

## National Highways & Infrastructure Development Corporation Limited

09.02.2021

Sub: Shifting of 33 kV & 11 kV and LT line on Jammu-Akhnoor of NH-144 A in the UT of Jammu & Kashmir.


Contract Package No.: NHIDCL/J&K/J-A/UtilityShifting/2020-21

Ref: Tender Id: 2021\_NHIDC\_611934\_1

### Amendment No. I

Clause	Existing Clause	Modified Clause
Section- I Clause No. 4.2 (k), P. No. 8 of RFP	Scanned copy of Bid Security <b>Bank Guarantee.</b>	Scanned copy of <b>proof of payment</b> for Bid security.
Section- I Clause No. 4.6, P. No. 8 of RFP	A= Maximum value of <b>civil engineering</b> works executed in any one year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the competed as well as works in progress.	A= Maximum value of <b>electrical engineering works (similar type of work)</b> in any one year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the competed as well as works in progress.
Section- II Clause No. 33.1 P. No. 20 of RFP.	Within 30 (thirty) days after receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a balance Performance Security i.e. <b>5%</b> percent of the Contract Price – the Bid Security converted into Performance Security, for the period of 28 days after the expiry of defect liability period from the date of issue of certificate of completion of work plus additional security for unbalanced Bid in accordance with clause 28.3 of ITB and sign the contract. The performance Security for the work shall be as mentioned in the Appendix to ITB.	Within 30 (thirty) days after receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a balance Performance Security i.e. <b>3%</b> percent of the Contract Price – the Bid Security converted into Performance Security, for the period of 28 days after the expiry of defect liability period from the date of issue of certificate of completion of work plus additional security for unbalanced Bid in accordance with clause 28.3 of ITB and sign the contract. The performance Security for the work shall be as mentioned in the Appendix to ITB.
Appendix to ITB Clause 33.1 P. No. 23 of RFP	Performance Security: <b>5%</b> of the Estimated cost.	Performance Security: <b>3%</b> of the Estimated cost.
Section –II, Clause No. 34. P. No. 21 of RFP	The Employer will provide Mobilization Advance as provided in Part-I General Conditions of Contract.	<b>Deleted</b>
Section-V Clause 16.2 P. No. 48 of RFP.	The Contractor shall construct, install and maintain the Works during defect liability period in accordance with the documents forming part of the contract. No payment for maintenance during defect liability period is payable. <b>Payment for maintaining the office for a period of 5 years after defect liability will be paid as</b>	The Contractor shall construct, install and maintain the Works during defect liability period in accordance with the documents forming part of the contract. No payment for maintenance during defect liability period is payable.

	<b>per the contract.</b>	
Section- V, Clause No. 24.1, P. No. 49 of RFP	The contractor shall maintain the site offices after defect liability period of 12 months for a period of 5 years. The contractor will be paid quarterly (every three month) for carrying out the maintenance services after duly certification by the Office –in- charge as per the rates in BOQ.	<b>Deleted</b>
	<b>BOQ</b>	<b>Modified BOQ</b>
Section –VI Scope of work, Technical specifications and Drawings	Scope of works	<b>Modified Scope of works as per Annexure I</b>

  
**B. Shivprasad**  
**General Manager (T)**

## Annexure-I

### SECTION - VI

#### Modified Scope of Work

Approximate quantities of various items to be executed for a unit of work for the guidance of the bidder:-

#### **A) For shifting of 33kV electrical lines**

**a(i) 33kV road crossing by 33 kV XLPE cable trenchless from Canal Chowk to Toph Pulh of 33 KV Canal-Shakti Nagar Toph Line with 33kV XLPE cable (3x400 sq. Mm), jointing kit (3x400 sq. Mm) size O/D type, 33 kV cable J/Kit (3x400 sq mm)S/T type, STP-SP-56-11 mtr with Horizontal boaring with HDPE pipe.**

**a(ii) 33kV road crossing by 33 kV XLPE cable trenchless from BSF to Muthi Tiraha of 33 KVJanipur- Toph Muthi Line &33 kV Muthi MES line with 33kV XLPE cable (3x400 sq. Mm), jointing kit (3x400 sq. Mm) size O/D type, 33 kV cable J/Kit (3x400 sq mm)S/T type, STP-SP-56-11 mtr with Horizontal boaring with HDPE pipe.**

S. No.	Description of item	Unit	Quantity
1.	33 kV XLPE cable 3x400 mm <sup>2</sup>	Mtrs.	200
2.	Jointing Kit 3x400 mm <sup>2</sup> size O/D type	Nos.	4
3.	33 kV cable J/Kit 3x400 mm <sup>2</sup> S/T type	Nos.	1
4.	STP-SP-69-13 mtrs	Nos.	4
5.	Stone Pad	Nos.	4
6.	Horizontal Boaring with HDPE pipe.	Mtrs.	70
7.	Channel/Angle/Flat iron	Kg	400
8.	Danger plates	Nos.	2
9.	Anti climbing device (Galvanised)	Nos.	2
10.	Guy Rods with wire complete	Nos.	4
11.	G.I Pipe Dia 150 mm 3.0 mtrs long of each pipe.	Mtrs.	12
12.	Cement Bottoming 1:2:4 mix as per REC standards 0.7 cum/pole	Nos.	4
13.	Lightening Arrestor 30 kV 10 KA	Nos.	6
14.	ACSR Wolf conductor for jumper	Mtrs.	20
15.	P.G Clamps	Nos.	6
16.	Aluminium Thimbles off sizes	Nos.	6

**b(i) Construction of 33kV XLPE U/G Cable double circuit 2x2 from Palm island to Toph Pul 33 kV Canal-Shakti Nagar Toph Line with 33kV XLPE cable (3x400 sq. Mm), jointing kit (3x400 sq. Mm) size O/D type, 33 kV cable J/Kit (3x400 sq mm)S/T type, STP-SP-56-11 mtr with Horizontal boaring with HDPE pipe.**

**b(ii) Construction of 33kV XLPE U/G Cable double circuit 2x2 from BSF to Muthi Tiraha of 33 KVJanipur- Toph Muthi Line with 33 kV Muthi MES line with 33kV XLPE cable (3x400 sq. Mm), jointing kit (3x400 sq. Mm) size O/D type, 33 kV cable J/Kit (3x400 sq mm)S/T type, STP-SP-56-11 mtr with Horizontal boaring with HDPE pipe.**

S. No.	Description of item	Unit	Quantity
1.	33 kV XLPE cable 3x400 mm <sup>2</sup>	Mtrs.	2350
2.	Jointing Kit 3x400 mm <sup>2</sup> size O/D type	Nos.	32
3.	33 kV cable J/Kit 3x400 mm <sup>2</sup> S/T type	Nos.	2
4.	STP-SP-69-13 mtrs	Nos.	16
5.	Stone Pad	Nos.	16
6.	Horizontal Boaring with HDPE pipe.	Mtrs.	2000
7.	33 kV Pin Insulator with Pin (10 KN)	Nos.	24
8.	GI Channel including clamps & bracing	kgs	420
9.	Danger plates	Nos.	16
10.	Anti climbing device (Galvanised)	Nos.	4
11.	Guy Rods with wire complete	Nos.	16
12.	G.I Pipe Dia 150 mm 3.0 mtrs long of each pipe.	Mtrs.	96
13.	Cement Bottoming 1:2:4 mix as per REC standards 0.7 cum/pole	Nos.	16
14.	ACSR Wolf conductor for jumper	Mtrs.	120
15.	Aluminium Thimbles off sizes	Nos.	30

#### B) For shifting of 11kV & LT electrical lines

c) **11kv Road Crossing by 11kv XLPE cable Trenchless** - Laying of 11kV XLPE cable trenchless for X-ing of (2x70) m along with 11kV XLPE cable (3x300 sq. mm), jointing kit (3x300 sq. Mm) size O/D type, 11 kV cable J/Kit (3x300 sq. Mm)S/T type, STP-SP-56-11 mtr, 11 kV GO set with Horizontal boring with HDPE pipe.

S. No.	Description of item	Unit	Quantity
1.	11 kV XLPE cable 3x300 mm <sup>2</sup>	Mtrs.	140
2.	Jointing Kit 3x300 mm <sup>2</sup> size O/D type	Nos.	4
3.	11 kV cable J/Kit 3x300 mm <sup>2</sup> S/T type	Nos.	1
4.	STP-SP-56-11 mtr	Nos.	4
5.	Horizontal Boaring with HDPE pipe.	Mtrs.	70
6.	11 kV GO set	Nos.	2
7.	Channel/Angle/Flat iron	Kgs	350
8.	Danger plates	Nos.	2
9.	Anti climbing device (Galvanised)	Nos.	2
10.	Guy Rods with wire complete	Nos.	4
11.	Earthing complete	Nos.	4
12.	G.I Pipe Dia 150 mm 3.0 mtrs long of each pipe.	Mtrs.	12
13.	Cement Bottoming 1:2:4 mix as per REC standards 0.5 cum/pole	Nos.	4
14.	Lightening Arrestor 9 kV 10 KA	Nos.	2
15.	ACSR Dog conductor for jumper	Mtrs.	20
16.	P.G Clamps	Nos.	6
17.	Aluminium Thimbles off sizes & lugs	Nos.	6

d) **LT Road Crossing by XLPE cable Trenchless** - Laying of LT XLPE cable trenchless for X-ing of (2x70) mtr along with 120 sq mm LT cable 3.5 core armored, STP-SP-56-11 mtr with horizontal boring with HDPE pipe.

S. No.	Description of item	Unit	Quantity
1.	120 mm <sup>2</sup> LT cable 3.5 core armoured	Mtrs.	140
2.	STP-SP-56-11 mtr	Nos.	4

3.	Horizontal Boaring with HDPE pipe.	Mtrs.	70
4.	Channel/Angle/Flat iron	Kgs	300
5.	Danger plates	Nos.	2
6.	Anti climbing device (Galvanised)	Nos.	2
7.	Guy Rods with wire complete	Nos.	4
8.	Earthing complete	Nos.	4
9.	G.I Pipe Dia 150 mm 3.0 mtrs long of each pipe.	Mtrs.	12
10.	Cement Bottoming 1:2:4 mix as per REC standards 0.5 cum/pole	Nos.	4
11.	ACSR Rabit conductor for jumper	Mtrs.	30
12.	P.G Clamps	Nos.	8
13.	Aluminium Thimbles off sizes & lugs	Nos.	24

e) **Construction of 11/0.4kv S/S with existing T/F 25 KVA** - Construction of Distribution Substation with existing 25kVA T/F along with STP-SP-56-11 mtr, 11kv GO switch 400 Amp, 11 kV DO fuse 3 phase 400 amp, 25 sq mm Single core LT cable, 11 kv Disc Insulator with fitting (45kN).

S. No.	Description of item	Unit	Quantity
1.	STP-SP-56-11 mtr	Nos.	2
2.	11kV GO switch 400 amp	set	1
3.	11kV DO fuse 3 phase 400 amp	set	1
4.	25 mm <sup>2</sup> Single core LT cable	Mtrs.	44
5.	11 kV Disc insulator with fitting (45 KN)	Nos.	3
6.	GI Channel/Angle/Flat iron off sizes including clamps	Kgs	220
7.	Danger plates	Nos.	1
8.	Guy Rods with wire complete	Nos.	2
9.	Cement Bottoming 1:2:4 mix as per REC standards 0.5 cum/pole	Nos.	2
10.	32/63 amps TPN Switch Disconnecter Fuse unit	Nos.	1
11.	Earthing of substation complete	Nos.	3
12.	Gapless surge Arrestor 9 kV 10KA	set	1
13.	ACSR Dog conductor for jumper	Mtrs.	20
14.	P.G Clamps	Nos.	6
15.	GI Barbed wire for Anti Climbing	Kgs	15

f) **Construction of 11/0.4kv S/S with existing T/F 63 KVA** -Construction of Distribution Substation with existing 63 kVa T/F along with STP-SP-56-11 mtr, 11kv GO switch 400 Amp, 11 kV DO fuse 3 phase 400 amp, LT 50 sq mm cable, 11 kV Disc Insulator with fitting (45 kN).

S. No.	Description of item	Unit	Quantity
1.	STP-SP-56-11 mtr	Nos.	2
2.	11kV GO switch 400 amp	set	1
3.	11kV DO fuse 3 phase 400 amp	set	1
4.	LT 50 mm <sup>2</sup> cable	Mtrs.	44
5.	11 kV Disc insulator with fitting (45 KN)	Nos.	3
6.	GI Channel/Angle/Flat iron off sizes including clamps	Kgs	220
7.	Danger plates with clamps	Nos.	1
8.	Guy Rods with wire complete	Nos.	2
9.	LT Distribution Box for 63 kva DTR with MCCB for incomer & SFU's for outgoing circuits.	Nos.	1
10.	Cement Bottoming 1:2:4 mix as per REC standards 0.6	Nos.	2

	cum/pole		
12.	Earthing of substation complete	Nos.	3
13.	Gapless surge Arrestor 9 kV 10KA	set	1
14.	GI Barbed wire for Anti Climbing	kgs	15
15.	3- $\phi$ , 4-wire Trivector meter with CT with meter box	Nos.	1
16.	ACSR Dog conductor for jumper	Mtrs.	20
17.	P.G Clamps	Nos.	6

g) **Construction of 11/0.4kv S/S with existing T/F 100 KVA** -Construction of Distribution Substation with existing 100 kVa T/F along with STP-SP-56-11 mtr, 11kv GO switch 400 Amp, 11 kV DO fuse 3 phase 400 amp, LT 70 sq mm cable, 11 kV Disc Insulator with fitting (45 kN).

S. No.	Description of item	Unit	Quantity
1.	STP-SP-56-11 mtr	Nos.	2
2.	11kV GO switch 400 amp	set	1
3.	11kV DO fuse 3 phase 400 amp	set	1
4.	LT 70 mm <sup>2</sup> cable	Mtrs.	44
5.	11 kV Disc insulator with fitting (45 KN)	Nos.	3
6.	GI Channel/Angle/Flat iron off sizes including clamps	Kgs	220
7.	Danger plates with clamps	Nos.	1
8.	Guy Rods with wire complete	Nos.	2
9.	LT Distribution Box for 100 kva DTR with MCCB for incomer & SFU's for outgoing circuits.	Nos.	1
10.	Cement Bottoming 1:2:4 mix as per REC standards 0.5 cum/pole	Nos.	2
12.	Gapless surge Arrestor 9 kV 10KA	set	1
13.	Earthing of substation complete	Nos.	3
14.	GI Barbed wire for Anti Climbing	kgs	15
15.	3- $\phi$ , 4-wire Trivector meter with CT with meter box	Nos.	1
16.	ACSR Rabbit conductor for jumper	Mtrs.	20
17.	P.G Clamps	Nos.	6

h) **Construction of 11/0.4kv S/S with existing T/F 250 KVA** - Construction of Distribution Substation with existing 250 kVa T/F along with STP-SP-56-11 mtr, 11kv GO switch 400 Amp, 11 kV DO fuse 3 phase 400 amp, LT 185 sq mm cable, 11 kV Disc Insulator with fitting (45 kN).

S. No.	Description of item	Unit	Quantity
1.	STP-SP-56-11 mtr	Nos.	2
2.	11kV GO switch 400 amp	set	1
3.	11kV DO fuse 3 phase 400 amp	set	1
4.	LT 185 mm <sup>2</sup> cable	Mtrs.	44
5.	11 kV Disc insulator with fitting (45 KN)	Nos.	3
6.	GI Channel/Angle/Flat iron off sizes including clamps	Kgs	220
7.	Danger plates with clamps	Nos.	1
8.	Guy Rods with wire complete	Nos.	2
9.	LT Distribution Box for 250 kva DTR with MCCB for incomer & SFU's for outgoing circuits.	Nos.	1
10.	Cement Bottoming 1:2:4 mix as per REC standards 0.5 cum/pole	Nos.	2
11.	Earthing of substation complete	Nos.	3
12.	Gapless surge Arrestor 9 kV 10KA	set	1

13.	GI Barbed wire for Anti Climbing	kgs	15
14.	3- $\phi$ , 4-wire Trivector meter with CT with meter box	Nos.	1
15.	ACSR Rabbit conductor for jumper	Mtrs.	20
16.	P.G Clamps	Nos.	6

i) **Construction of 11 kV over head line for single circuit along with STP-SP-56-11 mtr, 11 kV Pin insulator with Pin (5kN)**

S. No.	Description of item	Unit	Quantity
1.	STP-SP-56-11 mtr	Nos.	35
2.	11 kV Pin insulator with Pin (5 KN)	Nos.	105
3.	GI Channel including clamps & bracing	Kgs	1450
4.	Danger plates	Nos.	35
5.	Earthing complete	Nos.	35
6.	Guy Rods with wire complete	Nos.	35
7.	Cement Bottoming 1:2:4 mix as per REC standards 0.6 cum/pole	Nos.	35
8.	ACSR Rabbit conductor	Mtrs.	1020

j) **Construction of 11 kV XLPE U/G cable in trench for Double circuit- Laying of 11kV XLPE cable in trench for Double circuit along with 11kV XLPE cable (3x185 sq mm), Jointing Kit (3x185 sq mm) size O/D type, 11 kV cable J/Kit (3x185 sq mm) S/T type, STP-SP-56-11 mtr., 11 kV Pin Insulator with Pin (5kN) with Horizontal Boring with HDPE pipe.**

S. No.	Description of item	Unit	Quantity
1.	11 kV XLPE cable 3x185 mm <sup>2</sup>	Mtrs.	2390
2.	Jointing Kit 3x185 mm <sup>2</sup> size O/D type	Nos.	22
3.	11 kV cable J/Kit 3x185 mm <sup>2</sup> S/T type	Nos.	2
4.	STP-SP-56-11 mtr	Nos.	8
5.	Horizontal Boaring with HDPE pipe.	Mtrs.	2000
6.	GI Channel including clamps & bracing	Kgs	220
7.	11 kV Pin insulator with Pin (5 KN)	Nos.	12
8.	Danger plates	Nos.	4
9.	RMU (2LBS+1VCB)	Nos.	1
10.	RMU Pad	Nos.	1
11.	Anti climbing device (Galvanised)	Nos.	4
12.	Guy Rods with wire complete	Nos.	8
13.	Earthing complete	Nos.	12
14.	G.I Pipe Dia 150 mm 3.0 mtrs long of each pipe.	Mtrs.	48
15.	Cement Bottoming 1:2:4 mix as per REC standards 0.6 cum/pole	Nos.	8
16.	ACSR Rabbit conductor for jumper	Mtrs.	60
17.	Aluminium Thimbles off sizes & lugs	Nos.	30

k) **Construction of L.T. Line on AB Cable- Erection of 120 sq mm LT AB Cable with minimum span of 330 mtr. along with STP-SP-33-09 mtr., 120 sq mm AB (LT) Cable (3x120+1x16+1x70 sq mm)**

S. No.	Description of item	Unit	Quantity
1.	STP-SP-33-09 mtr	Nos.	35
2.	120 mm <sup>2</sup> AB(LT) Cable (3x120+1x16+1x70 mm <sup>2</sup> )	Mtrs.	1100
3.	Suspension/Tension clamp with eye hook	Nos.	40
4.	Straight through cable jointing kit	Set	1
5.	Horizontal Boaring with HDPE pipe.	Mtrs.	1000
6.	Danger plates	Nos.	35
7.	Anti climbing Device with clamps	Nos.	35

8.	Earthing complete by GI rod 20mm 2.5 mtr long through GI wire	Nos.	35
9.	Cement Bottoming 1:2:4 mix as per REC standards 0.45 cum/pole	Nos.	35
10.	Insulating piercing connectors	Nos.	100
11.	PG Clamps	Nos.	10
12.	Galvanized stay set complete including clamps	Nos.	8
13.	35 mm <sup>2</sup> 4c PVC cable from ABC tapping point through Piercing connector to MSDB.	Mtr.	40
14.	Main service Distribution Box (MSDB)	Nos.	20

C) Dismantling of following Existing 33 kV, 11 kV & LT lines coming in the alignment:-

- i. 11 kV line on PCC pole using ACSR Conductor, 11 kV line on ST Pole, 11 kV line AB cable, LT line on PCC Pole, LT line on ST Pole and LT line AB cable.
  - ii. ACSR Wolf Conductor from 33 kV Janipur-Toph-Muthi and Muthi-MES lines, ACSR Panther Conductor from 33 kV Canal-Shakti Nagar-Toph lines, 1 Nos 66 kV Tower of 33 kV Canal-Toph Lines, 33 kV Pin insulator with pin, channel including clamps and braces, ST/Rails/channel poles.
- D) All the works shall be completed as per the specifications of “Jammu Power Distribution Corporation Limited”, Jammu in the UT of J&K.
- E) All the dismantled material shall be the property of contractor for which a fixed amount of Rs. 60,00,000/- (Rupees Sixty Lakh Only) shall be deducted from the payable due to the contractor.
- F) Payment for dismantled materials shall be deducted @2.5% of payable amount till Rs. 60,00,000/- (Rupees Sixty Lakh Only) is deducted.

