



Bharat Heavy Electricals Limited

(A Govt. of India Undertaking)

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CORRIGENDUM - 04 TO NIT NO-63418

Subject: Corrigendum-4 to Tender enquiry for Pre-bid Tie up for Supply & Services of 400kV GIS for POWERGRID Khavda-2 Project.

Project : POWERGRID Khavda-2 PROJECT
Equipment / Item : SUPPLY & SERVICES OF 400 kV GIS.
Enquiry No/Date : NIT63418_61Q2200230 dated 28.02.2022
BHEL NIT NO : 63418
Original Tender due date : 07.03.2022

The Corrigendum is being issued by BHEL TBG for incorporation of following:

TECHNICAL CORRIGENDUM - 2 (KHAVADA_KPS2)		Dated 25 March 2022
SL	DESCRIPTION	REMARKS
2	ANNEXURE_BOQ_KHAVADA_KPS2 Rev.03	BILL OF QUANTITY REVISED, THE CHANGES MADE HAS BEEN HIGHLIGHTED BLUE.
	SPECIAL NOTE	All technical clarification(s) for GIS published by m/s POWERGRID with reference to subject project will also valid for this technical specification

Revised Price bid format is also being furnished with this corrigendum.

All other terms and conditions for this tender enquiry shall remain unchanged.

Bidder to ensure submission of offer on or before due i.e. **28.03.2022**.

Note: Tender ID in CPP Portal is **2022_BHEL_8882_1**.

Thanking you

Vineet Gupta
BHEL TBG, NOIDA

TECHNICAL CORRIGENDUM - 2 (KHAVADA_KPS2)**dated 25 March 2022**

SL	DESCRIPTION	REMARKS
2	ANNEXURE_BOQ_KHAVADA_KPS2 Rev.03	BILL OF QUANTITY REVISED, THE CHANGES MADE HAS BEEN HIGHLIGHTED BLUE.

SPECIAL NOTE

ALL TECHNICAL CLARIFICATION(S) FOR GIS PUBLISHED BY M/S POWERGRID WITH REFERENCE TO SUBJECT PROJECT WILL ALSO VALID FOR THIS TECHNICAL SPECIFICATION

SL	DESCRIPTION	UNIT	QTY	REMARKS
1	SUPPLY- GIS : 400KV, 63KA FOR 1S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS			
1.01	SUPPLY- GIS : 420KV, 63KA FOR 1S, 3150A, SF6 GIS AUXILIARY BUS MODULE FOR SPARE TRANSFORMER	SET	1	Details as per Section-1_Annexure-IV of technical specification.
1.02	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS BUS REACTOR FEEDER BAY	SET	2	Details as per Section-1_Annexure-IV of technical specification.
1.03	SUPPLY- GIS : 400KV, 63KA FOR 1S, 4000A, GIS BUS BAR MODULE	SET	4	Details as per Section-1_Annexure-IV of technical specification.
1.04	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS TIE BAY WITHOUT PIR	SET	4	Details as per Section-1_Annexure-IV of technical specification.
1.05	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS ICT FEEDER BAY	SET	4	Details as per Section-1_Annexure-IV of technical specification.
1.06	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS LINE FEEDER BAY WITHOUT PIR	SET	3	Details as per Section-1_Annexure-IV of technical specification.
1.07	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS LINE FEEDER BAY WITH PIR	SET	1	Details as per Section-1_Annexure-IV of technical specification.
1.08	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS TIE BAY WITH PIR	SET	1	Details as per Section-1_Annexure-IV of technical specification.
1.09	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, GIS SWITCHABLE LINE REACTOR BAY	SET	1	Details as per Section-1_Annexure-IV of technical specification.
1.10	SUPPLY- GIS : 400KV, GIS BUS SECTIONALISER MODULE	SET	2	Details as per Section-1_Annexure-IV of technical specification.
1.11	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3000A, SINGLE PHASE GAS INSULATED BUS DUCT OUTSIDE GIS HALL (INCLUDING SF6 GAS, SUPPORT STRUCTURE & HARDWARES)	MTR	900	GIB outside the GIS Hall wall shall be considered for mode of measurement. Inside GIB shall be considered as part of respective Feeder Bay and cost of the same shall be deemed inclusive.
1.12	SUPPLY- GIS : 400KV, 63KA FOR 1S, 3150A, SINGLE PHASE SF6 TO AIR BUSHING (INCLUDING SUPPORT STRUCTURE & HARDWARES)	SET	28	Details as per Section-1_Annexure-IV of technical specification.

SL	DESCRIPTION	UNIT	QTY	REMARKS
1.13	SUPPLY- GIS : 400KV, CONTROLLED SWITCHING DEVICE (CSD) FOR GIS CB	SET	11	Controlled Switching Device for 3-ph Circuit Breaker
1.14	SUPPLY- GIS : SF6 GAS REQUIRED FOR PLACING GIS INTO SUCCESSFUL OPERATION	Lot	1	Complete in all respect in compliance to technical specification and requirements. Excluding SF6 Gas for GIB which is included in the scope of respective BOQ item.
1.15	SUPPLY- GIS : STRUCTURE MATERIAL INCLUDING FOUNDATION BOLTS, EMBEDDED ITEMS, RAILS AND/ OR OTHER MATERIALS ETC.	Lot	1	Complete in all respect in compliance to technical specification and requirements. Excluding support structure & hardware material for GIB which is included in the scope of respective BOQ item. In the event of changes in present scope, payment shall be made on pro-rata basis of number of circuit breaker bays only.
1.16	SUPPLY- GIS : EARTHING MATERIALS INCLUDING HIGH FREQUENCY EARTHING (AS APPLICABLE)	Lot	1	
1.17	SUPPLY- GIS : TOOLS AND TACKLES	SET	1	Non returnable Tools and Tackles for 400kV GIS. Bidder to provide detail list along with the bid.

3	SERVICES- GIS : 400KV, 63KA FOR 1S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS			
3.01	SERVICES- GIS : 400KV, SUPERVISION OF ERECTION OF GIS	LOT	1	Supervision of erection of 400kV GIS, complete in all respect including LCC. It also includes supervision of unloading & verification of materials for proper storage at site. In the event of changes in scope, payment shall be made on pro-rata basis of circuit breaker bays only.
3.02	SERVICES- GIS : 400KV, SUPERVISION OF ERECTION OF GAS INSULATED BUS DUCT	MTR	900	400kV, 3000A Single-phase Busduct.
3.03	SERVICES- GIS : 400KV, SUPERVISION OF ERECTION OF SF6 TO AIR BUSHING	SET	28	Single phase SF6 Bushing.
3.04	SERVICES- GIS : 400KV, SUPERVISION OF ERECTION OF CSD COMPLETE IN ALL RESPECT	SET	11	

SL	DESCRIPTION	UNIT	QTY	REMARKS
3.05	SERVICES- GIS : 400KV, TESTING & COMMISSIONING OF GIS	LOT	1	Testing and commissioning of complete 400kV GIS system is to be executed by contractor. All testing instruments, kits, T&P etc. are to be arranged by contractor on returnable basis. Please refer relevant section of technical specification for details. (Testing & commissioning of GIB, SAB & CSD are break-up separately in following BOQ Line items)
3.06	SERVICES- GIS : 400KV, TESTING & COMMISSIONING OF GAS INSULATED BUS DUCT	MTR	900	400kV, 2000/ 3000A Single-phase Busduct.
3.07	SERVICES- GIS : 400KV, TESTING & COMMISSIONING OF SF6 TO AIR BUSHING	SET	28	Single phase SF6 Bushing.
3.08	SERVICES- GIS : 400KV, TESTING & COMMISSIONING OF CSD	SET	11	
3.09	SERVICES- GIS : 400KV, FINAL SUCCESSFUL HV/ POWER FREQUENCY TESTING OF GIS INCLUDING ARRANGING OF HV TEST KIT ALONG WITH OPERATOR	LOT	1	Carrying out successful HV/ Power Frequency Testing of GIS as per IEC including Arrangement of HV Test kit (on returnable basis) shall be in scope of bidder, which includes charges HV test kit with operator, accessories & tools required for completion of HV testing. Bays may be commissioned separately.
3.10	SERVICES- GIS : INSULATION CO-ORDINATION STUDIES FOR GIS SYSTEM	LOT	1	Including VFTO report.
4	SPARES- GIS : REFERENCE UNIT PRICE FOR ADDITION / DELETION OF SUPPLY ITEMS (Unit Prices of Individual Equipment included here or in mandatory spares are required for any Addition/Deletion of Equipment and replacement of damaged items. Vendor to ensure that the unit prices have a logical relationship with prices of assemblies in main items. Quoting for unit prices is mandatory and shall be considered for evaluation)			
4.01	SPARES- GIS : 400KV, 63KA FOR 1S, 4000A, SINGLE PHASE BUS BAR	MTR	1	Complete in all respect.
4.02	SPARES- GIS : 400KV, GIS METALLIC ENCLOSURE	KG	50	
4.03	SPARES- GIS : 400KV, EXPANSION BELLOWS/ JOINTS	Set	1	For Single Phase of any type and any rating.
4.04	SPARES- GIS : 400KV, TEE BEND	Set	1	For Single Phase of any type and any rating.
4.05	SPARES- GIS : 400KV, ANGLE BEND (135°)	Set	1	For Single Phase of any type and any rating.
4.06	SPARES- GIS : 400KV, L-BEND	Set	1	For Single Phase of any type and any rating.

SL	DESCRIPTION	UNIT	QTY	REMARKS
5	SERVICES- GIS : REFERENCE UNIT PRICE FOR ADDITION / DELETION OF SERVICES (Unit Prices of Individual services included here are required for any Addition/Deletion of Equipment and replacement of damaged items. Vendor to ensure that the unit prices have a logical relationship with prices of assemblies in main items. Quoting for unit prices is mandatory and shall be considered for evaluation)			
5.01	SERVICES- GIS : 400KV, REF. UNIT PRICE OF GIS INDIVIDUAL ITEM/ EQUIPMENT - SERVICES FOR SUPERVISION OF ERECTION OF GIS	MANDAY	10	Charges for repetition of services - (if required due to reasons not attributed to the contractor) This item will be executed only if repetition of services is required by BHEL.
5.02	SERVICES- GIS : 400KV, REF. UNIT PRICE OF GIS INDIVIDUAL ITEM/ EQUIPMENT - SERVICES FOR TESTING & COMMISSIONING OF GIS	MANDAY	10	Charges for repetition of services - (if required due to reasons not attributed to the contractor) This item will be executed only if repetition of services is required by BHEL.
5.03	SERVICES- GIS : 400KV, REF. UNIT PRICE OF GIS INDIVIDUAL ITEM/ EQUIPMENT - HIRING CHARGES OF HV TEST KIT WITH OPERATOR	LOT	1	Additional HV test kit charges including charges of operator, HV test kit, accessories & tools required for completion of HV test (Dielectric Test after installation of GIS). This item is executed only if repetition/ additional HV Test is required by BHEL i.e. post successful commissioning of GIS. (if required due to reasons not attributed to the contractor)
5.04	SERVICES- GIS : TRAINING FOR GIS AT SITE	DAY	1	
5.05	SERVICES- GIS : TRAINING FOR GIS AT MANUFACTURER WORKS	DAY	1	