



Commission, KSEB is authorised to charge from a person requiring a supply of electricity, any expenses reasonably incurred in providing any electric line or electric plant used for the purpose of giving that supply.

5. In cases where works involving construction of electric plants and lines above 11 kV level is required, KSEB at present collects charges based on estimate prepared for each work as per the site conditions and load requirements. The estimates are prepared in line with the stipulations prescribed by the Hon. Commission as per sub clauses 2, 3 and 4 of clause 8 of Kerala Electricity Supply Code Regulations, 2005. In order to facilitate notification of uniform estimate rate for transmission works required for giving supply to consumers having large power requirement, estimates have been standardised based on the following methodology detailed in Table 1 and is submitted before the Hon. Commission for approval.

Table - 1 : Methodology for estimation of cost of Transmission works

<b>Sl. No.</b>	<b>Description</b>	<b>Amount</b>
1	Cost of materials	= A
2	Spares	= 3% of A
3	Contingency	= 3.75% of A
4	Erection & Commissioning	= 10% of A
5	Transportation & Insurance	= 10% of A
6	Civil works	= B
7	Total	= (1+2+3+4+5+6) = C
8	Survey & Tree cutting compensation if any	= 10% of C = D
9	Total	= C + D = E
10	Overhead / Supervision charges	= 10% of E = F
11	Total	= E + F = G

6. Based on the above methodology, KSEB has prepared the estimate rates for the following works and the detailed estimates are attached herewith as *Annexure*.
- i. Construction of 1 km 33 kV single circuit line using ACSR Dog conductor and 'A' type poles at a maximum span of 80 m
  - ii. Construction of 1 km 33 kV Double Circuit line using ACSR Dog conductor and 'A' type poles at a maximum span of 80 m
  - iii. Construction of 1 km 33 kV single circuit line using lattice poles with a maximum span of 55 m
  - iv. Construction of 1 km 33 kV double circuit line using lattice poles with a maximum span of 55 m
  - v. Converting 66 kV line to 110 kV Double Circuit line
  - vi. Construction of 1 km 110 kV Double Circuit line
  - vii. Construction of 1 km 220 kV Double Circuit line
  - viii. Construction of 2 Nos 66 kV feeder bays in the existing substation
  - ix. Construction of 2 Nos 110 kV feeder bays in the existing substation
  - x. Construction of 2 Nos 220 kV feeder bays in the existing substation
  - xi. Construction of 2 Nos transformer bays of 66/11 kV, 2 x 10 MVA transformer in existing substation
  - xii. Construction of 2 Nos transformer bays of 110/11 kV, 2 x 12.5 MVA transformer in existing substation
  - xiii. Construction of 2 Nos 110 kV feeder bays and installation of 110/33 kV, 2 x 16 MVA transformer and 4 Nos 33 kV feeders in the existing substation
  - xiv. Installation of 2 x 20 MVA 110/66 kV transformer in the existing substation
  - xv. Upgradation of 66 kV substation with 2 Nos 110 kV feeder bays and installation of 2 x 12.5 MVA 110/11 kV transformer and 6 Nos 11 kV feeder with switchgear

- xvi. Upgradation of 110 kV substation to 220 kV substation with 2 Nos 220 kV feeder bays by installing 2 x 100 MVA 220/110 kV transformer and 2 Nos 110 kV feeder bays
  - xvii. Construction of 33/11 kV substation by installing 2 x 5 MVA, 33/11 kV transformer and 2 Nos 33 kV feeder bays
  - xviii. Construction of 110 kV substation with 2 Nos 110 kV feeder bays by installing 2 x 12.5 MVA, 110/11 kV transformers
  - xix. Construction of 220 kV substation with 2 Nos 220 kV feeder bays by installing 2 x 100 MVA, 220/110 kV transformer and 2 x 12.5 MVA, 110/11 kV transformers with 2 Nos 110 kV feeder bays
7. It may please be noted that provision for tree cutting compensation has been included only for the construction of transmission lines. In the case of construction of new substations, cost of land @ Rs. 25,00,000/- per acre has also been included, in addition to the items included in Table - 1, for arriving at the estimate rate of works.
8. In the case of construction of new substations, to facilitate introduction of SCADA operations, provisions for remote metering, remote controls etc. are essential, the cost of which are not included in the estimate. The necessity of introduction of such facilities would be determined based on the relative importance of the substation in the grid network. Hence it is humbly requested before the Hon. Commission to permit realisation of the cost of such equipment at actuals in addition to the proposed rates.
9. In certain instances, the requests of the consumer for a new connection or additional demand could be met by enhancing the transformer capacity alone in an existing substation. Estimate for such works are not submitted along with the present petition. It is requested

before the Hon. Commission to permit KSEB to collect expenditure incurred for such works at actuals from the prospective consumers.

**Prayer**

KSEB most humbly requests the Hon. Commission

1. to approve the estimate rates for transmission works attached herewith as *Annexure*.
2. to permit KSEB to collect expenditure incurred at actuals for works requiring enhancing the capacity of existing transformer from prospective consumers.

Acc: *Annexure*

**Chief Engineer  
Commercial & Tariff**

**Estimate Rate for Transmission Works****Abstract**

<b>Item No.</b>	<b>Name of Work</b>	<b>Amount in Rs. Lakhs</b>
1	Construction of 1 km 33 kV single circuit line using ACSR Dog conductor and 'A' type poles at a maximum span of 80 m	15.61
2	Construction of 1 km 33 kV Double Circuit line using ACSR Dog conductor and 'A' type poles at a maximum span of 80 m	18.91
3	Construction of 1 km 33 kV single circuit line using lattice poles with a maximum span of 55 m	29.21
4	Construction of 1 km 33 kV double circuit line using lattice poles with a maximum span of 55 m	32.60
5	Converting 66 kV line to 110 kV Double Circuit line	80.26
6	Construction of 1 km 110 kV Double Circuit line	81.84
7	Construction of 1 km 220 kV Double Circuit line	123.37
8	Construction of 2 Nos 66 kV feeder bays in the existing substation	164.40
9	Construction of 2 Nos 110 kV feeder bays in the existing substation	180.84
10	Construction of 2 Nos 220 kV feeder bays	286.55
11	Construction of 2 Nos transformer bays of 66/11 kV, 2 x 10 MVA transformer in existing substation	379.15
12	Construction of 2 Nos transformer bays of 110/11 kV, 2 x 12.5 MVA transformer in existing substation	408.95
13	Construction of 2 Nos 110 kV feeder bays and installation of 110/33 kV, 2 x 16 MVA transformer and 4 Nos 33 kV feeders in the existing substation	684.05
14	Installation of 2 x 20 MVA 110/66 kV transformer in the existing substation	717.83
15	Upgradation of 66 kV substation with 2 Nos 110 kV feeder bays and installation of 2 x 12.5 MVA 110/11 kV transformer and 6 Nos 11 kV feeder with switchgear	536.21
16	Upgradation of 110 kV substation to 220 kV substation with 2 Nos 220 kV feeder bays by installing 2 x 100 MVA 220/110 kV transformer and 2 Nos 110 kV feeder bays	2564.99
17	Construction of 33/11 kV substation by installing 2 x 5 MVA, 33/11 kV transformer and 2 Nos 33 kV feeder bays	278.42
18	Construction of 110 kV substation with 2 Nos 110 kV feeder bays by installing 2 x 12.5 MVA, 110/11 kV transformers	702.26
19	Construction of 220 kV substation with 2 Nos 220 kV feeder bays by installing 2 x 100 MVA, 220/110 kV transformer and 2 x 12.5 MVA, 110/11 kV transformers with 2 Nos 110 kV feeder bays	3253.37

<b>1. CONSTRUCTION OF 1 KM 33 kV SINGLE CIRCUIT LINE USING ACSR DOG CONDUCTOR AND 'A' TYPE POLES AT A MAXIMUM SPAN OF 80 M</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	12 m, A-Type Fabricated Poles	No	16	15000.00	240000.00
	Cross Arm with Accessories	LS		41000.00	41000.00
	Back Clamp with Bolt & Nut	No	14	45.00	630.00
	Stay Set	Set	28	981.53	27482.84
	Insulators and hardware accessories	LS		18000.00	18000.00
	Special fabricated Poles for road crossing	No	4	80000.00	320000.00
	ACSR Dog Conductor	km	3.15	56052.92	176566.70
	<b>A. Total Cost of Materials</b>				<b>823679.54</b>
2	Spares 3%				24710.39
3	Contingencies 3.75%				30887.98
4	Erection and Commissioning 10%				82367.95
5	Insurance, Sales Tax & Transporting 10%				82367.95
6	<b>B. Civil Works - Foundation for poles</b>	No	20	12000.00	240000.00
	Pipe Earthing Coil Earthing, Danger Board, etc.	LS		6000.00	6000.00
7	<b>C. Total</b>				1290013.81
8	<b>D. Survey &amp; Tree Cutting Compensation 10%</b>				129001.38
9	<b>E. Total</b>				1419015.20
10	<b>F. Overhead / Supervision Charges 10%</b>				141901.52
11	<b>G. Grand Total</b>				<b>1560916.72</b>
	<b>Rounded to</b>	<b>15.61</b>	<b>lakhs</b>		

<b>2. CONSTRUCTION OF 1 KM 33 kV DOUBLE CIRCUIT LINE USING ACSR DOG CONDUCTOR AND 'A' TYPE POLES AT A MAXIMUM SPAN OF 80 M</b>					
<b>Sl. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	12 m, A-Type Fabricated Poles	No	16	15000.00	240000.00
	Cross arm with accessories	LS		60000.00	60000.00
	Back Clamp with Bolt & Nut	No	42	45.00	1890.00
	Stay Set	Set	28	981.53	27482.84
	Insulator and hardware accessories	LS		36000.00	36000.00
	Special angle iron Poles	No	4	80000.00	320000.00
	ACSR Dog Conductor	km	6.3	56052.92	353133.40
	<b>A. Total Cost of Materials</b>				<b>1038506.24</b>
2	Spares 3%				31155.19
3	Contingencies 3.75%				38943.98
4	Erection and Commissioning 10%				103850.62
5	Insurance, Sales Tax & Transporting 10%				103850.62
6	<b>B. Civil Works - Foundation for poles</b>	No	20	12000.00	240000.00
	Pipe Earthing Coil Earthing, Danger Board, etc.	LS		6000.00	6000.00
7	<b>C. Total</b>				1562306.65
8	<b>D. Survey &amp; Tree Cutting Compensation 10%</b>				156230.67
9	<b>E. Total</b>				1718537.32
10	<b>F. Overhead Charges 10%</b>				171853.73
11	<b>G. Grand Total</b>				<b>1890391.05</b>
	<b>Rounded to</b>	<b>18.91</b>	<b>lakhs</b>		



<b>3. CONSTRUCTION OF 1 KM 33 KV SINGLE CIRCUIT LINE USING LATTICE POLES WITH MAXIMUM SPAN 55 M</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	Lattice pole C type	No	18	74349.00	1338282.00
	ACSR Dog conductor	km	3.15	56052.92	176566.70
	Insulators and hardware fittings	LS		46000.00	46000.00
	Cross arm with accessories	LS		82000.00	82000.00
	<b>A. Total Cost of Materials</b>				<b>1642848.70</b>
2	Spares 3%				49285.46
3	Contingencies 3.75%				61606.83
4	Erection and Commissioning 10%				164284.87
5	Insurance, Sales Tax, Transporting 10%				164284.87
6	<b>B. Civil Works - Foundation to lattice pole @ Rs.18000/-</b>				324000.00
	Pipe earthing/coil earthing and danger board fixing	LS		7000.00	7000.00
7	<b>C. Total</b>				2413310.72
8	<b>D. Survey &amp; Tree cutting compensation 10%</b>				241331.07
9	<b>E. Total</b>				2654641.80
10	<b>F. Overhead charges 10%</b>				265464.18
11	<b>G. Grand Total</b>				<b>2920105.98</b>
	<b>Rounded to</b>	<b>29.21</b>	<b>lakhs</b>		

<b>4. CONSTRUCTION OF 1 KM 33 kV DOUBLE CIRCUIT LINE USING LATTICE POLES WITH MAXIMUM SPAN 55 M</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	Lattice pole C type	No	18	74349.00	1338282.00
	ACSR Dog conductor	Km	6.3	56052.92	353133.40
	Insulators and hardware fittings	LS		91000.00	91000.00
	Cross arm with accessories	LS		82000.00	82000.00
	<b>A. Total Cost of Materials</b>				<b>1864415.40</b>
2	Spares 3%				55932.46
3	Contingencies 3.75%				69915.58
4	Erection and Commissioning 10%				186441.54
5	Insurance, Sales Tax, Transporting 10%				186441.54
6	<b>B. Civil Works - Foundation to lattice pole @ Rs.18000/-</b>				324000.00
	Pipe earthing/coil earthing and danger board fixing	LS		7000.00	7000.00
7	<b>C. Total</b>				2694146.51
8	<b>D. Survey &amp; Tree cutting compensation 10%</b>				269414.65
9	<b>E. Total</b>				2963561.17
10	<b>F. Overhead charges 10%</b>				296356.12
11	<b>G. Grand Total</b>				<b>3259917.28</b>
	<b>Rounded to</b>	<b>32.60</b>	<b>lakhs</b>		

<b>5. CONVERTING 66 kV LINE TO 110 kV DOUBLE CIRCUIT LINE</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	Tower	M T	25	75000.00	1875000.00
	Tower Accessories	LS			75000.00
	Power Conductor (Wolf)	km	6.09	87459.67	532629.39
	Power Conductor accessories	LS			37284.06
	Earth Wire	km	1.02	34276.71	34962.24
	Earth Wire accessories	LS			4894.71
	Insulators & Hardware items	No	250	500.00	125000.00
	<b>A. Total Cost of Materials</b>				<b>2684770.41</b>
2	Spares 3%				80543.11
3	Contingencies 3.75%				100678.89
4	Erection & Commissioning 10%				268477.04
5	Insurance, Sales Tax & transporting 10%				268477.04
6	Civil Works - Foundation	LS			3360000.00
	Dismantling charges for old 66 kV Line	LS			200000.00
7	<b>B. Total</b>				6962946.49
8	<b>C. Survey &amp; Tree Cutting Compensation 10%</b>				696294.65
9	<b>D. Total</b>				7659241.14
10	<b>E. Overhead charges 10%</b>				765924.11
11	<b>F. Grand Total</b>				<b>8425165.25</b>
	Depreciated value of old 66 kV materials	LS			400000.00
	<b>G. Net amount</b>				<b>8025165.25</b>
	<b>Rounded to</b>	<b>80.26</b>	<b>lakhs</b>		

<b>6. CONSTRUCTION OF 1 KM 110 kV DOUBLE CIRCUIT LINE</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	Tower	M T	25	75000.00	1875000.00
	Tower accessories	LS			75000.00
	Power Conductor (Wolf)	km	6.09	87459.67	532629.39
	Power Conductor accessories	LS			37284.06
	Earth Wire	km	1.02	34276.71	34962.24
	Earth Wire accessories	LS			4894.71
	Insulators & Hardware items	No	250	500.00	125000.00
	<b>A. Total Cost of Materials</b>				<b>2684770.41</b>
2	Spares 3%				80543.11
3	Contingencies 3.75%				100678.89
4	Erection & Commissioning 10%				268477.04
5	Insurance, Sales Tax & transporting 10%				268477.04
6	<b>B. Civil Works - Foundation</b>	LS			3360000.00
7	<b>C. Total</b>				6762946.49
8	<b>D. Survey &amp; Tree Cutting Compensation 10%</b>				676294.65
9	<b>E. Total</b>				7439241.14
10	<b>F. Overhead charges 10%</b>				743924.11
11	<b>G. Grand Total</b>				<b>8183165.25</b>
	<b>Rounded to</b>	<b>81.84</b>	<b>lakhs</b>		

<b>7. CONSTRUCTION OF 1 KM 220 kV DOUBLE CIRCUIT LINE</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	Tower	M T	40	75000.00	3000000.00
	Tower Accessories	LS			120000.00
	Power Conductor (Kundah)	km	6.09	196459.00	1196435.31
	Power Conductor accessories	LS			83750.47
	Earth Wire	km	1.02	34276.71	34962.24
	Earth Wire accessories	LS			4894.71
	Insulators & Hardware items	No	550	700.00	385000.00
	<b>A. Total Cost of Materials</b>				<b>4825042.74</b>
2	Spares 3%				144751.28
3	Contingencies 3.75%				180939.10
4	Erection & Commissioning 10%				482504.27
5	Insurance, Sales Tax & transporting 10%				482504.27
6	<b>B. Civil Works - Foundation</b>	LS			4080000.00
7	<b>C. Total</b>				10195741.67
8	<b>D. Survey &amp; Tree Cutting Compensation 10%</b>				1019574.17
9	<b>E. Total</b>				11215315.84
10	<b>F. Overhead charges 10%</b>				1121531.58
11	<b>G. Grand Total</b>				<b>12336847.42</b>
	<b>Rounded to</b>	<b>123.37</b>	<b>lakhs</b>		

<b>8. CONSTRUCTION OF 2 Nos 66 kV FEEDER BAYS IN THE EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	66 kV Circuit Breaker (SF <sub>6</sub> )	Set	2	482032.54	964065.08
	66 kV Current Transformer	No	6	69030.31	414181.86
	66 kV Lightning Arrestor	No	6	17749.00	106494.00
	66 kV Bus Isolator	Set	4	91035.03	364140.12
	66 kV Line Isolator	Set	2	96555.27	193110.54
	66 kV Potential Transformer	No	6	46652.00	279912.00
	Feeder control & Relay Panel	No	2	300057.40	600114.80
	Kundah Conductor for Bus arrangements	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	400	500.00	200000.00
	Earthing arrangements	LS			1000000.00
	Control Cable of various sizes	km	5	180000.00	900000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		882000.00	882000.00
	<b>A. Total Cost of Materials</b>				<b>8950477.40</b>
2	Spares 3%				268514.32
3	Contingencies 3.75%				335642.90
4	Erection & Commissioning 10%				895047.74
5	Insurance, Sales Tax & transporting 10%				895047.74
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		3600000.00	3600000.00
7	<b>C. Total</b>				14944730.10
8	<b>F. Overhead charges 10%</b>				1494473.01
9	<b>G. Grand Total</b>				<b>16439203.11</b>
	<b>Rounded to</b>	<b>164.40</b>	<b>lakhs</b>		

<b>9. CONSTRUCTION OF 2 Nos 110 kV FEEDER BAYS IN THE EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	110 kV Circuit Breaker (SF <sub>6</sub> )	Set	2	526818.75	1053637.50
	110 kV Current Transformer	No	6	118694.00	712164.00
	110 kV Lightning Arrestor	No	6	29312.00	175872.00
	110 kV Bus Isolator	Set	4	132279.00	529116.00
	110 kV Line Isolator	Set	2	158641.00	317282.00
	110 kV Potential Transformer	No	6	111341.16	668046.96
	Feeder control & Relay Panel	No	2	322658.00	645316.00
	Kundah Conductor for Bus arrangements	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	400	500.00	200000.00
	Earthing arrangements	LS			1000000.00
	Control Cable of various sizes	km	5	180000.00	900000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		882000.00	882000.00
	<b>A. Total Cost of Materials</b>				<b>10129893.46</b>
2	Spares 3%				303896.80
3	Contingencies 3.75%				379871.00
4	Erection & Commissioning 10%				1012989.35
5	Insurance, Sales Tax & transporting 10%				1012989.35
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		3600000.00	3600000.00
7	<b>C. Total</b>				16439639.96
8	<b>F. Overhead charges 10%</b>				1643964.00
9	<b>G. Grand Total</b>				<b>18083603.96</b>
	<b>Rounded to</b>	<b>180.84</b>	<b>lakhs</b>		

<b>10. CONSTRUCTION OF 2 Nos 220 kV FEEDER BAYS IN THE EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	220 kV Circuit Breaker (SF <sub>6</sub> )	Set	2	1143857.30	2287714.60
	220 kV Current Transformer	No	6	302614.00	1815684.00
	220 kV Lightning Arrestor	No	6	51815.00	310890.00
	220 kV Potential Transformer	No	6	365361.27	2192167.62
	220 kV Bus Isolator	Set	4	302927.84	1211711.36
	220 kV Line Isolator with Earth Switch	Set	2	301799.66	603599.32
	Feeder Control & Relay Panel (Duplex Type)	No	2	770281.44	1540562.88
	Kundah conductor for Bus arrangements	km	3	196459.00	589377.00
	Insulator & Hardware fittings	No	800	700.00	560000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	5	200000.00	1000000.00
	Fabricated steel structure	M T	48	75000.00	3600000.00
	Bus Arrangement	LS		1000000.00	1000000.00
	<b>A. Total Cost of Materials</b>				<b>17711706.78</b>
2	Spares 3%				531351.20
3	Contingencies 3.75%				664189.00
4	Erection & Commissioning 10%				1771170.68
5	Insurance, Sales Tax & transporting 10%				1771170.68
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		3600000.00	3600000.00
7	<b>C. Total</b>				26049588.34
8	<b>F. Overhead charges 10%</b>				2604958.83
9	<b>G. Grand Total</b>				<b>28654547.18</b>
	<b>Rounded to</b>	<b>286.55</b>	<b>lakhs</b>		



<b>11. CONSTRUCTION OF 2 Nos TRANSFORMER BAYS OF 66/11 kV, 2 x 10 MVA TRANSFORMER IN EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	<b>66 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	2	482032.54	964065.08
	Current Transformer	No	6	69030.31	414181.86
	Lightning Arrestor	No	6	17749.00	106494.00
	Neutral CT	No	2	23978.00	47956.00
	Bus Isolator	No	4	91035.03	364140.12
	Power Transformer (66/11 kV), 10 MVA	No	2	5313400.00	10626800.00
	Transformer Control & Relay Panel	No	2	306242.00	612484.00
	Kundah Conductor	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	200	500.00	100000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	2	180000.00	360000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		882000.00	882000.00
	Total				18524580.06
	<b>11 kV Side</b>				
	10 Panel Indoor Switch Gear with 2 Nos Neutral CTs	No	1	2546613.00	2546613.00
	500 mm <sup>2</sup> XLPE 1 Core Cable	km	1	368340.00	368340.00
	300 mm <sup>2</sup> XLPE 3 Core Cable	km	1.5	979064.04	1468596.06
	Cable End Termination Arrangement	No	24	5000.00	120000.00
	Total				4503549.06
	<b>A. Total Cost of Materials</b>				<b>23028129.12</b>
2	Spares 3%				690843.87
3	Contingencies 3.75%				863554.84
4	Erection & Commissioning 10%				2302812.91
5	Insurance, Sales Tax & transporting 10%				2302812.91
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		5280000.00	5280000.00
7	<b>C. Total</b>				34468153.66
8	<b>F. Overhead charges 10%</b>				3446815.37
9	<b>G. Grand Total</b>				<b>37914969.03</b>
	<b>Rounded to</b>	<b>379.15</b>	<b>lakhs</b>		

<b>12. CONSTRUCTION OF 2 Nos TRANSFORMER BAYS OF 110/11 kV, 2 x 12.5 MVA TRANSFORMER IN EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	<b>110 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	2	526818.75	1053637.50
	Current Transformer	No	6	118694.00	712164.00
	Lightning Arrestor	No	6	29312.00	175872.00
	Neutral CT	No	2	23978.00	47956.00
	Bus Isolator	No	4	132279.00	529116.00
	Power Transformer (110/11 kV), 12.5 MVA	No	2	6113567.00	12227134.00
	Transformer Control Panel	No	2	263623.00	527246.00
	Kundah Conductor	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	200	500.00	100000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	2	180000.00	360000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		882000.00	882000.00
	Total				20661584.50
	<b>11 kV Side</b>				
	10 Panel Indoor Switch Gear with 2 Nos Neutral CTs	No	1	2546613.00	2546613.00
	500 mm <sup>2</sup> XLPE 1 Core Cable	km	1	368340.00	368340.00
	300 mm <sup>2</sup> XLPE 3 Core Cable	km	1.5	979064.04	1468596.06
	Cable End Termination Arrangement	No	24	5000.00	120000.00
	Total				4503549.06
	<b>A. Total Cost of Materials</b>				<b>25165133.56</b>
2	Spares 3%				754954.01
3	Contingencies 3.75%				943692.51
4	Erection & Commissioning 10%				2516513.36
5	Insurance, Sales Tax & transporting 10%				2516513.36
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		5280000.00	5280000.00
7	<b>C. Total</b>				37176806.79
8	<b>F. Overhead charges 10%</b>				3717680.68
9	<b>G. Grand Total</b>				<b>40894487.47</b>
	<b>Rounded to</b>	<b>408.95</b>	<b>lakhs</b>		

**13. CONSTRUCTION OF 2 Nos 110 kV FEEDER BAYS AND INSTALLATION OF 110/33 kV, 2 x 16 MVA TRANSFORMER AND 4 Nos 33 kV FEEDERS IN EXISTING 110 kV SUBSTATION**

Sl. No.	Particulars	Unit	Qty	Rate in Rs.	Amount in Rs.
1	Materials				
	<b>110 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	2	526818.75	1053637.50
	Current Transformer	No	6	118694.00	712164.00
	Lightning Arrestor	No	6	29312.00	175872.00
	Neutral CT	No	2	23978.00	47956.00
	Bus Isolator	No	4	132279.00	529116.00
	Power Transformer (110/33 kV), 16 MVA	No	2	13100483.00	26200966.00
	Transformer Control Panel 110/33 kV (both sides)	No	2	475068.00	950136.00
	Kundah Conductor	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	250	500.00	125000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	1.5	180000.00	270000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus arrangement	LS		882000.00	882000.00
	Total				34993306.50
	<b>33 kV Side</b>				
	Circuit Breaker	Set	6	168299.00	1009794.00
	Current Transformer	No	18	33272.00	598896.00
	Lightning Arrestor	No	18	12263.00	220734.00
	Bus Isolator	No	12	51841.00	622092.00
	Line Isolator	No	4	63773.00	255092.00
	Neutral CT	No	2	25266.00	50532.00
	Potential Transformer	No	18	20156.00	362808.00
	Feeder control Panel	No	4	151986.75	607947.00
	Control Cable of various sizes	Km	5	150000.00	750000.00
	Fabricated steel structure	M T	28	75000.00	2100000.00
	Bus arrangement (including conductor)	LS		485000.00	485000.00
	Total				7062895.00
	<b>A. Total Cost of Materials</b>				<b>42056201.50</b>
2	Spares 3%				1261686.05

3	Contingencies 3.75%				1577107.56
4	Erection & Commissioning 10%				4205620.15
5	Insurance, Sales Tax & transporting 10%				4205620.15
6	<b>B.</b> Civil Works - Cable trench and foundation of structures	LS		8880000.00	8880000.00
7	<b>C.</b> Total				62186235.40
8	<b>F.</b> Overhead charges 10%				6218623.54
9	<b>G. Grand Total</b>				<b>68404858.94</b>
	<b>Rounded to</b>	<b>684.05</b>	<b>lakhs</b>		

<b>14. INSTALLATION OF 2 x 20 MVA 110/66 kV TRANSFORMER IN EXISTING SUBSTATION</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	<b>110 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	2	526818.75	1053637.50
	Current Transformer	No	6	118694.00	712164.00
	Lightning Arrestor	No	6	29312.00	175872.00
	Bus Isolator	No	4	132279.00	529116.00
	Power Transformer (110/66kV), 20 MVA	No	2	13100483.00	26200966.00
	Neutral CT	No	2	23978.00	47956.00
	Transformer Control Panel 110/66kV (both sides)	No	2	475068.00	950136.00
	Kundah Conductor	km	1	196459.00	196459.00
	Insulator & Hardware fittings	No	250	500.00	125000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	4	180000.00	720000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		882000.00	882000.00
	Total				35443306.50
	<b>66 kV Side</b>				
	Circuit Breaker	Set	2	482032.54	964065.08
	Current Transformer	No	6	69030.31	414181.86
	Lightning Arrestor	No	6	17749.00	106494.00
	Bus Isolator	No	4	91035.03	364140.12
	Neutral CT	No	2	23978.00	47956.00
	Insulator & Hardware fittings	No	150	500.00	75000.00
	Kundah Conductor	km	1	196459.00	196459.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	1.5	180000.00	270000.00
	Fabricated steel structure	M T	25	75000.00	1875000.00
	Bus Arrangement	LS		882000.00	882000.00
	<b>Total</b>				<b>6195296.06</b>
	<b>A. Total Cost of Materials</b>				<b>41638602.56</b>

2	Spares 3%				1249158.08
3	Contingencies 3.75%				1561447.60
4	Erection & Commissioning 10%				4163860.26
5	Insurance, Sales Tax & transporting 10%				4163860.26
6	<b>B.</b> Civil Works - Cable trench and foundation of structures	LS		12480000.00	12480000.00
7	<b>C.</b> Total				65256928.74
8	<b>F.</b> Overhead charges 10%				6525692.87
9	<b>G. Grand Total</b>				<b>71782621.62</b>
	<b>Rounded to</b>	<b>717.83</b>	<b>lakhs</b>		

**15. UPGRADATION OF 66 KV SUBSTATION WITH 2 Nos 110 KV FEEDER BAYS AND  
INSTALLATION OF  
2 x 12.5 MVA 110/11 KV TRANSFORMER AND 6 NOS 11 KV FEEDER WITH SWITCH  
GEAR**

Sl. No.	Particulars	Unit	Qty	Rate in Rs.	Amount in Rs.
1	Materials				
	<b>110 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	4	526818.75	2107275.00
	Current Transformer	No	12	118694.00	1424328.00
	Potential Transformer	No	12	111341.16	1336093.92
	Lightning Arrestor	No	12	29312.00	351744.00
	Neutral CT	No	2	23978.00	47956.00
	Bus Isolator	No	10	132279.00	1322790.00
	Power Transformer (110/11 kV), 12.5 MVA	No	2	6113567.00	12227134.00
	Transformer Control Panel 110/11kV	No	2	263623.00	527246.00
	Kundah Conductor	km	2	196459.00	392918.00
	Feeder Control & Relay panel	No	2	322658.00	645316.00
	Insulator & Hardware fittings	No	300	500.00	150000.00
	Earthing arrangements	LS		1000000.00	1000000.00
	Control Cable of various sizes	km	2	180000.00	360000.00
	Fabricated steel structure	M T	38	75000.00	2850000.00
	Bus Arrangement	LS		1764000.00	1764000.00
	Total				26506800.92
	<b>11 kV Side</b>				
	10 Panel Indoor Switch Gear with 2 Nos Neutral CTs	No	1	2546613.00	2546613.00
	500 mm <sup>2</sup> XLPE 1 Core Cable	km	1	368340.00	368340.00
	300 mm <sup>2</sup> XLPE 3 Core Cable	km	1.5	979064.04	1468596.06
	Cable End Termination Arrangement	No	24	5000.00	120000.00
	Total				4503549.06
	<b>A. Total Cost of Materials</b>				<b>31010349.98</b>
2	Spares 3%				930310.50
3	Contingencies 3.75%				1162888.12
4	Erection & Commissioning 10%				3101035.00

5	Insurance, Sales Tax & transporting 10%				3101035.00
6	<b>B.</b> Civil Works - Cable trench and foundation of structures	LS		8880000.00	8880000.00
	Dismantling charges	LS		560000.00	560000.00
7	<b>C.</b> Total				48745618.60
8	<b>F.</b> Overhead charges 10%				4874561.86
9	<b>G. Grand Total</b>				<b>53620180.46</b>
	<b>Rounded to</b>	<b>536.21</b>	<b>lakhs</b>		



**16. UPGRADATION OF 110 kV SUBSTATION TO 220 kV SUBSTATION WITH 2 Nos 220 kV FEEDER BAYS, BY INSTALLING 2 x 100 MVA, 220/110 kV TRANSFORMER AND 2 Nos 110 kV FEEDER BAYS**

Sl. No.	Particulars	Unit	Qty	Rate in Rs.	Amount in Rs.
1	Materials				
	<b>220 kV Side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	5	1143857.30	5719286.50
	Current Transformer	No	18	302614.00	5447052.00
	Potential Tranformer	No	12	365361.27	4384335.24
	Lightning Arrestor	No	12	51815.00	621780.00
	Bus Isolator	Set	12	302927.84	3635134.08
	Line Isolator	Set	2	301799.66	603599.32
	Power Transformer (220/110 kV), 100 MVA	No	2	60000000.00	120000000.00
	Feeder control and Relay Panel	No	2	770281.44	1540562.88
	Transformer Control Panel (Both sides)	No	2	770281.44	1540562.88
	Kundah Conductor	km	6	196459.00	1178754.00
	Insulator & Hardware fittings	No	1500	700.00	1050000.00
	Earthing arrangements	LS		2000000.00	2000000.00
	Control Cable of various sizes	km	5	200000.00	1000000.00
	Fabricated steel structure	M T	85	75000.00	6375000.00
	Neutral CTs	No	2	23978.00	47956.00
	Bus Arrangement	LS		2000000.00	2000000.00
	Total				157144022.90
	<b>110 kV Side</b>				
	SF <sub>6</sub> Circuit Breaker	Set	4	526818.75	2107275.00
	Current Transformer	No	12	118694.00	1424328.00
	Lightning Arrestor	No	18	29312.00	527616.00
	Feeder control and Relay Panel	No	2	322658.00	645316.00
	Bus Isolator	No	10	132279.00	1322790.00
	Potential Tranformer	No	18	111341.16	2004140.88
	Kundah Conductor for Bus arrangements	km	2	196459.00	392918.00
	Insulator & Hardware fittings	No	350	500.00	175000.00
	Control Cable of various sizes	km	3	180000.00	540000.00

	Fabricated steel structure	M T	30	75000.00	2250000.00
	Earthing arrangements	LS		1600000.00	1600000.00
	Neutral CTs	No	2	23978.00	47956.00
	Bus Arrangement	LS		1764000.00	1764000.00
	Total				14801339.88
	<b>A. Total Cost of Materials</b>				<b>171945362.78</b>
2	Spares 3%				5158360.88
3	Contingencies 3.75%				6447951.10
4	Erection & Commissioning 10%				17194536.28
5	Insurance, Sales Tax & transporting 10%				17194536.28
6	<b>B. Civil Works - Cable trench and foundation of structures</b>	LS		14400000.00	14400000.00
	Provision for Control room extension	LS		840000.00	840000.00
7	<b>C. Total</b>				233180747.32
8	<b>F. Overhead charges 10%</b>				23318074.73
9	<b>G. Grand Total</b>				<b>256498822.06</b>
	<b>Rounded to</b>	<b>2564.99</b>	<b>lakhs</b>		

<b>17. CONSTRUCTION OF 33/11 kV SUBSTATION BY INSTALLING 2 x 5 MVA, 33/11 kV TRANSFORMER AND 2 Nos 33 kV FEEDER BAYS</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	<b>33 kV Side</b>				
	33/11 kV, 5 MVA Transformer	No	2	2770144.00	5540288.00
	Control & Relay Panel for 33/11 kV Transformer		2	215111.00	430222.00
	33 kV VCB with Control Panel	No	4	168299.00	673196.00
	33 kV Single Phase PT	No	9	20156.00	181404.00
	33 kV CT	No	12	33272.00	399264.00
	33 kV Lightning Arrestor	No	12	12263.00	147156.00
	33 kV Bus Isolator	No	5	51841.00	259205.00
	33 kV Isolator with earth switch for line	No	2	63773.00	127546.00
	Trivector meter(33 kV side of Transformer)	No	2	73000.00	146000.00
	33 kV neutral CT	No	2	25266.00	50532.00
	<b>11 kV Side</b>				
	10 Panel Indoor Switch Gear with 2 NCTs	No	1	2546613.00	2546613.00
	11 kV Lightning Arrestor	No	18	1752.00	31536.00
	11 kV, 200A, AB switch	No	4	13724.00	54896.00
	11 kV, 400A, AB switch	No	2	13724.00	27448.00
	<b>Common Equipment</b>				
	11 kV/415 V, 100 kVA Transformer	No	1	90676.49	90676.49
	AC Supply Panel	No	1	60000.00	60000.00
	100 AH Battery set with battery charger	No	1	180000.00	180000.00
	Busbar Arrangement	LS		400000.00	400000.00
	Control cables	km	3	189000.00	567000.00
	Steel Structures	MT	10	75000.00	750000.00
	<b>A. Total Cost of Materials</b>				<b>12662982.49</b>
2	Spares 3%				379889.47
3	Contingencies 3.75%				474861.84
4	Erection & Commissioning 10%				1266298.25

5	Insurance, Sales Tax & transporting 10%				1266298.25
6	<b>B. Civil Works - Cable trench</b>	LS		360000.00	360000.00
	Site leveling, road, compound wall, foundation work of yard equipment structure, office cum store building, control room, water supply, electrification, P & T phone etc.	LS			6000000.00
	Earthing Arrangement	LS		400000.00	400000.00
7	<b>C. Total</b>				22810330.31
8	<b>D. Land</b>	LS			2500000.00
9	<b>E. Total</b>				25310330.31
10	<b>F. Overhead charges 10%</b>				2531033.03
	<b>G. Grand Total</b>				<b>27841363.34</b>
	<b>Rounded to</b>	<b>278.42</b>	<b>lakhs</b>		

<b>18. CONSTRUCTION OF 110 kV SUBSTATION WITH 2 Nos 110 kV FEEDER BAYS BY INSTALLING 2 x 12.5 MVA, 110/11 kV TRANSFORMERS</b>					
<b>Sl. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate in Rs.</b>	<b>Amount in Rs.</b>
1	Materials				
	<b>110 kV Side</b>				
	Power Transformer, 110/11 kV, 12.5 MVA	No	2	6113567.00	12227134.00
	Power Transformer control relay panel	No	2	263623.00	527246.00
	SF <sub>6</sub> Circuit Breaker	Set	4	526818.75	2107275.00
	Current Transformer	No	12	118694.00	1424328.00
	Kundah Conductor	km	2	196459.00	392918.00
	Lightning Arrestor	No	18	29312.00	527616.00
	110 kV Feeder Control & Relay Panel	No	2	322658.00	645316.00
	Neutral CT	No	2	23978.00	47956.00
	Bus Isolator	No	10	132279.00	1322790.00
	Potential Transformer	No	12	111341.16	1336093.92
	Line Isolator with earth switch	No	2	158641.00	317282.00
	Battery with Charger	No	1	180000.00	180000.00
	Insulator & Hard ware fitting	No	300	500.00	150000.00
	<b>11 kV Side</b>				
	10 Panel Indoor Switch Gear with 2 Nos Neutral CTs	No	1	2546613.00	2546613.00
	500 mm <sup>2</sup> XLPE 1 Core Cable	km	1	368340.00	368340.00
	300 mm <sup>2</sup> XLPE 3 Core Cable	km	1.5	979064.04	1468596.06
	Cable End Termination Arrangement	No	24	5000.00	120000.00
	<b>Common Equipment</b>				
	11kV/415V, 100kVA Transformer	No	1	90676.49	90676.49
	AC Supply Panel	No	1	60000.00	60000.00
	Battery set with battery charger	No	2	180000.00	360000.00
	Steel structures, fabricated galvanised structure for switch yards	M T	40	75000.00	3000000.00
	110 kV, 11 kV Bus bar arrangements	LS		1764000.00	1764000.00

	Earthing System & Metal spreading of Yard	LS		1200000.00	1200000.00
	Yard lighting	LS		400000.00	400000.00
	Fire fighting equipments	LS		200000.00	200000.00
	Control Cable of various size	km	1.5	180000.00	270000.00
	<b>A. Total Cost of Materials</b>				<b>33054180.47</b>
2	Spares 3%				991625.41
3	Erection & Commissioning 10%				3305418.05
4	Insurance, Sales Tax & transporting 10%				3305418.05
5	Contingencies 3.75%				1239531.77
6	<b>B. Civil Works - Site levelling &amp; Roads</b>	LS		1440000.00	1440000.00
	Fencing & Compound wall	LS		1800000.00	1800000.00
	Substation Building	LS		3600000.00	3600000.00
	Water, Sanitation & Electrification	LS		1200000.00	1200000.00
	Cable Trenches and Foundation for Yard structure & Equipments	LS		8880000.00	8880000.00
	P & T Phone etc.	LS		25000.00	25000.00
7	<b>C. Total</b>				<b>58841173.75</b>
8	<b>D. Land</b>	Acre	2	2500000.00	5000000.00
9	<b>E. Total</b>				63841173.75
10	<b>F. Overhead Charges 10%</b>				6384117.37
	<b>G. Grand total</b>				<b>70225291.12</b>
	<b>Rounded to</b>	<b>702.26</b>	<b>lakhs</b>		

**19. CONSTRUCTION OF 220 kV SUBSTATION WITH 2 Nos 220 kV FEEDER BAYS,  
BY INSTALLING 2 x 100 MVA, 220/110 kV TRANSFORMER AND 2 x 12.5 MVA  
110/11 kV TRANSFORMER WITH 2 Nos 110 kV FEEDER BAYS**

Sl. No.	Particulars	Unit	Qty	Rate in Rs.	Amount in Rs.
1	Materials				
	<b>220 kV side</b>				
	Circuit Breaker (SF <sub>6</sub> )	Set	5	1143857.30	5719286.50
	Current Transformer	No	18	302614.00	5447052.00
	Potential Tranformer	No	12	365361.27	4384335.24
	Lightning Arrestor	No	12	51815.00	621780.00
	Bus Isolator	Set	12	302927.84	3635134.08
	Line Isolator	Set	2	301799.66	603599.32
	Power Transformer (220/110 kV), 100 MVA	No	2	60000000.00	120000000.00
	Feeder control and Relay Panel	No.	2	770281.44	1540562.88
	Transformer Control Panel (Both sides)	No	2	770281.44	1540562.88
	Kundah Conductor	km	6	196459.00	1178754.00
	Insulator & Hardware fittings	No	1500	700.00	1050000.00
	Earthing arrangements	LS		2000000.00	2000000.00
	Control Cable of various sizes	km	5	200000.00	1000000.00
	Fabricated steel structure	M T	85	75000.00	6375000.00
	Neutral CTs	No	2	23978.00	47956.00
	Bus Arrangement	LS		2000000.00	2000000.00
	<b>110 kV side</b>				
	SF <sub>6</sub> Circuit Breaker	Set	6	526818.75	3160912.50
	110/11 kV 12.5 MVA Transformer	No	2	6113567.00	12227134.00
	Transformer Control Panel	No	2	263623.00	527246.00
	Current Transformer	No	18	118694.00	2136492.00
	Lightning Arrestor	No	24	29312.00	703488.00
	Feeder control and Relay Panel	No	2	322658.00	645316.00
	Bus Isolator	No	12	132279.00	1587348.00
	Potential Tranformer	No	18	111341.16	2004140.88
	Kundah Conductor for Bus arrangements	km	3	196459.00	589377.00
	Insulator & Hardware fittings	No	450	500.00	225000.00
	Control Cable of various sizes	km	4	180000.00	720000.00

	Fabricated steel structure	M T	45	75000.00	3375000.00
	Earthing arrangements	LS		2400000.00	2400000.00
	Neutral CTs	No	4	23978.00	95912.00
	Bus Arrangement	LS		2645000.00	2645000.00
	<b>11 kV side</b>				
	10 Panel Indoor Switch Gear with 2 NCTs	No	1	2546613.00	2546613.00
	500 mm <sup>2</sup> XLPE 1 Core Cable	km	1	368340.00	368340.00
	300 mm <sup>2</sup> XLPE 3 Core Cable	km	1.5	979064.04	1468596.06
	Cable End Termination Arrangement	No	24	5000.00	120000.00
	<b>Common Equipment</b>				
	11 kV/415 V, 100kVA Transformer	No	1	90676.49	90676.49
	AC Supply Panel	No	1	60000.00	60000.00
	Battery set (Plante) with battery charger	No	1	970432.00	970432.00
	Battery set (VRLA) with battery charger	No	1	307691.00	307691.00
	<b>A. Total Cost of Materials</b>				<b>196118737.83</b>
2	Spares 3%				5883562.13
3	Erection & Commissioning 10%				19611873.78
4	Insurance, Sales Tax & transporting 10%				19611873.78
5	Contingencies 3.75%				7354452.67
6	<b>B. Civil Works - Site levelling &amp; Roads</b>	LS		3000000.00	3000000.00
	Fencing & Compound wall	LS		3600000.00	3600000.00
	Substation Building	LS		6000000.00	6000000.00
	Water, Sanitation & Electrification	LS		2400000.00	2400000.00
	Cable Trenches and Foundation for Yard structure & Equipments	LS		19680000.00	19680000.00
7	<b>C. Total</b>				283260500.20
8	<b>D. Land</b>	Acre	5	2500000.00	12500000.00
9	<b>E. Total</b>				295760500.20
10	<b>F. Overhead Charges 10%</b>				29576050.02
	<b>G. Grand total</b>				<b>325336550.22</b>
	<b>Rounded to</b>	<b>3253.37</b>	<b>lakhs</b>		