

Parbati Koldam Transmission Company Limited

Amendment No. - 03 (Pre Bid Clarifications)

26.06.2024

Subject: Procurement of Emergency Restoration System (ERS) for 2 X 400 kV S/c Parbati - Koldam Transmission Line and 400 kV D/c Koldam - Ludhiana Transmission Line

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
1	Bid Price Schedule	Schedule-2		It is not being added field training in total. Only software training is showing in total of Schedule-2 as well as in Schedule-4, Grand Summary. Please reset the calculation so that both software & field training will be added in total.	It is not being added field training in total. Only software training is showing in total of Schedule-2 as well as in Schedule-4, Grand Summary. Please reset the calculation so that both software & field training will be added in total	It has been updated. Please refer Corrigendum -01 for the updated Bid Price Schedule
2	Bid Data Sheet SECTION - III	Cl.no: 1.1 (i)	1.1 The bidder shall be (i) a qualified manufacturer of Emergency Restoration System consisting of	We have developed India's first indigenously manufactured ERS with License transfer from CSIR-SERC in the year 2020, Our experience in manufacturing dates back for around	As Indigrd has floated this as a public tender and as per GOI's MII initiative in 2017,	We are reviewing the requirement internally and same will be updated soon.
3	Bid Data Sheet	Cl.no: 2.1	modular sub structures for emergency restoration	4 years. We request competent	preference to local	

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/ Amendments	PrKTCL Replies
	SECTION - III		of transmission lines for the last five years or	authority to give us relaxation and ask for 3 years of experience.	Manufacturer has to be implemented in all the procurement.	
4	Bid Data Sheet SECTION - III	Cl.no: 2.2 and Clause 2.3	<p>2.1. The qualified manufacturer/supplier/ licensee/ authorized channel partner should have designed, manufactured/ got manufactured, tested/ got tested and supplied Emergency Restoration system consisting of modular sub structures for 345kV or above voltage transmission lines within the last five years as on. 15.03.2024.</p> <p>The qualified manufacturer/supplier/ licensee/ authorized channel partner should have supplied minimum 2 (Two) sets (minimum 6 Nos. of ERS Towers per set to be counted) of</p>	<p>Post License Agreement with CSIR-SERC in November 2020, we have developed the designs, models, calculations, manufacturing unit & commercialization of the product. non-availability to access of road due to severe weather condition which qualifies under Force Majeure condition at J&K since 15th Dec, 2024 to till date; Further, under Make in India, PGCIL has awarded the contract for the Design, Manufacturing & Supply of 16 ERS Towers in 2022 for NR II Region of J&K State.</p> <p>The order is on-going & we are geared up to complete the supply (62% supply already completed). However, due to Supply Chain disruption and Logistics arrangements delayed on account of non-availability to access of road due to severe weather condition which qualifies under Force Majeure condition at J&K since 15th Dec, 2024</p>	<p>We would like to bring to kind attention of competent authority that by not adding MII clause with purchase preference will lead to dishonor of GOI's Order for public procurement. Hence, we request to release a corrigendum for the preference of purchase to Indian Class I Manufacturer as per Make in India.</p>	

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
			<p>Single Circuit Emergency Restoration Towers consisting of modular structures for 345kV or above in India during the last 5 years as on 15.03.2024.</p> <p>Out of the above supplied 2 (Two) sets of ERS, any one should have been used at least once for restoration of 345kV or above voltage transmission line(s) and should have minimum 2 years of performance certificate issued by its purchaser for satisfactory performance of the supplied system before 15.03.2024. (Completion certificate and performance certificate to be submitted as proof).</p>	<p>to till date; Knowing facts and severity of the conditions, the PGCIL has communicated us and granted the Time Extension to this project up to 2nd July 2024.</p> <p>Purchase Order/NOA Copy, Type Tests Reports, received CIPs & Delivery Challan shall be furnished to established the credibility of our organization.</p>		

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
5			Bid Submission to be done in person	Kindly Allow to submit the Bid via Email as well because bid shall be prepared in USA.		Bid shall be submitted in Hard copy only.
6			GST shall be applicable	Direct import Local GST won't be applicable. Kindly Capture this in Price Bid Schedule and terms and conditions.		Bid submitted by the Bidders shall be inclusive of all such taxes, if any.
7			Terms of Payment given for domestic supplier	Kindly share the terms of payment for International supplier.		Payment terms shall remain same for all suppliers, international and domestic.
8				Kindly allow the following in equivalent USD a. Bid Price b. BG/CPBG c. Tender Cost		The Bid Price, BG/CPBG and Tender Cost shall be in INR only. All existing provisions concerning these shall remain unchanged.
9			ERS , PLS -CADD is required	For our ERS , PLS -CADD is not required. Our own ERS software is sufficient for all ERS operations. Kindly exclude this requirement for		Please refer Sl. 44 of Annexure B (Indicative Break-up details

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/ Amendments	PrKTCL Replies
				the manufacturers who have their own ERS software		for ERS Towers) of Technical Specification: Section 2 and Item No. 44 of Schedule 1, Bid Price Schedule, we have already mentioned the relevant software to be provided by the bidder.
10				In the present tender from IndiGrid How many suspension towers of 400 kV S/C are required? How many tension towers of 400 kV S/C are required?	The ERS from us can be used as a single circuit as well as a double circuit structure. The most convenient way to use the ERS is usually as a single circuit one, because it is the most convenient way to replace a damaged lattice tower	Please refer clause 2.1.3 of section-II of Technical specification regarding to circuit & Tension / suspension ERS.
11				Please confirm that the approx. height of ERS towers is 47 m?		Refer Sl. No 1 of Bid Price Schedule and Indicative Break up details in Annexure- B of

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
						Technical Specification: section 2 for approximate tower height. Again, please go through the note in Indicative Break up and Bid Price Schedule. Height and other parameters of ERS shall be based on the design parameter and electrical clearance requirements.
12				Shall we match the quantity of the materials on the BOM or are we allowed to offer the quantity of materials based on the PLS Calculation and the requirements for our ERS design?		Refer Note in the Indicative Break up in Annexure B of Technical Specifications : section 2
13				What is the OPGW outer diameter?		OPGW/ Earthwire dia

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
						may vary from 10mm to 14mm.
14				Can we use a 245 kV insulator and double it in series to be used for 400 kV, rather?		Only 400kV Insulators shall be considered.
15	Technical Specification - Section I	1.2(v) containers for ERS items (except mast structures).....	Please explain how should mast structures be stored and delivered?		All ERS items including Mast structure will be stored and delivered though 20 ft Container as mentioned in Indicative Break up details in Annexure- B of Technical Specification: section 2. The arrangement of ERS Mast/ ERS Items shall be decided by Bidder

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
16	Technical Specification - Section I	4.1.3.6	To the maximum degree possible, the Supplier shall utilize the "metallic Containers" for shipping of equipment's/tools to India	What is a "metallic container" precisely? Please explain for more context. Secondly does Indigrd requires a brand new container or a Grade A single use containers also acceptable? We normally provide Grade A 20ft Dry-Van Shipping containers. Please confirm.		Clause 4.13.6 of Section -1 defines material Type - which is standard Metallic 20ft container. All containers shall be Brand new, which will be used for storage and Transportation of ERS. The container shall be placed in open yard, and it shall be all weatherproof. Single use containers are not acceptable.
17	Technical Specification - Section II	2.2The bearing capacity shall be considered as 27,350 kg/sqm for normal soil	For the low bearing capacity soil, is there normally any soil preparation done by Indigrd where ERS will be erected? For instance, top soil removal,		Soil preparation for ERS will be done based on requirement. Right now, we

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
			and 10,000 kg/sqm for low bearing capacity soil.	compacted gravel, cement plates etc. Please confirm.		are procuring the ERS as a part of emergency preparedness. Supply Quantity of different type of anchor assembly is mentioned in Indicative Break up details in Annexure- B of section 2 of Technical Specification Sl no 7 to 11.
18	Technical Specification - Section II	2.7.2The hardware fittings shall be supplied for Quad Moose conductor as per Table 1.	As per BOM, its mentioned yoke plate shall be suitable for both Quad Moose & Triple Snowbird conductor.		Qual hardware fittings shall be supplied with additional hole at middle of Yoke plate to place single string in place of Double string in order to avoid unbalance load during

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
						stringing of Triple conductor
19	Technical Specification - Section II, Annexure-B	Item - 26	Conductor Lifting Hook 4T	Please provide more information regarding the application of the conductor lifting hook 4T.		Please refer Note of Annexure B "Description and Quantity of items in this Bill of Quantity is indicative and may vary according to the design of ERS towers and it is the responsibility of supplier to furnish the required items for erection and stringing of complete ERS towers". As ERS is non-standard item and varies at vendor level, It

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/ Amendments	PrKTCL Replies
						is bidders responsibility to provide all Items related to ERS and its installation of ERS.
20	Technical Specification for ERS "Section-II"	2.7.2(Page-6 of 22)	a) Composite long rod suspension insulator (3.5m length, 160KN tensile strength)b) Composite long rod line post insulator (3.5m length, minimum 90mm core dia, 120KN tensile strength, 90KN compression strength)	Our request is to mention: "Composite long rod suspension insulator (± 3.9 m length, 160KN tensile strength)	As you know, triangle shape insulator assembly is made for each phase on ERS using Long rod suspension insulator & Line post insulator. If we use 3.5m length Line post horizontally then definitely long rod suspension insulator placed inclined in shape will require more length to get connected with ERS tower body. Hence,	The length mentioned in clause 2.7.2 (Page-6 of 22) section -II is for indicative purposes only. Bidders can choose insulator length as per their design requirement considering all electrical clearance.

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/ Amendments	PrKTCL Replies
					Both type of insulators can not be of same length.	
21	Technical Specification for ERS "Section-II"	2.9.3.2 Point-iv (Page-8 of 22)	Wind zone-4 Wind zone 2 2 4		Plz specify which Wind Zone to be followed for 400KV D/C Quad Moose Line, 400KV S/C Quad Moose Line & 400KV D/C Tripple Snowbird Line.	ERS masts to be designed for Wind Zone 4 which is clearly mentioned in clause 2.9.3.2 page 8 of 22, section-2.
22	Technical Specification for ERS "Section-II"	2.9.7.5 (Page-11 of 22)	In addition to the above, computer programme, supplier shall also supply PLS-CADD software package including tower spotting, tower design, mass/pole design modules (1 license) for line design using ERS structures, self-supporting permanent towers, guyed towers etc. including necessary software for thermal	This item is not part of Price Indicative Break up details in Annexure- B of section 2 of Technical Specification. Plz specify if this item is to be quoted or not. If to be quoted, plz add it in Price Indicative Break up details in Annexure- B of section 2 of Technical Specification.	This item usually Power Utility already have in their software bank because this PLS-CADD Software package is for Transmission Line design & Permanent Tower design work. It does not have any relation with ERS design work.	Bidders to follow Sl. No 44 of Indicative Break up details in Annexure- B of Technical Specification : section- 2 "Relevant Software for ERS with Technical support, validation & Update for 5

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/ Amendments	PrKTCL Replies
			ratings of various conductors, sag tension calculations, tower loading trees, tower analysis, foundation loads, tower spotting etc.		<p>For ERS design work we are already going to quote Design Software against Price Indicative Break up details in Annexure- B of section 2 of Technical Specification Sl. No-44.</p> <p>Hence, in our opinion this software package should not be part of Price Indicative Break up details in Annexure- B of section 2 of Technical Specification.</p>	years". Bidders shall consider complete software package which includes spotting, design, stringing chart generation etc. In other terms software which covers all activity for line restoration.
23	Technical Specification for ERS "Section-II" Annexure-B	Sl No. 41	Power Winch (Engine Driven) Capacity 2 Tons Wheel Mounted - 2 Nos.	Power Winch (Engine Driven) Capacity 2 Tons Wheel Mounted - 3 Nos.		Noted: Power Winch (Engine Driven) Capacity 2 Tons Wheel Mounted - 3 Set(s). Please refer the Sl. 41 of

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
						Bid Price Schedule and quantity column "Total Qty to be supplied" of Annexure B of Technical specifications : section -2
24	Technical Specification - Section 2	2.1.3	<p>As per the proposed requirements mentioned in Table 1, the Bidder shall workout for below ERS combination.</p> <p>i) For Hilly Terrain: (All Tension ERS) C2 X 12 = Total 12 ERS</p> <p>ii) For Normal Terrain: (Tension & Suspension ERS) 8 x C1 + 4 x C2 = Total 12 ERS</p>	<p>Please provide existing overhead transmission line tower co-ordinates or DXF or shape file for us to verify the scenarios as requested in the tender document.</p> <p>400 kV Single Circuit Lines - Parbati to Koldam 2X400Kv S/C with Quad Moose Conductor.</p> <p>400 kV Double Circuit Lines - Koldam to Ludhiana 400KV D/C With triple snowbird conductor.</p>		<p>Bidder needs to follow 2.1.3 of Technical specification-Section 2 for finalizing hardware quantities for Hilly and Normal terrains. ERS requirement is already finalized, Bidder's need not to work on Scenarios.</p>

Sl. No.	Name of the Document	Clause no.	Existing Provision/Extract from Specification	Suggested texts for amendments/Query/Clarification Sought	Rationale for the Clarification/Amendments	PrKTCL Replies
25	Technical Specification - Section 2	2.9.4.2	Ph. To Ph. electrical clearance for ERS is mentioned as 8.0 meters.	Is it acceptable if Phase to Phase electrical clearance is considered as 5.8 meter based on our last time technical discussion.		<p>Clause no.2.9.4.2 shall be followed by the bidder.</p> <p>Previous agreement is not for present Bid and shall not be valid here.</p>