC-1-GTS_TL	TIME SCHEDULE	11.0.0	16 of 33	Survey, Design, engineering, manufacture, testing, transport and delivery at site, storage at site, erection, testing and commissioning of overall transmission system for 400 kV, 2375 MW Park with 400 kV Single Circuit Transmission Line between 400/33 kV PSS-1 and PSS-2 to CTUIL KPS-II S/s on double circuit towers with last 500 meters (approximately) on multi circuit tower(s), 400 kV Single Circuit Transmission Line between PSS 2 to CTUIL KPS-II S/s on double circuit towers with last 500 meters (approximately) on multi circuit tower(s), 400 kV Single Circuit Transmission Line between PSS-1 to PSS-2 on double circuit towers with auxiliary cross arm (if applicable). One (1) gantry tower with one girder (beam) at PSS-1 for transmission line between PSS-1 to PSS-2. All transmission lines with AL59 Quad Moose conductor (cross sectional area of AL59 moose conductor with highest ampacity with minimum cross sectional area of 587 sq.mm.): 10 months including monsoon season from date of LOI	We request to amend the Time schedule for completion as 12 months from the date of Sec 68 Approval against the requirement of Statutory approvals, working season and Piling work involved.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
18	Vol II SEC-1-GTS_TL	DRAWINGS, DATA AND MANUAL	12.2.0	17 of 33	To Be Submitted After Award of Contract: Link Budget Calculation as per CEA regulations	Kindly clarify the requirement.	Please refer Amendment-1
19	Vol II SEC-1-GTS_TL	OTHER REQUIREMENTS	13.3.0	18 of 33	Obtaining all the statutory approvals including permission for first time charging (FTC) of transmission line shall be in scope of bidder / contractor.	We understand that First time charging clearance code is not applicable for Transmission line contractor.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
20	Vol II SEC-1-GTS_TL	SCOPE OF SUPPLY AND SERVICES	2.1.0 (n)	5 of 33	Earthing of all OPGW cable with associate hardware, accessories and fittings to the Earth Pit of each transmission line tower.	OPGW Cable earthing to be provided upto Earth pit or as per general practice earth bond to be fitted with tower member. Kindly clarify.	Earthing of all OPGW cable with associate hardware, accessories and fittings to the Earth Pit of each transmission line tower. Further bidder to note that the earthing of OPGW can be merged in the same earth pit to be installed for Tower. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
21	Vol II SEC-2.2-DTS_Towers and Accessories	TECHNICAL REQUIREMENTS	4.1.0	5 of 18	The basic drawings for all the towers and their extensions shall be provided by Tower Manufacturer and the same design shall be Type tested for the WZ-4, Seismic Zone-V, which shall include structural drawings/erection drawings and / or shop fabrication drawings, Bill of Materials for all the towers and their extensions as well as construction drawings for foundations. Bidder shall include in their offer the following:....	To avoid time delay in tower testing, can we go for higher factor of safety (=1.3 as per industry practice) and avoid type testing of tower wherever quantity of towers are less. Kindly confirm the factor of safety to be considered to avoid tower testing.	The Specification calls for Type testing for 400kV Double Circuit & Multi Circuit Towers. However Proto has to be done for Gantry and Transmission Towers as well. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
22	Vol II SEC-2.2-DTS_Towers and Accessories	SCOPE OF WORK	2.2.0	4 of 18	For this package, the towers shall be designed for Wind Zone – IV (47m/s), Seismic Zone- V and Corrosion Zone C5-M (as per ISO 12944).	As per IS:875, wind map of India our site location is falling under wind zone 5. Kindly specify the same for which wind zone tower shall be designed.	Please refer Amendment-1

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23	Vol II SEC-2.2-DTS_Towers and Accessories	TECHNICAL REQUIREMENTS	4.1.0	6 of 18	Design, Proto Fabrication, Assembly and Type Testing (non-destructive type) of new 400kV Double Circuit towers. Bidder may also offer already designed & type-tested tower meeting the above requirement.	For gantry tower type testing facility is not available and the same is not an industrial practice also. We request you to kindly exempt the type testing for gantry tower.	The Specification calls for Type testing for 400kV Double Circuit & Multi Circuit Towers not for Gantry Tower. However Proto has to be done for Gantry and Transmission Towers as well. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
24	Vol II SEC-2.2-DTS_Towers and Accessories	Normal Span	13.1.0	15 of 18	Wind Speed: Zone as per IS: 875: IV (47m/s)	As per IS:875, K4 factor = 1.3 has to be considered for costal area. Kindly confirm the Factor K4 is has to be considered for the design or not?	Wind Zone: No change in Tender Conditions. For Coastal Factor (K4): Please refer Amendment-1
25	Vol II SEC-2.2-DTS_Towers and Accessories	TOWER LOADING CONDITIONS	16.0.0	17 of 18	a. Terrain category shall be considered as 2	As per IS:802, the region is following under terrain category 1. Kindly clarify which has to be considered for design.	There are two approach/ internal road crossings coming in the route of this line and both the roads are at more than 1.5 m height from the F.G.L. Therefore Terrain category 2 shall be considered. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
26	Vol II SEC-2.2-DTS_Towers and Accessories	TOWER LOADING CONDITIONS	16.0.0 (a)	17 of 18	The design of towers shall be carried out by the Contractor as per IS 802 (Part 1/section1) 2015 considering wind zone 4. However, for Drag co efficient calculation to be followed as per IS802 (P1/S1:1995) a. Terrain category shall be considered as 2	As per IS, Terrain category 1 shall be considered for open sea coasts, desert area? Please confirm the Terrain category?	There are two approach/ internal road crossings coming in the route of this line and both the roads are at more than 1.5 m height from the F.G.L. Therefore Terrain category 2 shall be considered. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
27	Vol II SEC-2.2-DTS_Towers and Accessories	TOWER LOADING CONDITIONS	16.0.0 (b)	17 of 18	The design of towers shall be carried out by the Contractor as per IS 802 (Part 1/section1) 2015 considering wind zone 4. However, for Drag co efficient calculation to be followed as per IS802 (P1/S1:1995) b. Reliability level shall be considered as 2 for 400 kV lines.	As per Latest IS 802, for Quad conductor, Reliability level 2 shall be considered for tower design. Please confirm the Reliability level?	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
28	Vol II SEC-2.3-DTS_Conductors	DESIGN TEMPERATURES.	3.2.0	4 of 19	The following temperature range for the conductors and ground wires shall adopted for line design as below or as per given temperature in conductor data sheet. a) Minimum Temperature: 0 deg.C b) Everyday Temperature of conductor: As per site meteorological data. c) Maximum Temperature of Conductor: Maximum temperature corresponding to actual loading d) Maximum temperature of Earth wire exposed to sun : 53 deg.C.	As per Latest IS 802, Max. temp. for ACSR conductor is 85 deg. C and for AAAC, max. Temp. is 95 deg. C . Please confirm the max. temp. for AL59 conductor?	Maximum Conductor Temperature shall be considered as per CEA Guidelines for RATIONALISED USE OF HIGH PERFORMANCE CONDUCTORS
29	Vol II SEC-2.7-DTS_Tower Foundation	CONCRETING	1.6.0	5 of 14Reinforcement fixing shall be as per IS 2502. Reinforcement supports shall include all spacers, chairs, ties, slab bolster, clips, chair bars, and other devices for properly assembling, placing, spacing, supporting, and fastening therein formwork. Spacers shall be cast from concrete of the same quality as that in which they will be embedded. Concrete block spacers shall be cast in metal moulds with an approved means of separating blocks and of ensuring that the blocks are of the proper size. Coated binding wire shall be incorporated into the blocks to enable them to be securely attached to vertical or horizontal bars and the contractor shall demonstrate both that the blocks are of the requisite strength and that the means of attachment to the reinforcement are adequate.....	Please confirm whether we can use CRS steel	Fe 550D CRS rebar steel(Higher grade) is approved in principally. This will be without any cost or time implication to GIPCL for the project. Formal approval shall be issued to successful bidder after review of Data Sheet from the manufacturer during detail engineering
30	Vol II SEC-2.7-DTS_Tower Foundation	PERMITTED EXTRA CONSUMPTION OF LINE MATERIALS	16.0.0		PERMITTED EXTRA CONSUMPTION OF LINE MATERIALS	We understand that the mentioned clause is not applicable being LSTK contract. The excess material supplied above the actual consumption can be taken back by the contractor excluding spare which needs to be handed over to GIPCL.	Please refer Amendment-1
31	"SLD for Transmission Line System" (DWG NO.FCE-171125-EL-SLD-2100-001)	Notes	Sr. No. 2	1 of 1	2. Tower "TC" and Girder (Beam) "G2" at PSS-1 is in scope of Transmission line EPC contractor. (Tower "TA", "TB" and "G1" at PSS-1 is in scope of GIPCL)	We request you, kindly arrange to provide the Structure and foundation details for Tower TC and Girder G2.	Tower TC & Girder G2 shall be designed by Transmission Line EPC Contractor. No change in Tender Conditions. Bidder shall Comply with Tender Conditions.
32	"SLD for Transmission Line System" (DWG NO.FCE-171125-EL-SLD-2100-001)	Notes	Sr. No. 6	1 of 1	6. Transmission line from PSS-1 to PSS-2 is not equipped with terminal switchgears, hence suitable jumpering system (with required connectors and hardwares) shall be provided at appropriate location which are to be temporary installed for testing / charging the system and same shall be removed after satisfactory testing activity.	We understand that, Transmission Line contractor do not have to provide any equipment related to Termination of Transmission Line.	No change in Tender Conditions. Bidder shall Comply with Tender Conditions.