

NEPAL ELECTRICITY AUTHORITY

(An Undertaking of Government of Nepal)
Project Management Directorate



TRANSMISSION LINE UPGRADING PROJECT

*A component of
Electricity Grid Modernization Project*

BIDDING DOCUMENT FOR

**Design, Supply, Installation and Commissioning of 132kV Transmission Line Conductor
Upgrading
(Procurement of Plant)**

**Single-Stage, Two-Envelope
Bidding Procedure**

Issued on:	10 August 2020
Invitation for Bids No.:	PMD/EGMP/TLUP-077/78-01
OCB No.:	PMD/EGMP/TLUP-077/78-01
Employer:	Nepal Electricity Authority
Country:	Nepal

VOLUME –III OF III
August 2020

**Transmission Line upgrading Project
Project Management Directorate
NEA Training Centre Complex, Kharipati
Bhaktapur, Nepal**

Telephone:

SECTION IV PRICE SCHEDULE

Note:

- 1) Bidder is required to quote prices in this Schedule for all the individual items/sub-items.
- 2) The Prices of equipment's are inclusive of type test charges.
- 3) BOQ given is indicative only, the quantities mentioned above may undergo changes during detailed engineering to meet the functional requirement and scope of work defined in Employer's Requirements. Based on the detail engineering and design, the Contractor shall prepare and submit the final BOQ within 90 days of signing of Contract.
- 4) The bidders are require to quote their price including all taxes and duties applicable in their county / Country of origin, & all business taxes, income taxes (TDS etc) applicable in Nepal. The quoted price shall be exclusive of taxes and duties applicable in Nepal like Custom, VAT etc.

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 PROJECT MANAGEMENT DIRECTORATE
 Transmission Line Upgrading Project

Electricity Grid Modernization Project (EGMP)

PMD/EGMP/TLUP-077/78-01, Transmission Line Upgrading Project

FC: Foreign Currency

Schedule No.1: Plant and Equipment including Mandatory Spares to be supplied from abroad

LC: Local Currency

Item No.	Item description	Country of origin	Estimated		CIP Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Custom, VAT and other taxes
			Unit	Quantity	FC			LC
					Currency#	Unit Rate	Amount	
1	2	3	4	5	6	7	8 = (7) x (5)	9
	TRANSMISSION LINE CONDUCTOR UPGRADE							
	Part-A : EMPLOYER ASSESSED QUANTITIES							
PART I	TRANSMISSION UPGRADE							
A	Design, Manufacture, Testing and Supply of HTLS Conductor with all necessary accessories to complete the specified scope of works as per technical specification							
A.1	High Tension Low Sag (HTLS) Conductor equivalent ACSR Bear including ten (10) km for spare		Km	885.0				
A.2	High Tension Low Sag (HTLS) Conductor equivalent ACSR Duck including two (2) km for spare		Km	15.0				
	SUB TOTAL 'A'							
	B Insulators with hardware fitting and accessories							
B.1	Design, manufacture, testing and Supply of Disc Insulators 70 KN with fittings		Nos.	500				
B.2	Design, manufacture, testing and Supply of Disc Insulators 120 KN with fittings		Nos.	500				
	Accessories							
B.3	Vibration Damper for HTLS Conductor as per A.1		Nos	2680				
B.4	Vibration Damper for HTLS Conductor as per A.2		Nos	40				
B.5	Mid span compression joint for HTLS conductor (A.1)		Nos	80				
B.6	Mid span compression joint for HTLS conductor (A.2)		Nos	20				
B.7	Repair Sleeve for HTLS conductor (A.1)		Nos	80				
B.8	Repair Sleeve for HTLS conductor (A.2)		Nos	20				
	SUB TOTAL 'B'							

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Item No.	Item description	Country of origin	Estimated		CIP Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Custom, VAT and other taxes
			Unit	Quantity	FC			LC
					Currency#	Unit Rate	Amount	
1	2	3	4	5	6	7	8 = (7) x (5)	9
C.1	Design, fabrication & supply of following types of towers & tower extension parts complete with stubs, step bolts, hangers, D-shackles, bolts & nuts etc but excluding tower accessories such as danger plates, number plates, phase plates, anti-climbing devices							
1	Tower parts & members to replace existing missing members		MT	10				
TOTAL OF PART I								
PART II	SUBSTATION WORKS							
D	Design, Manufacture, Testing and Supply of							
1	132 kV, 3 Phase, 5 Core Current Transformer with all accessories as per Technical Specification.		Nos	122				
2	133 kV, 3 Phase, GIS Current Transformer with all accessories to replace in existing GIS as per Technical Specification.		Nos	3				
TOTAL OF PART I								
Sub-Total Part-A								
Part-B: CONTRACTOR ASSESSED QUANTITIES								
F	Supply of Earthing of towers as required		Lot	1				
G	Erection Hardware							
1	All necessary accessories, hardware and fittings (Tension, suspension clamps, Connector etc) required to complete the HTLS stringing works completely		Lot	1				
2	Twenty (20) percent spare parts equivalent in cost of all necessary accessories, hardware & fittings of item no. H.1		Lot	1				
3	All tools and tackles required for the installation of the HTLS conductor.		Lot	1				

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Item No.	Item description	Country of origin	Estimated		CIP Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Custom, VAT and other taxes
			Unit	Quantity	FC			LC
					Currency#	Unit Rate	Amount	
1	2	3	4	5	6	7	8 = (7) x (5)	9
H	Erection Hardware							
	Conductor, Al tube, bus-bar materials, cable trays, clamps, spacers, connectors including equipment connectors, Junction box, earthwire, buried cable trenches/pipe equipment & lighting, all accessories etc. as required		LS	1				
I	Earthing and lightning protection including necessary connectors/connections, risers etc. complete in all respect including counterpoise earthing where required							
1.0	Earth Conductor (copper)		LS	1				
2.0	Earth Rod (copper clad steel)		LS	1				

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FC: Foreign Currency

Schedule No.1: Plant and Equipment including Mandatory Spares to be supplied from abroad

LC: Local Currency

Item No.	Item description	Country of origin	Estimated		CIP Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Custom, VAT and other taxes
			Unit	Quantity	FC			LC
					Currency#	Unit Rate	Amount	
1	2	3	4	5	6	7	8 = (7) x (5)	9
J	POWER & CONTROL CABLES							
1	Power Cables(PVC)- (1.1kV grade)		LS	1				
2	Control Cable (PVC)- (1.1kV grade)		LS	1				
3	Cable glands, lugs & straight through joints for Power & Control cables		LS	1				
K	132kV 1000 Sq.mm Cu XLPE Cable with termination for connection from existing AIS system to existing GIS complete with earthing and other accessories. Tentative lenth required 60m		LS	1				
L	Hot line Maintenance Tools and equipments for transmission Line, complete as per TS		LS	1				
Sub-Total Part-B								
Total of [(Part-A+ Part-B+ Part C)]								
Carried to General Summary								

Note : 1) Bidder is required to quote prices in this Schedule for all the individual items/sub-items.

2.) The Prices of equipments are inclusive of type test charges.

3.) BOQ given above is indicative only based on the scope of work as given in Employer's Requirements. The quantities mentioned above may undergo change during detailed engineering to meet the functional requirement and scope of work defined in Employer's Requirements.

4.) Bidder shall quote the rates excluding taxes and duties applicable in Nepal like Custom, VAT etc, but shall include all taxes, duties outside Nepal and any applicable business taxes in Nepal like TDS (income tax) etc.

Name of Bidder:

Signature of Bidder:

(Printed Name)

(Designation)

(Common Seal)

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Electricity Grid Mordernization Project (EGMP)
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Schedule No.2: Plant and Equipment including Mandatory Spares Parts to be supplied from within Nepal

LC: Local Currency (ALL Price in Local Currency)

Item No.	Item description	Unit	Quantity	Ex Factory Price (Excluding VAT) in LC		Inland transportation to site in LC		Total Amount (Excluding Taxes)	Custom, VAT and other taxes
				Unit Rate	Amount	Unit Rate	Amount		
1	2	3	4	5	6 = (4) x (5)	7	8=(4)x(7)	9=6+8	10
0.0	TRANSMISSION LINE CONDUCTOR UPGRADE								
	Part-A : EMPLOYER ASSESSED QUANTITIES								
	Sub-Total Part-A								
	Part-B: CONTRACTOR ASSESSED QUANTITIES								
	Sub-Total Part-B								

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Schedule No.2: Plant and Equipment including Mandatory Spares Parts to be supplied from within Nepal

LC: Local Currency (ALL Price in Local Currency)

Item No.	Item description	Unit	Quantity	Ex Factory Price (Excluding VAT) in LC		Inland transportation to site in LC		Total Amount (Excluding Taxes)	Custom, VAT and other taxes
				Unit Rate	Amount	Unit Rate	Amount		
1	2	3	4	5	6 = (4) x (5)	7	8=(4)x(7)	9=6+8	10
	Part-C: Mandatory Spares								
	Sub-Total Part-C								
	Total of [(Part-A+ Part-B+ Part C)]								
	Carried to General Summary								

Note : 1) Bidder is required to quote prices in this Schedule for all the individual items/sub-items.

2.) The Prices of equipments are inclusive of type test charges.

3.) BOQ given above is indicative only based on the scope of work as given in Employer's Requirements. The quantities mentioned above may undergo change during detailed engineering to meet the functional requirement and scope of work defined in Employer's Requirements.

Specify currency in accordance with BDS ITB Clause 32.1, Part-I of the Bidding Documents.

* Strike-out whichever is not applicable.

^a Specify currency in accordance with ITB 19.1 of the BDS.

^b Column 5 Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items.

Name of Bidder:

Date:

Signature of Bidder:

(Printed Name)

(Designation)

(Common Seal)

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Schedule A-3: Design Services

Item No.	Item Description	Estimated		Unit Prices		Total Prices	
				Local Currency Portion	Foreign Currency Portion		
		Quantity	Unit	NRs	Currency		
1	2	3	4	5	6	7=3x5	8=3x6
0		Not Applicable					
	Total carried forward to General Summary)						

Name of Bidder:
Signature of Bidder:
 (Printed Name)
 (Designation)
 (Common Seal)

Date:

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Schedule No. 4 : Installation and Other Services

(a): Installation and Construction Charges

Sl. No.	Item Description	Installation Charges								
		Country of Origin	Type & Designation	Unit	Qty.	Portion in Foreign Currency			Portion in Nepalese Currency (in NPR)	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8.00	9=8x6	10.00	11=10x6
0.0	TRANSMISSION LINE CONDUCTOR UPGRADE									
	Part-A : EMPLOYER ASSESSED QUANTITIES									
PART I	SUB TRANSMISSION UPGRADE									
A	Check Survey of existing Transmission line (Determination of tower type, span length, sag, hardware & accessories require in each tower, finding of missing members and earthing in each tower etc)									
A.1	Pathlaiya Dhalkebar DC Line			LS	1					
A.2	Kusaha Duhabi DC Line (Scoped line in one circuit)			LS	1					
A.3	Suichatar - Matatirtha DC ACSR Bear			LS	1					
A.4	Suichatar - Balaju SC ACSR Duck			LS	1					
A.5	Suichatar - Teku DC ACSR Bear			LS	1					
A.6	Suichatar - Patan DC ACSR Wolf			LS	0					
B	Dismantling and storing of Existing ACSR Conductor, hardware & accessories and Stringing, tensioning, clamping, jointing etc of HTLS Conductor including fitting of all necessary line materials complete and Testing and Commissioning of Line									
B.1	Dismantling of Existing ACSR Conductor, hardware, accessories, fittings and storage at NEA Site store			Km	900.0					
B.2	Stringing of HTLS conductor with installation of all <i>required</i> hardwares and accessories and testing and commissioning of Transmission line as specified									
B.2.1	High Tension Low Sag (HTLS) Conductor equivalent ACSR Bear including ten (10) km for spare			Km	885.00					
B.2.2	High Tension Low Sag (HTLS) Conductor equivalent ACSR Duck including two (2) km for spare			Km	15.00					
	SUB TOTAL 'A'									
	B Insulators with hardware fitting and accessories									
B.1	Design, manufacture, testing and Supply of Disc Insulators 70 KN with fittings			Nos.	500					
B.2	Design, manufacture, testing and Supply of Disc Insulators 120 KN with fittings			Nos.	500					

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Schedule No. 4 : Installation and Other Services

(a): Installation and Construction Charges

Sl. No.	Item Description	Installation Charges								
		Country of Origin	Type & Designation	Unit	Qty.	Portion in Foreign Currency			Portion in Nepalese Currency (in NPR)	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8.00	9=8x6	10.00	11=10x6
	Accessories									
B.3	Vibration Damper for HTLS Conductor as per A.1			Nos	2680					
B.4	Vibration Damper for HTLS Conductor as per A.2			Nos	40					
B.5	Mid span compression joint for HTLS conductor (A.1)			Nos	80					
B.6	Mid span compression joint for HTLS conductor (A.2)			Nos	20					
B.7	Repair Sleeve for HTLS conductor (A.1)			Nos	80					
B.8	Repair Sleeve for HTLS conductor (A.2)			Nos	20					
	SUB TOTAL 'B'									
C.1	Design, fabrication & supply of following types of towers & tower extension parts complete with stubs, step bolts, hangers, D-shackles, bolts & nuts etc but excluding tower accessories such as danger plates, number plates, phase plates, anti-climbing devices									
1	Tower as per Existing Design to replace existing tower				0					
2	Tower parts & members to replace existing missing members				MT					
	TOTAL OF PART I									
PART II	SUBSTATION WORKS									
D	Design, Manufacture, Testing and Supply of									
1	132 kV, 3 Phase, 5 Core Current Transformer with all accessories as per Technical Specification.			Nos	122					
2	133 kV, 3 Phase, GIS Current Transformer with all accessories to replace in existing GIS as per Technical Specification.			Nos	3					
E	132kV 1000 Sq.mm Cu XLPE Cable with termination for connection from existing AIS system to existing GIS complete with earthing and other accessories. Tentative lenth required 60m			LS	1					
F	Reprogramming of the protection system in all substation			LS	1					
	TOTAL OF PART II									
	Sub-Total Part-A									

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Schedule No. 4 : Installation and Other Services**(a): Installation and Construction Charges**

Sl. No.	Item Description	Installation Charges								
		Country of Origin	Type & Designation	Unit	Qty.	Portion in Foreign Currency			Portion in Nepalese Currency (in NPR)	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8.00	9=8x6	10.00	11=10x6
	Part-B: CONTRACTOR ASSESSED QUANTITIES									
PART I	SUB TRANSMISSION UPGRADE									
F	Earthing of towers as required			Lot	1					
H	Erection Hardware									
1	All necessary accessories, hardware and fittings (Tension, suspension clamps, Connector etc) required to complete the HTLS stringing works completely			LS	1					
PART II	SUBSTATION WORKS									
H	Erection Hardware									
	All necessary accessories, hardware and fittings (Tension, suspension clamps, Connector etc) required to complete the HTLS stringing works completely			LS	1					
I	Earthing and lightning protection including necessary connectors/connections, risers etc. complete in all respect(but excluding LM structures for Lightning protection)									
1	Earth Conductor (copper)			LS	1					
2	Earth Rod (copper clad steel)			LS	1					
J	POWER & CONTROL CABLES									
1	Power Cables(PVC)- (1.1kV grade)			LS	1					
2	Control Cable (PVC)- (1.1kV grade)			LS	1					
3	Cable glands, lugs & straight through joints for Power & Control cables			LS	1					
	Sub-Total Part-B									

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Schedule No. 4 : Installation and Other Services

(a): Installation and Construction Charges

Sl. No.	Item Description	Installation Charges								
		Country of Origin	Type & Designation	Unit	Qty.	Portion in Foreign Currency			Portion in Nepalese Currency (in NPR)	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8.00	9=8x6	10.00	11=10x6
	PART-C: Civil Works (As per technical specification)									
1	Excavation in all types of soil and rock including backfilling disposal etc. for all leads and lifts			Cu.Mtr.	100					
2	Providing and laying of Plain Cement Concrete (PCC) (1:4:8)			Cu.Mtr.	20					
3	Providing and laying of Plain Cement Concrete (PCC) (1:2:4)			Cu.Mtr.	20					
4	Providing and laying of Reinforced Cement Concrete Design Mix (M25) including pre cast, shuttering, Grouting of pockets & underpinning but excluding steel reinforcement.			Cu.Mtr.	100					
5	Providing and laying Plain Cement Concrete 1:5:10 (1 cement : 5 sand : 10 Stone aggregate)			Cu.Mtr.	20					
6	Steel Reinforcement (Fe 500)			MT	1					
	Sub-Total Part-C									
	Total of [(Part-A+ Part-B+ Part C)]									
	Carried to General Summary									

Specify currency in accordance with ITB Clause 12.1 and corresponding BDS clauses, Vol.I of the Bidding Documents.

Name of Bidder:
Signature of Bidder:
(Printed Name)
(Designation)
(Common Seal)

Date:

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Schedule No. 4 : Installation and Other Services (Common for all)

(b): Training Charges for training to be imparted to Employer's Personnel by Bidder's Instructor in Nepal

Sl. No.	Description of the Test	Item for which training is to be imparted.	Training duration in days	Currency	Training Charges for Contractors Trainers	
					Unit rate	Total Training Charges
1	2	3	4	5	6	7 = 4x 6
a)	On Job training on operation, maintenance and erection of HTLS Conductor as per Technical Specification	i) HTLS Conductor	6	NPR		
		ii) Hardwares	6	NPR		
b)	Training of Hotline Maintenance Equipment		15	NPR		
Total for Training Charges (Total of column 7 to be carried forward to Schedule 5: Grand Summary)						

2. On Job Training in Nepal: The traveling and living expenses of Owner's personnel for the training programme conducted in Nepal shall be borne by the Owner.

Date:

Signature: _____

Printed Name: _____

Designation: _____

Common Seal: _____

NOTE: To and fro charges and accommodation for the Instructor (Trainer) and Training material for the Trainees shall be included in the prices quoted by the bidder. However, arrangements for trainees and premises for conducting the training shall be arranged by OWNER.

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Schedule No. 5: Grand Summary

Sl. No.	Description	Total Price Foreign ()*	Total Price Local ()*
1	TOTAL SCHEDULE NO. 1		
	Plant and Equipment including Mandatory Spares to be supplied from abroad.		
2	TOTAL SCHEDULE NO. 2		
	Plant and Equipment including Mandatory Spares Parts to be supplied from within Nepal		
3	TOTAL SCHEDULE NO. 3		
	Design Services		
4	TOTAL SCHEDULE NO. 4		
	(a) Installation and construction charges		
	(b) Training charges for training to be imparted in Nepal		
	GRAND TOTAL [1+2+3+4]		