

# **Bharat Heavy Electricals Limited**

(A Govt. of India Undertaking) Transmission Business Group Materials Management, 5th Floor, Plot No.25, Sector-16A, Noida, Uttar Pradesh, PIN No: 201301 Phone: 0120-6748543, Email: gaurav.agarwal@bhel.in

## **CORRIGENDUM - 02 TO NIT NO-91739**

Dated 10-06-2025

Subject: Corrigendum-02 to Tender enquiry for Pre-Bid Tie up with the GIS OEM for Supply & Services of 66KV GIS PACKAGE for BINA PETCHEM AND REFINERY EXPANSION PROJECT (BPREP) OF M/S BHARAT PETROLEUM CORPORATION LIMITED (BPCL).

**Proiect** : 66kV GIS for Bina Petchem of BPCL

Equipment / Item : Supply & Services of 66kV GIS & Its associated equipment

Enquiry No/Date : Enquiry No. 61Q2600123 Dated 30-05-2025

BHEL NIT NO : 91739 Original Tender due date : 10-06-2025

This Corrigendum is issued by BHEL TBG against above mentioned NIT/ enquiry for-

-Issuance of Technical Corrigendum Rev-02 along with Technical clarifications (enclosed). Due to change in BOQ, Revised price bid format (unpriced) is also enclosed and same need to be followed for bid submission.

-Due date extension upto 13-06-2025.

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

Bidder to ensure submission of offer on or before due date.

Note: Tender ID on CPP Portal is 2025\_BHEL\_49057\_1.

Thanking you

-----Sd/-----Gaurav Agarwal BHEL TBG, NOIDA Ref. No. Technical Corrigendum-02

Pre-Bid Tie up for,

Project: 220kV GIS Package of BINA PETCHEM & REFINERY EXPANSION PROJECT (BPREP) of M/S BHARAT PETROLEUM CORPORATION

LIMITED (BPCL)

Package/ Item: 66kV Gas Insulated Switchgear (GIS) with its accessories

Date: 09.06.2025

SI. No.	Volume/ Section/ Clause	Volume/ Section/ Clause as Existing	Volume/ Section/ Clause as Amended/ Added in Technical Corrigendum-01
1	Technical Specification		Section 1.5 (Annexure- BOQ REV01) is revised as Section 1.5 (Annexure- 66kV GIS BOQ REV02).
2			Pre-bid clarifications from bidders are also attached.

1. The changes/ revision are marked/ highlighted in yellow.

Note:

2. Amendment/ addendum/ clarification/ corrigendum issued herein shall form part of Technical Specification.

Bidders to please note that amendment/addendum/ clarification/ corrigendum issued shall supersede the respective Volume/ Section/ Clause of Technical Specification Document to the extent for the Volume/ Section/ Clause or part thereof the amendment is issued.

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SI. No.	Item Description	Unit	Qty.	Remarks
1.0	SUPPLY- GIS: 66kV, 40KA FOR 3S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS (Two/ Double bus scheme)  66kV GIS			
1.01	GIS SUPPLY: 66kV, 3150A, 40kA, SF6 GIS BUS BAR MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING	SET	4	
1.02	GIS SUPPLY: 66kV, 40kA, SF6 BUS PT/ VT BAY MODULE WITH BUS EARTH SWITCH (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	4	66KV PT/ VT BAY MODULE shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism.  (b) 1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism.  (c) 3 NO- 1 phase multi winding Voltage Transformer with residual Current Circuit Breaker arrangement in addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable shall be included, however, Online PD Monitoring System, Local Control Cubicle and End Terminations, if applicable shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.  Please refer section-2 (TS for EHV GIS)- Technical Specification.
1.03	GIS BAY SUPPLY: 66kV, 3150A, 40 kA, SF6 INCOMING GIS TRANSFORMER FEEDER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	3	66kV INCOMING GIS TRANSFORMER FEEDER BAY MODULE shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism  (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism.  (c) 1 SET- 1 NO x3 phase Disconnector without Maintenance Grounding Switch, complete with operating mechanism.  (d) 1 SET- 1 NO x3 phase Disconnector without Maintenance Grounding Switch, complete with operating mechanism.  (e) £3 NO - 1 phase multi ratio Current Transformer.  In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately.  GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.  Please refer section-2 (TS for EHV GIS)- Technical Specification.
1.04	GIS BAY SUPPLY: 66kV, 3150A, 50kA, SF6 GIS BUS COUPLER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	2	66kV GIS BUS COUPLER BAY MODULE shall include following but not limited to, (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism. (c) 6 NO- 1 phase multi ratio Current Transformer. In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System (OPMS), Local Control Cubicle (LCC) and End Terminations, if applicable shall be covered separately. GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc. Please refer section-2 (TS for EHV GIS)- Technical Specification.
1.05	GIS BAY SUPPLY: 66kV, 3150A, 40kA, SF6 GIS BUS SECTIONALISER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	2	66kV GIS BUS SECTIONALIZAER BAY MODULE shall include following but not limited to, (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism. (c) 6 NO- 1 phase multi ratio Current Transformer. In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System (OPMS), Local Control Cubicle (LCC) and End Terminations, if applicable shall be covered separately. GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc. Please refer section-2 (TS for EHV GIS)- Technical Specification.
1.06	GIS BAY SUPPLY: 66kV, 3150A, 50 kA, SF6 OUTGOING GIS TRANSFORMER FEEDER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	2	66kV GIS TRANSFORMER FEEDER BAY MODULE shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism  (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism.  (c) 1 SET- 1 NO x3 phase Disconnector without Maintenance Grounding Switch, complete with operating mechanism.  (d) 1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism.  (e) 6/3 NO - 1 phase multi ratio Current Transformer.  (f) 3 NO - Cable connection module suitable upto 1Rx1000sqmm XLPE Cable. (additional requirement, if any shall be payable as per other line item) In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately.  GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.  Please refer section-2 (TS for EHV GIS)- Technical Specification.
1.07	GIS BAY SUPPLY: 66kV, 3150A, 50kA, SF6 OUTGOING GIS SPARE TRANSFORMER FEEDER BAY (FULLY EQUIPPED) MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	28	66kV OUTGOING GIS SPARE FEEDER BAY MODULE shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism  (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism.  (c) 1 SET- 1 NO x3 phase Disconnector without Maintenance Grounding Switch, complete with operating mechanism.  (d) 1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism.  (e) 64 3 NO- 1 phase multi ratio Current Transformer.  (f) 3 NO- Cable connection module suitable upto 1Rx1000sqmm XLPE Cable. (additional requirement, if any shall be payable as per other line item) In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately.  GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.  Please refer section-2 (TS for 66kV GIS)- Technical Specification.

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SI. No.	Item Description	Unit	Qty.	Remarks
1.08	GIS BAY SUPPLY: 66kV, 3150A, 40kA, SF6 OUTGOING GIS SPARE TRANSFORMER FEEDER BAY (FULLY EQUIPPED) MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	SET	1	66kV OUTGOING GIS SPARE FEEDER BAY MODULE shall include following but not limited to, (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism (b) 2 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism. (c) 1 SET- 1 NO x3 phase Disconnector without Maintenance Grounding Switch, complete with operating mechanism. (d) 1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism. (e) £4 3 NO- 1 phase multi ratio Current Transformer. (f) 3 NO- Cable connection module suitable upto 1Rx1000sqmm XLPE Cable. ( additional requirement, if any shall be payable as per other line item) In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately. GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc. Please refer section-2 (TS for 66kV GIS)- Technical Specification.
1.09	GIS SUPPLY: 66KV, 4/3 PHASE SURGE ARRESTER WITH SURGE COUNTER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	NO	38	Please refer section-2 (TS for 66kV GIS)- Technical Specification. It is considered for INCOMING BAYS & BUS BAR MODULE only.
1.10	GIS SUPPLY: 66kV, 1/3 PHASE CABLE CONNECTION MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	NO	9	Please refer section-2 (TS for 66kV GIS)- Technical Specification. This is an optional item and shall be used, as per requirement. This shall suitable upto 1Rx1000sqmm XLPE Cable. (additional requirement, if any shall be payable as per other line item)
1.11	GIS SUPPLY: 66kV, 1/3 PHASE VOLTAGE TRASNFORMER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	NO	1	Please refer section-2 (TS for 66kV GIS)- Technical Specification. This is an optional item and shall be used, as per requirement.
1.12	SUPPLY- GIS: 66KV, 3150A, #3 PHASE GAS INSULATED BUS DUCT (INCLUDING SF6 GAS, STRUCTURE WITH HARDWARES AND EARTHING MATERIALS)	MTRS	30	Please refer section-2 (TS for 66kV GIS)- Technical Specification.
1.13	GIS SUPPLY: 66KV, 3150, 1 PHASE SF6 TO OIL BUSHING (POLYMER) (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	NO	9	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
1.14	GIS SUPPLY: LOCAL CONTROL CUBICLES FOR GIS	SET	38	Please refer section-2 (TS for 66kV GIS)- Technical Specification. It is considered for ALL BAYS only.
1.15	GIS SUPPLY: ONLINE PARTIAL DISHCARGE (PD) MONITORING SYSTEM	SET	4	Please refer section 2 (TS for 66kV GIS) Technical Specification.
	66kV GIS- IBP			
1.16	GIS SUPPLY: 66 KV, 630A, 40KA, SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS  GIS SUPPLY: 66 KV, 630A, 40KA, SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	NO NO	26	66kV SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism  (b) 1 SET- 1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism.  (c) 1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism.  (e) 6 NO- 1 phase multi ratio Current Transformer.  (f) 6 NO- Cable connection module suitable upto 1Rx1000sqmm XLPE Cable. ( additional requirement, if any shall be payable as per other line item)  In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately.  GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.  Please refer section-2 (TS for 66kV GIS)- Technical Specification.  66kV SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER shall include following but not limited to,  (a) 1 SET- 1 NO x3 phase Circuit Breaker, complete with operating mechanism
1.18	GIS SUPPLY: 66kV, #/ 3 PHASE CABLE CONNECTION MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING	NO	18	(b) 1 SET-1 NO x3 phase Disconnector with Maintenance Grounding Switch, complete with operating mechanism. (c) 1 SET-1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism. (e) 6 NO-1 phase multi ratio Current Transformer. (f) 6 NO- Cable connection module suitable upto 1Rx1000sqmm XLPE Cable. (additional requirement, if any shall be payable as per other line item) In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if applicable shall be covered separately. GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc. Please refer section-2 (TS for 66kV GIS)- Technical Specification.  Please refer section-2 (TS for 66kV GIS)- Technical Specification. This is an optional item and shall be used, as per requirement. This shall
1.19	GIS SUPPLY: LOCAL CONTROL CUBICLES FOR GIS IBP	SET	28	Please refer section-2 (TS for 66kV GIS)- Technical Specification.
1.20	GIS SUPPLY: 66KV, #3 PHASE SURGE ARRESTER WITH SURGE COUNTER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	NO	28	It is considered for ALL BAYS only.  Please refer section-2 (TS for 66kV GIS)- Technical Specification.  It is considered for INCOMING BAYS & BUS BAR MODULE only.
2.0	SUPPLY- GIS: SPECIAL TOOLS AND TESTING & MAINTENANCE INSTRUMENTS AS PER TS			
2.01	GIS SUPPLY: 66kV GIS- ONLINE PORTABLE SF6 GAS FILLING AND	NO	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.02	GIS SUPPLY: 66kV GIS- HANDLE FOR DISCONNECTOR SWITCH DRIVE	NO	4	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.03	GIS SUPPLY: 66kV GIS- HANDLE FOR EARTHING SWITCH DRIVE	NO	4	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.04	GIS SUPPLY: 66kV GIS- PRE SELECTION/ MECHANICAL KEY GIS SUPPLY: 66kV GIS- POWER CABLE TERMINATION KIT ALONG WITH PLUG AND SOCKET (R, Y, B PHASES)	NO SET	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.  Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.06	GIS SUPPLY: 66kV GIS- TRIPPING COIL	NO	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.07	GIS SUPPLY: 66kV GIS- CLOSING COIL	NO	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.08	GIS SUPPLY: 66kV GIS- CAPACITIVE TYPE VOLTAGE DETECTORS	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.09	GIS SUPPLY: 66kV GIS- CONTROL FUSES/ MCB (1 SET= 10 NO OF EACH RATING & TYPE)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.10	GIS SUPPLY: 66kV GIS- DENSITY MONITORING DEVICE (1 SET= 2 NO	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.

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SI. No.	Item Description	Unit	Qty.	Remarks
2.11	GIS SUPPLY: 66kV GIS- INDICATING LAMP COVERS (1 SET= 5 NO OF	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.12	GIS SUPPLY: 66kV GIS- INDICATING LAMPS (1 SET= 20% OR 3 NO (MIN), WHICHEVER IS MORE)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.13	GIS SUPPLY: 66kV GIS- PORTABLE SF6 GAS LEAKAGE DETECTOR	NO	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.14	GIS SUPPLY: 66kV GIS- ETHERNET SWITCH (1 SET= 1 NO OF EACH	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.15	GIS SUPPLY: 66kV GIS- PRESSURE GAUGE (1 SET= 2 NO OF EACH	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.16	GIS SUPPLY: 66kV GIS- SF6 GAS ANALYSER	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.17	GIS SUPPLY: 66kV GIS- PORTABLE PARTIAL DISCHARGE (PD) MONITORING SYSTEM (1 SET= 1 NO)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
	66kV GIS- IBP			
2.18	GIS SUPPLY: 66kV GIS IBP- ONLINE PORTABLE SF6 GAS FILLING AND	NO	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.19	GIS SUPPLY: 66kV GIS IBP- HANDLE FOR DISCONNECTOR SWITCH	NO	4	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.20	GIS SUPPLY: 66kV GIS IBP- HANDLE FOR EARTHING SWITCH DRIVE	NO	4	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.21	GIS SUPPLY: 66kV GIS IBP- PRE SELECTION/ MECHANICAL KEY	NO	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.22	GIS SUPPLY: 66kV GIS IBP- POWER CABLE TERMINATION KIT ALONG WITH PLUG AND SOCKET (R, Y, B PHASES)	SET	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.23	GIS SUPPLY: 66kV GIS IBP- TRIPPING COIL	NO	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.24	GIS SUPPLY: 66kV GIS IBP- CLOSING COIL	NO	2	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.25	GIS SUPPLY: 66kV GIS IBP- CAPACITIVE TYPE VOLTAGE DETECTORS	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.26	GIS SUPPLY: 66kV GIS IBP- CONTROL FUSES/ MCB (1 SET= 10 NO OF EACH RATING & TYPE)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.27	GIS SUPPLY: 66kV GIS IBP- DENSITY MONITORING DEVICE (1 SET= 2	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.28	GIS SUPPLY: 66kV GIS IBP- INDICATING LAMP COVERS (1 SET= 5 NO	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.29	GIS SUPPLY: 66kV GIS IBP- INDICATING LAMPS (1 SET= 20% OR 3 NO (MIN), WHICHEVER IS MORE)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.30	GIS SUPPLY: 66kV GIS IBP- PORTABLE SF6 GAS LEAKAGE DETECTOR	NO	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.31	GIS SUPPLY: 66kV GIS IBP- ETHERNET SWITCH (1 SET= 1 NO OF EACH	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.32	GIS SUPPLY: 66kV GIS IBP- PRESSURE GAUGE (1 SET= 2 NO OF EACH	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.33	GIS SUPPLY: 66kV GIS IBP- SF6 GAS ANALYSER	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.
2.34	GIS SUPPLY: 66kV GIS IBP- PORTABLE PARTIAL DISCHARGE (PD) MONITORING SYSTEM (1 SET= 1 NO)	SET	1	Please refer section-2 (TS for 220kV GIS)- Technical Specification.

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SI. No.	Item Description	Unit	Qtv.	Remarks
3.0	SPARES- GIS: 66KV, 40KA FOR 3S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS			
3.01	GIS SPARES: RECOMMENDED SPARES FOR 2 YEARS OF NORMAL OPERATION AND MAINTENANCE	SET	1	
4.0	SUPPLY- GIS: REFERENCE UNIT PRICE FOR ADDITION/ DELETION OF SUPPLY ITEMS (Unit Prices of Individual Equipment included here or in manadatory spares are required for any Addition/Deletion of Equipment and replacement of damaged items. Bidder 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	SUPPLY- GIS: SPARES: 66KV, OPERATING MECHANISM FOR CIRCUIT BREAKER COMPLETE IN ALL RESPECT	SET	1	
4.02	SUPPLY- GIS: SPARES: 66KV, OPERATING MECHANISM FOR DISCONNECTOR COMPLETE IN ALL RESPECT	SET	1	
4.03	SUPPLY- GIS: SPARES: 66KV, OPERATING MECHANISM FOR MAINTENANCE EARTHING SWITCH COMPLETE IN ALL RESPECT	SET	1	
4.04	SUPPLY- GIS: SPARES: 66KV, OPERATING MECHANISM FOR FAST ACTING/ HIGH SPEED GROUNDING SWITCH COMPLETE IN ALL	SET	1	
4.05	SUPPLY- GIS: SPARES: 66KV, MAINTENANCE EARTHING SWITCH COMPLETE IN ALL RESPECT	SET	1	
4.06	SUPPLY- GIS: SPARES: 66KV, FAST ACTING/ HIGH SPEED GROUNDING SWITCH COMPLETE IN ALL RESPECT	SET	1	
4.07	SUPPLY- GIS: SPARES: 66KV, SINGLE/ THREE PHASE BUS BAR	MTRS	1	Complete in all respect.
4.08	SUPPLY- GIS: SPARES: 66KV, GIS METALLIC ENCLOSURE	KGS	50	
4.09	SUPPLY- GIS: SPARES: 66KV, EXPANSION JOINTS	SET	1	1set= 1 nos. of each type and each rating.
4.10	SUPPLY- GIS: SPARES: 66KV, FLEXIBLE CONNECTIONS	SET	1	1set= 1 nos. of each type and each rating.
4.11	SUPPLY- GIS: SPARES: 66KV, BARRIER INSULATOR	SET	1	1set= 1 nos. of each type and each rating.
4.12	SUPPLY- GIS: SPARES: 66KV, NON-BARRIER INSULATOR	SET	1	1set= 1 nos. of each type and each rating.
4.13	SUPPLY- GIS: SPARES: 66KV, GAS SEALS	SET	1	1set= 1 nos. of each type and each rating.
4.14	SUPPLY- GIS: SPARES: 66KV, GAS DENSITY MONITOR SWITCH	SET	1	1set= 1 nos. of each type and each rating.
4.15	SUPPLY- GIS: SPARES: 66KV, GAS PRESSURE SWITCH	SET	1	1set= 1 nos. of each type and each rating.
4.16	SUPPLY- GIS: SPARES: 66KV, TEE BEND	SET	1	1set= 1 nos. of each type and each rating.
4.17	SUPPLY- GIS: SPARES: 66KV, ANGLE BEND	SET	1	1set= 1 nos. of each type and each rating.
4.18	SUPPLY- GIS: SPARES: 66KV, L-BEND	SET	1	1set= 1 nos. of each type and each rating.
4.19	SUPPLY- GIS: SPARES: 66KV, VOLATGE DETECTORS	SET	1	1set= 1 nos. of each type and each rating.

ANNEXURE BOQ 66kV GIS SERVICE BPCL Bina REV No: 02 09.06.2025

SI. No.	Description	Unit	Quantity	Remarks
5.0	SERVICES- GIS: 66KV, 40KA FOR 3S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS			
	66kV GIS			
5.01	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF GIS  SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 4/3	Bays	38	Supervision of erection of GIS with main bus including BUS VT Bays, complete as per TS in all respect including LCC and its accessories. It also includes verification of materials for proper storage at site for final storage. Earthing, SF6 Gas Filing works, Internal Cabling from GIS to LCC, including Structure Works are covered under this item. Surge Arrester, Voltage Transformer, Cable Connection Module are not covered in this BOQ item.
5.02	PHASE SURGE ARRESTER WITH SURGE COUNTER	SET	38	Supervision of erection of Surge Arrester complete as per TS in all respect. Earthing, SF6 Gas Filing works, Internal Cabling with tray work, including Structure Works are covered under this item.
5.03	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 4/3 PHASE CABLE CONNECTION MODULE	NO	40	Supervision of erection of Additional Cable Connection Module complete as per TS in all respect. Earthing, SF6 Gas Filing works, Internal Cabling with tray work, including Structure Works are covered under this item.
5.04	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 4/3 PHASE GAS INSULATED BUS DUCT	MTR	30	Supervision of erection of GIB complete as per TS in all respect. GIB shall be considered from first equipment of GIS. Earthing, SF6 Gas Filing works, Internal Cabling with tray work including Structure Works are covered
5.05	SERVICES- 220kV GIS: SUPERVISION OF ERECTION OF 1 PHASE SF6 TO OIL BUSHING (POLYMER)	SET	9	Supervision of erection of SF6 to Oil Bushing complete as per TS in all respect. Earthing, SF6 Gas Filing works, Internal Cabling with tray work, including Structure Works are covered under this item.
5.06	SERVICES- 66kV GIS: TESTING & COMMISSIONING OF GIS	Bays	38	Testing and commissioning of complete GIS system including main bus, LCC and associated system (LA, VT, CSD, Cable Connection Module etc.) is to be executed by bidder. All the special testing instruments, kits, T&P etc. are to be arranged by bidder on returnable basis. Please refer relevant section of technical specification for details.
5.07	SERVICES- 66kV GIS: FINAL SUCCESSFUL HV/ POWER FREQUENCY TESTING OF GIS INCLUDING ARRANGING OF HV TEST KIT ALONG WITH OPERATOR	Bays	38	Carrying out successful HV/ Power Frequency Testing of GIS as per IEC including Arrangement of HV Test kit with operator (on returnable basis) shall be in scope of bidder, which includes charges of HV test kit with operator, accessories & tools required for completion of HV testing. The quoted price shall include GIS bays including Main Bus, GIB, SAB/SOB and other common items as per TS complete in all respect. In this BOQ item, mobilization and demobilization for HV test kit is considered for once. In case of more, for reasons not attributable to bidder, same shall be paid extra as per BOQ Item.
	66kV GIS- IBP			
5.08	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF GIS IBP	Bays	28	Supervision of erection of GIS with main bus including BUS VT Bays, complete as per TS in all respect including LCC and its accessories. It also includes verification of materials for proper storage at site for final storage. Earthing, SF6 Gas Filing works, Internal Cabling from GIS to LCC, including Structure Works are covered under this item. Surge Arester, Voltage Transformer, Cable
5.09	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 4/3 PHASE SURGE ARRESTER WITH SURGE COUNTER OF GIS IBP	SET	28	Supervision of erection of Surge Arrester complete as per TS in all respect. Earthing, SF6 Gas Filing works, Internal Cabling with tray work, including Structure Works are covered under this item.
5.10	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 4/3 PHASE CABLE CONNECTION MODULE OF GIS IBP	NO	74	Supervision of erection of Additional Cable Connection Module complete as per TS in all respect. Earthing, SF6 Gas Filing works, Internal Cabling with tray work, including Structure Works are covered under this item.
5.11	SERVICES- 66kV GIS: TESTING & COMMISSIONING OF GIS IBP	Bays	28	Testing and commissioning of complete GIS system including main bus, LCC and associated system (LA, VT, CSD, Cable Connection Module etc.) is to be executed by bidder. All the special testing instruments, kits, T&P etc. are to be arranged by bidder on returnable basis. Please refer relevant section of technical specification for details.

SI. No.	Description	Unit	Quantity	Remarks
5.12	SERVICES- 66kV GIS: FINAL SUCCESSFUL HV/ POWER FREQUENCY TESTING OF GIS INCLUDING ARRANGING OF HV TEST KIT ALONG WITH OPERATOR	Bays	28	Carrying out successful HV/ Power Frequency Testing of GIS as per IEC including Arrangement of HV Test kit with operator (on returnable basis) shall be in scope of bidder, which includes charges of HV test kit with operator, accessories & tools required for completion of HV testing. The quoted price shall include GIS bays including Main Bus, GIB, SAB/SOB and other common items as per TS complete in all respect. In this BOQ item, mobilization and demobilization for HV test kit is considered for once. In case of more, for reasons not attributable to bidder, same shall be paid extra as per BOQ Item.
5.13	SERVICES- 66kV GIS : 3D MODEL FOR 66kV GIS	LOT	1	Please refer TS.
5.14	SERVICES- 66kV GIS: INSULATION CO-ORDINATION STUDIES FOR GIS SYSTEM	LOT	1	1 Lot means Complete study report as per technical specification, Including VFTO report.
5.15	SERVICES- 66kV GIS: TRAINING FOR GIS AT SITE (GIS/ ONLINE PARTIAL DISCHARGE MONITORING SYSTEM)	DAY	7	Training of ten OWNER's personnel & two BHEL's personnel for a period of at least Seven days at site
5.16	SERVICES- 66kV GIS : TRAINING FOR GIS AT MANUFACTURER WORKS	DAY	7	Training of two OWNER's personnel & two BHEL's personnel for a period of at least Seven days at manufacturer's works
6.0	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)			
6.01	SERVICES- 66kV GIS: 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 bidder) This item will be executed only if repetition of services is required by
6.02	SERVICES- 66kV GIS: 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 bidder) This item will be executed only if repetition of services is required by
	DEMOBILIZATION AND REMOBILIZATION CHARGES			
6.03	SERVICES- 66kV GIS: DEMOBILIZATION AND REMOBILIZATION CHARGES FOR GIS ERECTION SUPERVISION TEAM	Set	2	THIS BOQ ITEM SHALL BE PAYABLE IF REQUIRED FOR REASONS NOT ATTRIBUTABLE TO BIDDER.
6.04	SERVICES- 66kV GIS: DEMOBILIZATION AND REMOBILIZATION CHARGES FOR GIS TESTING & COMMISSIONING TEAM	Set	2	BOQ ITEM SHALL BE PAYABLE IF REQUIRED FOR REASONS NOT ATTRIBUTE TO BIDDER. HV TESTING IS NOT PART OF THIS ITEM
6.05	SERVICES- 66kV GIS: DEMOBILIZATION & REMOBILIZATION CHARGES OF HV TEST KIT ALONG WITH OPERATOR	Lot	1	In this BOQ item, mobilization and demobilization chages for HV test kit is considered for second time or more, for reasons not attributable to bidder. HV testing charges shall be paid per bay basis as per main HV testing charge.

SI. No.	Document name	Reference clause No.	Page No.	Reference clause & Specifications	Queries / Clarifications to Client'	Queries / Clarifications to EPC	Clarifications by BHEL
1	TS	-	221 of 295	Maximum Ambient Temperature: 48 Deg C	We confirm 3150A at maximum ambient of 40 Deg for both 66kV GIS. At the temperature of 45 Deg., the		Kindly comply TS/ BOQ &
2	TS	1.1	12 of 295	Design ambient temperature C 45.0	ccurrent shall be derated accordingly.		subsequent Corrigendum
3	TS	Other General Requirements	14 of 295	5. The GIS Equipment shall be complete with all necessary supports, ladders, galleries, staircases, catwalks, movable platforms or walkways (for accessing the equipment above two meters for maintenance and operation), mechanism cabinets, internal cable raceways etc for each bay and it shall be of modular construction and extendable design. All structures, galleries, staircases and walkways shall conform to the relevant Occupational Safety and Health Administration (OSHA).		The supply of only structure for GIS, cable trays and Mobile type ladder shall be provided. However, supply of any other materials will be excluded from GIS OEM Scope.	Kindly comply TS/ BOQ & subsequent Corrigendum
4	TS	Modular Design &     Future extensions	15 of 295	The switchgear shall be of the freestanding, self-supporting dead-front design, with all high-voltage equipment installed inside gas-insulated, metallic grounded enclosures, and suitably subdivided into individual arc and gas proof compartments, preferably for:  (1) Bus bars  (2) Intermediate compartment  (3) Circuit breakers  (4) Line dis-connectors  (5) Voltage transformers  (6) Gas Insulated bus duct section between GIS and,  (7) Gas insulated bus section between GIS and oil filled transformer.  (8) Current Transformers.	Current Transformer is a Passive Device and due care is taken with respect to shielding thus separate compartment is not required. Hence the CT and Circuit breaker in the same compartment in line with the type tested design. The gas compartment shall be as per Gas SLD enclosed. Also, the Gas insulated Bus shall be three phase encapsulated as per type tested design.  We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum
5	TS	5.7.VII.22	56 of 295	Isolating/ removable link shall be provided on both side of each busbar so that future extension can be done. Also, dedicated gas compartment shall be provided at both ends. However, connecting complete busbar is permitted for shut down for safety purpose.	In case of 66kV GIS isolating link for future extension can be part of future bays. Supply of isolating link in present scope is not envisaged Kindly confirm.		Kindly comply TS/ BOQ & subsequent Corrigendum
6	TS	5.7.VII.23	56 of 295	Dedicated gas compartment shall be provided in between two adjacent bays.	In case of 66kV GIS PROPOSDED GAS sld fulfills below clauses A) MRE01: for fault in circuit breaker compartment B) MRE10: for future extension of GIS C) For fault in Busbar compartment: Specification of EHV GIS 6-51-0066 Rev. 1 Clause 5.3.2.b suggest that "For fault in one bus bar & disconnector compartment, at the maximum the adjacent feeders are permitted to be out of service during maintenance and repair". We confirm to follow the same. Above Configuration is as per previously executed 66kV HRRL Project which is adhering to cl. No. 5.3.2 of 6-51-0066. We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum.
7	TS	5.7.VII.34	58 of 295	All portions of the earthing switch and operating mechanism required for earthing shall be connected together utilizing flexible copper conductors having a minimum cross-sectional area of 100 sq. mm.	The requirement calls for connection of earthing switch with earth mat via 100 sq.mm cable. For our specific design the earthing switch are grounded via GIS enclosure separate earthing is not required.		'Kindly comply TS/ BOQ & subsequent Corrigendum.
8	TS	5.7.VII.35	59 of 295	Earthing switches located at the beginning of the line/ transformer feeder bay modules shall be of the high speed, make proof type and will be used to discharge the respective charging currents, trapped charge in addition to their safety earthing function.	The High Speed Earthing Switch is required only in the case of Line Feeders to earth long line trapped charges. However, work-in Progress earthing switch is suffice to earth trapped line charges due to short line length in Trafo Feeders/ Busbar earthing. We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum
9	TS	5.7.VII.40	60 of 295	For SF6 gas site tests for moisture, air content, flash point and dielectric strength to be done during commissioning of GIS.	flash point and dielectric strength are not part of site test. Hence, we shall provide routine test certificate at vendor's end for your review.		Kindly comply TS/ BOQ & subsequent Corrigendum.

SI. No.	Document name	Reference clause No.	Page No.	Reference clause & Specifications	Queries / Clarifications to Client'	Queries / Clarifications to EPC	Clarifications by BHEL
10	TS	5.7.VII.42	60 of 295	In case gas leakage under specified conditions is found to be greater than 0.5% after one year of commissioning, the manufacturer will give additional warranty for FIVE years.	Leakage at site may cause due to various unforeseen reasons. However, if in rare case the leakage happens then we shall repair the same within warranty tenure at free of cost. Additional warranty cannot be confirmed at this stage for this kind of future scenario.  We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum.
11	TS	5.7.X.6	61 of 295	Calculations to show that there is no Ferro resonance due to capacitance of GIS for the voltage transformers	Ferro resonance generally applicable for 400kV voltage level and long length lines. Hence, we understand for subject package the same is not applicable.		Kindly comply TS/ BOQ & subsequent Corrigendum.
12	TS	XI.	61 of 295	All transport packages containing critical units viz. Circuit breakers and Voltage transformers shall be provided with sufficient number of electronic impact recorders (on returnable basis) during transportation to measure the magnitude and duration of the impact in all three directions.	Impact recorder is normally envisaged when there are no firm bolted connection. Since, GIS module are bolted joints hence critical component like VT shall be provided with Shock recorder. As a OEM standard practice we assure to you that shock indicator suffice the requirement.		Kindly comply TS/ BOQ & subsequent Corrigendum.
13	TA-01	5.7.1	159 of 295	EHV GIBD shall be phase separated SF6 insulated type.	Offered GIS is three phase encapsulated type. Request your kind acceptance.		It shall be subject to customer approval during detailed engineering stage.
14	TS	-	185 of 295	-	From Datasheet B957-000-16-50-DS-6612, we understand that there is requirement of Bus duct in incomer bay. Hence, Please share the Layout of Substation for the same.		Kindly comply TS/ BOQ & subsequent Corrigendum.
15	TS	-	185 of 295	-	In line with Data sheet B957-000-16-50-DS-6614 & B957-000-16-50-DS-6612 VT is with motorized isolation. The motorized solation for VT is normally pursued for busbar. Line VT is always connected to line and the isolation is done only during maintenance of line which is very rare occurrence. Hence, isolation requirement is generally not required. However, if isolation is envisaged we propose to provide manual isolation link in place of motorized in line with earlier executed EIL Projects. Kindly confirm.		Kindly comply TS/ BOQ & subsequent Corrigendum.
16	TS	1.02	188 of 295	3 NO- 1 phase multi winding Voltage Transformer with residual Current Circuit Breaker arrangement	The VT shall be provided with miniature circuit breaker (MCB). Also, the supply of RCCB in VT is not envisaged. We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum.
17	TS	1.02	188 of 295	1 SET- 1 NO x3 phase High Speed make proof Earthing Switch, complete with operating mechanism.	The High Speed Earthing Switch is required only in the case of Line Feeders to earth long line trapped charges. However, work-in Progress earthing switch is suffice to earth trapped line charges due to short line length in Trafo Feeders/ Busbar earthing. We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum.
18	TS			In addition to above, Gas device, UHF sensors, Pressure Switches, Expansion joints/ Flexible connections, Insulators etc. as applicable, however, Controlled Switching Device (CSD), Online PD Monitoring System, Local Control Cubicle and End Terminations, Surge Arresters, if	As per Prebid Discussion meeting dated 04.06.2025, We understand that there is requirement of Portable PD monitoring system. Hence, the requirement for online PD monitoring system is not envisaged. Please Confirm		Kindly comply TS/ BOQ & subsequent Corrigendum.
19	TS	1.03	188 of 295	applicable shall be covered separately. GIS shall be complete with all necessary terminal boxes, inspection windows, SF6 gas, grounding connection, pipings for gas monitoring system, trays, support structures with mounting hardwares, walkways, interconnecting cables with glands, ferrules, lugs etc.	As per Prebid Discussion meeting dated 04.06.2025,, there is no requirement of Controlled switching Device in case of 66kV GIS. Please Confirm.		Kindly comply TS/ BOQ & subsequent Corrigendum.
20	TS			Please refer section-2 (TS for EHV GIS)- Technical Specification.	The supply of walkways shall be excluded from GIS OEM scope. However the mobile type ladder shall be provided for accessing GIS. Please Note.		Kindly comply TS/ BOQ & subsequent Corrigendum.
21	TS	1.12	189 of 295	SUPPLY- GIS: 66KV, 3150A, 1 PHASE GAS INSULATED BUS DUCT (INCLUDING SF6 GAS, STRUCTURE WITH HARDWARES AND EARTHING MATERIALS)	As offered GIS is of 3 phase encapsulated Gas Insulated bus Duct. The design is type tested and is accepted by many utilities and oil and gas customers. Hence, We understand three phase quantity to be considered 30 metres in case of line item in front of S.I No. 1.12. Please Confirm		Kindly comply TS/ BOQ & subsequent Corrigendum.

SI. No.	Document name	Reference clause No.	Page No.	Reference clause & Specifications	Queries / Clarifications to Client'	Queries / Clarifications to EPC	Clarifications by BHEL
22	TS	1.18	190 OF 295	GIS SUPPLY: 66kV, 1 PHASE CABLE CONNECTION MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	As offered GIS is of 3 phase encapsulated Cable connection module. The design is type tested and is accepted by many utilities and oil and gas customers. Hence three phase quantity is to be considered which is 18 No. s in case of line item in front of S.I No. 1.18. Please Confirm		Kindly comply TS/ BOQ & subsequent Corrigendum.
23	TS	1.2	190 of 295	GIS SUPPLY: 66KV, 1 PHASE SURGE ARRESTER WITH SURGE COUNTER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	As offered GIS is of 3 phase encapsulated Surge arrestor. The design is type tested and is accepted by many utilities and oil and gas customers. Hence three phase quantity is to be considered which is 28 No.s in case of line item in front of S.I No. 1.20. Please Confirm		Kindly comply TS/ BOQ & subsequent Corrigendum.
24	TS	2.08	190 of 295	GIS SUPPLY: 66kV GIS- CAPACITIVE TYPE VOLTAGE DETECTORS	Voltage detector will not be required as per Datasheet No. B957-000-16-50-DS-6601 Rev.C and B957-000-16-50-DS-6610 Rev.C. of Technical ammendment-02. Hence, It will not be a part of mandatory spares and shall be excluded from GIS OEM Scope. Point Closed		Kindly comply TS/ BOQ & subsequent Corrigendum.
25	TS	5.6.3	201 of 295	Further suitable arrangements of test plug / socket shall be provided which will permit full dielectric testing for outgoing cable of all cable feeders including primary current injection test fo current transformers. The voltage rating of test plug / socket shall be as specified in data sheet job specification.			Kindly comply TS/ BOQ & subsequent Corrigendum.
26	TS	5.6.3	201 of 295	Isolating links shall be provided in cable termination module for disconnection between GIS and cable during cable testing.	We confirm to provide isolating link within cable enclosure. This link can be isolated by accessing the aperture in the cable enclosure by removing the gas.	The Supply or Design of Male and Female Part of Cable termination Kit shall be Excluded from GIS OEM Scope. Please Note.	Kindly comply TS/ BOQ & subsequent Corrigendum.
27	TS	5.10 Nameplates	202 of 295	Engraved nameplates shall preferably be of 3-ply (Black-White-Black) limacoid sheets or anodised aluminum. However back engraved Perspex sheet nameplates are also acceptable. Nameplates shall be fastened by screws and not by adhesives.	The stainless steel type of rating name plate is provided. However these are accepted by many customer. This is for your information only.		Kindly comply TS/ BOQ & subsequent Corrigendum.
28	TS	5.12.2	203 of 295	All cables required amongst various components of GIS i.e. circuit breaker, disconnectors, earth switches, CT, VT, LCC, CRP etc. along with the cable glands & lugs shall be provided by the vendor. The cables shall be Cu conductor, FRLS, armoured type. These shall be suitable for directly laying in cable trays/ lined RCC trenches. Maximum distance between GIS/LCC and corresponding CRP shall be considered as 150 meters unless otherwise specified. Exact distances shall be informed during vendor drawing review based on the final locations of GIS/LCC and CRP.	Kindly note the requirement of LCC is bay mounted. Hence all cables shall be laid on the GIS surface so requirement of armoured cable is not envisaged. This proposal is in line with earlier executed EIL project. Hence we shall supply unarmoured cable.		Kindly comply TS/ BOQ & subsequent Corrigendum.
29	TS	4.1	204 of 295	Interlocks	The electrical interlocks in LCC shall be Provided. Also the Padlocking for the respective modules are provided. However, the Mechanical Interlocking for the Modules can't be provided as per previously executed EIL Projects. We request your kind acceptance.		Kindly comply TS/ BOQ & subsequent Corrigendum.
30	TS	6.1.6 iii)	207 of 295	For all HV Variable frequency drive feeders, breaker shall be additionally provided with under voltage release. However, in case it is not possible to provide under voltage release in the standard design, as an alternative, one shunt trip coil shall be suitable for DC control supply while second shunt trip coil shall be suitable for external AC control supply. The control supply voltage level shall be as specified in datasheet.	Under Voltage release is not applicable and same cannot be provided. Further we confirm that at 70% rated DC voltage CB can be tripped.		Kindly comply TS/ BOQ & subsequent Corrigendum.
31	TS	6.2.2 Constructional Features	209 of 295	Arrangement shall be provided to permit manual operation of the disconnectors & earthing switches. Whenever the manual handle is inserted into the drive mechanism, it shall not be possible to control the device electrically. Manual operating handle shall be provided with pad lock. The contacts shall be both mechanically and electrically disconnected during the manual operation.	Mechanical interlocks provided in the disconnector switch, however electrical interlocks shall be provided in LCC to prevent operation of disconnector without opening CB. Please Note		Kindly comply TS/ BOQ & subsequent Corrigendum.
32	TS	6.4.8	211 of 295	Over pressure for each gas compartment of the bay.	As per our GIS design, differential pressure between compartment is less, However, the substantial increase in pressure will be very less. Hence, the Switchgear without overpressure signaling is proposed. This is in line with earlier executed EIL Projects		Kindly comply TS/ BOQ & subsequent Corrigendum.

SI. No.	Document name	Reference clause No.	Page No.	Reference clause & Specifications	Queries / Clarifications to Client'	Queries / Clarifications to EPC	Clarifications by BHEL
33	TS	6.6 Current Transformers	214 of 295	The CT short time rating shall be equal to that of the switchgear. The CT ratings shall be as shown in the data sheet. Protective CTs shall have an accuracy class of 5P and an accuracy limit factor greater than 10. CTs for instruments shall have an accuracy class of 1.0 and an accuracy limit factor less than 5.0. For numerical relays having protection and metering functions, dual rated CT shall be provided suitable for protection class and metering class. One leg of CTs shall be earthed.		The Study of CT sizing calculation, Knee Point Voltage Calculation shall be excluded from GIS OEM Scope. Please Note.	Kindly comply TS/ BOQ & subsequent Corrigendum.
34	TS	6.10 c)	216 of 295	High pressure interlock and monitoring device shall be provided.	As per our GIS design, differential pressure between compartment is less, However, the substantial increase in pressure will be very less. Hence, the Switchgear without overpressure signaling is proposed. This is in line with earlier executed EIL Projects		Kindly comply TS/ BOQ & subsequent Corrigendum.
35	TS	6.14.4	218 of 295	All current carrying parts shall be of Copper.	Conductors proposed are of Aluminum alloy. This design is type tested and supplied across various utilities globally. Request your concurrence on the same.		Kindly comply TS/ BOQ & subsequent Corrigendum.
36	TS	7.4	219 of 295	Type test certificates / reports shall be considered acceptable if they are in compliance with the latest applicable relevant Standards and conducted at recognized laboratory. If the type test reports submitted are not in accordance with the above requirements, Owner/ELI reserves the right to ask for the type tests to be repeated in the vendor's premises or other recognized place. The recognized laboratory shall issue the relevant type test certificates upon successful testing.	Type test report are valid as per CEA guidelines and shall be shared for review. Repetition of any type test is not considered for GIS.		Kindly comply TS/ BOQ & subsequent Corrigendum.
37	TS	7.5	219 of 295	Switchgears and their components shall be subjected to routine tests as per the relevant IEC standards. Routine test certificates shall be submitted for EIL/Owner's review and approval before shipment of the switchgear components. The routine tests for the switchgear shall also include the functional tests for the associated LCC & CRP.	The insulators routine test certificates conducted at vendor's premised shall be submitted for review.		Kindly comply TS/ BOQ & subsequent Corrigendum.
38	TS	-	221 of 295	Shunt trip coil -2 (see note-1): 230V AC (UPS)	As per Page No. 1 of 5 of B957-000-16-50-DS-6601 Rev. A, We understand that there is requirement of Shunt trip coil of 230V AC (UPS). However, 2 No.s of 110V DC or 220 V DC can be envisaged due to reliability of DC Power Supply.  We request your kind acceptance for the same in 66kV/ 220kV GIS.		Kindly comply TS/ BOQ & subsequent Corrigendum.
39				General	28 No.s of 66kV GIS IBPs are required. However there is no clarity on no. of substations. Thus we shall quote strictly as per provided BoQ.		Kindly comply TS/ BOQ & subsequent Corrigendum.

Validate Print Help <u>Item Wise BoQ</u>

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

Name of the	
Bidder/ Bidding	
Firm / Company:	

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

	1	TEXT #			TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER#	I	TEXT #
MBER#	TEXT #	IEAI #	NUMBER#	TEXT #	IEXI#	NOWIDER #	INDIVIDER	NUNIBER	NUNIDER	NUMBER	NUIVIBER	INUIVIDEK #	INCIVIDER #	NOIVIBER #		16AI #
SI. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	Unit RATE In Figures To be entered by the Bidder in Rs. P	GST (in Percentage)	GST Amount (Unit Rate*Quantity* GST) Rs. P	Unit Freight & Insurance Charges in Rs. P	GST (in Percentage)	GST Amount on F&I (Unit Rate*Quantity*G ST) Rs. P	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT excluding GST in Rs. P	TOTAL Ex-Works + F & I AMOUNT including GST in Rs. P	TOTAL AMOUNT In Words	
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54		55
1.01	SUPPLY- GIS: 66kV, 40KA FOR 3S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS (Two/ Double bus scheme) (For item sl. No. 1.01-1.19): GIS SUPPLY: 66kV, 3150A, 40kA, SF6 GIS BUS BAR MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item1	4	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.02	GIS SUPPLY: 66kV, 40kA, SF6 BUS PT/ VT BAY MODULE WITH BUS EARTH SWITCH (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item2	4	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.03	GIS BAY SUPPLY: 66kV, 3150A, 40 kA, SF6 INCOMING GIS TRANSFORMER FEEDER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item3	3	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.04	GIS BAY SUPPLY: 66kV, 3150A, 50kA, SF6 GIS BUS COUPLER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item4	2	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
05	GIS BAY SUPPLY: 66kV, 3150A, 40kA, SF6 GIS BUS SECTIONALISER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item5	2	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.06	GIS BAY SUPPLY: 66kV, 3150A, 50 kA, SF6 OUTGOING GIS TRANSFORMER FEEDER BAY MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item6	2	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.07	GIS BAY SUPPLY: 66kV, 3150A, 50kA, SF6 OUTGOING GIS SPARE TRANSFORMER FEEDER BAY (FULLY EQUIPPED) MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item7	28	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.08	GIS BAY SUPPLY: 66kV, 3150A, 40kA, SF6 OUTGOING GIS SPARE TRANSFORMER FEEDER BAY (FULLY EQUIPPED) MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item8	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.09	GIS SUPPLY: 66KV, 14/3 PHASE SURGE ARRESTER WITH SURGE COUNTER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item9	38	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
10	GIS SUPPLY: 66kV, 14 3 PHASE CABLE CONNECTION MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item10	9	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.11	GIS SUPPLY: 66kV, 4-/3 PHASE VOLTAGE TRASNFORMER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item11	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.12	SUPPLY- GIS: 66KV, 3150A, 4/3 PHASE GAS INSULATED BUS DUCT (INCLUDING SF6 GAS, STRUCTURE WITH HARDWARES AND EARTHING MATERIALS)	item12	30	MTRS	INR			0.00			0.00		0.000	0.000	INR Zero Only	

Validate Print Help Item Wise BoQ

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

Name of the	
Bidder/ Bidding	
Firm / Company :	

# PRICE SCHEDULE

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IUMBER#	TEXT #	TEXT #	NUMBER#	TEXT #	TEXT #	NUMBER#	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER #		TEXT#
SI. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	Unit RATE In Figures To be entered by the Bidder in Rs. P	GST (in Percentage)	(Unit Rate*Quantity* GST)	Unit Freight & Insurance Charges in Rs. P	GST (in Percentage)	GST Amount on F&I (Unit Rate*Quantity*G ST)	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT excluding GST in Rs. P	TOTAL Ex-Works + F & I AMOUNT including GST in Rs. P	TOTAL AMOUNT In Words	
								Rs. P			Rs. P					
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54		55
1.13	GIS SUPPLY: 66KV, 3150, 1 PHASE SF6 TO OIL BUSHING (POLYMER) (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item13	9	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
1.14	GIS SUPPLY: LOCAL CONTROL CUBICLES FOR GIS	item14	38	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
1.15	GIS SUPPLY: 66 KV, 800A, 40kA, SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item15	2	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
16	GIS SUPPLY: 66 KV, 630A, 40kA, SF6 GAS INSULATED ISOLATING BREAKER PANEL WITH SF6 CIRCUIT BREAKER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS) AS PER TS	item16	26	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.17	GIS SUPPLY: 66kV, 1/3 PHASE CABLE CONNECTION MODULE (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item17	18	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.18	GIS SUPPLY: LOCAL CONTROL CUBICLES FOR GIS IBP	item18	28	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.19	GIS SUPPLY: 66KV, 1 3 PHASE SURGE ARRESTER WITH SURGE COUNTER (INCLUDING SF6 GAS, STRUCTURE, HARDWARES & EARTHING MATERIALS)	item19	28	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.01	SUPPLY- GIS: SPECIAL TOOLS AND TESTING & MAINTENANCE INSTRUMENTS AS PER TS (For item sl. No. 2.01-2.34): GIS SUPPLY: 66kV GIS- ONLINE PORTABLE SF6 GAS	item20	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.02	FILLING AND EVACUATION CART GIS SUPPLY: 66kV GIS- HANDLE FOR DISCONNECTOR SWITCH DRIVE	item21	4	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.03	GIS SUPPLY: 66kV GIS- HANDLE FOR EARTHING SWITCH DRIVE	item22	4	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
04	GIS SUPPLY: 66kV GIS- PRE SELECTION/ MECHANICAL KEY	item23	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
.05	GIS SUPPLY: 66kV GIS- POWER CABLE TERMINATION KIT ALONG WITH PLUG AND SOCKET (R, Y, B PHASES)	item24	2	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
)6	GIS SUPPLY: 66kV GIS- TRIPPING COIL	item25	2	NO	INR			0.00			0.00		0.000		INR Zero Only	
17	GIS SUPPLY: 66kV GIS- CLOSING COIL GIS SUPPLY: 66kV GIS- CAPACITIVE TYPE VOLTAGE	item26 item27	1	NO SET	INR			0.00			0.00		0.000 0.000		INR Zero Only INR Zero Only	
)9	DETECTORS GIS SUPPLY: 66kV GIS- CONTROL FUSES/ MCB (1 SET=	item28	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
10	10 NO OF EACH RATING & TYPE)  GIS SUPPLY: 66kV GIS- DENSITY MONITORING DEVICE	item29	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
11	(1 SET= 2 NO OF EACH TYPE) GIS SUPPLY: 66kV GIS- INDICATING LAMP COVERS (1 SET= 5 NO OF EACH COLOUR)	item30	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
12	GIS SUPPLY: 66kV GIS- INDICATING LAMPS (1 SET= 20% OR 3 NO (MIN), WHICHEVER IS MORE)	item31	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
13	GIS SUPPLY: 66kV GIS- PORTABLE SF6 GAS LEAKAGE DETECTOR	item32	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only	
14	GIS SUPPLY: 66kV GIS- ETHERNET SWITCH (1 SET= 1 NO OF EACH TYPE)	item33	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	
15	GIS SUPPLY: 66kV GIS- PRESSURE GAUGE (1 SET= 2 NO OF EACH TYPE)	item34	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only	

Validate Print Help <u>Item Wise BoQ</u>

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

Name of the
Bidder/ Bidding
Firm / Company :

PRICE SCHEDULE

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NUMBER #	TEXT #	TEXT #	NUMBER#	TEXT #	TEXT #	NUMBER#	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER#	TEXT #
SI. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	Unit RATE In Figures To be entered by the Bidder in Rs. P	e GST (in Percentage	) GST Amount (Unit Rate*Quantity* GST) Rs. P	Unit Freight & Insurance Charges in Rs. P	GST (in Percentage)	GST Amount on F&I (Unit Rate*Quantity*G ST) Rs. P	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT excluding GST in Rs. P	TOTAL Ex-Works + F & I AMOUNT including GST in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54	55
2.16	GIS SUPPLY: 66kV GIS- SF6 GAS ANALYSER	item35	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.17	GIS SUPPLY: 66kV GIS- PORTABLE PARTIAL DISCHARGE (PD) MONITORING SYSTEM (1 SET= 1 NO)	item36	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.18	GIS SUPPLY: 66kV GIS IBP- ONLINE PORTABLE SF6 GAS FILLING AND EVACUATION CART	item37	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.19	GIS SUPPLY: 66kV GIS IBP- HANDLE FOR DISCONNECTOR SWITCH DRIVE	item38	4	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.20	GIS SUPPLY: 66kV GIS IBP- HANDLE FOR EARTHING SWITCH DRIVE	item39	4	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.21	GIS SUPPLY: 66kV GIS IBP- PRE SELECTION/ MECHANICAL KEY	item40	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.22	GIS SUPPLY: 66kV GIS IBP- POWER CABLE TERMINATION KIT ALONG WITH PLUG AND SOCKET (R, Y, B PHASES)	item41	2	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.23	GIS SUPPLY: 66kV GIS IBP- TRIPPING COIL	item42	2	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.24	GIS SUPPLY: 66kV GIS IBP- CLOSING COIL	item43	2	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.25	GIS SUPPLY: 66kV GIS IBP- CAPACITIVE TYPE VOLTAGE DETECTORS	item44	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.26	GIS SUPPLY: 66kV GIS IBP- CONTROL FUSES/ MCB (1 SET= 10 NO OF EACH RATING & TYPE)	item45	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.27	GIS SUPPLY: 66kV GIS IBP- DENSITY MONITORING DEVICE (1 SET= 2 NO OF EACH TYPE)	item46	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.28	GIS SUPPLY: 66kV GIS IBP- INDICATING LAMP COVERS (1 SET= 5 NO OF EACH COLOUR)	item47	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.29	GIS SUPPLY: 66kV GIS IBP- INDICATING LAMPS (1 SET= 20% OR 3 NO (MIN), WHICHEVER IS MORE)	item48	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.30	GIS SUPPLY: 66kV GIS IBP- PORTABLE SF6 GAS LEAKAGE DETECTOR	item49	1	NO	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.31	GIS SUPPLY: 66kV GIS IBP- ETHERNET SWITCH (1 SET= 1 NO OF EACH TYPE)	item50	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.32	GIS SUPPLY: 66kV GIS IBP- PRESSURE GAUGE (1 SET= 2 NO OF EACH TYPE)	item51	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.33	GIS SUPPLY: 66kV GIS IBP- SF6 GAS ANALYSER	item52	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
2.34	GIS SUPPLY: 66kV GIS IBP- PORTABLE PARTIAL DISCHARGE (PD) MONITORING SYSTEM (1 SET= 1 NO)	item53	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
3.01	SPARES- GIS: 66KV, 40KA FOR 3S, GAS INSULATED SWITCHGEAR (GIS) AS PER TS (For item SI. No. 3.01): GIS SPARES: RECOMMENDED SPARES FOR 2 YEARS OF NORMAL OPERATION AND MAINTENANCE	item54	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only

Validate Print Help Item Wise BoQ

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

Name of the	
Bidder/ Bidding	
Firm / Company:	

# PRICE SCHEDULE

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NUMBER #	TEXT #	TEXT#	NUMBER#	TEXT #	TEXT #	NUMBER#	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER#	TEXT#
		Item Code /	Quantity	Units	Quoted	Unit RATE In Figures To be entered by the	GST (in Percentage)		Unit Freight & Insurance Charges	GST	GST Amount	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT	TOTAL Ex-Works + F & I	TOTAL AMOUNT In Words
		Make			Currency in INR / Other	Bidder in Rs. P		(Unit Rate*Quantity*	in Rs. P	(in Percentage)	on F&I (Unit Rate*Quantity*G		excluding GST in  Rs. P	AMOUNT including GST in Rs. P	
SI. No.	Item Description				Currency			GST) Rs. P			ST) Rs. P				
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54	55
	SUPPLY- GIS: REFERENCE UNIT PRICE FOR				INR			0.00			0.00		0.000	0.000	INR Zero Only
	ADDITION/ DELETION OF SUPPLY ITEMS														
	(Unit Prices of Individual Equipment included														
	here or in manadatory spares are required														
	for any Addition/Deletion of Equipment and replacement of damaged items. Bidder to														
	ensure that the unit prices have a logical														
4.01	relationship with prices of assemblies in	item55	1	SET											
	main items. Quoting for unit prices is														
	mandatory and shall be considered for														
	evaluation) (For item sl. No. 4.01-4.19): SUPPLY- GIS: SPARES: 66KV, OPERATING														
	MECHANISM FOR CIRCUIT BREAKER COMPLETE IN														
	ALL RESPECT														
	CURRY OF SPARE SERVICES														lung a d
4.02	SUPPLY- GIS: SPARES: 66KV, OPERATING MECHANISM FOR DISCONNECTOR COMPLETE IN ALL	item56	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.02	RESPECT	itemso		351											
	SUPPLY- GIS: SPARES: 66KV, OPERATING				INR			0.00			0.00		0.000	0.000	INR Zero Only
4.03	MECHANISM FOR MAINTENANCE EARTHING SWITCH COMPLETE IN ALL RESPECT	item57	1	SET											
	SUPPLY- GIS: SPARES: 66KV, OPERATING				INR			0.00			0.00		0.000	0.000	INR Zero Only
4.04	MECHANISM FOR FAST ACTING/ HIGH SPEED	item58	1	SET											
	GROUNDING SWITCH COMPLETE IN ALL RESPECT														
4.05	SUPPLY- GIS: SPARES: 66KV, MAINTENANCE	item59	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
1.05	EARTHING SWITCH COMPLETE IN ALL RESPECT	itemos	<u> </u>	351	INR			0.00			0.00		0.000	0.000	IND Zere Oek
4.06	SUPPLY- GIS: SPARES: 66KV, FAST ACTING/ HIGH SPEED GROUNDING SWITCH COMPLETE IN ALL	item60	1	SET	IINK			0.00			0.00		0.000	0.000	INR Zero Only
	RESPECT														
4.07	SUPPLY- GIS: SPARES: 66KV, SINGLE/ THREE PHASE BUS BAR	item61	1	MTRS	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.08	SUPPLY- GIS: SPARES: 66KV, GIS METALLIC ENCLOSURE	item62	50	KGS	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.09	SUPPLY- GIS: SPARES: 66KV, EXPANSION JOINTS	item63	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.10	SUPPLY- GIS: SPARES: 66KV, FLEXIBLE CONNECTIONS	item64	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
	SUPPLY- GIS: SPARES: 66KV, BARRIER INSULATOR				INR			0.00			0.00		0.000	0.000	INR Zero Only
4.11	SUPPLY- GIS: SPARES: 66KV, NON-BARRIER	item65	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.12	INSULATOR	item66	1	SET											
4.13	SUPPLY- GIS: SPARES: 66KV, GAS SEALS	item67	1	SET	INR			0.00			0.00		0.000		INR Zero Only
4.14	SUPPLY- GIS: SPARES: 66KV, GAS DENSITY MONITOR SWITCH	item68	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.15	SUPPLY- GIS: SPARES: 66KV, GAS PRESSURE SWITCH	item69	1	SET	INR			0.00			0.00		0.000	0.000	INR Zero Only
4.16	SUPPLY- GIS: SPARES: 66KV, TEE BEND	item70	1	SET	INR			0.00			0.00		0.000		INR Zero Only
4.17	SUPPLY- GIS: SPARES: 66KV, ANGLE BEND	item71	1	SET	INR INR			0.00			0.00		0.000		INR Zero Only INR Zero Only
4.18	SUPPLY- GIS: SPARES: 66KV, L-BEND SUPPLY- GIS: SPARES: 66KV, VOLATGE DETECTORS	item72	1	SET	INR			0.00			0.00		0.000		INR Zero Only
4.19		item73	1	SET											
	SERVICES- GIS: 66KV, 40KA FOR 3S, GAS				INR			0.00			0.00		0.000	0.000	INR Zero Only
5.01	INSULATED SWITCHGEAR (GIS) AS PER TS (For item sl. No. 5.01-5.16):	item74	38	Bays											
	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF														
	GIS														

Validate Print Help Item Wise BoQ

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

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NUMBER#	TEXT #	TEXT #	NUMBER#	TEXT #	TEXT #	NUMBER#	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER #		TEXT#
SI. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	Unit RATE In Figures To be entered by the Bidder in Rs. P	GST (in Percentage)	GST Amount (Unit Rate*Quantity* GST) Rs. P	Unit Freight & Insurance Charges in Rs. P	GST (in Percentage)	GST Amount on F&I (Unit Rate*Quantity*G ST) Rs. P	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT excluding GST in Rs. P	TOTAL Ex-Works + F & I AMOUNT including GST in Rs. P	TOTAL AMOUNT In Words	
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54		55
5.02	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 1/3 PHASE SURGE ARRESTER WITH SURGE COUNTER	item75	38	SET	INR			0.00			0.00		0.000	0.00	00 INR Zero Only	
5.03	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 1/3 PHASE CABLE CONNECTION MODULE	item76	40	NO	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.04	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 1/3 PHASE GAS INSULATED BUS DUCT	item77	30	MTR	INR			0.00			0.00		0.000	0.00	00 INR Zero Only	
5.05	SERVICES- 220kV GIS: SUPERVISION OF ERECTION OF 1 PHASE SF6 TO OIL BUSHING (POLYMER)	item78	9	SET	INR			0.00			0.00		0.000	0.00	00 INR Zero Only	
5.06	SERVICES- 66kV GIS: TESTING & COMMISSIONING OF GIS	item79	38	Bays	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.07	SERVICES- 66kV GIS : FINAL SUCCESSFUL HV/ POWER FREQUENCY TESTING OF GIS INCLUDING ARRANGING OF HV TEST KIT ALONG WITH OPERATOR	item80	38	Bays	INR			0.00			0.00		0.000	0.00	00 INR Zero Only	
5.08	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF GIS IBP	item81	28	Bays	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.09	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 1/3 PHASE SURGE ARRESTER WITH SURGE COUNTER OF GIS IBP	item82	28	SET	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.10	SERVICES- 66kV GIS: SUPERVISION OF ERECTION OF 14/3 PHASE CABLE CONNECTION MODULE OF GIS IBP	item83	74	NO	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.11	SERVICES- 66kV GIS: TESTING & COMMISSIONING OF GIS IBP	item84	28	Bays	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.12	SERVICES- 66kV GIS : FINAL SUCCESSFUL HV/ POWER FREQUENCY TESTING OF GIS INCLUDING ARRANGING OF HV TEST KIT ALONG WITH OPERATOR	item85	28	Bays	INR			0.00			0.00		0.000	0.00	INR Zero Only	
5.13	SERVICES- 66kV GIS : 3D MODEL FOR 66kV GIS	item86	1	LOT	INR			0.00			0.00		0.000		INR Zero Only	
5.14	SERVICES- 66kV GIS : INSULATION CO-ORDINATION STUDIES FOR GIS SYSTEM	item87	1	LOT	INR			0.00			0.00		0.000		INR Zero Only	
5.15	SERVICES- 66kV GIS : TRAINING FOR GIS AT SITE (GIS/ ONLINE PARTIAL DISCHARGE MONITORING SYSTEM)	item88	7	DAY	INR			0.00			0.00		0.000		INR Zero Only	
5.16	SERVICES- 66kV GIS : TRAINING FOR GIS AT MANUFACTURER WORKS	item89	7	DAY	INR			0.00			0.00		0.000		INR Zero Only	
6.01	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) (For item sl. No: 6.01-6.05): SERVICES- 66kV GIS: REF. UNIT PRICE OF GIS INDIVIDUAL ITEM/ EQUIPMENT - SERVICES FOR SUPERVISION OF ERECTION OF GIS		10	MANDAY	INR			0.00			0.00		0.000	0.00	10 INR Zero Only	

Validate

Print

Help

Item Wise BoQ

Tender Inviting Authority: BHEL TBG NOIDA

Name of Work: BPCL Bina-66KV GIS

Enquiry/NIT No: NIT No.91739\_Enquiry No.61Q2600123 Dated 30-05-2025

Name of the Bidder/ Bidding Firm / Company :																
				(This BOQ te	mplate must not	be modified/replaced by the bidder and the	same should be uploa	ded after filling the	PRICE SCHEDULE relevent columns, else the bidder is liable	e to be rejected for th	is tender. Bidders ar	e allowed to enter the	Bidder Name and Values only )			
NUMBER #	TEXT#	TEXT #	NUMBER#	TEXT #	TEXT #	NUMBER#	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER#	NUMBER #	NUMBER#	TEXT#	
SI. No.	Item Description	Item Code / Make	Quantity	Units	Quoted Currency in INR / Other Currency	Unit RATE In Figures To be entered by the Bidder in Rs. P		GST Amount (Unit Rate*Quantity* GST) Rs. P	Unit Freight & Insurance Charges in Rs. P	GST (in Percentage)	GST Amount on F&I (Unit Rate*Quantity*G ST) Rs. P	HSN / SAC Code	TOTAL Ex-Works + F & I AMOUNT excluding GST in Rs. P	TOTAL Ex-Works + F & I AMOUNT including GST in Rs. P	TOTAL AMOUNT In Words	
1	2	3	4	5	12	13	14	15	16	20	21	51	53	54	55	
6.02	SERVICES- 66kV GIS: REF. UNIT PRICE OF GIS INDIVIDUAL ITEM/ EQUIPMENT - SERVICES FOR TESTING & COMMISSIONING OF GIS	item91	10	MANDAY	INR			0.00			0.00		0.000	0.000	INR Zero Only	
6.03	SERVICES- 66kV GIS: DEMOBILIZATION AND REMOBILIZATION CHARGES FOR GIS ERECTION SUPERVISION TEAM	item92	2	Set	INR			0.00			0.00		0.000	0.000	INR Zero Only	
6.04	SERVICES- 66kV GIS: DEMOBILIZATION AND REMOBILIZATION CHARGES FOR GIS TESTING & COMMISSIONING TEAM	item93	2	Set	INR			0.00			0.00		0.000	0.000	INR Zero Only	
6.05	SERVICES- 66kV GIS: DEMOBILIZATION & REMOBILIZATION CHARGES OF HV TEST KIT ALONG WITH OPERATOR	item94	1	Lot	INR			0.00			0.00		0.000	0.000	INR Zero Only	
Total in Figure	es	'					,						0.000	0.000	Zero Only	
oted Rate in W	/ords									INR Zero On	ly			I	1	