

POWER GRID COMPANY OF BANGLADESH LIMITED

Project Name: Design, Supply, Installation, Testing & Commissioning of 400/230kV, 500/750MVA Transformer and associated Switchgear in existing
Meghnaghat 400/230kV AIS Substation
(ICB No.: PGCB/400KVTx/Meghnaghat SS)
RFB No.: 27.21.0000.101.07.427.24.2467; May 06, 2024

CLARIFICATION NO.1

Issued on: 27 June, 2024

A Pre-bid meeting was held on 20 May 2024 as mentioned in the IFB, and Clarifications to the queries received from the prospective Bidders regarding the Bidding Documents prior to and during the Pre-bid meeting and after the Pre-bid meeting are given below which will form part of the bidding document.



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Sl. No.	Reference and Queries of Prospective Bidders	Reply (PGCB)	Addendum (Y/N)
1	Vomule 01/ Section 2/ Tender Data Sheet / ITB 11.2(k) Description: ii) Delivery & 540 days Schedule as per Schedule C in Volume 1 of 2 of the Bidding Document; Bidder's Query: We didn't found any Schedule C in volume 1 but we found Schedule C in Volume 03. As per our understanding we have to follow Schedule C of Volume 03. Please confirm our understanding is correct.	Refer to volume 3	N
2	Vomule 01/ Section 2/ Tender Data Sheet / ITB 11.2(k) Description: iii) Name & Nationality of manufacturer's as per requirement of Schedule D in Volume 1 of 2 of the Bidding Document; Bidder's Query: We didn't found any Schedule D in volume 1 but we found Schedule D in Volume 03. As per our understanding we have to follow Schedule D of Volume 03. Please confirm our understanding is correct.	Refer to volume 3	N





3	Vomule 01/ Section 2/ Tender Data Sheet / ITB 11.2(k)	Description: iv) Technical Particulars and Guarantees as per Schedule E in Volume 1 of 2 of the Bidding Document; Bidder's Query: We didn't found any Schedule E in volume 1 but we found Schedule E in Volume 03. As per our understanding we have to follow Schedule E of Volume 03. Please confirm our understanding is correct.	Refer to volume 3	N
4	Vomule 01/ Section 2/ Tender Data Sheet / ITB 11.2(k)	Description: v) Proposed Subcontractors as per Schedule F in Volume 1 of 2 of the Bidding Document; Bidder's Query: We didn't found any Schedule F in volume 1 but we found Schedule F in Volume 03 which is not for Proposed Subcontractors. The schedule F in Volume 3 is for Departures from the Specifications. Please clarify.	Schedule F - Not Applicable	N





5	Vomule 01/ Section 2/ Tender Data Sheet / ITB 11.2(k)	Description: v) Confirmation Letter as per schedule-G in Volume 1 of 2 of the Bidding Document; Bidder's Query: We didn't found any Schedule G in volume 1 but we found Schedule G in Volume 03 which is not for Confirmation Letter. The schedule G in Volume 3 is for Proposed Alternative Standards to which Equipment shall be provided. Please clarify.	Refer to volume 3	N
6	Vomule 01/ Section 3/ Evaluation and Qualification Criteria / 2.5 Personnel and Volume 03 / Schedule H: Proposed Contract and Site Organization	Description: Volume-01/Section 3 - Personnel Requirement Volume 03 - Schedule H: Proposed Contract and Site Organization Bidder's Query: There are two personnel requirement in tender document. There is a difference in experience criteria of personnel requirement. Please clarify which one we should follow.	Refer to volume 01	N





7	Time for Completion Volume 01 / Section 8 / Special Conditions of Contract / 8.2 and Volume 01 / Section 9 / Contract Forms / Appendix 4 - Time Schedule	Description: 8.2 The Time for Completion of the whole of the Facilities as well as each individual section/part shall be 540 (Five Hundred Forty) Days from the Effective Date as described in the Contract Agreement. However, Location wise Completion of each individual substation works will be considered as Completion of that individual part/section only Appendix 4 - The Time for Completion of the whole of the Facilities as well as each individual section/part shall be 720 (seven hundred twenty) days from the Effective Date as described in Volume 1, Section 8 - Special Conditions of Contract, Sub-Clause 8.2 and as per Article 3 of this contract agreement. Bidder's Query: 1) Please clarify and confirm the completion period, which one is correct. 2) Considering the major substation equipment sourced from EU countries, please note that the lead times of these factories are currently quite long and they are overbooked. This is largely due to the post-Covid socio-economic situation and the Russia-Ukraine war. Based on the above information we understand that the given project	The Time for Completion of the whole of the Facilities as well as each individual section/part shall be 540 (Five Hundred Forty) Days from the Effective Date as described in the Contract Agreement. Please see the addendum-1	Y
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		completion time is not sufficient. So we request you to extend the project completion time by at least 30 months.		
8	Tender Notice & Volume 01/ ITB 1.1 & ITB 23.2	Description: Tender Notice & ITB 1.1 - Tendering method is Single Stage Two Envelopes ITB 23.2 - Tendering method is Single Stage Single Envelope Bidder's Query: Please clarify which one is correct.	Tendering method is Single Stage Two Envelopes. Please see the addendum-1	Y
9	Volume 01/ Clause No. 1.2/ Type Test Requirements for Major Equipment (For Substation Part)	Description: *Short circuit withstand test for 400/230kV Transformer For short circuit withstand test the rating of transformer shall be 380kV, 250MVA, three phase or higher rating Bidder's Query:	It shall be as per bidding document.	N

		Due to this three phase short circuit withstand test requirement, many of the world's renowned manufacturers are unable to come to this bidding. For competitive bidding, we request you to relax this eligibility criteria from three phase or higher rating to single/three phase or higher rating, which we have seen in previous PGCB tender (Invitation for Bids No. : 27.21.0000.101.07.420.23.398, OCB No. : PGCB/400KVTxAminbazar SS)		
10	General	According to the Price Schedule – 01, the materials shall be imported from abroad. As a local JV Partner / Bidder our advising bank also local scheduled bank. According to the SCC Clause 14.2, PGCB will pay the relevant customs duty against the imported item under Price Schedule – 01. PGCB will provide us local Master LC in this regard by which foreign import is not possible. PGCB will issue the Master LC in our local bank and subsequently in order to import the materials from abroad, we have to issue several LC(s) to different Manufacturers in various countries on FOB, FCA, CFR or CPT terms mentioning the Master LC and relevant contract reference complying with Master LC. It's to be noted that according to the Import Policy Order, CIP LC can't be opened by us without prior permission of the Commerce Ministry. Though we obtain the prior permission from the Commerce Ministry, all of the criteria under the import policy order will not be fulfilled due to the following reason: - According to the Import Policy Order and SCC Clause 34.8 of the Contract documents: All of the insurance shall be issued from Sadharan Bina Corporation, Bangladesh including Marine Cargo Insurance / Policy. If we open the LC on CIP basis to our manufacturer(s), they have to take the responsibility of Insurance accordingly against the specific project. For your information, our	It shall be as per bidding document.	N

		supplier(s) / manufacturer(s) are from different countries and they don't have any local branch office in Bangladesh. In such case, Insurance / Marine cargo policy can't be issued from Sadharan Bima Corporation by them. Which is also not complying with the referred contract clause as well as Import Policy Order. However, we will be issuing Marine Cargo Policy from Sadharan Bima Corporation according to the Contract. Moreover, according to the LC we will be mentioning Freight Prepaid on the relevant shipping documents and the materials will be delivered directly from port to PGCB's nominated store which is the fulfillment of CIP incoterm. Also, according to the NBR guideline no. NBR/IT/AWIP/2015-2016/973 (1-18), Dated: 18-05-2016, we shall collect a NOC issued by PGCB in order to use the BIN of PGCB in the Bill of Entry. Therefore, as a local bidder, we are requesting to accept the bill of entry and customs clearance according to the import invoice under Price schedule – 1.		
11	General/Site Visit	Description: In the location of the 400kV bay extension, there is an HDPE pipe (approximately dia 900mm) at a distance of 17.5 meters from SPR-1. For the 400kV bay extension, this pipe should be relocated from the location. Bidder's Queries: The bidder understands that the employer will relocate the HDPE pipe before the project execution. Please confirm our understanding.	HDPE pipe will not be at site at the time of execution.	N

12	General/Site Visit	Description: As per our site visit, in the 230KV switchyard of the old substation, there is a lot of grass has grown in the switchyard. Bidder's Queries: The bidder's understanding is the removal and relaying of the gravel at the existing 230KV old substation is not in the bidder's scope. Please confirm our understanding is correct.	Existing Graveling shall be removed. New Gravel shall be provided as per price schedule. Necessary site preparation is under the scope of the bidders.	N
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Sl. No.	Reference and Queries of Prospective Bidders		Reply (PGCB)	Addendum (Y/N)
1	Volume 02/ Clause No. 2.31	Description: Insulating oil shall comply with the requirements of IEC 60296. Insulating oil shall be provided by the Contractor for all oil-filled apparatus and 10% excess shall be provided for topping up purposes in	Refer to addendum 01	Y





		sealed drums. The Contractor shall provide at no additional cost any oil treatment facilities he may require for his own use in order to ensure that insulating oil meets the requirements of the specification. Bidder's Query: Here you mentioned that the contractor has to supply 10% extra oil but it is not mentioned in the price schedule. Please add it to the price schedule		
2	Volume 02/ Clause No. 4.13.2	Description: Oil treatment plant for the treatment of insulating oil for the initial filling of transformers at Site and handed over the same to Employer at the end of work. The oil treatment plant is to be mounted on a steerable trailer equipped with pneumatic types, over-run and parking brakes and weatherproof canopy. The plant shall be capable of treatment of oil to IEC 60296 and IEC 60422, shall be of the replaceable paper filter type and shall have the following facilities: - Oil treatment rate as required - Water extraction capability down to 5 ppm. - Reduction of dissolved gas content to 1% by volume or less. - Filtration level less than 1 micron. - Oil transfer, vacuum pumps and heaters suitable for 400V, 3 phase 50Hz, 4 wire, supply.	Your understanding is correct. The supply of the oil treatment plant is not applicable for this package.	N

		- Vacuum capability approximately 1 Torr. - Facility to apply vacuum to transformer tank during oil filling. - Two 15m lengths of wire reinforced hose coloured differently for clean and dirty oil. - Facility for "closed loop" operation. - One 20m length of power supply cable with plug and socket at the filter end only. Bidder's Query: You have mentioned oil treatment plant in technical specification but it is not mentioned in price schedule. As per our understanding bidder need not consider oil treatment plant. Please confirm our understanding is correct.		
3	Volume 2 / Technical Specification / 4. Power Transformer	Description: Regarding Power Transformer Bidder's Query: The project is an expansion station and requires the nameplate diagram of the original product. It is necessary to clarify the maximum and minimum tap impedances of high-voltage and low-voltage.	Please refer to addendum -1	Y





4	Volume 2 / Technical Specification / 4. Power Transformer	Description: Regarding Delivery Time of Power Transformer Bidder's Query: The bushing is of an brand from Europe and the delivery time is relatively long. You need to consider the overall delivery time of the project to see if it can be replaced with a Chinese one.	It shall be as per bidding document	N
5	Volume 2 / Technical Specification / 4. Power Transformer	Description: Regarding RIP Bushings of Power Transformer Bidder's Query: RIP bushings are required. The outer insulation is made of porcelain. Generally, RIP bushings correspond to silicone rubber jackets. Please clarify.	All bushings shall be Resin Impregnated Paper (RIP) bushings oil-free dry and the outer insulation is made of porcelain.	N
6	Volume-2 / Annexure-B / Drawing / Layout	Description: Layout of Meghnaghat old 230KV AIS Substation Bidder's Query: Layout of Meghnaghat old 230KV AIS Substation was not provided in the tender document. Please, provide us the Layout drawing of Meghnaghat old 230KV AIS Substation.	Please refer to Point 4 of Addendum-1.	Y

7	Volume-2/ Drawings/Outdoor cable trench routing & trench layout for 400/230KV switchyard	Description: In the drawing of the cable trench layout, there are two types of road-crossing sections. One is Culvert type C-2 in 400kV bay extension and another is HDD in the 230kV side of transformer. Bidder's Queries: Can the bidder consider both crossing section culvert type C-2? Please clarify	No, exact drawings are attached in the drawing. Same shall be implemented.	N
8	Tender document Volume 2 Drawings	In a drawing of Volume 2 titled '230kV Diameter -7 Line to Aminbazar Block diagram' it has been mentioned that RED670 and REL670 shall be replaced. These are relays from ABB and those are mentioned to be replaced by relays that is identical to the new 230kV switchyard. Does this mean that only the relays would be replaced and panels would remain, or the whole panels are to be replaced by new panels from new supplier?	Only relays to be replaced.	N





	Existing TR - parallel operation or not If our Proposed Power Transformer need parallel operation with Existing Transformer (Siemens Austria), in this case, we need to have Existing Transformer design information. Specially below Impedance information is necessary. Please confirm whether it is mandatory for parallel operation or not, if yes please let us have below Impedance information.																									
9	General Technical <table border="1"> <thead> <tr> <th rowspan="2">Tap pos</th> <th colspan="3">%Impedance</th> <th rowspan="2">Base capacity</th> </tr> <tr> <th>Min</th> <th>Rat</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>HV-MV</td> <td></td> <td></td> <td></td> <td>750MVA</td> </tr> <tr> <td>HV-LV</td> <td></td> <td></td> <td></td> <td>150MVA</td> </tr> <tr> <td>MV-LV</td> <td></td> <td></td> <td></td> <td>150MVA</td> </tr> </tbody> </table>	Tap pos	%Impedance			Base capacity	Min	Rat	Max	HV-MV				750MVA	HV-LV				150MVA	MV-LV				150MVA	Please find the attached nameplate in this regard attached as Attachment 2.	Y
Tap pos	%Impedance			Base capacity																						
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HV-MV				750MVA																						
HV-LV				150MVA																						
MV-LV				150MVA																						
10	General Technical Size Limitation	Please refer to the layout and section drawing attached in volume 2.	N																							

		We would like to know whether there are Transformer size limitation or not. (Please confirm we need to follow with same dimensions of existing transformer.) First, some information on existing transformers is listed below in tender documents. If PGCB want the same dimensions as an existing transformer, the design data for the existing transformer below is required. 1. Outline drawing approval documents 2. Technical data 3. Foundation drawing 4. Approved sub vendor list (exact Model name) A more accurate model name is needed than a sub-vendor. It is usually indicated on the approval drawing or confirmed separately in the bushing drawing, etc. 5. Transformer Weight, Quantity of TR Oil The oil quantity is indicated on the outline drawing or nameplate, and the shared nameplate contains no additional information other than voltage capacity CT information.	Drawings reveal for the gantry, diameter, transformer, adjacent road and the termination tower position. Existing transformer technical parameter is mentioned in the nameplate drawing. Design should be according to the drawing.	
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Sl. No.	Reference and Queries of Prospective Bidders	Reply (PGCB)	Addendum (Y/N)
1	Volume-3 / Price Schedule / Schedule_1,2,3 / Line Item No. G1 Description: Reagrnding Earthing Mesh System Bidder's Query: As per site visit, we have observed that there is existing earthing mesh system in Meghnaghat old 230kV AIS Substation. So, As per our understandings only earthing riser conductor is required for newly supplied equipment's earthing, no need to modify or re-establish existing grounding mesh system after doing soil resistivity test. Please confirm us whether our understanding is right or not.	Earth mesh shall be designed through measurement of soil resistivity for 400kv and 230kv switchyard area. However, the 230kv old substation shall be connected to the existing mesh through the riser. Equipment connection drawing shall be followed in all cases.	N
2	Volume-3/Price Schedule/ Schedule-4: Installation and Services/Item-J13 Description: Dismantle of the existing 230kv equipment for diameter _7 (aminibazar_2) and dismantled equipment transport to the store (same substation) Bidder's Queries:	Structure: New structure need to be used with proper analysis as per the geometry, Short circuit force and other relevant aspect to comply with the new equipment specifications .	N






		Can the bidder use the existing equipment structure and foundation? Please clarify.	The existing structure need to be dismantled and transported to the store in such a way that its suitability for reuse is not hampered. Foundation: The existing foundation may be used for the respective structure with proper analysis and modification(if required).	
3	Tender document Volume 3 Item 1.1	In the tender document volume 3 item 1.1, we understand that that from transformer LV side equipment to old switchyard there will be a short line and this work would be in the scope of the EPC contractor. Also, we found in price schedule volume 3 item B10.2 that 10 sets of steel structures are required; we understand that this item will be used for this short distance 230kV transmission line. We need to know that whether there are any previously approved drawing or technical specification of this type of gantry structure that will be used for transmission line of this project, if any then please provide us that.	There is no approved drawing so far but tender purpose drawing is attached in volume2	N
4	Tender document Volume 3 Schedule J Price Schedule Item J	We understand that the civil work for line between transformer LV side equipment to old switchyard is in the scope of the EPC contractor. But in the BOQ item J, the civil foundation of the gantry of this short distance transmission line, stringing work for the connection are not clearly mentioned, please clarify to us properly.	Refer to price schedule 4, item j3	N