

राष्ट्रहित में बिजली बचाये

कार्यालय अधिशासी अभियन्ता  
उ० प्र० भावर ट्रांसमिशन कारपोरेशन लि०  
विद्युत पारेषण खण्ड-द्वितीय  
220 केवी उपकेन्द्र सेक्टर-20 नोएडा/  
दूरभाष/फैक्स- 0120-2500096  
मोबाइल नं०-7290059664



OFFICE OF THE  
EXECUTIVE ENGINEER  
U.P. POWER TRANSMISSION CORP. LTD  
ELECTY TRANSMISSION DIVISION-II  
220 KV SUB STATION SEC-20 NOIDA  
Email: [eeetd2noida@upptcl.org](mailto:eeetd2noida@upptcl.org)

CIN No. U 40101 UP20045GC028687  
GST No. 09AAACU8823E1Z9

No: 2411/ ETD-II/Noida/ data centre

/Date 05-11-2022

**Sub:-** "Revised estimate for an amount of Rs.52.89 Crore against construction of Construction of 02 number independent 220 KV feeders includes both bay & line for releasing 200 MW load of M/s NIDP Developers Pvt Ltd. from 220 KV GIS substation Jalpura, Greater Noida and 220 KV GIS substation KP-05, Greater Noida."

**Vice President (Operation)**  
**M/s NPCL**  
**Greater Noida**

In reference to cited subject and in continuation to this office letter number 2381, date 01.11.2022 it is to inform you that a revised estimate for an amount of Rs.52.89 Crore against construction of Construction of 02 number independent 220 KV feeders includes both bay & line for releasing 200 MW load of M/s NIDP Developers Pvt Ltd. from 220 KV GIS substation Jalpura, Greater Noida and 220 KV GIS substation KP-05, Greater Noida under deposit head is being submitted with request to submit the amount in Division account with details as given below.

Name of bank: Punjab National Bank, Sector 27 Noida.  
Name: UPPTCL ETD II NOIDA  
Account number:2726002100054142  
IFSC code: PUNB 0272600.

No: 2411/ ETD-II/Noida/ data centre

Copy forwarded for information and necessary action.

1. Chief Engineer (Transmission West), UPPTCL, D-130 Victoriya Park Meerut.
2. Superintending Engineer Electricity Transmission Circle, Noida.

  
(Abhishek Singh)  
Executive Engineer  
/Date 05-11-2022

  
(Abhishek Singh)  
Executive Engineer

ALLOCATION SHEET

1. PROVINCE : UTTAR PRADESH  
2. NAME OF CIRCLE : Electricity Transmission Circle  
3. NAME OF DIVISION : Electricity Transmission Division- II, Noida  
District- Gautambudh Nagar (U.P)  
4. STATION : NOIDA (G.B.NAGAR)  
5. NAME OF ESTIMATE : Estimate for the Construction of 02 number independent  
220 KV feeders includes both bay & line for releasing  
200 MW load of M/s NIDP Developers Pvt Ltd. from  
220 KV GIS substation Jalpura, Greater Noida and 220  
KV GIS substation KP-05, Greater Noida.  
6. DEPARTMENTAL HEAD : - 14.965/14966.  
7. SERVICE HEAD : - Deposit  
8. CHARGEABLE HEAD : DEPOSIT  
9. ESTIMATE NO. : 05/2022-2023  
10. AMOUNT : Rs 52.89 Crore

(Rs. Fifty two crore and eighty nine lacs only)

Checked

Allocation Checked

  
DA

*Sanctioned for Rs 52.89 Crore  
(Rs. Fifty two crore and eighty nine lacs only)  
Registered at serial no. 05..date 21/10/2022-23*

  
(Abhishek Singh)  
Executive Engineer

## REPORT

An estimate has been framed for Rs. 52.89 Crore (Fifty two crore and eighty nine lacs only) to cover the cost for construction of 02 number independent 220 KV feeders includes both bay & line for releasing 200 MW load of M/s NIDP Developers Pvt Ltd. from 220 KV GIS substation Jalpura, Greater Noida and 220 KV GIS substation KP-05, Greater Noida. M/s NIDP Developers Pvt Ltd. has planned to set up a major data center at Plot number-07, Knowledge Park-05, Greater Noida in District G.B Nagar. For which 200 MVA load has been demanded by M/S NIDP Developers. M/s NPCL has demanded for the sanction of load to M/S NIDP Developers Pvt Ltd. Supply from 220 KV GIS S/S Knowledge Park- 05, Greater Noida and 220 KV GIS S/S Jalpura, Greater Noida has been proposed by NPCL to M/S NIDP Developers Pvt Ltd. for reliability of Electricity supply on 220 KV level. For extending power supply on 220 KV level to M/S NIDP Developers, One no. 220 KV G.I.S. bay is proposed to be constructed at 220 KV GIS S/S Knowledge Park- 05, Greater Noida and additional one no. 220 KV G.I.S. bay at 220 KV GIS S/S Jalpura, Greater Noida along with construction of 220 KV Single circuit underground transmission line from 220 KV GIS S/S Knowledge Park- 05, Greater Noida and construction of 220 KV Single circuit (underground & overhead) transmission line from 220 KV GIS S/S Jalpura, Greater Noida to the premises of M/S NIDP Developers Pvt Ltd. at Plot number-07, Knowledge Park-05, Greater Noida for approximate 0.7 Kms underground (220 KV 1000 sq mm copper conductor cable) and 7.8 Kms (7.0 Km overhead (ACSR Zebra conductor stringing on existing 220 KV multi circuit monopole line & 02 number monopole construction) +0.8 Km (220 KV 1000 sq mm copper conductor cable)) lengths respectively.

The above work shall be carried out under full deposit by M/S NIDP Developers. The estimate has been prepared as per cost schedule 2022-23 and past agreements rates while loading have been taken as per latest guideline. As per site requirement and engineering quantities are listed in estimate. However contingency charges are also added as per UPPTCL norms. After the completion of works As Executed estimate shall be framed and final valuation of project shall be made & intimated to M/s NIDP Developers Pvt Ltd.. Accordingly final settlement of accounts shall be completed.

The work shall be supervised by SDO, ETSD-I under ETD-II, Noida. The proposed Transmission Elements shall be integral part of Intra-State transmission system of UPPTCL which shall be built, owned, operate & maintained by UPPTCL.

  
(Abhishek Singh)  
Executive engineer  
ETD-II, Noida

**Estimate for the Construction of 02 number Independent 220 KV feeders includes both bay & line for releasing 200 MW load of M/s NIDP Developers Pvt Ltd, from 220 KV GIS substation Jalpura, Greater Noida and 220 KV GIS substation KP-05, Greater Noida**

Sl. No.	Particulars	Amount in Crore
<b>A</b>	<b>FIRST SOURCE</b>	
1	Estimate for Construction of 01 number 220 KV GIS bay at 220 KV GIS substation Jalpura, Greater Noida.	6.92
2	Estimate for construction of 220 KV S/C line from Jalpura to M/s NIDP	29.67
	<b>Sub Total A</b>	<b>36.59</b>
<b>B</b>	<b>SECOND SOURCE</b>	
1	Estimate for Construction of 01 number 220 KV GIS bay at 220 KV GIS substation Knowledge Park-05, Greater Noida.	6.92
2	Estimate for construction of 220 KV S/C line from Knowledge Park-05 to M/s NIDP	9.38
	<b>Sub Total B</b>	<b>16.30</b>
	<b>TOTAL</b>	<b>52.89</b>

*(Handwritten signature)*

*(Handwritten signature)*  
**(Abhishek Singh)**  
**Executive Engineer**

**Tentative Estimate for Construction of**  
**220 KV SC underground (1000sqmm (3+0)) + overhead line from 220 KV Jalpura source to M/s NIDP**  
**Developers Pvt Ltd--7.8km**

Sl. No.	Name of Item	Unit	Quantity	Rate	Amount
A-1	<b>Part-A (New Monopole to be installed) Supply, Foundation &amp; Erection</b>				
1	Design of 220 kV DC Monopoles with extension nuts, bolts, washers & ladders etc. on ACSR Zebra conductor and its foundations (design of monopoles & its respective foundations duly approved from any of the independent Govt. approved test lab i.e. CPRI / IIT (Mumbai, Delhi, Roorkee, Khadagpur, Chennai, Kanpur).				
(a)	DC PD (30-60 degree) CT Pole cross arm -28 mtr	Job	1	175,000.00	175,000.00
2	Fabrication, galvanizing, inspection & supply of 220 kV DC Monopole with extension and nuts, bolts, washers & ladder etc as per design				
(a)	DC PD (30-60 degree) CT Pole cross arm -28 mtr	No.	2	6,000,000.00	12,000,000.00
3	Mono Poles Accessories				
(a)	Number Plate	No.	2	276.00	552.00
(b)	Danger Plate	No.	2	276.00	552.00
(c)	Phase Plate in Set of Red, Blue & Yellow	Set	2	226.00	452.00
(d)	Pipe type Earthing material	Set	4	2,478.00	9,912.00
1	Supply of ACSR Zebra conductor.	Km	21	333,340.00	7,000,140.00
2	Hardware Suitable for Zebra conductor				
(a)	Single Tension fitting	Set	200	2,975.00	595,000.00
(b)	Double Tension fitting	Set	40	5,482.00	219,280.00
(c)	160 KN tension polymer string	Set	280	5,280.00	1,478,400.00
3	Conductor Accessories Suitable for Zebra conductor				
(a)	Vibration Dampers	Set	240	1,004.00	240,960.00
(b)	Mid Span Compression Joint	Set	20	891.00	17,820.00
(c)	Repair Sleeve	Set	50	297.00	14,850.00
4	Mono Poles Accessories				
(a)	Phase Plate in Set of Red, Blue & Yellow	Set	37	226.00	8,362.00
6	FODP 48 Fiber	No.	2	50,382.00	100,764.00
				<b>Total Part [A-1]</b>	<b>21,862,044.00</b>
A-2	<b>Supply</b>				
1	<b>LATTICE TOWERS</b>				
a	Fabrication, galvanizing, inspection & supply of MS Steel GI Structures as per BOM	MT	0	98,542.00	-
b	Hot dip galvanised, Hexagon round hexagon head transmission tower Bolts Nuts, washers, spring Washer and Step Bolts etc. for above lattice structures as per BOM	MT	0	110,541.00	-
2	Fabrication, galvanizing, inspection & supply of 4x220 KV Multi Circuit Mono Poles with extension and nuts, bolts, washers & ladder etc complete in all respect as per design.				
a	Multi Ckt. Pole PB(0-15 degree) Bottom Cross arm height 19 mtr	Nos.	26	5,200,500.00	135,213,000.00
b	Multi Ckt. Pole PC(15-30 degree) Bottom Cross arm height 19 mtr	Nos.	2	5,385,500.00	10,771,000.00
c	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 19 mtr	Nos.	5	5,585,500.00	27,927,500.00
d	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 21 mtr	Nos.	2	5,785,500.00	11,571,000.00

Sl. No.	Name of Item	Unit	Quantity	Rate	Amou
e	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 27 mtr	Nos.	0	6,485,500.00	
f	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 32 mtr	Nos.	2	6,785,500.00	13,571,000.00
3	<b>TOWER ACCESSORIES</b>				
a	Number Plate	Nos.	37	305.00	11,285.00
b	Danger Plate	Nos.	37	305.00	11,285.00
c	Phase Plate in Set of Red, Blue & Yellow	Set	0	955.00	-
d	Pipe type Earthing material	Set	37	4,205.00	155,585.00
4	<b>COMPOSIT SILICON RUBBER INSULATOR STRING</b>				
a	160 KN for Tension Fitting	Nos.	0	5,487.00	-
b	120 KN for Tension Fitting	Nos.	0	4,643.00	-
c	70 KN for Suspension Fittings	Nos.	0	4,193.00	-
5	Copper Bond	Nos.	0	1,343.00	-
6	<b>48 FIBRE OPGW</b>				
a	48 Fibre (DWSM) OPGW Fibre Optic Cable	route km	7	220,156.00	1,541,092.00
b	Supply & Installation of Hardware set for 48 Fibre OPGW*	Set.	7	39,656.00	277,592.00
c	Joint Box (48 Fibre)	Nos.	5	18,656.00	93,280.00
d	FODP 96F	Nos.	0	238,156.00	-
7	<b>48 FIBRE OPTIC APPROACH CABLE</b>				
a	Fibre Optic Approach Cable for 48 F OPGW	route km	0	245,156.00	-
b	Supply & Installation of hardware' set for 48 Fibre (DWSM, G.652D) Fibre Optic Approach Cable*	Set.	0	138,156.00	-
8	<b>Supply of following items for aviation requirements as per IS:5613</b>				
a	Span Markers	Nos.	0	42,151.00	-
b	<b>Obstruction lights (to be provided as per IS 5613)</b>				
	i) 1 Medium + 2 low intensity	Sets.	0	155,151.00	-
	ii) 1 Medium + 4 low intensity	Sets.	0	165,151.00	-
	<b>TOTAL</b>				<b>201,143,619.00</b>
	<b>Subtotal A-2 (1:4 ratio as only 01 ckt is being used out of 04 ckt)</b>				<b>50,285,904.75</b>
A-3	<b>SUPPLY</b>				
1	220.KV single core 1000 sq. mm Copper Conductor, XLPE insulated corrugated Aluminium sheathed Power Cable (Construction as per IEC- 60502-2 and testing as per IEC - 62067) .	Meter	4500	11,229.00	50,530,500.00
2	Outdoor Type Complete End termination kit suitable for above cable with all accessories	Nos.	18	525,000.00	9,450,000.00
3	Normal Straight Through Join/insulated Joint suitable for above with cable all accessories	Nos.	9	301,000.00	2,709,000.00
4	Single Phase Link box with/without svl as required	Nos.	9	28,032.00	252,288.00
5	Three Phase Link Box with/without SVL as required	Nos.	6	60,977.00	365,862.00
6	Single core 500 Sq mm Copper Conductor PVC insulated 6.6 KV Grade Earthing cable	Meter	900	5,156.00	4,640,400.00
7	Single Core 6.6 KV 500 sq mm sheath Bonding Coaxlal cable	Meter	600	9,750.00	5,850,000.00
8	Aluminium Alloy trefoil clamp	Nos.	50	1,474.00	73,700.00
9	Aluminium Alloy Single clamps	Nos.	30	1,000.00	30,000.00
10	Terminal Connector	Nos.	18	997.00	17,946.00
11	132 KV Lightening Arrestor with terminal connector	Nos.	12	83,962.00	1,007,544.00
12	HDPE Pipe suitable for above Cable	Meter	600	1,515.00	909,000.00
13	Supply of Pipe suitable for laying of Approach cable in trenchless crossing	Meter	100	70.00	7,000.00
14	Warning Tape	Meter	1200	24.00	28,800.00
15	Steel Support Structure for Termination and L.A.	Nos.	6	42,522.00	255,132.00

	Name of Item	Unit	Quantity	Rate	Amount
16	Route Marker	Nos.	30	1,217.00	36,510.00
17	Fiber optic approach cable 24 Fiber	Km	0.9	81,371.00	73,233.90
18	Supply and installation of hardware set for 24 fiber optic approach cable.	Km	0.9	24,469.00	22,022.10
			<b>Total Supply</b>		<b>76,258,938.00</b>
	<b>Subtotal A-3 (1:2 ratio as common for 02 ckt)</b>				<b>38,129,469.00</b>
	<b>Supply A (A-1+A-2+A-3)</b>				<b>110,277,417.75</b>
	<b>GST @ 18%</b>				<b>19,849,935.20</b>
	<b>Total Supply A (A-1+A-2+A-3)</b>				<b>130,127,352.95</b>
<b>B</b>	<b>Work</b>				
<b>B-1</b>	<b>Part-B (Stringing Work along with associated accessories) On existing 37 number 220 KV M/C monopole and above 02 number new 220 KV D/C monopole with ACSR Zebra conductor.</b>				
1	Laying, stringing, tensioning, clamping, jointing etc of ACSR Zebra conductor including hoisting of insulators, fitting of all necessary hardware and accessories i.e. fitting armour rods, vibration dampers etc on all three phase of 220 KV SC lines.	Km	7	89,122.00	623,854.00
2	Installation of FODP	Nos	2	14,348.00	28,696.00
3	Survey including preparation of final tower schedule of martial, marking of location (Route length) and super impose the GPS coordinates.	Km	1	12,359.00	12,359.00
4	Check survey & final peg marking (Route length)	Km	1	6,221.00	6,221.00
5	Cost of complete foundation work as per approved design by IIT's CPRI (Excavation, Piling, reinforcement, setting of monopoles template, fixing of foundation bolts, concreting backfilling etc) for all type of multicircuit monopoles foundation. Cost includes cost of cement, dewatering, shuttering, forming & curing including cost of reinforcement bars with M20 M25 mix.				
6	DC PD (30-60 degree) CT Pole cross arm -28 mtr	Nos	2	2,550,000.00	5,100,000.00
7	Erection of 220 kV DC monopoles				
8	DC PD (30-60 degree) CT Pole cross arm -28 mtr	No.	2	495,000.00	990,000.00
9	Grounding workk including earth work etc for pipe type grounding including cost of coke & salt.	No.	4	2,674.00	10,696.00
				<b>Subtotal [B-1]</b>	<b>6,771,826.00</b>
<b>B-2</b>	<b>SUPPLY</b>				
1 (i)	Survey including preparation of final tower schedule of material, marking of location (Route length) and super impose the GPS coordinates of diverted locations on elevated road plan to get the clearance from existing building/structures etc before start of work.	km	7	12,000.00	84,000.00
(ii)	Check survey & final peg marking (Route length)	km	7	10,000.00	70,000.00
2	<b>Design of 4x220 KV Multi Circuit Monopoles suitable for ACSR Zebra conductor with extension and nuts, bolts, washers &amp; ladder etc and its foundation (Design of Monopole &amp; its respective foundations duly approved from any of the Govt. approved agency i.e CPRI/ IIT FOR WIND ZONE-5</b>				
a	Multi Ckt. Pole PB(0-15 degree) Bottom Cross arm height 19 mtr	Job	1	100,000.00	100,000.00
b	Multi Ckt. Pole PC(15-30 degree) Bottom Cross arm height 19 mtr	Job	1	100,000.00	100,000.00
c	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 19 mtr	Job	1	100,000.00	100,000.00

Sl. No.	Name of Item	Unit	Quantity	Rate	Amount
d	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 21 mtr	Job	1	100,000.00	100,000.00
e	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 27 mtr	Job	0	100,000.00	-
f	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 32 mtr	Job	1	100,000.00	100,000.00
3	Cost of complete foundation work (Excavation, Piling, reinforcement, setting of monopole template, fixing of foundation bolts, concreting backfilling etc) for all type of 4x220 KV Multi Circuit Monopoles & there extensions where ever required including cost of cement, dewatering, shuttering, forming & curing including cost of reinforcement bars with M20/M25 mix concrete.				
a	Multi Ckt. Pole PB(0-15 degree) Bottom Cross arm height 19 mtr	Nos.	26	1,855,000.00	48,230,000.00
b	Multi Ckt. Pole PC(15-30 degree) Bottom Cross arm height 19 mtr	Nos.	2	1,855,000.00	3,710,000.00
c	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 19 mtr	Nos.	5	2,100,000.00	10,500,000.00
d	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 21 mtr	Nos.	2	2,150,000.00	4,300,000.00
e	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 27 mtr	Nos.	0	2,275,000.00	-
f	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 32 mtr	Nos.	2	2,450,000.00	4,900,000.00
4	Cost of Foundation of 220kV Gantry including material & complete in all sence for erection with earthing arrngment. Required for the crossing of 220kV lines ( Total Foundations for 12 Nos. of Gantry Coloums)	Nos.	0	200,000.00	-
5	Erection of Superstructure of Gantry wherever required including all work above ground level excluding hoisting of insulators, hardware & accessories	MT	0	9,500.00	-
6	Erection of 4x220kV Multi Circuit Monopoles & and assesories etc. including all work above ground level				
a	Multi Ckt. Pole PB(0-15 degree) Bottom Cross arm height 19 mtr	Nos.	26	250,000.00	6,500,000.00
b	Multi Ckt. Pole PC(15-30 degree) Bottom Cross arm height 19 mtr	Nos.	2	250,000.00	500,000.00
c	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 19 mtr	Nos.	5	250,000.00	1,250,000.00
d	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 21 mtr	Nos.	2	300,000.00	600,000.00
e	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 27 mtr	Nos.	0	325,000.00	-
f	Multi Ckt. Pole PD(30-60 degree) Bottom Cross arm height 32 mtr	Nos.	2	450,000.00	900,000.00
6(a)	(a) Grounding work including earth work etc for pipe type grounding including cost of coke & salt.	Nos	37	3,400.00	125,800.00
6(b)	(b) Grounding work including earthwork etc for counterpoise grounding materials including cost of all material	Nos	0	3,800.00	-
7	Laying, stringing, tensioning, clamping, jointing, including fittings of all necessary Hardware and accessories of OPGW & OFAC, termination at S/s, end to end connectivity & testing etc on 220 KV Multi Circuit lines	per route Km	0	188,000.00	-

100,000.00  
Amount

	Name of Item	Unit	Quantity	Rate	Amount
8	Providing barricades for avoiding any accident during the period of excavation to backfilling of soil during erection of Monopoles.	Job	37	12,500.00	462,500.00
9	Installation of Aviation Requirement				
a	Painting of Monopole above 45 meter from ground level including cost of all materials	sqm	0	10,000.00	-
b	Span Marker	Sets	0	7,500.00	-
c	Obstruction lights				
	i) 1 Medium+2 low intensity	Sets	0	15,500.00	-
	ii) 1 Medium+4 low intensity	Sets	0	16,800.00	-
				<b>TOTAL</b>	82,632,300.00
	<b>Subtotal B-2 (1:4 ratio as only 01 ckt is being used out of 04 ckt)</b>				<b>20,658,075.00</b>
B-3	<b>WORK</b>				
1	Route survey and preparation of including the digging of trail pit for specified route length	Meter	900	136.00	122,400.00
2	Excavation of trench (1.5 meter)	Meter	800	1,069.00	855,200.00
3	Formation of trenchless road crossing with HDPE pipe.	RMT	100	10,790.00	1,079,000.00
4	Sand bedding and laying of all (6+1) single core cable along with approach cable in excavated trench (including jointing and installation of approach cable).	RMT	800	6,242.00	4,993,600.00
5	Laying of all (6+1) single core cable through HDPE pipe in road crossing	RMT	100	1,915.00	191,500.00
6	Back filling of trench with sand RCC cover warning tape root marker and fill in and relieving of excavated earth	RMT	800	4,339.00	3,471,200.00
7	Installation of outdoor end termination kit.	Nos	9	119,138.00	1,072,242.00
8	Installation of straight through joint kit.	Nos	21	108,961.00	2,288,181.00
9	Installation of three phase link Box with /without SVL	Nos	6	9,137.00	54,822.00
10	Installation of single phase link Box with /without SVL	Nos	8	9,758.00	78,064.00
11	Civil foundation and erection of structure at substation end and all associated works including installation of LA	Job	2	1,408,660.00	2,817,320.00
12	Civil foundation and erection of Steel support structure for cable and termination outdoor	Nos.	12	76,014.00	912,168.00
13	Testing and commissioning	Job	1	344,518.00	344,518.00
				<b>Total</b>	<b>18,280,215.00</b>
	<b>Subtotal B-3 (1:2 ratio as common for 02 ckt)</b>				<b>9,140,107.50</b>
	<b>WORK B (B-1+B-2+B-3)</b>				<b>36,570,008.50</b>
	<b>GST@18%</b>				<b>6,582,601.53</b>
	<b>WORK B (B-1+B-2+B-3)</b>				<b>43,152,610.03</b>
	<b>Total Supply+Work (A+B)</b>				<b>173,279,962.98</b>
i	Loading as per circular no. 949 Dt 05.02.2021				
ii	Price Escalation 3.0% on (C)				5,198,398.89
iii	Contingency @ 3% on (C)				5,198,398.89
iv	Road cutting and restoration Charges				35,000,000.00
v	<b>Total [D]</b>				<b>218,676,760.76</b>
vi	Supervision Charges 15% on (D)				32,801,514.11
vii	<b>TOTAL [E]</b>				<b>251,478,274.87</b>
viii	<b>G.S.T. @ 18% on Deposit Works</b>				<b>45,266,089.48</b>
ix	<b>Grand Total</b>				<b>296,744,364.35</b>
	<b>Say in Rs Crore</b>				<b>29.67</b>

*Handwritten signature/initials in green ink.*

*Handwritten signature/initials in blue ink with text "EE, ETO-II Noida".*

**Tentative Estimate for Construction of  
220 KV SC underground line from 220 KV S/S Knowledge Park-05 to M/s NIDP Developers Pvt Ltd  
Plot no. 07 Knowledge Park -05 on 1000 sqmm copper cable (3+0) - 0.7 km**

SN	Discriptions	Unit	Qty	Rate	Amount
<b>A</b>	<b>SUPPLY</b>				
1	220.KV single core 1000 sq. mm Copper Conductor, XLPE insulated corrugated Aluminium sheathed Power Cable (Construction as per IEC- 60502-2 and testing as per IEC -62067) .	Meter	4500	11,229.00	50,530,500.00
2	Indoor/ Outdoor Type Complete End termination kit suitable for above cable with all accessories	Nos.	18	525,000.00	9,450,000.00
3	Normal Straight Through Join/insulated Joint suitable for above with cable all accessories	Nos.	9	301,000.00	2,709,000.00
4	Single Phase Link box with/without svl as required	Nos.	9	28,032.00	252,288.00
5	Three Phase Link Box with/without SVL as required	Nos.	6	60,977.00	365,862.00
6	Single core 500 Sq mm Copper Conductor PVC insulated 6.6 KV Grade Earthing cable	Meter	900	5,156.00	4,640,400.00
7	Single Core 6.6 KV 500 sq mm sheath Bonding Coaxial cable	Meter	600	9,750.00	5,850,000.00
8	Aluminium Alloy trefoil clamp	Nos.	50	1,474.00	73,700.00
9	Aluminium Alloy Single clamps	Nos.	30	1,000.00	30,000.00
10	Terminal Connector	Nos.	18	997.00	17,946.00
11	132 KV Lightening Arrestor with terminal connector	Nos.	12	83,962.00	1,007,544.00
12	HDPE Pipe suitable for above Cable	Meter	600	1,515.00	909,000.00
13	Supply of Pipe suitable for laying of Approach cable in trenchless crossing	Meter	100	70.00	7,000.00
13	Warning Tape	Meter	1200	24.00	28,800.00
14	Steel Support Structure for Termination and L.A.	Nos.	6	42,522.00	255,132.00
15	Route Marker	Nos.	30	1,217.00	36,510.00
16	Fiber optic approach cable 24 Fiber	Km	0.9	81,371.00	73,233.90
17	Supply and installation of hardware set for 24 fiber optic approach cable.	Km	0.9	24,469.00	22,022.10
				<b>Supply</b>	<b>76,258,938.00</b>
					<b>SUPPLY @1:2 ratio as common for 02 ckt</b>
					<b>38,129,469.00</b>
					<b>GST@18%</b>
					<b>6,863,304.42</b>
					<b>TOTAL SUPPLY</b>
					<b>44,992,773.42</b>
<b>B</b>	<b>WORK</b>				
1	Route survey and prepration of including the digging of trail pit for specified route length	Meter	900	136.00	122,400.00
2	Excavation of trench (1.5 meter)	Meter	800	1,069.00	855,200.00

✓

*[Handwritten Signature]*  
ES

3	Formation of trenchless road crossing with HDPE pipe.	RMT	100	10,790.00	1,079,000.00
4	Sand bedding and laying of all (6+1) single core cable along with approach cable in excavated trench (including jointing and installation of approach cable).	RMT	800	6,242.00	4,993,600.00
5	Laying of all (6+1) single core cable through HDPE pipe in road crossing	RMT	100	1,915.00	191,500.00
6	Back filling of trench with sand RCC cover warning tape root marker and fill in and relieving of excavated earth	RMT	800	4,339.00	3,471,200.00
7	Installation of outdoor/ indoor end termination kit.	Nos	9	119,138.00	1,072,242.00
8	Installation of straight through joint kit.	Nos	21	108,961.00	2,288,181.00
9	Installation of three phase link Box with /without SVL	Nos	6	9,137.00	54,822.00
10	Installation of single phase link Box with /without SVL	Nos	8	9,758.00	78,064.00
11	Civil foundation and erection of structure at substation end and all associated works including installation of LA	Job	2	1,408,660.00	2,817,320.00
12	Civil foundation and erection of Steel support structure for cable and termination outdoor	Nos.	12	76,014.00	912,168.00
13	Testing and commissioning	Job	1	344,518.00	344,518.00
<b>Total Work</b>					<b>18,280,215.00</b>
<b>Work @1:2 ratio as common for 02 ckt</b>					<b>9,140,107.50</b>
<b>GST@18%</b>					<b>1,645,219.35</b>
<b>TOTAL WORK</b>					<b>10,785,326.85</b>
<b>Toatal (Supply +Work)</b>					<b>55,778,100.27</b>
18	Loading as per circular no. 949 Dt 05.02.2021				1,673,343.01
20	Price Excalation 3.0% on (C+D)				1,673,343.01
19	Contigency @ 3%				10,000,000.00
22	Road cutting and restoration Charges				69,124,786.29
<b>Total (C+D)</b>					<b>10,368,717.94</b>
21	Supervision Charges 15% on (C+D)				79,493,504.23
<b>TOTAL E</b>					<b>14,308,830.76</b>
<b>G.S.T. @ 18% on (E ) Deposit Works</b>					<b>93,802,334.99</b>
<b>Grand Total</b>					<b>9.38</b>
<b>Say in Rs Crore</b>					

*Handwritten signature and initials in green ink.*

*Handwritten signature and initials in blue ink, with text "cc, ETO-II Narda" below it.*

**Tentative Estimate for Construction of 01 number 220 KV GIS bay at 220 KV GIS substation Knowledge Park-05, Greater Noida.**

Sl. No.	Name of Item	Unit	Quantity	Rate	Amount
1	Line feeder bay module as per 220 KV S/S TS	Set	1	11,948,253.00	11,948,253.00
2	Bus bar as per 220 KV TS.	Set	2	6,104,104.00	12,208,208.00
3	GI bus duct (3-ph)	Mtr.	20	118,008.00	2,360,160.00
4	220 KV bus bar extension including adaptor module integration.	Job	1	6,539,077.00	6,539,077.00
5	Suitable SF6/ Air bushing for connecting with bus duct with all fittings and accessories.	No	3	230,514.00	691,542.00
6				TOTAL	33,747,240.00
7	Add				
8	Erection, Labour cess Survey, Drawing, Site office, Expences, etc.	7.50%			2,531,043.00
9	<b>Sub Total A-2</b>				36,278,283.00
10	Civil works without GST				2,500,000.00
11	<b>Sub Total A-3</b>				38,778,283.00
12	<b>GST @18% on A-3</b>				6,980,090.94
13	<b>Total A-4</b>				45,758,373.94
14	Cost of land (inclusive of taxes)				-
15	Development of land such as forest clearance, demolition of structures etc (inclusive of taxes)				-
16	Trasportation, Loading, Unloading, T&P, Testing & commissioning on A-4	4.00%			1,830,334.96
17	Price escalation on A-4	3.00%	1.5 year (for 220 KV S/S)		2,059,126.83
18	Contingency on A-4	3.00%			1,372,751.22
19	Administrative and establishment charges on A-4	0%			-
20	<b>B</b>				51,020,586.95
21	IDC on 70% on B (Not applicable on deposit work)	0.00%	1.5 year (for 220 KV S/S)		-
22	<b>Total [C]</b>				51,020,586.95
23	Supervision Charges 15% on (C)				7,653,088.04
24	<b>TOTAL [D]</b>				58,673,674.99
25	G.S.T. @ 18% on Deposit Works				10,561,261.50
26	<b>Grand Total</b>				69,234,936.49
27	<b>SAY IN CRORE</b>				6.92

*DA  
BIDNoida*

*69,234.99  
Noida*

**Tentative Estimate for Construction of 01 number 220 KV GIS bay at 220 KV GIS  
substation Jalpura, Greater Noida.**

Sl. No.	Name of Item	Unit	Quantity	Rate	Amount
1	Line feeder bay module as per 220 KV S/S TS	Set	1	11,948,253.00	11,948,253.00
2	Bus bar as per 220 KV TS.	Set	2	6,104,104.00	12,208,208.00
3	GI bus duct (3-ph)	Mtr.	20	118,008.00	2,360,160.00
4	220 KV bus bar extension including adaptor module integration.	Job	1	6,539,077.00	6,539,077.00
5	Suitable SF6/ Air bushing for connecting with bus duct with all fittings and accessories.	No	3	230,514.00	691,542.00
6				TOTAL	33,747,240.00
7	Add				
8	Erection, Labour cess Survey, Drawing, Site office, Expences, etc.	7.50%			2,531,043.00
9	<b>Sub Total A-2</b>				
					36,278,283.00
10	Civil works without GST				2,500,000.00
11	<b>Sub Total A-3</b>				
					38,778,283.00
12	GST @18% on A-3				6,980,090.94
13	<b>Total A-4</b>				45,758,373.94
14	Cost of land (inclusive of taxes)				-
15	Development of land such as forest clearance, demolition of structures etc (inclusive of taxes)				-
16	Trasportation, Loading, Unloading, T&P, Testing & commissioning on A-4	4.00%			1,830,334.96
17	Price escalation on A-4	3.00%	1.5 year (for 220 KV S/S)		2,059,126.83
18	Contingency on A-4	3.00%			1,372,751.22
19	Administrative and establishment charges on A-4	0%			-
20	<b>B</b>				
					51,020,586.95
21	IDC on 70% on B (Not applicable on deposit work)	0.00%	1.5 year (for 220 KV S/S)		-
22	<b>Total [C]</b>				
					51,020,586.95
23	Supervision Charges 15% on (C)				7,653,088.04
24	<b>TOTAL [D]</b>				
					58,673,674.99
25	G.S.T. @ 18% on Deposit Works				10,561,261.50
26	<b>Grand Total</b>				
					69,234,936.49
27	<b>SAY IN CRORE</b>				
					6.92

*Handwritten signature in green ink: J.B. Singh, JDA, Greater Noida.*

*Handwritten signature in blue ink: J.P. Singh, EE, ETD-II, Noida.*