

**POWER GRID BANGLADESH PLC**

**Bidding Document**

**For**

**Procurement of**

**Design, Supply, Installation, Testing & Commissioning of 230/132/33 kV AIS Substation at Madhabpur and Monohardi including two nos. 132KV bay extension at Bajitpur 132/33kV grid substation and associated 230kV and 132kV Transmission Lines on turnkey basis (Package-2).**

**(Contract No. POWERGRID/ADB/PTSIREP/230kV Monohardi & Madhabpur SS/Package-2)**

**Addendum No. 01**

**(Date: October 27, 2025)**

Following revisions/changes are made in the Bidding Document which will form part of the Bidding Document:

**Volume 1 of 3**

**1. Price schedule**

**i) Price schedule 4B**

The unit of measure for item no. 2.2.5 of price schedule 4B shall be "per tower".

**ii) Price schedule 2A, 2B, 2C, 4A, 4B & 4C.**

Following Note is added at the end of price schedule-2A, 2B & 2C:

"If any bidder claims domestic preference for any item in Schedule 2, they must quote at least 30% of the price for that specific item in BDT (Bangladeshi Taka) as per ITB 19.2 of BDS."

Following Note is added at the end of price schedule-4A, 4B & 4C:

"As per ITB 19.2 of BDS, Bidders shall have to quote all prices under Schedule 4 (Installation and other Services) in Bangladeshi Taka (BDT). However, if there is a specific requirement for quoting the price in foreign currency, then the bidder has to give proper justification while submitting the financial bid".

**The corrected pages of the price schedule is attached as attachment 1.**

Addendum-1

POWERGRID/ADB/PTSIREP/230kV Monohardi & Madhabpur SS/Package-2

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**2. Description, unit and quantity of the following Items are corrected in the Schedule-4D of price schedule and attached as attachment 2:**

1K.2 i) a) & b); 1K.2 ii) b), c), d) & g); 1K.2 iii) a) & b); 1K.2 iv) b), c), d) & g); 1K.2 x);

2K.2 i) a) & b); 2K.2 ii) b), c), d) & g); 2K.2 iii) a) & b); 2K.2 iv) b), c), d) & g); 2K.2 x);

3K.1 i) a) & b); 3K.1 ii) g);

**3. Description, unit and quantity of the following Items are corrected in the Schedule-1D, 2D and 4D of price schedule and attached as attachment 3:**

1D: 1B.14\_c)\_ix), 1C.14\_a), 1C.14\_c)\_ix), 2B.14\_c)\_ix),

2C.14\_a), 2C.14\_c)\_ix), 3C.14\_a), 3C.14\_c)\_ix),

2D: 1B.14\_c)\_ix), 1C.14\_a), 1C.14\_c)\_ix), 2B.14\_c)\_ix),

2C.14\_a), 2C.14\_c)\_ix), 3C.14\_a), 3C.14\_c)\_ix)

4D: 1B.14\_c)\_ix), 1C.14\_a), 1C.14\_c)\_ix), 2B.14\_c)\_ix),

2C.14\_a), 2C.14\_c)\_ix), 3C.14\_a), 3C.14\_c)\_ix)

**Volume 2 of 3 (Substation)**

**1) SEC 03: HV SWITCHGEAR AND NEUTRAL EARTHING EQUIPMENT**

i) **Clause no: 3.4.5.6 'Mandatory Maintenance Equipment'** is not applicable under this scope and shall be deleted.

**ii) Clause no: 3.4.10 Busbars, Conductors and Connections**

'Tubular bus conductor shall be used for 400kV, 230KV and 132kV busbar and supported by station post insulator.'

**The above mentioned text shall be replaced by the following:**

Tubular/flexible bus conductor shall be used for 400kV, 230KV and 132kV busbar and supported by station post insulator.

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**2) SECTION 02: ANCILLARY MECHANICAL AND ELECTRICAL APPARATUS**

**Clause no: 2.31 INSULATING OIL**

‘Insulating oil shall comply with the requirements of IEC 60296. Insulating oil shall be provided by the Bidder for all oil-filled apparatus and 10% excess shall be provided for topping up purposes in sealed drums. The Bidder 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.’

**The above mentioned text shall be replaced by the following:**

Insulating oil shall comply with the requirements of IEC 60296. Insulating oil shall be provided by the Bidder for all oil-filled apparatus. The Bidder 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.

**3) Section 5: Protection, Metering and Control Including Substation Automation**

**Clause no: 5.1.1.4**

‘During the design and execution stage, the contractor shall submit the GTP of the panel (annexure 1) for approval and must also adhere to the employer's requirements for manufacturing all panels as per annexure 2.1 and annexure 2.2.’

**Inadvertently, these Annexures were not included with the bidding document. Annexure 1 and 2.1 are now added as attachment 4 and Annexure 2.2 is not applicable and deleted hereby.**

**4) Section 11, Clause 11.3.1 Architectural and Structural Requirements of Buildings - shall be replaced with the text attached as attachment 5.**

**Volume 2 of 3 (Transmission Line)**

**1).Section 23; Annex 23-1 (Page No 23-2):**

**Sl. No 1 & 2 of Monohordi-Bajitpur 132kV Double Circuit Transmission Line is replaced by following information:**

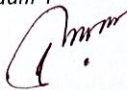
Addendum-1

POWERGRID/ADB/PTSIREP/230kV Monohardi & Madhabpur SS/Package-2

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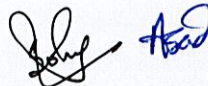
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| SL No. | Easting        | Northing        | Code         | District      | Upazila       | Union          | Mouza               |
|--------|----------------|-----------------|--------------|---------------|---------------|----------------|---------------------|
| 1      | 268166.80<br>5 | 2674791.31<br>2 | Gantry       | Narsingd<br>i | Manohard<br>i | Chalak<br>Char | Kismot<br>Sarikandi |
| 2      | 268179.63<br>4 | 2674869.82<br>6 | TT No<br>-01 | Narsingd<br>i | Manohard<br>i | Chalak<br>Char | Kismot<br>Sarikandi |

## 2).Section-6: Annex 6-1(1) Description of Clearance -Minimum Clearance

Road Clearance is revised as below:

| Description | Unit | 132kV | 230kV | 400kV |
|-------------|------|-------|-------|-------|
| Roads       | (m)  | 11.0  | 13.0  | 14.0  |

### Volume 3 of 3 (Substation)

#### 1) SCHEDULE A :

##### I) Clause no. 4: O & M training for new substations:

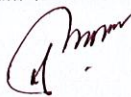
‘For on-site instruction training, the contractor shall not be responsible for any costs for trainees except meal and the aforementioned onsite training shall have to be arranged at any Substation’s respective local Grid Circle or GMD area with the consultation of Superintending Engineer, Grid Circle, PGCB. In “Schedule B4.2: Installation and Other Services” of the Price Schedule, costs of Local O&M Training are given as a provisional sum. These costs are fixed ceiling and will be included in the total price. But the payment shall be at actual upon submission of relevant documents.’

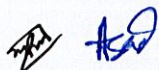
**The above mentioned text shall be replaced by the following:**

For on-site instruction training, the contractor shall not be responsible for any costs for trainees except meal and the aforementioned onsite training shall have to be arranged at any Substation’s respective local Grid Circle or GMD area with the consultation of Superintending Engineer, Grid Circle, PGCB. In “Schedule 4D: Installation and Other Services” of the Price Schedule, costs of Local O&M Training are fixed ceiling and will be included in the total price. But the payment shall be at actual upon submission of relevant documents.

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**II) Clause no. 1I1 :**

‘110V substation alkaline batteries complete with chargers and distribution switchboard to be supplied, installed and commissioned to provide all DC supplies to equipment being supplied.’

**The above mentioned text shall be replaced by the following:**

‘110V substation Nickel Cadmium (NiCd) batteries complete with chargers and distribution switchboard to be supplied, installed and commissioned to provide all DC supplies to equipment being supplied.’

**III) Clause no. 2I1 :**

‘110V substation alkaline batteries complete with chargers and distribution switchboard to be supplied, installed and commissioned to provide all DC supplies to equipment being supplied.’

**The above mentioned text shall be replaced by the following:**

‘110V substation Nickel Cadmium (NiCd) batteries complete with chargers and distribution switchboard to be supplied, installed and commissioned to provide all DC supplies to equipment being supplied.’

**IV) Clause no. 1D2.7 shall be replaced by the following:**

Six (6) nos. of 36kV, 31.5 kA/1 sec, 50Hz, 170kVp BIL, post type current transformer.

2400-1600-800/1A, Class 5P20, 30VA for Main 1 Protection

2400-1600-800/1A, Class 5P20, 30VA for Main 2 Protection,

2400-1600-800/1A, Class 0.2S, 15VA for Metering 1

2400-1600-800/1A, Class 0.2S, 15VA for Metering 2, BCU

[Actual Burden shall be finalized at execution time based on sizing calculation.  
Accuracy & VA shall have to be defined for all ratio]

**V) Clause no. 2D2.7 shall be replaced by the following:**

Six (6) nos. of 36kV, 31.5 kA/1 sec, 50Hz, 170kVp BIL, post type current transformer.

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2400-1600-800/1A, Class 5P20, 30VA for Main 1 Protection

2400-1600-800/1A, Class 5P20, 30VA for Main 2 Protection,

2400-1600-800/1A, Class 0.2S, 15VA for Metering 1

2400-1600-800/1A, Class 0.2S, 15VA for Metering 2, BCU

[Actual Burden shall be finalized at execution time based on sizing calculation.  
Accuracy & VA shall have to be defined for all ratio]

**VI) Clause no.1: MADHABPUR 230/132/33 kV AIS Substation**

**230kV Air Insulated Switchgears (AIS)**

*New 230kV AIS switchyard for four 230kV line bays to connect Line in-out of existing 230kV Cumilla(N)- Shahjibazar double circuit overhead line (Cumilla (N) 1 & 2 and Shahjibazar 1 & 2); Three 230kV transformer bays for HV side of three 230/132/33kV transformer; one 230kV bus-coupler bay; space shall be kept for future extension of three (3) 230kV overhead line bays.*

**132kV Air Insulated Switchgears (AIS)**

*New 132kV AIS switchyard for four 132kV line bays to connect Shahjibazar-Brahmanbaria 132kV double circuit overhead line ((Shahjibazar 1 & 2 and Brahmanbaria 1 & 2)); Three 132kV transformer bays for LV side of two 230/132kV transformer; two 132kV transformer bays for HV side of two 132/33kV transformer; one 132kV bus-coupler bay; space for future extension of three overhead 132kV line bays.*

**The above mentioned text shall be replaced by the following:**

**230kV Air Insulated Switchgears (AIS)**

**New 230kV AIS switchyard for four 230kV line bays to connect Line in-out of existing 230kV Cumilla(N)- Shahjibazar double circuit overhead line {(Cumilla (N) 1 & 2 and Shahjibazar 1 & 2)}; Three 230kV transformer bays for HV side of three 230/132/33kV transformer; one 230kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three (3) 230kV overhead line/ transformer bays.**

**132kV Air Insulated Switchgears (AIS)**

New 132kV AIS switchyard for four 132kV line bays to connect Shahjibazar-Brahmanbaria 132kV double circuit overhead line (Shahjibazar 1 & 2 and Brahmanbaria 1 & 2); Three 132kV transformer bays for LV side of three 230/132kV transformer; two 132kV transformer bays for HV side of two 132/33kV transformer; one 132kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three overhead 132kV line/ transformer bays.

**VII) Clause no.2: MONOHARDI 230/132/33 kV AIS Substation**

**230kV Air Insulated Switchgears (AIS)**

New 230kV AIS switchyard for four 230kV line bays to connect Line in-out of existing 230kV Sripur- Ashugonj double circuit overhead line (Sripur 1 & 2 and Ashugonj 1 & 2); Two 230kV transformer bays for HV side of two 230/132/33kV transformer; one 230kV bus-coupler bay; space shall be kept for future extension of three (3) 230kV overhead line bays.

**132kV Air Insulated Switchgears (AIS)**

New 132kV AIS switchyard for two 132kV line bays to connect Monohardi-Bajitpur 132kV double circuit overhead line (Bajitpur 1 & 2); Two 132kV transformer bays for LV side of two 230/132/33kV transformer; two 132kV transformer bays for HV side of two 132/33kV transformer; one 132kV bus-coupler bay; space for future extension of three overhead 132kV line bays.

**-The above mentioned text shall be replaced by the following:**

**230kV Air Insulated Switchgears (AIS)**

New 230kV AIS switchyard for four 230kV line bays to connect Line in-out of existing 230kV Sripur- Ashugonj double circuit overhead line (Sripur 1 & 2 and Ashugonj 1 & 2); Two 230kV transformer bays for HV side of two 230/132/33kV transformer; one 230kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made shall be kept for future extension of three (3) 230kV overhead line/transformer bays.

**132kV Air Insulated Switchgears (AIS)**

New 132kV AIS switchyard for two 132kV line bays to connect Monohardi-Bajitpur 132kV double circuit overhead line (Bajitpur 1 & 2); Two 132kV transformer bays for LV

side of two 230/132/33kV transformer; two 132kV transformer bays for HV side of two 132/33kV transformer; one 132kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three overhead 132kV line/ transformer bays.

**VIII) Clause no. 2E3 shall be replaced by the following:**

“Two (2) sets 33/0.415 kV, 300kVA three phase outdoor type earthing/auxiliary Zig-Zag transformers associated with Bushing & outdoor neutral CTs and steel support structures including all necessary connections.”

**IX) Clause no. 1B11, 1C11, 1D1.4, 1D2.4, 2B11, 2C11, 2D1.4, 2D2.4, 3C11**

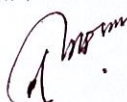
*In all these clause “5P20” shall be replaced by “3P”*

**2) Schedule E: Technical Particulars**

**i) Bidders are requested to correct the GTPs according to below mentioned table:**

| Sl no. | Equipment name                                      | Description                                                                        | Unit | Minimum Requirements    |                                       |
|--------|-----------------------------------------------------|------------------------------------------------------------------------------------|------|-------------------------|---------------------------------------|
|        |                                                     |                                                                                    |      | Previous                | Revised                               |
| 1.     | 1.1.2 230KV CIRCUIT BREAKERS                        | 14. Min. Rated continuous current (Ir)<br>(f) Bus coupler/ sectionalizer/ Mid 4000 | A    | 4000                    | 3150                                  |
| 2.     | 1.3.4 36KV CURRENT TRANSFORMER (For 120MVA Tr. Bay) | 1.5 Country of Origin                                                              |      | EU/UK/USA/ Japan/Turkey | EU/UK/USA/ Japan/Turkey or equivalent |
| 3.     | 2.4 33/0.415 kV EARTHING/AUXILIARY TRANSFORMERS     | 2.1 Rated power                                                                    | KVA  | 500                     | 300                                   |

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|     |                                                                     |                                                                                                                                            |                   |                                                                                                  |                                                                                                  |
|-----|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 4.  | 2.4 33/0.415 kV<br>EARTHING/AUXILIARY<br>TRANSFORMERS               | 2.4 Tap changer:<br><ul style="list-style-type: none"><li>Type of tap changing</li><li>Tapping range</li><li>Tapping step</li></ul> Rating | %<br>%            | Off-load<br>±5<br>2.5<br>Rated power 500 kVA, all taps (As per BoQ)<br>(Calculation is required) | Off-load<br>±5<br>2.5<br>Rated power 300 kVA, all taps (As per BoQ)<br>(Calculation is required) |
| 5.  | 1.1.4 33KV<br>CIRCUIT<br>BREAKERS                                   | 1.7 - Isolating and quenching medium                                                                                                       |                   | Vacuum                                                                                           | SF6/Vacuum                                                                                       |
| 6.  | 1.1.4 33KV<br>CIRCUIT<br>BREAKERS                                   | 3.2.12 - Minimum number of available contacts (NO/NC/V)                                                                                    |                   | 6NO+6NC+1 V                                                                                      | 6NO+6NC                                                                                          |
| 7.  | 1.2.4 33KV<br>DISCONNECTORS                                         | 1.10 - Type of operating mechanism                                                                                                         |                   | Hand operated/Motorized                                                                          | Motor operated                                                                                   |
| 8.  | 1.3.5 36kV Current Transformer (For Earthing Transformer)           | 2.14 - Rated Transformer ratio                                                                                                             | A/A<br>A/A<br>A/A | 10/1<br>200/1<br>600/1                                                                           | 100/1<br>800/1<br>800/1<br>800/1                                                                 |
| 9.  | 1.3.5 36kV Current Transformer (For Earthing Transformer)           | 1.8 - Installation type - Indoor (For Cox's Bazar grid)                                                                                    |                   | Indoor (For Cox's Bazar grid)                                                                    | Outdoor                                                                                          |
| 10. | 1.3.5. 36KV<br>CURRENT<br>TRANSFORMER<br>(For Earthing Transformer) | 2.8.1 Rated primary current                                                                                                                | A                 | 600                                                                                              | 800                                                                                              |

|     |                                                                    |                                            |    |                     |           |
|-----|--------------------------------------------------------------------|--------------------------------------------|----|---------------------|-----------|
| 11. | 3.1 - 33 KV XLPE<br>POWER CABLES                                   | Nominal Current A                          | A  | ≥ 2000              | insert    |
| 12. | 3.1 - 33 KV XLPE<br>POWER CABLES                                   | Type of curing (dry) -<br>Dry Curing (VCV) |    | Dry Curing<br>(VCV) | CCV / VCV |
| 13. | 1.5.2 245KV Surge<br>Arrester                                      | 6. Rated voltage                           | kV | 196                 | 198       |
| 14. | 2.2 230/132/33<br>kV, 225/300MVA, 3-<br>PHASE POWER<br>TRANSFORMER | 5.1.2 Class                                | kV | 420                 | 245       |

ii) **Clause no. 4.1, 110V Batteries; PART-B: (Manufacturer Information):**

“Overall compliance with detail specification described in other PARTS & existing Charger Module specification”

**The above mentioned text shall be replaced by the following:**

“Overall compliance with above requirements & detail specification described in other PARTS”

Encl: as stated.

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