

# NEPAL ELECTRICITY AUTHORITY

(An Undertaking of Government of Nepal)  
Project Management Directorate



## KATHMANDU VALLEY CENTRAL AND NORTHERN DISTRIBUTION SYSTEM ENHANCEMENT PROJECT

*(A Component of  
Power Transmission and Distribution Efficiency Enhancement Project)*

### BIDDING DOCUMENT FOR

#### Procurement of Plant

Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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

Issued on: 23 July 2017  
Invitation for Bids No.: PMD/PTDEEP/KVCNDSEP-074/75 - 01  
ICB No.: PMD/PTDEEP/KVCNDSEP-074/75- 01  
Employer: Nepal Electricity Authority  
Country: Nepal

VOLUME –III OF III

July 2017

---

Kathmandu Valley Central & Northern Distribution System  
Enhancement Project  
Project Management Directorate  
Matatirtha, Kanchan Basti, Chandragiri 11, Kathmandu, Nepal

Telephone: +977-1-5164104



# Table of Contents

## 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 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. The Contractor shall prepare and submit the final BOQ within 90 days of signing of Contract as per the Chapter 1, PSR.



## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

Kathmandu Valley Central & Northern Distribution System Enhancement Project

Power Transmission and Distribution Efficiency Enhancement Project

**PMD/PTDEEP/KVCNDSEP-074/75 - 01:** Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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)			Total Amount (Excluding Taxes and Duties)	Custom, VAT and other taxes
			Unit	Quantity	FC			FC	LC
					Currency#	Unit Rate	Amount		
1	2	3	4	5	6	7	8 = (7) x (5)	9=8	10
<b>PART 1</b>	<b>MaharajGunj Distribution Centre</b>								
	<b>Part-A : EMPLOYER ASSESSED QUANTITIES</b>								
<b>A</b>	<b>Poles</b>								
1.0	PCC Pole 11.0M Long (400kg working load)		Nos.	200					
2.0	PCC Poles 9 M Long (400kg working Load)		Nos.	200					
<b>B</b>	<b>Cables</b>								
<b>1</b>	<b>HT Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>								
1.1	3/C 400 mm <sup>2</sup> 11 kV XLPE Armoured cable		Km	65					
1.2	3/C 300 mm <sup>2</sup> 11 kV XLPE Armoured cable		Km	65					
1.3	3/C 150 mm <sup>2</sup> 11 kV XLPE Armoured cable		Km	25					
<b>2</b>	<b>HT ABC Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>								
2.1	3/C 150 mm <sup>2</sup> 11 kV cable		Km	40					
<b>3</b>	<b>LT Cables along with terminal and necessary accessories per TS</b>								
3.1	LT XLPE Cable S/C 630 MM. sq.		Km	10					
3.2	LT XLPE Armoured 3.5 Core, 300 sq.mm. cable		Km	70					
3.3	LT XLPE Armoured 3.5 Core, 185 sq.mm. cable		Km	130					
<b>4</b>	<b>LT ABC Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>								
4.1	120 mm <sup>2</sup> cable (3*120+1*95+1*16 sq.mm)		Km	80					
4.2	95 mm <sup>2</sup> cable (3*95+1*95+1*16 sq.mm)		Km	60					
<b>C</b>	<b>GO Switch with accessories</b>								
1.1	11 KV 400 Amps. GO Switch complete with handle, pipe & Supporting Channel complete.		Nos	50					
1.2	Motor & other control arrangement for remote and local operation with all accessories		Nos	50					
1.3	Communication arrangement suitable for RF and SCADA as per requirement		Nos	50					
<b>2</b>	11kV 3 phase Dropout fuse set with all accessories suitable for DT		Nos	500					
<b>D</b>	<b>9 kV LA</b>		Nos	100					
<b>E</b>	<b>RMU ( Ring Main Units)</b>								
1	Outdoor type 11 KV SF6 type extensible and motorized 5 way smart Ring Main Unit (RMU) complete with two VCB and three LBS with FRTU and FPI		Nos.	40					
2	Outdoor type 11 KV SF6 type extensible and motorized 4 way smart Ring Main Unit (RMU) complete with two VCB and two LBS with FRTU and FPI		Nos.	110					

## NEPAL ELECTRICITY AUTHORITY

### PROJECT MANAGEMENT DIRECTORATE

#### Kathmandu Valley Central & Northern Distribution System Enhancement Project

#### Power Transmission and Distribution Efficiency Enhancement Project

**PMD/PTDEEP/KVCNDSEP-074/75 - 01:** Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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)			Total Amount (Excluding Taxes and Duties)	Custom, VAT and other taxes
			Unit	Quantity	FC			FC	LC
					Currency#	Unit Rate	Amount		
3	4	5	6	7	8 = (7) x (5)	9=8	10		
3	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with two VCB and one LBS with FRTU and FPI		Nos.	35					
4	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with all one VCB and 2 LBS with FRTU and FPI		Nos.	35					
5	Outdoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with LB and with FPI		Nos.	10					
<b>F</b>	<b>LT Feeder Pillar</b>								
1	6-way Distribution feeder pillar with 2 no ACB, 4 pole, 3phase, 415 v , 800 Amps for incoming and 4 nos outgoing MCCB 4 pole, 3phase, 415 v , 600 Amps rating type, metering arrangement on incomer suitable for outdoor installation, in accordance with Technical Specification (TYPE A)		Nos	50					
2	5-way Distribution feeder pillar with 2 no ACB , 4 pole, 3phase, 415 v, 600 Amps for incoming and 3 nos outgoing MCCB 4 pole, 3phase, 415 v , 400 Amps rating type, metering arrangement on incomer suitable for outdoor installation, in accordance with Technical Specification, (TYPE B)		Nos	200					
3	4-way Distribution feeder pillar with 1 no ACB , 4 pole, 3phase, 415 v , 800 Amps for incoming and 3 nos outgoing MCCB 4 pole, 3phase, 415 v , 600 Amps rating type, metering arrangement on incomer suitable for outdoor installation , in accordance with Technical Specification. (TYPE C)		Nos	50					
4	5-way Distribution feeder pillar with 2 no MCCB , 4 pole, 3phase, 415 v, 400 Amps for incoming and 5 nos outgoing MCCB 4 pole, 3phase, 415 v, 200 Amps rating type suitable for outdoor installation , in accordance with Technical Specification. (TYPE D) <b>MCB 2P 32A</b>		Nos	150					
5	3 phase ,415 v , Distribution service Pillar for LT, 100 Amps incoming; 2 nos . 60A TPN 5 nos., 32A TPN 15 Nos, 16A TPN 10 Nos rating feeder type distribution service pillar suitable for outdoor installation, in accordance with Technical Specification. (TYPE E) <b>Consumer Dist Box</b>		Nos	2500					
<b>G</b>	<b>Optical Fiber</b>								
1	Un- Armoured Optical Fiber (48 Fibers) along with the all accessories connectors, switches etc.		Km	125					
2	PLB-HDPE (Permanently Lubricated High Density Poly Ethylene) pipe 40 mm. dia pipe for laying optical Fiber Cable.		Km	375					
<b>H</b>	<b>Testing &amp; Maintenance Equipment</b>								
1.0	Mobile Cable Fault Location Equipment as per TS		Set	1					
<b>I</b>	<b>Pipes</b>								
1	HDPE pipe 125 mm dia		Km	155					
2	HDPE pipe 160 mm dia		Km	495					

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

Kathmandu Valley Central & Northern Distribution System Enhancement Project

Power Transmission and Distribution Efficiency Enhancement Project

**PMD/PTDEEP/KVCNDSEP-074/75 - 01:** Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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)			Total Amount (Excluding Taxes and Duties)	Custom, VAT and other taxes
			Unit	Quantity	FC			FC	LC
					Currency#	Unit Rate	Amount		
1	2	3	4	5	6	7	8 = (7) x (5)	9=8	10
3	GI pipe 250mm dia, 14mm thick for crossing		Km	5					
<b>J</b>	<b>M.S. Galvanized Items</b>								
1.1	Fabrication and Supply of M.S. Galvanized items- Pole Top Bracket/hamper, Channel/angle, clamps, stay sets complete including stay insulator, D-Strap, structure for mounting of Transformer isolator, DO switch, GO switch, MS flat for knee bracing, MS Flat, various size of angle & channel etc. complete as required for complete scope of work		MT	25					
1.2	GI Nuts & Bolts with Washers (plain and spring)		MT	2					

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

Kathmandu Valley Central & Northern Distribution System Enhancement Project

Power Transmission and Distribution Efficiency Enhancement Project

**PMD/PTDEEP/KVCNDSEP-074/75 - 01:** Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

FC: Foreign Currency

LC: Local Currency

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

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)			Total Amount (Excluding Taxes and Duties)	Custom, VAT and other taxes
			Unit	Quantity	FC			FC	LC
					Currency#	Unit Rate	Amount		
1	2	3	4	5	6	7	8 = (7) x (5)	9=8	10
K	Metering units- separate enclosure suitable to be mounted on the RMU or Transformer including CT, PT and other Accessories		Set	40					
<b>Part-B: CONTRACTOR ASSESSED QUANTITIES</b>									
<b>A</b>	<b>Erection Hardware and insulators</b>								
1.1	Bus-bar materials, cable clamps, spacers, connectors, Junction box, all accessories etc for underground cables.		LS	1					
1.2	Erection hardware, cable clamps, rollers, connectors, Junction box, all accessories etc for ABC cables.		LS	1					
1.3	Insulators (Disc and Pin type) for DTs installation		LS	1					
1.4	Earthing								
1.4.1	Earthing Rod		LS	1					
1.4.2	Earthing with Cu clad MS 25x6 mm		LS	1					
2	Danger Plate Enameled		LS	1					
3	Number Plate Enameled		LS	1					
4	Phase Plate for each phase set of 3		LS	1					
5	HT & LT Cable RCC Route Marker and Straight Joint marker		LS	1					
<b>Sub-Total Part-B</b>									
<b>Part-C: Mandatory Spares</b>									
<b>A</b>	<b>Mandatory Spare List for RMU</b>								
1.0	Bushing of each rating with metal parts & gaskets and lifting tools		Set	25					
2.0	VCB of each rating		Set	10					
3.0	LBS of each rating		Set	10					
4.0	Strarters, contactors, switches & Relays for Electrical control panels(One ste of each type)		Set	10					
5.0	Overcurrent and earthfault relay		Set	10					
6.0	Power supply unit		Set	10					
<b>B)</b>	<b>Spare for Gang Operated (GO) Switch</b>								
1	Complete pole of each type & rating complete with operating mechanism		Nos.	10					
2	Opening coil assembly as applicable		Sets	20					

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

Kathmandu Valley Central & Northern Distribution System Enhancement Project

Power Transmission and Distribution Efficiency Enhancement Project

**PMD/PTDEEP/KVCNDSEP-074/75 - 01:** Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

FC: Foreign Currency

LC: Local Currency

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

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)			Total Amount (Excluding Taxes and Duties)	Custom, VAT and other taxes
			Unit	Quantity	FC			FC	LC
					Currency#	Unit Rate	Amount		
							8 = (7) x (5)	9=8	10
3	Closing coil assembly as applicable .		Sets	20					
4	Auxiliary switch assembly of each type		lot	10					
<b>C)</b>	<b>Spares for Distribution Pillars</b>								
1	Complete set of Air circuit breaker of each rating		Sets	5					
2	Single Phase/ 3-phase Earthing switch including main circuit, enclosure, driving mechanism.		Sets	5					
3	MCCB of each type and rating		Sets	10					
4	Push button switch - (1 No. of each type & rating) as applicable		Sets	10					
5	Limit switch and Aux. Switches for complete 3 phase equipment								
5.1	For isolator		Sets	10					
5.2	For earth switch		Sets	10					
6	Interlocking coils		Nos	10					
<b>(D)</b>	<b>HT &amp; LT Cable Route Marker and Straight Joint marker 5% of used Number</b>		LS	1					
<b>(E)</b>	<b>Spares for Fibre Optics &amp; Communication</b>								
1	Switches of each type, 5% of eac type		LS	1					
2	Transducers of each type, 5% of used type		LS	1					
3	FRTUs of used type, 5 % each type		LS	1					
4	Distribution Box 5% of used type		LS	1					
<b>(F)</b>	<b>Connector and Clamps 5% of used quantity</b>		LS	1					
<b>Sub-Total Part-C</b>									
<b>Total For PART 1 Maharajgunj DC [(Part-A+ Part-B+ Part C)]</b>									
<b>Total for Schedule 1 ( Total of column 9 to be carried forward to Schdule 5: Grand Summary)</b>									

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 requiremen 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.

**Name of Bidder:**

**Date:**

**Signature of Bidder:**

**(Printed Name)**

**(Designation)**

**(Common Seal)**



## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**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
<b>PART 1</b>	<b>MaharajGunj Distribution Centre</b>								
	<b>Part-A : EMPLOYER ASSESSED QUANTITIES</b>								
	<b>Part-B: CONTRACTOR ASSESSED QUANTITIES</b>								
	<b>Part-C: Mandatory Spares</b>								
	<b>Total For PART 1 [(Part-A+ Part-B+ Part C)]</b>								
	<b>Total for Schedule 2 (Total of column 9 to be carried forward to Schdule 5: Grand Summary)</b>								

Note : 1) Bidder is required to quote prices in this Schedule for all the items in Schedule 1 which they wish to supply from within Nepal.

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

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

\* Strike-out whichever is not applicable.

<sup>a</sup> Specify currency in accordance with ITB 19.1 of the BDS.

<sup>b</sup> 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)**

# NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

## Kathmandu Valley Central & Northern Distribution System Enhancement Project

### Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

#### Schedule A-3: Design Services

Item No.	Item Description	Estimated		Unit Prices		Total Prices	
				Local Currency Portion	Foreign Currency Portion		
		Quantity	Unit	NRs	Currency	LC	FC
1	2	3	4	5	6	7=3x5	8=3x6
PART 1	<b>MaharajGunj Distribution Centre</b>						
	Pre Construction Survey including detail survey, study and updating of existing GIS map and reporting of existing network for HT, LT & Consumer connection etc and complete design of the proposed reinforcement works including underground, communication and automation with loadflow analysis and needful calculations as per scope of this project.	1	LS				
	<b>Total for Schedule 3 (Total of column 7 &amp; 8 to be carried forward to Schdule 5: Grand Summary)</b>						

NOTE: The design cost for equipment is included in schedule 1.

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

**Date:**

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

#### Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

#### 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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
<b>PART 1</b>	<b>MaharajGunj Distribution Centre</b>									
	<b>Part-A : EMPLOYER ASSESSED QUANTITIES</b>									
<b>A</b>	<b>Poles</b>									
1.0	PCC Pole 11.0M Long (400kg working load) including hardware and stay sets as required			Nos.	200					
2.0	PCC Poles 9 M Long (400kg working Load) including hardware and stay sets as required			Nos.	200					
3.0	Dismantling of Poles, Hardware and conductor including transportation upto store			Nos.	400					
<b>B</b>	<b>Cables</b>									
<b>1</b>	<b>HT Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>									
1.1	3/C 400 mm <sup>2</sup> 11 kV XLPE Armoured cable			Km	65					
1.2	3/C 300 mm <sup>2</sup> 11 kV XLPE Armoured cable			Km	65					
1.3	3/C 150 mm <sup>2</sup> 11 kV XLPE Armoured cable			Km	25					
<b>2</b>	<b>HT ABC Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>									
2.1	3/C 150 mm <sup>2</sup> 11 kV cable			Km	40					
<b>3</b>	<b>LT Cables along with terminal and necessary accessories per TS</b>									
3.1	LT XLPE Cable S/C 630 MM. sq.			Km	10					
3.2	LT XLPE Armoured 3.5 Core, 300 sq.mm. cable			Km	70					
3.3	LT XLPE Armoured 3.5 Core, 185 sq.mm. cable			Km	130					
<b>4</b>	<b>LT ABC Cables along with Straight Jointing Kit, O/D &amp; I/D Termination Kit and other accessories as per TS</b>									
4.1	120 mm <sup>2</sup> cable (3*120+1*95+1*16 sq.mm)			Km	80					
4.2	95 mm <sup>2</sup> cable (3*95+1*95*1*16 sq.mm)			Km	60					
<b>C</b>	<b>GO Switch with accessories</b>									
<b>1</b>	11 KV 400 Amps. GO Switch complete with handle, pipe & Supporting Channel complete.			Nos	50					
<b>2</b>	Motor & other control arrangement for remote and local operation with all accessories			Nos	50					
<b>3</b>	Communication arrangement suitable for RF and SCADA as per requirement			Nos	50					
<b>4</b>	11kV Dropout fuse set with all accessories suitable for DT			Nos	500					
<b>D</b>	9 kV LA			Nos	100					

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

#### Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

#### 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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
<b>E</b>	<b>RMU (Ring Main Units)</b>									
1	Outdoor type 11 KV SF6 type non extensible and motorized 5 way smart Ring Main Unit (RMU) complete with two VCB and three LBS with FRTU and FPI			Nos.	40					
2	Outdoor type 11 KV SF6 type extensible and motorized 4 way smart Ring Main Unit (RMU) complete with two VCB and two LBS with FRTU and FPI			Nos.	110					
3	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with two VCB and one LBS with FRTU and FPI			Nos.	35					
4	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with all one VCB and 2 LBS with FRTU and FPI			Nos.	35					
5	Outdoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with LB and with FPI			Nos.	10					
<b>F</b>	<b>LT Feeder Pillar</b>									
1	6-way Distribution feeder pillar with 2 no ACB, 4 pole, 3phase, 415 v , 800 Amps for incoming and 4 nos outgoing MCCB 4 pole, 3phase, 415 v , 600 Amps rating type. <b>metering arrangement</b> on incomer suitable for outdoor installation, in accordance with Technical Specification (TYPE A)			Nos	50					
2	5-way Distribution feeder pillar with 2 no ACB , 4 pole, 3phase, 415 v , 600 Amps for incoming and 3 nos outgoing MCCB 4 pole, 3phase, 415 v , 400 Amps rating type. <b>metering arrangement</b> on incomer suitable for outdoor installation, in accordance with Technical Specification, (TYPE B)			Nos	200					
3	4-way Distribution feeder pillar with 1 no ACB , 4 pole, 3phase, 415 v , 800 Amps for incoming and 3 nos outgoing MCCB 4 pole, 3phase, 415 v , 600 Amps rating type. <b>metering arrangement</b> on incomer suitable for outdoor installation , in accordance with Technical Specification, (TYPE C)			Nos	50					
4	5-way Distribution feeder pillar with 2 no MCCB , 4 pole, 3phase, 415 v , 400 Amps for incoming and 5 nos outgoing MCCB 4 pole, 3phase, 415 v , 200 Amps rating type suitable for outdoor installation , in accordance with Technical Specification. (TYPE D) <b>MCB 2P 32A</b>			Nos	150					
5	3 phase, 415 v , Distribution service Pillar for LT, 100 Amps incoming; 2 nos . 60A TPN 5 nos., 32A TPN 15 Nos, 16A TPN 10 Nos rating feeder type distribution service pillar suitable for outdoor installation, in accordance with Technical Specification. (TYPE E) <b>Consumer Dist Box</b>			Nos	2500					
<b>G</b>	<b>Optical Fiber</b>									
1	Un-Armoured Optical Fiber (48 Fibers) along with the all accessories connectors, switches etc.			KM	125					
2										
2	PLB-HDPE (Permanently Lubricated High Density Poly Ethylene) pipe 40 mm. dia pipe for laying optical Fiber Cable.			KM	375					
<b>H</b>	<b>Testing &amp; Maintenance Equipment</b>									
1.0	Mobile Cable Fault Location Equipment as per TS			Set	1					

**NEPAL ELECTRICITY AUTHORITY**

PROJECT MANAGEMENT DIRECTORATE

**Kathmandu Valley Central & Northern Distribution System Enhancement Project****Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
<b>I</b>	<b>Pipes</b>									
1	HDPE pipe 125 mm dia			Km	155					
2	HDPE pipe 160 mm dia			Km	495					
3	GI pipe 250mm dia, 14mm thick for crossing			Km	5					
<b>J</b>	<b>M.S. Galvanized Items</b>									
1.1	Fabrication and Supply of M.S. Galvanized items- Pole Top Bracket/hamper, Channel/angle, clamps, D-Strap, structure for mounting of Transformer isolator, DO switch, GO switch, MS flat for knee bracing, MS Flat, various size of angle & channel etc. complete as required for complete scope of work			MT	25					
1.2	GI Nuts & Bolts with Washers (plain and spring)			MT	2					

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

#### Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

#### 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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
<b>K</b>	Metering units- separate enclosure suitable to be mounted on the RMU or Transformer including CT, PT and other Accessories			Set	40					
	<b>Sub-Total Part-A</b>									
	<b>Part-B: CONTRACTOR ASSESSED QUANTITIES</b>									
<b>A</b>	<b>Erection Hardware</b>									
1.1	Bus-bar materials, cable clamps, spacers, connectors, Junction box, all accessories etc for underground cables.			LS	1					
1.2	Erection hardware, cable clamps, rollers, connectors, Junction box, all accessories etc for ABC cables.			LS	1					
1.3	Earthing									
1.3.1	Earthing Rod			LS	1					
1.3.2	Earthing with Cu clad MS 25x6 mm			LS	1					
1.4	Dismantling of Poles and Conductors			LS	1					
<b>2</b>	Danger Plate Enameled			LS	1					
<b>3</b>	Number Plate Enameled			LS	1					
<b>4</b>	Phase Plate for each phase set of 3			LS	1					
<b>5</b>	HT & LT Cable RCC Route Marker and Straight Joint marker			LS	1					
<b>6</b>	Installation of Transformer including transportation from the NEA store			Nos.	500					
	<b>Sub-Total Part-B</b>									
	<b>PART-C: Civil Works (As per technical specification)</b>									
<b>1</b>	Excavation in all types of soil and rock including backfilling disposal etc. for all leads and lifts			Cu.Mtr.	66380					
<b>2</b>	Providing and laying of Plain Cement Concrete (PCC) (1:4:8)			Cu.Mtr.	225					
<b>3</b>	Providing and laying of Plain Cement Concrete (PCC) (1:2:4)			Cu.Mtr.	225					
<b>4</b>	Providing and laying of Reinforced Cement Concrete Design Mix (M25) including pre cast, Grouting of pockets & underpinning but excluding steel reinforcement.			Cu.Mtr.	5000					

**NEPAL ELECTRICITY AUTHORITY**

PROJECT MANAGEMENT DIRECTORATE

**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
5	Providing and laying Plain Cement Concrete 1:5:10 (1 cement : 5 sand : 10 Stone aggregate)			Cu.Mtr.	225					
6	Steel Reinforcement (Fe 500)			MT	150					
7	Black topping as per TS			Sq.Mtr	160000					
8	Miscellaneous Structural steel used for rails , plates for rail fixing, gratings, gratings supports etc for transformer foundation, cable supports and earthing cleats, chequered plates, embedments, edge protection angles for cable trenches but excluding the reinforcement steel and steel for lattice and pipe structures which shall be paid seperately.			MT	5					
9	Chain link fencing as per specification and approved drawing but excluding concrete which shall be paid seperately under respective items for DT, RMU and LT ACB feeder Panel.			RM	1500					
10	Fencing Gate excluding concrete which shall be paid seperately under respective items of BPS			Nos.	100					
11	Local Sand filling around and under Foundation and for backfilling of cable and pit as applicable.			Cu.Mtr.	18000					
12	Stone soling below foundations wherever specified in approved drawings during detailed engineering			Cu.Mtr.	100					
13	Geotechnical /Soil Investigation as per technical specification			LS	1					
14	Construction of Cubicle/Room for providing Distribution Transformer alongwith RMU and LT ACB including finishing but excluding excavation, RCC, Reinforcement, PCC etc as above			Nos	50					
15	Construction of double-decker Cubicle/Room for providing Distribution Transformer alongwith RMU and LT feeder pillar including finsihing but excluding excaation, RCC, Reinforcement, PCC etc as above			Nos	50					
16	Trenchless laying of Cable using HDD method with HDPE pipe or PLB-HDPE									
16.1	160 mm HDPE			km	385					
16.2	125 mm HDPE			km	110					
	<b>Sub-Total Part-C</b>									
	<b>Total For PART 1 Maharajgunj DC [(Part-A+ Part-B+ Part C)]</b>									
	<b>Total for Schedule 4(Total of column 9 and 11 to be carried forward to Schedule 5: Grand Summary)</b>									

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

#### Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

#### 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	
						Currency#	Unit Rate	Total Charges	Unit Rate	Total Charges
(1)	(2)	(3)	(4)	(5)	(6)	7	8	9=8x6	10	11=10x6
	<b>Total for Schedule 4( Total of column 9 and 11 to be carried forward to Schedule 5: Grand Summary)</b>									

# 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:**



**NEPAL ELECTRICITY AUTHORITY**  
PROJECT MANAGEMENT DIRECTORATE  
**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**Schedule No. 4 : Installation and Other Services (Common for all)****(b): Training Charges for training to be imparted abroad**

Sl. No.	Description	Item for which training is to be imparted.	Country where training is to be imparted	Nos. of Trainee	Training duration in days	Total Training Charges		
						Currency	Unit rate	Total Training Charges
1	2		3	4	5	6	7	8 = 4x5 x 7
A	Training to Owners personnel on Design , testing and Maintenance aspect as per Section Project, Technical Specification at manufacturer's works	i) Distribution planning with GIS based asset management		5	15			
		ii) Equipments (RMU, Feeder Pillars, Cable Jointing )		10	5			
		iii) Fault Location equipment and Fault location		10	5			
<b>Total for Training Charges (total of column 8 to be carried forward to Schedule 5: Grand summary)</b>								

**Name of Bidder:****Signature of Bidder:**

(Printed Name)

(Designation)

(Common Seal)

**Date:**

**NEPAL ELECTRICITY AUTHORITY**  
PROJECT MANAGEMENT DIRECTORATE  
**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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

**(c): 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	Training Charges for Contractors Trainers		
				Currency	Unit rate	Total Training Charges
1	2	3	4	5	6	7 = 4x 6
a)	On Job training on operation, maintenance and testing & commissioning aspect at each substation as per section Project, Technical Specification	i) XLPE Cable Laying and termination	5			
		ii) ABC Cable Laying and termination	5			
		iii) Fault Location equipment and Fault location	7			
		iv) Feeder Management	5			
		v) Equipment Maintenance	5			
<b>Total for Training Charges ( Total of column 7 to be carried forward to Schedule 5: Grand Summary)</b>						

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.

**NEPAL ELECTRICITY AUTHORITY**  
PROJECT MANAGEMENT DIRECTORATE  
**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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

**(d) Routine Test Charges for Tests to be conducted at independent lab to verify quality of goods after delivery of goods**

SI. No.	Description of Tests	Testing Location	TEST CHARGES	
			Currency #	Amount
1	2	3	4	5
<b>11kV XLPE Cable</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>11kV ABC Cable</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>LT XLPE Cable</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>LT ABC Cable</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>PLB-HDPE &amp; HDPE Pipe</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>Optical Fiber</b>				
1	Complete routine test - Sample testing			
2				
3				
<b>Total of Tests charges (Total of column 5 to be carried forward to Schedule 5: Grand Summary)</b>				-

Note: The Bidder shall get the prior approval from the employer for finalization of the testing standard.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Designation: \_\_\_\_\_  
 Common Seal: \_\_\_\_\_

## NEPAL ELECTRICITY AUTHORITY

PROJECT MANAGEMENT DIRECTORATE

### Kathmandu Valley Central & Northern Distribution System Enhancement Project

Power Transmission and Distribution Efficiency Enhancement Project

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

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

**(e) Social Safeguard and Environment Management Plan (as per clause 13 of Chap 1 PSR)**

SI. No.	Description	Testing Location	TEST CHARGES	
			Currency #	Amount
1	2	3	4	5
1	Social Safeguard and Environmental Plan	LS		
<b>Total of Type Tests charges (Total of column 5 to be carried forward to Schedule 5: Grand Summary)</b>				

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Common Seal: \_\_\_\_\_

**NEPAL ELECTRICITY AUTHORITY**  
**PROJECT MANAGEMENT DIRECTORATE**  
**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**Schedule No. 5: Grand Summary**

Sl. No.	Description	Phutung Substation	
		Total Price Foreign	Total Price Local
		1	2
<b>1</b>	<b>TOTAL SCHEDULE NO. 1</b>		
	Plant and Equipment including Mandatory Spares to be supplied from abroad.		
<b>2</b>	<b>TOTAL SCHEDULE NO. 2</b>		
	Plant and Equipment including Mandatory Spares Parts to be supplied from within Nepal		
<b>3</b>	<b>TOTAL SCHEDULE NO. 3</b>		
	Design Services		
<b>4</b>	<b>TOTAL SCHEDULE NO. 4</b>		
	(a) Installation and construction charges		
	(b) Training charges for training to be imparted abroad		
	(c) Training charges for training to be imparted in Nepal		
	(d) Routine Test Charges for Tests to be conducted at independent lab to verify quality of goods after delivery of goods		
	(e) Social Safeguard and Environment Management Plan (as per clause 13 of Chap 1 PSR)		
	<b>GRAND TOTAL [1+2+3+4]</b>		

Date:

Place:

**NEPAL ELECTRICITY AUTHORITY**  
**PROJECT MANAGEMENT DIRECTORATE**  
**Kathmandu Valley Central & Northern Distribution System Enhancement Project**

**Power Transmission and Distribution Efficiency Enhancement Project**

PMD/PTDEEP/KVCNDSEP-074/75 - 01: Enhancement of Distribution Networks in Northern Region of Kathmandu Valley (Design, Supply, Installation and Commissioning of Underground Distribution Network under Maharajgunj Distribution Center including Reinforcement and Automation)

**Schedule No. 6: Recommended Availability/Optional Spares Parts and recommended Test Equipment in line with technical Specifications**

Item No.	Name & Description of Parts	Name of Original Manufacturer	Part No.	Number of Units in each set	Total No. of Sets to be provided	Unit Price	Total Price	Remarks

Date:

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Designation: \_\_\_\_\_  
 Common Seal: \_\_\_\_\_