Design, Supply, Installation, Testing and Commissioning of 400kV and 132kV Transmission Lines under ESPNER Project
[Contract No.: PGCB/WB/ESPNERP/TL/Package-1]

Addendum No. 01

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

Volume 1 of 2

1. **Section X. Contract Forms**

   Appendix 2. Price Adjustment
   Towers and Poles (including Bolts and Nuts):

   Definition of P_0 shall be amended as follows:

   P_0 = Ex-works/CIP price component (base price) of fabricated towers, tower parts and poles (including bolts & nuts), less advance

2. **Schedule B: Bid Prices & Schedules**
   Schedule No. B4(i). Installation and Other Services

   'Item no. 7.8 - Craddle guard for highway and railway crossings' shall be deleted.

Volume 2 of 2

1. **Section 7. Foundations**

   Page 7/31 and Page -7-31- shall be replaced with the revised page no. 7/31 (rev. 1) and 7/31(a) [**Attachment 1**].

2. **Section 24. Environment and Social Management**

   The text 'Reconductoring of Transmission lines: Impact of Reconductoring of transmission lines and corresponding mitigation and enhancement measures' shall be replace with the following text:

   'Transmission lines: Impact of construction of transmission lines and corresponding mitigation and enhancement measures'

Attachment 1

APPENDIX 7.A1
FOUNDATION TYPES & USES

Soil Category	Allowable Foundation Type
1	Concrete Pad & Chimney/ Drilled Shaft Piled*/Rigid Frame Foundation**
2	Concrete Pad & Chimney/ Drilled Shaft Piled*/Rigid Frame Foundation**
3	Concrete Pad & Chimney/ Raft/ Drilled Shaft Piled*/Rigid Frame Foundation**
4	Concrete Pad & Chimney/ Drilled Shaft Piled*/Rigid Frame Foundation**

Note: Seismic zone coefficient, G=0.1 shall be considered.

* The bidder may propose any other proven type of piled foundation instead of Drilled Shaft Piled foundation except wooden pile. The bidder shall submit the design of the proposed type of piled foundation along with detailed design calculation, installation procedure with drawings, Quality Control procedure, Standards and Codes of Practices to be followed, advantages of selecting such type of piles, etc. with the bid. Reinforced concrete pile caps shall be used for all types of piles. Payments of all types of foundations shall be as per prices quoted in the Price Schedule.

** Foundations at high flood level area shall be rigid frame with multiple drilled or mechanically excavated cast-in-situ piled. The Contractor shall submit his proposed method of installation and Quality Control procedures to the Engineer prior to commencing his design. This is a **Hold Point**.

Due cognizance shall be taken of the setting level of the base of the tower relative to ground level, the maximum depth of flood water. Individual footings shall be interconnected by tie beams, which shall be adequate to resist lateral forces and hydrostatic pressure exerted by the flood water. A Cyclonic surge of 6m shall be considered for detailed design of tower and foundation for river crossing in the estuary.

As the location of river crossing towers are supposed to be submerged during most of year, temporary islands will be required to be built by the Contractor for foundation works of river crossing towers.

APPENDIX 7.A2
FOUNDATION STRENGTH FACTOR

400kV Twin ACSR Finch / Twin ACCC Dhaka Double Circuit Towers

The following strength factors shall be used to increase the ultimate tower reactions to get allowable load on the foundations for the design of the foundations:

Applied Loading Case	Overload Factor for Foundation for Tower Type	
All load case	4DL	4D1, 4D25, 4D45,4DT60
	1.33	1.45

132 kV Towers

132 kV Single ACSR Grosbeak / ACCC Grosbeak Double Circuit Towers (Narrow Base)

The following overload factor shall be used to increase the ultimate tower reactions on the foundations for the design of the foundations:

Applied Loading Case	Overload Factor for Foundation for all Tower Type
All load case	1.23

132kV Single ACSR Grosbeak / ACCC Grosbeak Four Circuit Towers

The following strength factors shall be used to increase the ultimate tower reactions on the foundations for the design of the foundations:

Applied Loading Case	Overload Factor for Foundation	
	Tower Type	
	1QL	1Q15, 1Q30, 1QT6
All load case	1.23	1.35

132 kV Line Crossing Gantry

The following overload factor shall be used to increase the ultimate tower/gantry reactions on the foundations for the design of the foundations:

Applied Loading Case	Overload Factor for Foundation
All load case	1.23