

Design, Supply, Installation, Testing and Commissioning of 400kV Transformer Bay and 230kV Transmission Line Diameter Extension at Kaliakoir Substation

[OCB No.: POWERGRID/BayExtensions/KaliakoirSS]

Clarification No.01

(23 July, 2026)

Pre-bid meeting was held on 29 June, 2026. Some queries were received from the prospective Bidders regarding the Bidding Documents. Clarifications on the above mentioned queries are given below, which will form part of the bidding documents.

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
1	Volume 1 of 3	Price Schedule_Kaliakoir Bay Extension/Schedule-B4/Civil Works, Building and Foundation/Item No-1M.2	Description: a) Modification works for Control Room and SPR room as necessary for 400kV & 230kV system Bidder's Queries: Dimensional requirements have not been provided for the existing SPR modification work. Please specify the required length, width, and height for the SPR extension.	To incorporate the panels in existing SPR and/or in Control Room Building, if any modification works are required, that is to be added. No extension of existing SPR and/or control room.	N
2	Volume 1 of 3	Price Schedule_Kaliakoir Bay Extension/Schedule-B4/Civil Works, Building and Foundation/Item No-1M.2	Description: b) Complete civil works for 1 No. 230kV Switchyard Panel Room with battery. Bidder's Queries: Technical specifications for the 230kV Switchyard Panel Room have not been provided. Please provide the detailed requirements, including the length, width, and height.	All works related to the 230 kV Switchyard Panel Room shall be carried out in accordance with Section 11 of the Technical Specifications contained in the Tender Documents. The dimensions shall be the same as those of the existing 230 kV SPR. A tentative tender drawing is attached as Addendum No. 1 for tendering purposes.	Y
3	Volume 1 of 3	Price Schedule	Description: There is no line item for auxiliary transformer foundations in the price schedule. Bidder's Queries:	Added in price schedule: B-4	Y

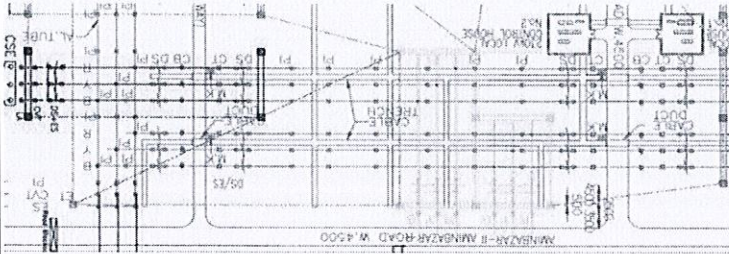
A

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)					
			Please add a line item for auxiliary transformer foundation in the price schedule.							
4	Volume 1 of 3	Price Schedule	Description: There is no line item for UG Cable connection sytem in the price schedule. Bidder's Queries: Please add a line item for the underground cable connection system in the Price Schedule.	Already added in price schedule. Item: 1G1, 1G2 [Price schedule:B-1, B-2, B-5], and 1M1-v(a), (b) [Price schedule:B-4]	N					
5	Volume 1 of 3	Tender Price Schedule and SCHEDULE A	Query: As per the Price Schedule and Schedule-A, Power Grid will supply certain primary AIS equipment and secondary equipment. The Bidder's responsibility for such Employer-supplied equipment shall be limited to installation, testing, and commissioning only. The Bidder understands that if OEM expert support is required for the installation, testing, or commissioning of such Employer-supplied equipment, the same shall not be under the Bidder's scope, as the equipment will be supplied by Power Grid. If required, Power Grid shall arrange and manage the necessary OEM expert support. Kindly confirm whether the Bidder's understanding is correct.	Power Grid will only supply some of AIS equipment, and will supply no BCU, CSD, Busbar Relay as stipulated in price schedule & scope of works. These are updated as per attached Addendum-1. Please note that if OEM expert support is required for the installation, testing, or commissioning of such Employer-supplied equipment, the same shall be solely under the Bidder's scope of works.	Y					
6	Volume 1 of 3	Volume-1, Section- 3, GCC	Description: <table border="1"><tr><td rowspan="2">41. Test & Inspection</td><td>41.1</td><td>The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.</td></tr><tr><td>41.2</td><td>The Procuring Entity and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Procuring Entity shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.</td></tr></table> Query:	41. Test & Inspection	41.1	The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.	41.2	The Procuring Entity and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Procuring Entity shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.	Your understanding is not correct. GCC Clause 41.2 does not shift the cost of the test itself to the Procuring Entity. It only clarifies that if Power Grid decides to send its representatives to witness the test, the attendance-related costs of those representatives will be borne by Power Grid. The Contractor remains fully responsible for all costs of performing the tests under GCC Clause 41.1.	N
41. Test & Inspection	41.1	The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.								
	41.2	The Procuring Entity and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Procuring Entity shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.								

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			As per GCC Clause 41.2, the Bidder understands that Power Grid shall bear the relevant costs associated with the Factory Acceptance Test (FAT). Kindly confirm whether the Bidder's understanding is correct.		
7	Volume 2 of 3	1B - 230kV Air Insulated Switchgear (AIS), serial no.1B8, page SA-6. & Volume-2, Section-17, Drawing, Layout	At 230kV Air Insulated Switchgear (AIS) serial number 1B8/ page SA-6 is mentioned that One (1) lot of rigid tubular bus is required for completing 230kV busbar and switchgear connection whole substation. For completion of the Bus bar extension work especially for the road crossing portion who will be responsible or is it in the present tender scope. If any relocation of Bus-1 & Bus-2 CVT, ES, PI is required who will responsible or is it in the present tender scope.	This project scope includes completion of the 230kV Bus bar extension work for this diameter construction, including relocation of Bus-1 & Bus-2 CVT, ES, PI. Existing 4.5m road crossing of 230kV busbar is under Package-1 of SCKTID project of Power Grid.	N
8	Volume 2 of 3	Volume-2_SS Part/ Section 1 7-Drawings/ Electrical Layout of Kaliakor 400/230kV Substation/Page -18/3	Description: In the Electrical Layout drawing of Kaliakair 400/230kV Substation, it is shown that the cable connection between the Transformer LV side and the 230kV Bay is through an underground (UG) cable system. Bidder's Queries: No technical information regarding the underground cable system has been provided. Please provide the drawing and details of the underground cable connection system.	230kV Power Cable GTP and Cable Trench drawings are attached in Addendum-1.	Y

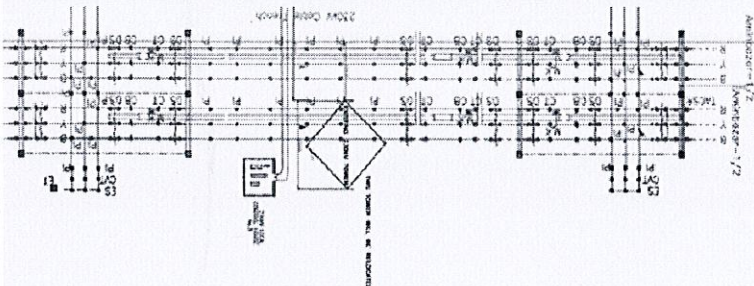





S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
9	Volume 2 of 3	Volume 2 of 3, Page no. 586 ELECTRICAL LAYOUT OF KALIAKOIR 400/230kV SUBSTATION	In the provided layout design, certain portions of the 230 kV system are highlighted in yellow and mentioned as "to be dismantled." Our understanding is that this portion is to be dismantled only by the bidder, no relocation or shifting of these components is not included in our scope of work. 	To be dismantled by the bidder and if required, dismantled equipment will have to be stored in Power grid store/open store yard within the substation premises.	N
10	Volume 2 of 3	Volume-2, Section-3, Clause- 3.4.7.1, Page- 52 of 79	Description: Specification of HV Switchgear and Neutral Earthing Equipment Page 52 of 79 3.4.7.1 General Design Disconnectors shall be for outdoor installation, double column, centre break. Disconnectors shall comply with the requirements of IEC 60129, IEC 60265, IEC 60273, IEC 60694, IEC 60815, IEC 62271. Insulators shall be porcelain, brown colour and follow the dimensions and characteristics defined in the technical specifications. The male-female parts shall be manufactured by manufacturers of European countries, USA, Canada, Korea and Japan.	Technical spec. in volume-2 is general requirement. Specific requirements to be followed as per price schedule, scope of work and GTP. For this, please follow GTP.	N

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
			Query: Although the GTP allows the country of origin for the disconnect switch to be open, the above-mentioned requirement may limit wider participation from qualified manufacturers and may also increase the overall project cost. Therefore, the Bidder requests the Employer to remove or amend the above-mentioned clause to allow broader participation of qualified manufacturers, as practiced in other ICT tenders of Power Grid.		
11	Volume 2 of 3	Volume-2, Section-3, Clause- 3.4.8.6.2, Page- 57 of 79	Description: Specification of HV Switchgear and Neutral Earthing Equipment Page 57 of 79 3.4.8.6.1 The current transformers shall be for outdoor installation, single phase, head type, hermetically sealed, oil-paper immersed. SF6 gas is not allowed. They shall be multi core with appropriate characteristics. They shall be designed to allow secondary reconnection. Primary reconnection is not allowed. 3.4.8.6.2 The winding, capacitor stack & Core shall be manufactured by manufacturers of European countries, USA, Canada, Korea and Japan. Query: Although the GTP allows the country of origin for the instrument transformers to be open, the above-mentioned requirement may limit wider participation from qualified manufacturers and may also increase the overall project cost. Therefore, the Bidder requests the Employer to remove or amend the above-mentioned clause to allow broader participation of qualified manufacturers, as practiced in other ICT tenders of Power Grid.	Technical spec. in volume-2 is general requirement. Specific requirements to be followed as per price schedule, scope of work and GTP. For this, please follow GTP.	N

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
12	Volume 2 of 3	Volume-2, Section-8, Clause- 8.3.1.4, Page- 4 of 14 and SCHEDULE-A	Description: Specification of Batteries, Chargers, and DC Switchgear Page 4 of 14 requirements of this Section. In addition, the voltages at the terminals of all components in the system (e.g. relays, trip and closing coils) shall not be outside of the individual voltage limits applying to them. 8.3.1.3 Two 100% duty batteries shall be connected to duplicate 100% duty chargers, having boost and float facilities, in such a way that either charger can be disconnected without interrupting the output of the other charger or the battery. 8.3.1.4 The complete equipment shall preferably be a Manufacturer's standard but any departure from this specification shall be subject to the approval of the Engineer. The Battery Charger with Panel & Battery shall be of Europe/USA/Japan Origin. ii. One (1) set of battery chargers complete, each charger shall not be less than 150A rating and input voltage three phase 50Hz, 415V AC. The charger rating shall be based on the load & boost charging rate and during execution stage after calculation if the higher charging charger is found to be required, it shall be supplied by the Contractor within the same Contract price. <u>Model of the charger shall be matching or compatible with the existing charger that is used to charge other battery set, complementary to battery set to be supplied under this contract.</u> Query: As per the Technical Specifications, the Battery and Battery Charger shall be of European/USA/Japan origin. However, as per Schedule-A, the newly supplied Battery Charger shall be matching or compatible with the existing charger. The existing Battery Charger make is HBL, India and HBL, India is no longer manufacturing Battery Chargers. Furthermore, as per the GTP, the country of origin for the Battery and Battery Charger is open.	Model of the charger shall be compatible with the existing charger that is used to charge other battery set, complementary to battery set to be supplied under this contract. This is amended in Addendum-1.	Y

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			Please clarify.		
13	volume 3 of 3	Scope of work	After the site visit & as per layout, it has been observed that there is an existing 230 kV transmission line tower located within the area designated for the new 230 kV bay extension. Kindly confirm whether the relocation of this tower is included in bidder's current scope of work. If the relocation is within the bidder's scope, please also confirm whether the materials need to be supplied if required for the tower relocation purpose in bidder's current scope of work. Do Bidder need to consider any Civil works for the location works of 230kV Transmission line. 	Tower Relocation shall be done by Power Grid.	N
14	volume 3 of 3	SCHEDULE A	Description: 10 Transportation of Equipment 101 Transportation of Item no: 1A1.1, 1A1.5, 1A1.6, 1B1, 1B5, 1B6. Query: Kindly confirm the source point of the above-mentioned equipment from where the transportation shall be arranged.	The source point of the mentioned equipment from where the transportation shall be arranged is attached with Addendum-1.	Y

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)										
15	volume 3 of 3	GTP	Description: 1.3.4 36KV CURRENT TRANSFORMER (For 75 MVA Tr. Bay) <table><tr><td>1.5</td><td>Country of Origin</td><td></td><td>EU/UK/USA/ Japan/Turkey or equivalent</td><td></td></tr></table> 1.3.5 36kV Current Transformer (For Earthing Transformer) <table><tr><td>1.5</td><td>Country of Origin</td><td></td><td>EU/UK/USA/ Japan/Turkey or equivalent</td><td></td></tr></table> Query: Although the GTP allows the country of origin for the instrument transformers to be open, including for 400kV and 230kV voltage levels, the above-mentioned requirement may limit wider participation from qualified manufacturers and may also increase the overall project cost. Therefore, the Bidder requests the Employer to remove or amend the above-mentioned clause to allow broader participation of qualified manufacturers, as practiced in other ICT tenders of Power Grid.	1.5	Country of Origin		EU/UK/USA/ Japan/Turkey or equivalent		1.5	Country of Origin		EU/UK/USA/ Japan/Turkey or equivalent		Technical spec. in volume-2 is general requirement. Specific requirements to be followed as per price schedule, scope of work and GTP. For this, please follow GTP.	N
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S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
16	volume 3 of 3	Tender Price Schedule and SCHEDULE A	Description: 1D1.1 One (1) lot of configuration/modification of Power Grid supplied Relay Panel for 400/230kV, 520MVA Power Transformer bay. Required accessories and materials shall be supplied to complete the Protection functionality as per Power Grid Bangladesh Standard. (Power Grid Bangladesh will supply Bay Unit for busbar protection). Query: As per the Price Schedule and Schedule-A, Power Grid will supply the relay panel for the transformer bay as well as the bay unit for busbar protection. The Bidder understands that, in case any relay(s) installed in the Power Grid-supplied relay panels require replacement or upgrading due to compatibility or any other requirements, the supply of such upgraded/replacement relay(s) shall be under Power Grid's scope. Kindly confirm whether the Bidder's understanding is correct.	Power Grid will supply no BCU, CSD, Busbar Relay as stipulated in price schedule & scope of works. These are updated as per attached Addendum-1. Please note that if OEM expert support is required for the installation, testing, or commissioning of such Employer-supplied equipment, the same shall be solely under the Bidder's scope of works.	Y
17	volume 3 of 3	Tender Price Schedule and SCHEDULE A	Description: 1D5 One (1) set of upgradation/modification of existing CRP Panel of line feeder to use as a 230kV incomer bays of 400/230kV Transformer and to integrate SAS system. Query: As per the Price Schedule and Schedule-A, the existing line bay panel will be utilized as the transformer incomer bay panel. The Bidder understands that if any relay(s) installed in the existing line bay panel require updating or replacement to suit the transformer incomer bay application, the supply and updating of such relay(s) shall be under Power Grid's scope. Kindly confirm whether the Bidder's understanding is correct.	As per the Price Schedule and Schedule-A, the existing line bay panel will be utilized as the transformer incomer bay panel. Please note that if any new relay for transformer incomer bay usage or relay(s) installed in the existing line bay panel require updating or replacement to suit the transformer incomer bay application, the supply and updating of such relay(s) shall be solely under the Bidder's scope of works. If needed, the bidder may visit the site to assess the actual requirement for this upgradation/ modification works.	N

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
18	volume 3 of 3	Tender Price Schedule and SCHEDULE A	Description: 245kV Circuits (Note: Manufacturer of existing CRP, BBP & SAS: HITACHI, DFDR: Qualitrol) 1D4 Two (2) sets of Control, Monitoring, Protection (Main-1 & Main-2 relay) & Substation Automation Facility including event recording function for 230KV circuits line bays. 1D5 One (1) set of upgradation/modification of existing CRP Panel of line feeder to use as a 230kV incomer bays of 400/230kV Transformer and to integrate SAS system. 1D6 One (1) lot of renovation/extension of existing Busbar protection for 230kV system. Query: 1) Who will supply the BCU and Bay Unit for the newly supplied control and protection panel, please confirm. 2) Since the 230kV system is based on a one-and-half breaker (1½ CB) diameter scheme, the Bidder understands that Power Grid will supply the Tie Circuit Breaker (Tie CB) associated bay control panel and protection panel. Kindly confirm whether the Bidder's understanding is correct.	For item 1D4: The supply of the BCU and Bay Unit, including 230kV new control, panel, relay panel, along with necessary relays & other accessories for the newly supplied control and protection panel for the new 230kv diameter, shall be solely under the Bidder's scope of works. For item 1D5: Upgradation/ modifications of the existing CRP panels of Line feeder shall be done to utilize it as a 230kV incomer bays of 400/230kV Transformer. Necessary relays & other accessories shall be solely under the Bidder's scope of works. If needed, the bidder may visit the site to assess the actual requirement for this upgradation/ modification works.	N

S.N.	Volume/Section	Clause No.	Bidder's Query	Reply From Power Grid	Addendum (Y/N)
19	volume 3 of 3	SCHEDULE A	Description: 1C Power Transformers & Earthing/Auxiliary Transformers 1C1 Auxiliary/ Earthing transformer 33/0.415kV, 300kVA: to be supplied by power grid. But its installation, 33kV & 415V connection to it, including 33kV CT, PT, LA, CB, DS/DES & other 33kV & 415V equipment as required; necessary 33kV and 415V cables/conductors, LVAC panels as required, including incoming & outgoing feeder breakers (Nos. to be fixed at design stage), busbars and full LVAC panel arrangements shall be under this project scope. The primary side (33kV) of this Auxiliary/ Earthing transformer shall be connected from the tertiary side (33kV) of the existing 400/132kV, 325MVA Auto-Transformer-2, and the location of installation of this Auxiliary/ Earthing transformer shall be in close proximity to the adjacent Auxiliary/ Earthing transformer or in the free/available space beside the 132kV SPR. Modifications (if needed) of the existing arrangements 33kV switchgears (33kV switchgears that are arranged from the existing 400/132kV transformer's tertiary side to be connected with the auxiliary transformer) shall be under the scope of this project. Location of LVAC shall be in the 132kV SPR, and location of LVDC, including 1 set 110V battery system, shall be in the 400kV SPR. Query: Please clarify whether the above-mentioned LVAC, LVDC, 1 set of 110V Battery System, is the same supply item mentioned in Price Schedule Item No. 1J and 1K or a separate supply item. If it is a separate supply item, kindly provide the relevant specifications and quantity details.	The mentioned LVAC, LVDC, 1 set of 110V Battery System, is the same supply item mentioned in Price Schedule Item No. 1J and 1K.	N
20	volume 3 of 3	HV Power Cable	Query: Please share the HV Power Cable technical specifications and GTP.	230kV Power Cable GTP is attached in Addendum-1.	Y