



বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড

Bangladesh Power Development Board

Central Secretariat
Bangladesh Power Development Board (BPDB)
WAPDA Building (1st Floor)
Motijheel C/A, Dhaka, Bangladesh
Telephone: 8802-9554209

Memo No: 27.11.0000.101.14.035.22. 4658

Date: /10/2022

Sub: Notice of Clarifications/Amendments No. 03 for Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 Nos. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chattogram Zone (2nd Phase), BPDB, Chattogram (GD-1, Lot-4).

Ref: i) Tender Invitation Memo No. 27.11.0000.101.14.035.22-3232, Date: 20/07/2022.

ii) Clarification Notice 01 Memo No. 27.11.0000.101.14.035.22-3970, Date: 31/08/2022

iii) Clarification Notice 02 Memo No. 27.11.0000.101.14.035.22-4310, Date: 20/09/2022

The undersigned is directed to enclose herewith the Clarifications/Amendments No. 03 on the Tender Documents for Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 Nos. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chattogram Zone (2nd Phase), BPDB, Chattogram. in response to the queries from Tenderers. Clarifications/Amendments No. 03 is issued and uploaded in BPDB website. Moreover, who purchased Tender Document, are requested to collect the Clarifications/Amendments No. 03 from the Office of Power Distribution System Development, Chattogram Zone (2nd Phase), BPDB, Chattogram.

Encl: Clarifications/Amendments No. 03. (Total No. of pages: 04, Attachment-1 (10 Pages) and Attachment-2 (2 Pages))

Engr. Md. Shamsuddin
ID No-1-1200
Project Director
Power Distribution System Development
Chattogram Zone (2nd Phase)
BPDB, Chattogram

(Mohammad Salim Reza)
Secretary

Bangladesh Power Development Board
(BPDB)
Motijheel C/A, Dhaka-1000, Bangladesh
Telephone: 8802-9554209

Date: /10/2022

Memo No: 27.11.0000.101.14.035.22.

Copy for information & necessary action to:

1. Member, Distribution/ P&D/Finance, BPDB, Dhaka.
2. Chief Engineer, P&D/Services, BPDB, Dhaka.
3. Project Director, Power Distribution System Development, Chattogram Zone (2nd Phase), BPDB, Chattogram.
4. C.S.O to Chairman, BPDB, Dhaka.
5. Director, Design & Inspection-2/Finance/Contract & C.A, BPDB, Dhaka.
6. Director, Public Relation, BPDB Dhaka.
7. Senior System Analyst, BPDB Dhaka. He is requested to upload this Clarifications/Amendments No. 03. in BPDB website.
8. M/S _____
9. Office copy

(Ahmed Bhuiyan Lipu)
Assistant Secretary (Dev.)
Central Secretariat
BPDB, Dhaka.

International Tender Ref. No.: 27.11.0000.101.14.035.22-3232, Dated- 20/07/2022 for "Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 No. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chattogram Zone (2nd Phase), BPPB, Chattogram," (LOT-4)

Sl. No.	Tender Clause & Page No.	Existing as in Tender Document	Amendment/Clarification/Remarks
1.	Section-5 Schedule No.-1 SL-1 Line Item No.-12 Page-163	Supply of 11 kV 3C×185 sq. mm XLPE (Cu) Cable for Outgoing feeder from 11 kV GIS as required. As per field requirement but not less than 480 meter.	Supply of 11 kV 3C×185 sq. mm XLPE (Cu) Cable for Outgoing feeder from 11 kV GIS as required. As per field requirement but not less than 960 meter. Amended as
2.	Section-6 Clause No.-6.1.2.2 Bill of Quantities Line Item No.-9 Page-341	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 150 meter.	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 210 meter. Amended as
3.	Section-6 Clause No.-6.1.2.2 Bill of Quantities Line Item No.-10 Page-341	Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 300 meter.	Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 420 meter. Amended as
4.	Section-6 Clause No.-6.1.2.3 Bill of Quantities Line Item No.-9 Page-344	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 150 meter.	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 210 meter. Amended as
5.	Section-6 Clause No.-6.1.2.3 Bill of Quantities Line Item No.-10 Page-344	Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 300 meter.	Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 420 meter. Amended as
6.	Section-6 Clause No.-6.1.2.4 Bill of Quantities Line Item No.-9 Page-347	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 150 meter.	Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 210 meter. Amended as

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International Tender Ref. No.: 27.11.0000.101.14.035.22-3232, Dated- 20/07/2022 for "Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 No. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chattoogram Zone (2nd Phase), BPPB, Chattoogram," (LOT-4)

<p>7. Section-6 Clause No.-6.1.2.4 Bill of Quantities Line Item No.-10 Page-347</p>	<p>Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 300 meter.</p>	<p><u>Amended as</u> Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 420 meter.</p>
<p>8. Section-6 Clause No.-6.1.2.4 Bill of Quantities Line Item No.-12 Page-347</p>	<p>Supply of 11 kV 3C×185 sq. mm XLPE (Cu) Cable for Outgoing feeder from 11 kV GIS as required. As per field requirement but not less than 640 meter.</p>	<p><u>Amended as</u> Supply of 11 kV 3C×185 sq. mm XLPE (Cu) Cable for Outgoing feeder from 11 kV GIS as required. As per field requirement but not less than 960 meter.</p>
<p>9. Section-6 Clause No.-6.1.2.5 Bill of Quantities Line Item No.-9 Page-350</p>	<p>Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 150 meter.</p>	<p><u>Amended as</u> Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 210 meter.</p>
<p>10. Section-6 Clause No.-6.1.2.5 Bill of Quantities Line Item No.-10 Page-350</p>	<p>Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 300 meter.</p>	<p><u>Amended as</u> Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 420 meter.</p>
<p>11. Section-6 Clause No.-6.1.2.6 Bill of Quantities Line Item No.-3 Page-352</p>	<p>GIS cubicles Incoming Feeders (2000A) with PT-2 Nos.</p>	<p><u>Amended as</u> GIS cubicles Incoming Feeders (2500A) with PT-2 Nos.</p>
<p>12. Section-6 Clause No.-6.1.2.6 Bill of Quantities Line Item No.-9 Page-353</p>	<p>Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 150 meter.</p>	<p><u>Amended as</u> Supply of 33kV 1C×500 sq.mm XLPE (Cu) Cable as required for Transformer Feeder. As per field requirement but not less than 210 meter.</p>
<p>13. Section-6 Clause No.-6.1.2.6 Bill of Quantities Line Item No.-10 Page-353</p>	<p>Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 300 meter.</p>	<p><u>Amended as</u> Supply of 11kV Single core XLPE copper cable for Transformer 2x1Cx630 Sq. mm per phase. As per field requirement but not less than 420 meter.</p>



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International Tender Ref. No.: 27.11.0000.101.14.035.22-3232, Dated- 20/07/2022 for "Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 No. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chatogram Zone (2nd Phase), BPDB, Chatogram," (LOT-4)

<p>14.</p> <p>Section-5 Schedule No.-1 SL-6 Line Item No.-1 Page-186</p>	<p>GIS cubicles Outgoing Feeders (1250A) with PT-12 Nos.</p>	<p><u>Amended as</u> GIS cubicles Outgoing Feeders (1250A) with PT-14 Nos.</p>
<p>15.</p> <p>Section-5 Schedule No.-1 SL-6 Line Item No.-2 Page-186</p>	<p>Supply of 33 kV, Single phase Lightning Arrester (ZnO-type) along with supporting structure and required accessories-15Set (1 set =03 Nos).</p>	<p><u>Amended as</u> Supply of 33 kV, Single phase Lightning Arrester (ZnO-type) along with supporting structure and required accessories-17Set (1 set =03 Nos).</p>
<p>16.</p> <p>Section-5 Schedule No.-1 SL-10 Line Item No.-8 Page-198</p>	<p>Optical fiber cable termination equipment exclusive of all accessories. - Cum - 2</p>	<p><u>Amended as</u> Optical fiber cable termination equipment exclusive of all accessories. - Set - 2</p>
<p>17.</p> <p>Section-5 Schedule No.-1& 2 Section-6 Clause No.-6,1,2,7 Bill of Quantities Line Item No.-5 Page-191, 241 & 355</p>	<p>33 kV 3 x single phase Current Transformer (3 nos. per circuit) outdoor type ratio 1200-2400/5/5A class 5P10 for protection and 0.2 for measuring along with supporting steel structure and suitable bi-metallic connectors and accessories as per field requirement. - 01(One) Set</p>	<p><u>Amended as</u> 33 kV 3 x single phase Current Transformer (3 nos. per circuit) outdoor type ratio 1200-2400/5/5A class 5P20 for protection and 0.2 for measuring along with supporting steel structure and suitable bi-metallic connectors and accessories as per field requirement. - 02(Two) Set</p>
<p>18.</p> <p>Section-5 Schedule No.-1 & 2 SL No.- 1 to 15 And Section-6 Bill of Quantities Clause No.: 6.1.2.1 - 6.1.2.8</p>	<p>Supply of Battery, 110 volt DC nominal, 150 Ah minimum with mounting rack including accessories. Supply of Battery Charger, constant voltage type (adjustable) with current limiting for boost and float charge, input- 400 volts, output DC 110 - 150 volts including all accessories. 0.415 kV, 4Cx 185 sq.mm PVC (Cu) Cable for Station Transformer as required</p>	<p><u>Amended as</u> Battery, 110volt DC nominal, ≥160Ah minimum with mounting rack including accessories. <u>Amended as</u> Battery Charger, constant voltage type (adjustable) with current limiting for boost and float charge, input- 415 volts, output DC 110 - 150 volts including all accessories. [01(One) set required] <u>Amended as</u> 0.415 kV, 4Cx 120 sq.mm PVC (Cu) Cable for Station Transformer as required</p>

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International Tender Ref. No.: 27.11.0000.101.14.035.22-3232, Dated- 20/07/2022 for "Design, Supply, Construction, Erection, Installation, Testing and Commissioning of 05 Nos. 33/11kV New GIS Substation, 01 No. 33/11kV Substation (GIS Up-gradation), 33kV Bay-Extension at 02 Nos. Substation and 33kV Underground Cable Double Circuit Source Line with Civil and other related works including automation of the Sub-station (SAS) on Turnkey Basis under Power Distribution System Development, Chattogram Zone (2nd Phase), BPDB, Chattogram," (LOT-4)

	Substation Automation System (SAS) including all accessories.	Supply of Substation Automation System (SAS) with Server, Monitor, UPS with 30 Minute battery back-up and Printer etc.	<u>Amended as</u>
19.	Section-6 Clause No.-6.1.2.8 Bill of Quantities Page-356	33 KV Bay Extension at Kalurghat 132/33 KV Grid Substation	<u>Amended as</u> As per Attachment -1
	Section-5 Schedule No.-1 & 2 SL-8 Page-194 & 243		
20.	Section-6 Clause No.-6.1.5 Bill of Quantities Page-377	Mandatory Spare parts	<u>Amended as</u> As per Attachment -2







Attachment-1 (For Addendum-3, LOT-4)

6.1.2.8 Bill of Quantities for Design, Supply, Erection, Installation, Testing and Commissioning of 33 KV Bay Extension at Kalurghat
132/33 KV Grid Substation Under S&D-Kalurghat, BPDDB, Chattogram.

SI No	Description of Item	Unit	Quantity
1.	33 kV Vacuum Circuit Breaker, 1600 A, 25 kA for 3 sec. outdoor type along with supporting structure and accessories.	Set	4
2.	33 kV Isolator 1600A, 25 kA for 3 sec. without earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.	Set	4
3.	33 kV Line Isolator 1600A, 25 kA for 3 sec. with earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.	Set	4
4.	Supply of 33 kV, Single phase Lightning Arrester (ZnO-type) along with supporting structure and required accessories.	Set (1 Set= 3Nos)	4
5.	33 kV 3 x single phase Current Transformer (3 nos. per circuit) outdoor type ratio 600-1200/5/5A class 5P20 for protection and 0.2 for measuring along with supporting steel structure and suitable bi-metallic connectors and accessories as per field requirement.	Set	4
6.	33 kV Control, Metering and Protection panel for 33 kV outgoing feeder with all indicating and integrating meters and 3 O/C, 1 E/F (IDMT and Ins), 3 Directional O/C + 1 Directional E/F relays	Nos	4
7.	Suitable busbar Droppers, Conductors, Connectors, outdoor marshal kiosk, hardware clamps, nuts and bolts, etc. as required for connecting the individual items of equipment of 33 kV	Lot	1




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	switchyard & complete bay extension.		
8.	PG Clamps.	Lot	1
9.	33 kV Disc Insulator set with necessary suitable front and back connecting clamps.	Lot	1
10.	33 kV Bus Bar Conductor (ACSR Martin).	Lot	1
11.	Control Cables including CT and PT cables and LV Power Cables with all accessories between Control Room panels and 33 kV switchyard equipment.	Lot	1
12.	All material for grounding connection of individual equipment with substation/ earthing mesh, 185 mm ² grounding copper conductor, suitable connector and earthing electrode as required to achieve Earth Resistance as per standard.	Lot	1
13.	Shield wire extension, overall diameter 9.252 mm standard steel with terminal tension clamp and fitting, Tension Clamp, Support Clamp set for fixing the shield wire with the gantry steel structure	Lot	1
14	Civil Works.		
	a) Earth filling and compaction as needed etc.	Lot	1
	b) Foundation of Equipment, Power & Control Cable Trench etc.	Lot	1
15	Installation of complete Bay with existing system including Inspection, design, drawing, as-built drawing, erection, testing & commissioning.	Lot	1







Schedule No.-1 (For Addendum-3, LOT-4)

08. Name of the Work: Design, Supply, Erection, Installation, Testing and Commissioning of 33 KV Bay Extension at Kalurghat 132/33 KV Grid Substation Under S&D-Kalurghat, BPDB, Chattogram.. (Bidder shall quote price considering the requirement to complete Substation as per BOQ Clause 6.2)

Line Item No	Description of Item	Country of Origin	Quantity	Unit Price CIP [Project Site, as per GCC 1.1 (oo)] [FC]	CIP price per Line Item [FC]	Taxes and Duties In Local Currency
1	2	3	4	5	6=4x5	7
1.	33-kV Vacuum Circuit Breaker, 1600 A, 25 KA for 3 sec. outdoor type along with supporting structure and accessories.		Set 4			
2.	33 kV Isolator 1600A, 25 KA for 3 sec. without earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.		Set 4			
3.	33 kV Line Isolator 1600A, 25 KA for 3 sec. with earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.		Set 4			





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Line Item No	Description of Item	Country of Origin	Quantity	Unit Price CIP	CIP price per Line Item	Taxes and Duties In Local Currency
1	2	3	4	5	6=4x5	7
4.	Supply of 33 kV, Single phase Lightning Arrester (ZnO-type) along with supporting structure and required accessories.		Set (1 Set= 3Nos)	4		
5.	33 kV 3 x single phase Current Transformer (3 nos. per circuit) outdoor type ratio 600-1200/5/5A class 5P20 for protection and 0.2 for measuring along with supporting steel structure and suitable bi-metallic connectors and accessories as per field requirement.		Set	4		
6.	33 kV Control, Metering and Protection panel for 33 kV outgoing feeder with all indicating and Integrating meters and 3 O/C, 1 E/F (IDMT and lns). 3 Directional O/C + 1 Directional E/F relays.		Nos	4		
7.	Suitable busbar Droppers, Conductors, Connectors, outdoor marshal kiosk, hardware clamps, nuts and bolts, etc. as required for connecting the individual items of equipment of 33 kV switchyard & complete bay extension.		Lot	1		





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Line Item No	Description of Item	Country of Origin	Quantity	Unit Price CIP [Project Site, as per GCC 1.1 (oo)] [FC]	CIP price per Line Item [FC]	Taxes and Duties In Local Currency
1	2	3	4	5	6=4x5	7
8.	PG Clamps.		Lot 1			
9.	33 kV Disc Insulator set with necessary suitable front and back connecting clamps.		Lot 1			
10.	33 kV Bus Bar Conductor (ACSR Martin).		Lot 1			
11.	Control Cables including CT and PT cables and LV Power Cables with all accessories between Control Room panels and 33 kV switchyard equipment.		Lot 1			
12.	All material for grounding connection of individual equipment with substation/ earthing mesh, 185 mm ² grounding copper conductor, suitable connector and earthing electrode as required to achieve Earth Resistance as per standard.		Lot 1			
13.	Shield wire extension, overall diameter 9.252 mm standard steel with terminal tension clamp and fitting, Tension Clamp, Support Clamp set for fixing the shield		Lot 1			





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Line Item No	Description of Item	Country of Origin	Quantity	Unit Price CIP [Project Site, as per GCC 1.1 (oo)] [FC]	CIP price per Line Item [FC]	Taxes and Duties In Local Currency	
1	wire with the gantry steel structure	2	3	4	5	6=4x5	7
TOTAL Column 6 to be carried forward to Schedule No. 6. Grand Summary							

Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies

Note: 2. Taxes and Duties in accordance with GCC 60.2 & PCC 60.4

Name:	[Insert full name of signatory]	Signature with Date and Seal
In the capacity of:	[Insert designation of signatory]	[Sign]
Duly authorised to sign the Tender for and on behalf of the Tenderer		







Schedule No.-2 (For Addendum-3, LOT-4)

08. Name of the Work: Design, Supply, Erection, Installation, Testing and Commissioning of 33 KV Bay Extension at Kalurghat 132/33 KV Grid Substation Under S&D-Kalurghat, BPDB, Chattogram.. (Bidder shall quote price considering the requirement to complete Substation as per BOQ Clause 6.2)

Line Item No.	Description of Item	Quantity	Unit Price EXW (Foreign Currency or Taka)	Total EXW Price (Foreign Currency or Taka)	Sales Tax (Foreign Currency or Taka)	Total Price (Foreign Currency or Taka)
1	33 kV Vacuum Circuit Breaker, 1600 A, 25 KA for 3 sec. outdoor type along with supporting structure and accessories.	Set	4	$5 = 3 \times 4$	6	$7 = 5 + 6$
2	33 kV Isolator 1600A, 25 KA for 3 sec. without earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.	Set	4			
3	33 kV Line Isolator 1600A, 25 KA for 3 sec. with earthing blade gang operated vertical mounted vertical break with galvanized steel support structure and necessary connectors and accessories.	Set	4			
4	Supply of 33 kV, Single phase Lightning Arrester (ZnO-type) along with supporting structure and required accessories.	Set (1 Set= 3Nos)	4			





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Line Item No.	Description of Item	Quantity	Unit Price EXW (Foreign Currency or Taka)	Total EXW Price (Foreign Currency or Taka)	Sales Tax (Foreign Currency or Taka)	Total Price (Foreign Currency or Taka)
1						
2						
3						
4						
5	33 kV 3 x single phase Current Transformer (3 nos. per circuit) outdoor type ratio 600-1200/5/5A class 5P20 for protection and 0.2 for measuring along with supporting steel structure and suitable bi-metallic connectors and accessories as per field requirement.	Set	4			
6	33 kV Control, Metering and Protection panel for 33 kV outgoing feeder with all indicating and integrating meters and 3 O/C, 1 E/F (IDMT and Ins). 3 Directional O/C + 1 Directional E/F relays.	Nos	4			
7	Suitable busbar Droppers, Conductors, Connectors, outdoor marshal kiosk, hardware clamps, nuts and bolts, etc. as required for connecting the individual items of equipment of 33 kV switchyard & complete bay extension.	Lot	1			
8	PG Clamps.	Lot	1			
9	33 kV Disc Insulator set with necessary suitable front and back connecting clamps.	Lot	1			





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Line Item No.	Description of Item	Quantity	Unit Price EXW (Foreign Currency or Taka)	Total EXW Price (Foreign Currency or Taka)	Sales Tax (Foreign Currency or Taka)	Total Price (Foreign Currency or Taka)
				$5 = 3 \times 4$		$7 = 5 + 6$
1	2	3	4		6	
10	33 kV Bus Bar Conductor (ACSR Martin).	Lot 1				
11	Control Cables including CT and PT cables and LV Power Cables with all accessories between Control Room panels and 33 kV switchyard equipment.	Lot 1				
12	All material for grounding connection of individual equipment with substation/ earthing mesh, 185 mm ² grounding copper conductor, suitable connector and earthing electrode as required to achieve Earth Resistance as per standard.	Lot 1				
13	Shield wire extension, overall diameter 9.252 mm standard steel with terminal tension clamp and fitting, Tension Clamp, Support Clamp set for fixing the shield wire with the gantry steel structure	Lot 1				
TOTAL Column 5 to be carried forward to Schedule No. 6. Grand Summary						
<input type="text"/>						

Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies

Note: 2. Taxes and Duties in accordance with GCC 60.2 & PCC 60.4

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Name:	[insert full name of signatory]	Signature with Date and Seal
In the capacity of:	[insert designation of signatory]	[Sign]
Duly authorised to sign the Tender for and on behalf of the Tenderer		







Attachment-2 (For Addendum-3, LOT-4)

6.1.5 Mandatory Spare parts

S/L No	Description of Item	Unit	Quantity
1.	Supply of HT Bushing for 20/26MVA Power Transformer (1 Set = 3 Nos.)	Sets	2
2.	Supply of LT Bushing for 20/26MVA Power Transformer (1 Set = 4 Nos.)	Sets	2
3.	Supply of 33kV, Single phase Post type Lightning Arrester (ZnO-type), Class-3	Sets (3 nos.= 1 set)	5
4.	Supply of 11kV, Single phase Post type Lightning Arrester (ZnO-type), Class-2	Sets (3 nos.= 1 set)	10
5.	Supply of Closing Coil for GIS panel	Sets	10
6.	Supply of Tripping Coil for GIS panel	Sets	10
7.	Supply of Universal Motor/Spring Charge motor for 11kV GIS panel	Sets	5
8.	Supply of Universal Motor/Spring Charge motor for 33kV GIS panel	Sets	5
9.	Supply of Differential Relay, 3 O/C + 1 E/F + 3 Directional O/C + 1 Directional E/F for 33kV Control Metering and Relay Panel as per technical specification.	Sets	2
10.	Supply of Bay Control and Protection Unit (BCPU), 3 Over Current + 2 Earth fault (1 E/F + 1 Separate Standby Earth Fault) + Directional O/C & E/F relay for 33kV Control Metering and Relay Panel as per technical specification.	Sets	2
11.	Supply of Bay Control and Protection Unit (BCPU), 3 Over Current + 2 Earth fault (1 E/F + 1 Separate Standby Earth Fault) + Directional O/C & E/F relay for 11kV	Sets	5

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	Control Metering and Relay Panel as per technical specification.		
12.	Supply of Heat shrinkable Straight through Jointing kits for 33kV, 800mm ² Cable including all accessories	Sets	30
13.	Supply of Heat shrinkable Indoor GIS termination kit including all accessories for 33kV, 800mm ² Cable	Sets	12
14.	Supply of Heat shrinkable Indoor GIS termination kit including all accessories for 33kV, 500mm ² Cable	Sets	6
15.	Supply of Heat shrinkable Outdoor termination kit including all accessories for 33kV, 500mm ² Cable	Sets	6
16.	Supply of Heat shrinkable Indoor GIS termination kit including all accessories for 11kV, 630mm ² Cable	Sets	6
17.	Supply of Heat shrinkable Outdoor termination kit including all accessories for 11kV, 630mm ² Cable	Sets	6
18.	Supply of Heat shrinkable Indoor GIS termination kit including all accessories for 11kV, 3x185mm ² Cable	Sets	30
19.	Supply of Heat shrinkable Outdoor termination kit including all accessories for 11kV, 3x185mm ² Cable	Sets	30
20.	Supply of Tool box for HV Cable Jointing and Termination	Set	2
21.	Supply of Test plug for Power Cable	Sets	2
22.	Supply of SFRA Testing Kit with all accessories and Software	Sets	2
23.	Supply of Cable fault locator with all accessories (EU/UK/USA/Korea/Japan/Australia make)	Sets	2
24.	Supply of Partial Discharge Measurement and Analysis of Transformer & Cable	Sets	2
25.	DS/ES Motor Control Unit/ Device/ Card for 33kV	sets	5
26.	DS/ES Motor Control Unit/ Device/ Card for 11kV	sets	5

