



MANGALORE REFINERY & PETROCHEMICALS LTD.

(A subsidiary of Oil & Natural Gas Corpn. Ltd – ONGC) Regd. Office: Kuthethoor P.O., Via: Katipalla, Mangalore-575030 (India) Phone: 0091-824-2270400 Fax: 0091-824-2271239

Addendum-2 dated 13.12.2023

To

Tender No. 3200000752 dated 31.10.2023

For

Main EPC Package For MRPL Refinery Complex **Power System Upgradation Project**

With reference to the above tender, bidders are requested to note the following:

The items, conditions, specification and stipulations of the Bidding Documents and the modified portion to the extent indicated in

a) Annexure-I: Commercial Addendum

b) Annexure-II: Technical Addendum

c) Annexure-III: Reply to Pre-bid Queries

The implications of the same, elsewhere in the tender shall be taken care of appropriately by the bidders. All other terms and conditions, stipulations and specifications of tender shall remain unaltered.

Note:

Bidder shall submit copy of these documents along with the techno-commercial bid, <u>duly signed and</u> **stamped**, as a token of having read and understood the same.





Addendum-2

Annexure-I: Commercial Addendum

SI. No.	Reference Section No./ Clause No.	Addition/Deletion/Modification
1.	Vol. I of II; Page 1 of 490;	The Tender Download End Date & Time shall be read as
	Tender Download End	28.12.2023, 15.00 Hrs
	Date & Time	
	and and	
	Subsequent Addendum-I	
	<u>Dated 28.11.2023</u>	
2.	Vol. I of II; Page 1 of 490;	The Bid Closing Date & Time shall be read as
	Bid Closing Date & Time	28.12.2023, 15.00 Hrs
	<u>and</u>	
	Subsequent Addendum-I	
	Dated 28.11.2023	
3.	Vol. I of II; Page 1 of 490;	The Un-Priced Bid Opening Date & Time shall be read
	Un-Priced Bid Opening	as 28.12.2023, 15.30 Hrs
	Date & Time	
	and and	
	Subsequent Addendum-I	
	<u>Dated 28.11.2023</u>	





Addendum-2

Annexure-II: Technical Addendum

SI. No.	Reference Section No./ Clause No.	Addition/Deletion/Modification	
1.	Vol. II of II; Page 13 of	The following items/activities shall be included in	
	190; Clause no. 2.1.1:	Bidder's scope of work:	
	Electrical Scope of Work	19. Following special tools & equipment shall be	
		supplied at minimum:	
		a) Relay Monitoring Tool (Laptop) for relay	
		programming with required software installed	
		and all hardwares and cables to connect to	
		relays: 1 no. for each make of relay and 2 sets of	
		hardwares. (min configuration: i7 13th Gen	
		Processor, 16 GB RAM, 1 TB Hard Disk SSD,	
		min 14 inch display, with required ports to	
		connect with relay, Windows, MS Office pre	
		installed with relay monitoring software).	
		b) MV Megger (Fluke/Equivalent make of up to 2.	
		kV rating): 2 nos.	
		c) HV Megger (Fluke/Equivalent make of up to 5 k	
		rating): 2 nos.	
		d) <u>Digital Tong Tester (Fluke/Equivalent make) of</u>	
		range of minimum 1000 A: 2 nos.	
		e) <u>Digital micro-amp-meter (Fluke/Equivalent</u>	
		make): 2 nos.	
		f) Multimeter (Fluke/Equivalent make): 10 nos.	
		g) Set of tools with tool bag (spanner set of all	
		type, screw driver set, allen key set, torque	
		wrench, filer, pliers of various sizes, wrench,	
		heavy screw drivers of various sizes etc): 5 set.	





SI. No.	Reference Section No./ Clause No.	Addition/Deletion/Modification
2.	Vol. II of II; Page 53 of 190; Clause no. 5.1.3.12: Plain Cenemt Concrete	h) FRP ladders of approved make (SUMIP FM1000 series or equivalent make) of 4 ft, 6 ft & 10 ft: 2 nos. of each type. i) Godrej make Almirah for keeping drawings & documents: 2 nos. j) Industrial Vacuum Cleaner: 2 nos. The following clauses shall be read as below (Clause no. b) shall remain unchanged): a) 75 mm thick lean concrete of grade 1:2:4 (M15
		nominal mix) shall be provided under all RCC foundations except under base slab of liquid retaining structures where thickness shall be 100 mm instead of 75 mm. c) PCC of grade 1:2:4 (M15 nominal mix) minimum 150 mm thickness shall be provided under all masonry wall foundations.
		d) Plain cement concrete of grade 1:2:4 (M15 nominal mix) of min 40 mm thickness shall be provided as DPC at plinth level of all masonry walls and to be coated with 3 mm thick bitumen emulsion Acrylic based waterproofing compound (2% by weight of cement) shall be mixed in concrete used as dampproof course at plinth level of all masonry walls.
3.	Grid Power Transformers	Grid Power Transformers can have YNyn0 vector group, provided all protection system is updated by bidder in line with this change.





SI. No.	Reference Section No./ Clause No.	Addition/Deletion/Modification
4.	33 kV and 220 kV Gas	The 33 kV Gas Insulated Switchgear (GIS) and 220 kV
	Insulated Switchgear	GIS along with its Local Control Cubicles (LCC) and
	(GIS)	Relay Panels shall have to be designed, engineered,
		supplied, installed, tested and commissioned by the
		respective Original Equipment Manufacturers (OEM).
		The power cabling/connection of all Gas Insulated
		Switchgears shall also be done by the OEM at site.

Tender No.: 3200000752_Addendum-2





Addendum-2

Annexure-III: Reply to Pre-bid Queries

Please refer to the next sheets

Sr. No.	Clause No.	Document Clause	Subject	Queries by Bidder	Replies by Purchaser
1				We would like to propose for using of Manfacure Sand for all civil works including filling. Kindly confirm	Confirmed with M-sand as per IS standard.
2				During the site visit we have noticed that, proposed SWYRD plot have trees of Girth 200-250mm nearly 20 nos on the permiter of the plot to be cut and disposed including roots. We assume that no any forest clearance is required for the same. M/s.MRPL will provide the clearance to remove the same.	Bidder's assumption is correct.
3			Site - Existing earth mat and metal		Bidder to refer to point number 65 in Pre-Bid Queries in Addendum-1.
	Vol-II, Clause No 5.1.3.12 - Page No 53 of 190	Plain cement concrete	Plain cement concrete	As per the technical norms CC 1:2:4 correspondee to nominal mix M15 not M20. Kindly confirm.	Confirmed. Please refer to Addendum-2 in this regard.
5				We assume that seperation barrication for the existing 110kV SWYRD towards proposed 220kV SWYRD will be closed before commencement of work at proposed 220kV SWYRD by M/s.MRPL. Kindly confirm If bidder to consider the same, request M/s.MRPL share the documents/drawings for the same.	Bidder to construct this barrication to segregate the new 220/33 kV S/S area from the existing 110 kV Switchyard area. Please refer to note-15 in the tender drawing for 220/33 kV Substation Layout.
	· '	Offshore - Clause No 6.12, 6.13, 6.14, 6.15, 6.16 - Page No 261 to 271 of 490	Offshore - Clause No 6.12, 6.13, 6.14, 6.15, 6.16 - Page No 261 to 271 of 490	We assume that these cluases are not applicable for the proposed SWYRD work.	Bidder's assumption is correct.
7			Site - SWYRD Drain	We consider our SWYRD storm water drain outfall point outside the fencing area within 5Mtrs. Kindly confirm	Confirmed.
8			Site - Rain water flooding	We understand that, proposed 220kV SWYRD is not prone for flooding and water retaining. Kindly confirm	
9			Soil Investigation Report - Attachment-12: Existing Geotech Report CPP-1&2 (For Reference Only)	confirm	Piling is not envisaged at present. However, as per tender requirement, the Bidder needs to conduct the geotechnical investigation, and the type of civil foundation shall be in line with GTI report/recommendation.
10	Vol-I, Pg. no. 487/490	5	Schedule of Quantities	instead of Dyn11. Since this being industry non standard	We confirm that the Grid Power Transformers can have YNyn0 vector group, provided all protection system is updated by bidder in line with this change.
11	Vol-I, Pg. no. 42/112	268	Pre Bid Reply: ERT	The Earthing Layout provided along with Amendment is Illegible. We kindly request you to provide readable Scan Document of Earthing Layout.	No better copy is available. However, the drawing was only for reference. The existing earth grid is @ 5 m in both directions.
12			Base MVA for losses and impedence	Please confirm base MVA which is to be considered for Impedence and losses	It is mentioned in tender drawing (Z=18% on 60 MVA Base). The Addendum-1 specifies the loss figures.
13			SLD	Since Insulation coordination is to done during detailed Engineering we kindly requesty to conisder GIS LA as on optional unit price. If the same is requied the same shall be brought in Main Price Schedule	Please consider the LA as shown in the tender drawings in your bid.
14	46/112	300	Prebid reply	indicated in the Payment Breakup	Please refer to tender document SP-05.
	Addendum-1, 42/112	269	Prebid reply		Only earthing conductor is existing in the proposed 220/33 kV Substation area.

Sr. No.	Clause No.	Document Clause	Subject	Queries by Bidder	Replies by Purchaser
16			220/33 KV, 60/75MVA grid transformer	As per SLD and Tender specification, vector group Dyn11 for 60/75MVA 220/33KV Transformer, this requirement is very rare in industry andtest set is not available on approved OEM, hence we propose to keep the vector Group YNyn0.Please provide confirmation.	We confirm that the Grid Power Transformers can have YNyn0 vector group, provided all protection system is updated by bidder in line with this change.
17			220/33 KV, 60/75MVA grid transformer	As per Layout& Data sheet HV cable box and LV cable box are shown at 90 Deg. We understand that we can propose HV and LV terminal (Cable box) at opposite /180 deg direction as per layout requirement.	Noted and confirmed.
18			220/33 KV, 60/75MVA grid transformer LOSS	Kindly confirm the base MVA against the mentioned loss.(as per prebid SL no 59)	The base MVA shall be the highest MVA rating of the transformer.
19			Mandatory Spare List	we found that many items mentioned in Spare list (available in tender documents) are not applicable for 33KV/220KV GIS. We will quote only which are applicable for GIS OEM.	Noted and confirmed.
20			Prebid reply and amendment	We have received the Document No. B038-999-16-50-EDB 1001 Rev No. 0 along with prebid reply, in some case there are contradictory in prebid reply and engineering design basis like for battery set etc.In this regard kindly confirm the document pf presedance.	In case there is a direct conflict between two clauses, the tender document scope of work shall prevail.
	Volume-I of II: COMMERCIAL SECTION	Form of tender, clause no. (vii)	Solvency Certificate		Purchaser will prefer for Solvency Certificate as per tender.
	Volume-I of II: COMMERCIAL SECTION		Payment Terms	The supply payments have mentioned has pro-rata basis to assist in the pro-rata basis, the bidder will submit a price breakdown of the supply item upon contract award and these breakdowns will be used for pro-rata supply items billing and payment. Please confirm	Confirmed.
	Volume-I of II: COMMERCIAL SECTION			Please clarify what additional documentation to be submitted along with the bid apart from the declaration by the bidder for percentage of Local Content in the bidder's offer.	Please refer to "NOTICE INVITING TENDER (NIT)" in Volume-I of II.
	Volume-II of II: TECHNICAL SECTION			800mm depth False floor to be provided for LV Switchgear area / Control and Relay Panels area / SAS Panels area / DC Charger and DCDB area / SCADA Room / Operator Room etc.,	The tender documents envisage concrete cable trench inside building also. However, the engineering options shall be finalized by the bidder.

Sr. No.	Clause No.	Document Clause	Subject	Queries by Bidder	Replies by Purchaser
25	Volume-II of II: TECHNICAL SECTION			We reckon that each Transformer (both 220/33KV and 33/33KV) will have a separate Oil collection pit away from the Transformer plinth. Please confirm.'	Please refer to the tender drawing along with its notes.
26	Volume-II of II: TECHNICAL SECTION			We request all civil works and erection of substation and 33 KV cables construction will be made on Pro-rata basis of the contractual Lumpsum amount based on percent completion as agreed between contractor and the MRPL	Please refer to the payment terms in Volume-I of II: Commercial Section.
27	Volume-II of II: TECHNICAL SECTION			including its Control and Relay Panel & SAS. Please clarify and confirm.	Bay 08 shall be supplied under this contract along with its control & relay panels & SAS.
28	Volume-II of II: TECHNICAL SECTION			regarding the number of 33 KV Circuits and the route	For number of 33 kV circuits, please refer to tender SLD or P&M Diagram. For route length, please refer to Volume-II of II, Scope of Work.
29	Volume-II of II: TECHNICAL SECTION			1	For number of 33 kV circuits, please refer to tender SLD or P&M Diagram.
30	Volume-II of II: TECHNICAL SECTION			Regarding LVAC Supply to New Substation, Please provide approximate cable route length from existing Refinery complex / Power supply tapping point.	Approximately 400 m.
31	Volume-II of II: TECHNICAL SECTION			Please clarify, new 33KV adopter cubicle is of AIS type or GIS type.	AIS type.
32	Volume-I 28 of 490	14	Earnest Money Deposit (EMD) of amount Rs. 65,52,000/- in the form of Bank guarantee/ Demand Draft/ NEFT/Online payment.	We request you to kindly consider the option of submitting Bid Security in the form of Bid Securing Declaration in line with Government of India notification and as being followed by other Central / State utilities.	Please follow Tender Conditions.
33	Volume-I 114 of 490	2.1.1.0	Security Deposit: Security Deposit in an amount equivalent to 10% of the Lumpsum Price of the contract.	We refer to the subject clause regarding submission of Performance Security for a value of 10% of the contract value. We request you to kindly consider reducing the same to 3% in line with the Government of India notification and the recent tenders floated by major Central / State utilities.	Please follow Tender Conditions. (The rule has been revised recently)
34	Volume-I 318 of 490	14.11	Price Basis Prices quoted by the bidder shall remain firm and fixed for the entire period of execution of the contract.	We request you to kindly consider the applicability of IEEMA Price Variation for all major supplies and installation including civil works in line with the practice being followed by other Central / State utilities.	Please follow Tender Conditions.
35	Volume-I 382 of 490	2.0	Mobilisation Advance shall be paid recoverable interest bearing Mobilization Advance up to a maximum of 10% (Ten Percent) of awarded Contract Value	We request you to kindly consider offering interest free mobilisation advance. This will help in better cah flow management. Kindly confirm.	Please follow Tender Conditions.

Sr. No.	Clause No.	Document Clause	Subject	Queries by Bidder	Replies by Purchaser
36	Volume-II 149 of 362	17.2.3		years for all equipments in line with the Guide lines issued by CEA and as being followed by most of the Central / state Power utilities. Kindly also confirm that no repetition of type tests is required in case there is no change in design.	CEA guidelines are acceptable.
37	Volume-I 382-388 of 490	1.0	Annexure - III to Special Conditions of Contract Payment Terms for contracts on EPC LSTK basis	We refer to the Terms of payment mentioned in the documents. We understand that 100% GST shall be released along with the progressive payments. Kindly confirm our understanding is correct.	Bidder's understanding is correct.
38		General	Labour Cess	We understand that Labour cess shall be applicable only on the Services portion and not on the complete contract value. Kindly confirm our understanding is correct.	Shall be as per prevailing laws.
39		General	Adjustment Of Advance Bank Guarantee	We understand that the Advance bank guarantee shall allowed to be adjusted / reduced every quarter. Kindly confirm our understanding is correct.	Please follow Tender Conditions.
40	P.g.no:8/490	5.0		We Kindly request to revise/Amend the BQC as below Notes: 1) "Similar work" is defined as experience of having carried out Engineering, Procurement, Construction, Erection, Testing and Commissioning of Substation/Switchyard having system voltage of 220 kV or above (GIS SS having minimum 6 Bays) . Statisfactory Performance for 2 Years to be submitted. 2. Work orders submitted and satisfying similar work for Past experience criteria of BQC shall be of PSU or Govt department or Public Ltd during the last 7 years ending last day of the month previous to the one in which tender was invited.	

Sr. No.	Clause No.	Document Clause	Subject	Queries by Bidder	Replies by Purchaser
41				aceptance, in case of delay in commissioning for reasons not attributable to Bidder from 30 days of Mechanical Completion. A) Request to release Final Payment against submission of	No new clause is acceptable, please follow Tender conditions. (A) If Commissioning and performance test is delayed beyond 5 months (as per tendered time schedule) from Mechanical Completion for reasons not attributable to bidder, payment towards these milestones will be released against submission of BG of equivalent amount valid for defect liability period as stipulated in the tender.
42	P.g.no:26/490	12.0	· · · ·	We kindly request to consider Price variation on Transformer as per IEEMA formula. The base month shall be 1 month prior to Bid Submission	Please follow Tender Conditions.
43	P.g.no:382/490	2.0		We kindly request to consider Interest Free Mobilization Advance as per Industry Standardr	Please follow Tender Conditions.