

APPENDIX A – KETRACO – FIRE & PERILS SUBSTATION POLICY

LIST OF ASSETS INSURED IN 43 SUBSTATIONS AS AT 15TH FEB.2021:

1) Malindi 220/33kV Substation:

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 220/33kV	pcs	1	1,527,383.00
2	15MVAR 33kV Reactor	pcs	1	147,210.36
3	Circuit Breakers 220kV	pcs	3	481,853.21
4	Circuit Breakers 33kV	pcs	7	182,049.00
5	Control Cables	Lot	1	286,384.35
6	Protection and Control Equipment 220kV	pcs	5	625,317.00
7	Protection and Control Equipment 33kV	pcs	8	154,556.51
8	Auxiliary Transformer 33/.430kV	pc	1	10,500.00
9	110V Battery Chargers and Batteries	set	2	123,311.00
10	48V Battery Chargers	set	2	38,639.17
11	Control Building		1	515,067.54
	TOTAL INSURABLE			4,092,271.14

2) Galu 132/33Kv Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	2	418,387.45	836,774.90
2	Circuit Breakers 132kV	pcs	3	34,496.00	103,488.00
3	Circuit Breakers 33kV	pcs	7	26,007.00	182,049.00
4	Control Cables	Lot	1	36,000.00	36,000.00
5	Protection and Control Equipment 132kV	pcs	5	35,000.00	175,000.00
6	Protection and Control Equipment 33kV	pcs	6	28,000.00	168,000.00
7	Auxiliary Transformer 33/.430kV	pc	1	10,500.00	10,500.00
8	110V Battery Chargers	pcs	1	27,610.00	27,610.00
9	48V Battery Chargers	pcs	1	22,110.00	22,110.00
10	Control Building		1		108,100.00
	TOTAL INSURABLE				1,669,631.90

3) Kegati (Kisii) 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,387.45	418,387.45
2	Circuit Breakers 220kV	pcs	1	31,360.00	31,360.00
3	Circuit Breakers 33kV	pcs	5	26,007.00	130,035.00
4	Control Cables	Lot	1	36,000.00	36,000.00
5	Protection and Control Equipment 132kV	pcs	2	35,000.00	70,000.00
6	Protection and Control Equipment 33kV	pcs	5	35,000.00	70,000.00
7	Auxiliary Transformer 33/.430kV	pc	1	10,500.00	10,500.00
8	110V Battery Chargers and Batteries	pcs	1	27,610.00	27,610.00
9	48V Battery Chargers and Batteries	pcs	1	22,110.00	22,110.00
10	Control Building		1		108,100.00
	TOTAL INSURABLE				924,202.45

4) Garsen 220/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value
1	Power Transformer 23MVA 220/33kV	pcs	1	1,527,383.00
2	15MVAR 33kV Reactor	pcs	1	147,210.36
3	Circuit Breakers 220kV	pcs	3	281,853.21
4	Circuit Breakers 33kV	pcs	7	182,049.00
5	Control Cables	Lot	1	261,000.00
6	Protection and Control Equipments 220kV	pcs	5	194,255.00
7	Protection and Control Equipment 33kV	pcs	6	115,917.00
8	110V Battery Chargers and Batteries	set	2	55,220.00
9	Auxiliary Transformer 33/.430kV	pc	1	10,500.00
10	48V Battery Chargers	set	2	44,220.00
11	Control Building		1	489,000.00
	TOTAL INSURABLE			3,308,607.57

5) Lamu 220/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 220/33kV	pcs	1	1,212,200.00
2	15MVAR 33kV Reactor	pcs	1	147,210.36
3	Circuit Breakers 220kV	pcs	2	160,617.00
4	Circuit Breakers 33kV	pcs	4	104,028.00
5	Control Cables	Lot	1	86,384.35
6	Protection and Control Equipment 220kV	pcs	2	125,063.00
7	Protection and Control Equipment 33kV	pcs	4	77,278.25
8	Auxiliary Transformer 33/.430kV	pc	1	10,500.00
9	110V Battery Chargers and Batteries	set	2	55,220.00
10	48V Battery Chargers	set	2	44,220.00
11	Control Building		1	388,320.00
	TOTAL INSURABLE			2,411,040.96

6) Isiolo 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,387.45	418,387.45
2	Circuit Breakers 132kV	pcs	3	34,496.00	103,488.00
3	Circuit Breakers 33kV	pcs	5	26,007.00	130,035.00
4	Control Cables	Lot	1	36,000.00	36,000.00
5	Protection and Control Equipment 132kV	pcs	5	35,000.00	175,000.00
6	Protection and Control Equipment 33kV	pcs	5	28,000.00	140,000.00
7	Auxiliary Transformer 33/.430kV	pc	1	10,500.00	10,500.00
8	110V Battery Chargers	pcs	1	27,610.00	27,610.00
9	48V Battery Chargers	pcs	1	22,110.00	22,110.00
10	Telecommunication & SCADA	lot	1	362,000.00	362,000.00
11.	Control Building		1		108,100.00
	TOTAL INSURABLE				1,533,230.45

7) Meru 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,387.45	418,387.45
2	Circuit Breakers 132kV	pcs	3	34,496.00	103,488.00
3	Circuit Breakers 33kV	pcs	7	26,007.00	182,049.00
4	Control Cables	Lot	1	36,000.00	36,000.00
5	Protection and Control Equipment 132kV	pcs	5	35,000.00	175,000.00
6	Protection and Control Equipment 33kV	pcs	6	28,000.00	168,000.00
7	110V Battery Chargers	pcs	1	27,610.00	27,610.00
8	48V Battery Chargers	pcs	1	22,110.00	22,110.00
9	Telecommunication & SCADA	lot	1	362,000.00	362,000.00
10.	Control Building		1		108,100.00
	TOTAL INSURABLE				1,602,744.45

8) Githambo 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,337.00
2	Circuit Breakers 132kV	pcs	2	78,021.00
3	Circuit Breakers 33kV	pcs	4	104,028.00
4	Control Cables	Lot	1	86,384.35
5	Protection and Control Equipment 132kV	pcs	2	125,063.00
6	Protection and Control Equipment 33kV	pcs	4	77,278.25
7	110V Battery Chargers and Batteries	set	2	55,220.00
8	48V Battery Chargers	set	2	44,220.00
9	Control Building		1	108,423.00
	TOTAL INSURABLE			1,096,974.60

9) Gatundu 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,337.00
2	Circuit Breakers 132kV	pcs	2	78,021.00
3	Circuit Breakers 33kV	pcs	4	104,028.00

4	Control Cables	Lot	1	86,384.35
5	Protection and Control Equipment 132kV	pcs	2	125,063.00
6	Protection and Control Equipment 33kV	pcs	4	77,278.25
7	110V Battery Chargers and Batteries	set	2	55,220.00
8	48V Battery Chargers	set	2	44,220.00
9	Control Building		1	108,423.00
	TOTAL INSURABLE			1,096,974.60

10) Mangu 132/33kV Substation.

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	418,387.00
2	Circuit Breakers 132kV	pcs	4	181,984.00
3	Circuit Breakers 33kV	pcs	6	156,046.00
4	Control Cables	Lot	1	186,384.35
5	Protection and Control Equipment 132kV	pcs	4	145,063.00
6	Protection and Control Equipment 33kV	pcs	4	77,278.25
7	110V Battery Chargers and Batteries	set	2	55,220.00
8	48V Battery Chargers	set	2	44,220.00
9	Control Building		1	108,345.00
	TOTAL INSURABLE			1,372,927.60

11) Rangala 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	2	836,674.00
2	Circuit Breakers 132kV	pcs	2	117,031.25
3	Circuit Breakers 33kV	pcs	4	104,028.00
4	Control Cables	Lot	1	86,384.35
5	Protection and Control Equipment 132kV	pcs	5	192,500.00
6	Protection and Control Equipment 33kV	pcs	6	115,917.40
7	110V Battery Chargers and Batteries	set	1	27,610.00
8	48V Battery Chargers	set	1	22,110.00
9	Control Building		1	108,423.00
	TOTAL INSURABLE			1,610,678.00

12) Embakasi 220/66kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Shunt Reactors 220kV 100MVAR	pcs	1	2,002,508.00	2,002,508.00
2	Circuit Breakers 132kV	pcs	5	315,230.50	315,230.50
3	Control Cables	Lot	1	374,570.50	374,570.50
4	Protection and Control Cabinets 220kV	pcs	5	391,673.00	391,673.00
5	Telecommunication & SCADA	lot	1	637,085.00	637,085.00
	TOTAL INSURABLE				3,721,067.00

13) Rabai 220/132kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Shunt Reactors 220kV 100MVAR	pcs	1	2,002,508.00	2,002,508.00
2	Circuit Breakers 132kV	pcs	5	315,230.50	315,230.50
3	Control Cables	Lot	1	374,570.50	374,570.50
4	Protection and Control Cabinets 220kV	pcs	5	391,673.00	391,673.00
5	110V Battery Chargers	pcs	2	27,610.00	55,220.00
6	48V Battery Chargers	pcs	2	22,110.00	44,220.00
7	Telecommunication & SCADA	lot	1	637,085.00	637,085.00
8	Contrl Building		1		108,100.00
	TOTAL INSURABLE				3,928,607.00

14) Kindaruma 132kV Substation:

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit Breakers 132kV	pcs	3	34,040.00	102,120.00
2	HT Cable/MV Cable	Lot	1	391,500.00	391,500.00
3	Control Cables	Lot	1	63,750.00	63,750.00
4	Protection and Control Cabinets 132kV	Lump sum		428,877.00	428,877.00
5	110V Batteries	set	1	37,060.00	37,060.00
6	110V Battery Chargers	set	1	12,950.00	12,950.00

7	48V Battery	set	2	10,189.00	20,378.00
8	48V Battery Chargers	set	2	10,615.00	21,230.00
9	Telecommunication & SCADA	Lot	1	158,710.00	158,710.00
10	Control Building	Lump sum		94,879.00	94,879.00
	TOTAL INSURABLE				1,331,454.00

15) Garissa 132/33/11kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 7.5MVA 132/33kV	pcs	1	590,660.00	590,660.00
2	Power Transformer 7.5MVA 132/33/11kV	pcs	1	493,640.00	493,640.00
3	Circuit Breakers 132kV	pcs	4	34,830.00	139,320.00
4	Circuit Breakers 33kV	pcs	4	16,910.00	67,640.00
5	Switchboard panel for 11kV transformer incomer and 11kv incomer	Lump sum		222,230.00	222,230.00
6	Control Cables	Lot	1	99,820.00	99,820.00
7	Protection and Control Cabinets 33 kv & 132kV	Lump sum		746,167.00	746,167.00
8	110V Battery	set	1	29,648.00	29,648.00
9	110V Battery Chargers	set	1	12,950.00	12,950.00
10	48V Battery	set	2	10,189.00	20,378.00
11	48V Battery Chargers	set	2	10,615.00	21,230.00
12	Telecommunication & SCADA	Lump sum		154,810.00	154,810.00

13	Control Room	Lump sum		114,607.00	114,607.00
14	11 kV Switchgear building	Lump sum		27,089.00	27,089.00
	TOTAL INSURABLE				2,713,100.00

16) New Menengai 132kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Auxiliary transformer 33/0.415 kV, 100 kVA	pcs	1	10,010
2	Circuit breakers 132 kV, 1600 A, 31.5 kA	set	6	260,256.00
3	Low voltage and control cables	Lot	1	91,757.00
4	132kV Substation protection, control and monitoring system	Lot	1	232,011.00
5	Telecommunication & SCADA	Lot	1	200,198.00
6	48V/110 V DC battery, 300 Ah (including battery racks)	set	1	21,354.00
7	48V/110 V DC battery chargers (redundant battery chargers)	set	1	33,366.00
8	Control Building	Lump sum	1	174,416.00
	TOTAL INSURABLE			1,023,368

17) Soilo 132kV Substation (Expansion of existing substation)

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	132kV HYPACT Switchgear (including 1 set of CB, 2 sets of DS/ES, 1 set of CT)	pcs	2	500,000.00
2	Low voltage and control cables	Lot	1	30,585.00
3	132kV Substation protection, control and monitoring system	Lot	1	223,474.00
4	Telecommunication & SCADA	Lot	1	246,700.00
5	48V DC Battery, Redundant Battery Charger and distribution panel	Lot	1	38,705.00
	TOTAL INSURABLE			1,039,464

18) Narok 132/33kv Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	523,907.00
2	Circuit Breakers 132kV	set	2	72,564.00
3	Circuit Breakers 33kV	pcs	5	66,705.00
4	Control Cables	Lot	1	49,927.00
5	Protection and Control Cabinets 132kV	Lot	1	238,961.00
6	Auxiliary Supply Transformer 33/.430kV	pc	1	10,500.00
7	110V Battery Chargers	lumpsum	1	16,571.00
8	Telecommunication & SCADA	Lot	1	165,562.00
9	Control Building	Lumpsum	1	59,793.00
	TOTAL INSURABLE			1,204,490.00

19) Wote 132/33kV Substation

	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	523,907.00
2	Circuit Breakers 132kV	pcs	3	109,809.00
3	Circuit Breakers 33kV	pcs	7	93,387.00
4	Control Cables	Lot	1	68,469.00
5	Protection and Control Equipment 132/33kV	pcs	9	361,522.00
6	Telecommunication & SCADA	Lot	1	179,236.00
7	110V Battery Chargers and Batteries	set	1	55,773.00
8	48V Battery Chargers	set	1	23,130.00
9	Control Building	Lumpsum	1	74,416.00
	TOTAL INSURABLE			1,489,649.00

20) Nyahururu 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1.	Power Transformer 132/33kV, 23MVA	pc	1	523,907.00	523,907.00
2.	Circuit breakers 132kV, 2000A, 31.5kA	set	1	40,749.00	40,749.00
3.	Circuit breakers 132 kV, 800 A, 31.5 kA	set	1	30,320.00	30,320.00

4.	Circuit breakers 33kV 800A, 25kA rms	set	5	13,341.00	66,705.00
5.	Control Cables	set	1	49,927.00	49,927.00
6.	Protection and Control Equipment 132/33kV	set	1	176,717.00	176,717.00
7.	110V DC battery chargers and batteries	set	1	55,773.00	55,773.00
8.	48V Battery Chargers and batteries	set	1	23,130.00	23,130.00
9.	Telecommunication & SCADA equipment	set	1	231,781.00	231,781.00
10.	Control Building	Lumpsum	1	59,793.97	59,793.97
	TOTAL INSURABLE				1,258,802.97

21) Kitui 132/33kV Substation

	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	523,907.00
2	Circuit Breakers 132kV	pcs	3	109,809.00
3	Circuit Breakers 33kV	pcs	7	93,387.00
4	Control Cables	Lot	1	69,054.00
5	Protection and Control Cabinets 132/33kV	pcs	9	361,522.00
6	Telecommunication & SCADA	Lot	1	179,236.00
7	110V Battery Chargers and Batteries	set	1	55,773.00
8	48V Battery Chargers	set	1	23,130.00
9	Control Building	Lumpsum	1	74,416.00
	TOTAL INSURABLE			1,490,234.00

22) Kabarnet 132/33KV Substation

S/No	Equipment To Insure	Unity	Qty	Cost per unit	Total Insurable Value (USD)
1.	Power transformer 132/33 kV, 23 MVA	pcs	1	523,907.00	523,907.00
2.	Circuit breakers 132 kV, 2000 A, 31.5 kA	set	1	40,749.00	40,749.00
3.	Circuit breakers 132 kV, 800 A, 31.5 kA	set	1	30,320.00	30,320.00
4.	Circuit breakers 33 kV, 800 A, 25 kA rms	set	5	13,341.00	66,705.00

5.	Control Cables	set	1	49,927.00	49,927.00
6.	132kV Control and protection panels	Pcs	2	81,204.00	162,408.00
7.	33kV control and protection panel	pcs	6	25,864.00	155,184.00
8.	110V Battery Chargers	pcs	1	55,773.00	55,773.00
9.	48V Battery Chargers	pcs	1	23,130.00	23,130.00
10.	Control Building	Lumpsum	1	59,793.00	59,793.00
	TOTAL INSURABLE				1,167,896.00

23) Sultan Hamud 132/33kV Substation

	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	523,907.00
2	Circuit Breakers 132kV	pcs	6	213,207.00
3	Circuit Breakers 33kV	pcs	7	93,387.00
4	Control Cables	Lot	1	80,724.00
5	Protection and Control Cabinets 132/33kV	pcs	12	484,266.00
6	Telecommunication & SCADA	Lot	1	214,546.00
7	110V Battery Chargers and Batteries	set	1	55,773.00
8	48V Battery Chargers	set	1	23,130.00
9	Control Building	Lumpsum	1	74,416.00
	TOTAL INSURABLE			1,763,356.00

24) Olkaria 132/33Kv Substation – 132Kv Bay

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit Breakers 132kV	set	2	40,749.00	81,498.00
2	Circuit Breakers 132kV	set	1	30,320.00	30,320.00
3	Control Cables	Lot	1	16,643.00	16,643.00
4	Protection and Control Cabinets 132kV	Lot	5	119,552.00	119,552.00
5	Telecommunication & SCADA	Lot	1	17,667.00	17,667.00
	TOTAL INSURABLE				265,680.00

25) Lessos Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit Breakers 132kV	pcs	2	30,320.00	60,640.00
2	Control Cables	Lot	1	16,643.00	16,643.00
3	Protection and Control Cabinets 132/33kV	set	1	184,956.00	184,956.00
4	110V Battery Chargers and Batteries	pcs	1	26,682.00	26,682.00
	TOTAL INSURABLE				288,921.00

26) Mwingi 132/33Kv Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit Breakers 132kV	set	1	40,749.00	40,749.00
2	23MVA 132/33kV Power Transformer	No.	1	523,907.00	523,907.00
3	Control Cables and low voltage cables	Lot	1	6,486.00	6,486.00
4	Protection and Control equipment 132kV	Lump sum	1	115,161.00	109,413.00
5	Auxiliary Transformer	No.	1		10,500.00
6	Telecommunication & SCADA	lot	1	95,241.00	95,241.00
7	110V &48V Battery and Battery Chargers	lot	1	132,216.00	132,216.00
8	Control Building	Lumpsum	1	74,416.00	74,416.00
	TOTAL INSURABLE				992,928.00

27) Ishiara 132kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1.	Circuit breakers 132kV, 2000A, 31.5kA	set	3	40,749.00	122,247.00
2.	Control Cables	lot	1	19,412.00	19,412.00
3.	Protection and Control Cabinets 132 & 33kV	lot	1	162,544.00	162,544.00
4.	110V &48V Battery and Battery Chargers	lot	1	132,216.00	132,216.00

5.	Telecommunication & SCADA equipment	lot	1	208,078.00	208,078.00
6.	Control Building	Lumpsum	1	74,416.00	74,416.00
	TOTAL INSURABLE				718,913.00

28) Kieni 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1.	Power Transformer 132/33kV, 23MVA	pc	1	523,907.00	523,907.00
2.	Circuit breakers 132kV, 2000A, 31.5kA	set	1	40,749.00	40,749.00
3.	Circuit breakers 132kV,800A, 31.5kA	set	1	30,320.00	30,320.00
4.	Circuit breakers 33kV 800A, 25kA rms	set	5	13,341.00	66,705.00
5.	Control Cables	set	1	49,927.00	49,927.00
6.	Protection & Control Cabinets	set	1	176,717.00	176,717.00
7.	110V DC battery chargers and batteries	set	1	55,773.00	55,773.00
8.	48V Battery Chargers and batteries	set	1	23,130.00	23,130.00
9.	Auxiliary Transformer 132/33kV	pc	1	10,500.00	10,500.00
10.	Telecommunication & SCADA equipment	set	1	221,335.00	221,335.00
11.	Control Building	Lumpsum	1	74,416.00	74,416.00
	TOTAL INSURABLE				1,273,479.00

29) Sotik 132kV Switching Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Circuit Breakers 132 kV	pcs	3	122,247.00
2	Control Cables	Lot	1	11,066.00
3	Protection and Control Equipment 132kV	pcs	5	639,730.00
4	Protection and Control Equipment 33kV	pcs	8	154,556.51
5	110V Battery Chargers and Batteries	set	2	125,344.00
6	48V Battery Chargers	set	2	38,639.17
7	Control Building	Lumpsum	1	59,793.97
	TOTAL INSURABLE			1,151,376.65

30) Bomet 132/33Kv Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Power Transformer 23MVA 132/33kV	pcs	1	444,214.45	444,214.45
2	Circuit Breakers 132kV	pcs	3	38,000.00	114,000.00
3	Circuit Breakers 33kV	pcs	7	26,665.00	186,655.00
4	Control Cables	Lot	1	38,462.00	38,462.00
5	Protection and Control Equipment 132kV	pcs	5	39,799.20	198,996.00
6	Protection and Control Equipment 33kV	pcs	6	28,000.00	168,000.00
7	110V Battery Chargers	pcs	1	30,361.00	30,361.00
8	48V Battery Chargers	pcs	1	22,110.00	22,110.00
9	Control Building	Lumpsum	1	59,793.97	59,793.97
	TOTAL INSURABLE				1,262,592.42

31) Nanyuki 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit Breakers 132kV	pcs	3	33,369.00	100,107.00
2	Control Cables	Lot	1	36,821.00	36,821.00
3	Protection and Control Equipment 132kV	pcs	2	38,758.00	77,516.00
4	Protection and Control Equipment 33kV	pcs	5	35,000.00	70,000.00
5	110V Battery Chargers and Batteries	pcs	1	28,926.00	28,926.00
6	48V Battery Chargers and Batteries	pcs	1	22,110.00	22,110.00
	TOTAL INSURABLE				335,480.00

32) Awendo Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1.	132kV Circuit Breakers	set	1	71,569.90
2.	132/33kV Power Transformer	No.	1	445,000.00
3.	132kV Disconnect Switch and Earth Switch	No.	2	22,891.68

4.	132kV Current Transformer	pcs	3	39,946.78
5.	132kV Capacitive Voltage Transformer	Pcs	3	26,258.62
6.	132kV Surge Arrestor	pcs	3	9,725.08
7.	Power and Control Cables	Lot		141,753.84
8.	Protection and Control Equipment	Lot		60,179.68
9.	Auxiliary supply transformer 33/11kV	No.	1	10,500.00
10.	Telecommunication & SCADA Equipment	Lot		160,436.44
11.	Control Building	Lumpsum	1	202,017.62
	TOTAL INSURABLE			1,190,279.64

33) Ndhiwa 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1.	132/33kV, 23MVA Power Transformer	pcs	1	675,793.09
2.	132kV Circuit Breakers	set	3	197,441.98
3.	132kV Disconnect Switch and Earth Switch	No.	8	87,068.40
4.	Circuit Breakers 33kV	pcs	4	139,663.68
5.	33kV Disconnect Switch and Earth Switch	Pcs	7	50,519.72
6.	132kV Current Transformer	pcs	9	123,100.05
7.	132kV Capacitive Voltage Transformer	Pcs	6	52,517.24
8.	132kV Surge Arrestor	pcs	9	29,175.24
9.	33kV Surge Arrestor	Pcs	12	17,041.43
10.	33kV Voltage Transformer	pcs	3	10,217.83
11.	33kV Current Transformer	Pcs	12	62,196.75
12.	Power and Control Cables	Lot	1	213,915.95
13.	Protection and Control Cabinets	Lot	1	326,843.04
14.	110VDC Battery and Battery Chargers	Lumpsum	1	17,455.05
15.	48VDC Battery and Battery Chargers	Lumpsum	1	26,182.56
16.	AC and DC Distribution Panels	Lumpsum	1	82,839.22
17.	Telecommunication & SCADA	Lot	1	320,827.88

18.	Control Building	Lumpsum	1	202,017.62
19.	Auxiliary Transformer	Pcs	1	10,622.22
	TOTAL INSURABLE			2,645,438.95

34) Kitale 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1.	132/33kV, 23MVA Power Transformer	pcs	2	1,351,586.00
2.	132kV Circuit Breakers	set	3	197,441.98
3.	132kV Disconnect Switch and Earth Switch	No.	8	87,068.40
4.	Circuit Breakers 33kV	pcs	4	139,663.68
5.	33kV Disconnect Switch and Earth Switch	Pcs	7	50,519.72
6.	132kV Current Transformer	pcs	9	123,100.05
7.	132kV Capacitive Voltage Transformer	Pcs	6	52,517.24
8.	132kV Surge Arrestor	pcs	9	29,175.24
9.	33kV Surge Arrestor	Pcs	12	17,041.43
10.	33kV Current Transformer	Pcs	12	62,196.75
11.	Power and Control Cables	Lot	1	213,915.95
12.	Protection and Control Equipment	Lot	1	326,843.04
13.	110VDC Battery and Battery Chargers	Lumpsum	1	17,455.05
14.	48VDC Battery and Battery Chargers	Lumpsum	1	26,182.56
15.	AC and DC Distribution Panels	Lumpsum	1	82,839.22
16.	Telecommunication & SCADA	Lot	1	320,827.88
17.	Control Building	Lumpsum	1	202,017.62
18.	Auxiliary Transformer	Pcs	1	10,622.22
	TOTAL INSURABLE			3,311,014.03

35) Konza 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1.	132/33kV, 23MVA Power Transformer	Pcs	1	675,793.09
2.	132kV Circuit Breakers	Set	4	263,255.98

3.	132kV Disconnecter Switch and Earth Switch	No.	8	87,068.40
4.	Circuit Breakers 33kV	Pcs	5	174,579.60
5.	33kV Disconnecter Switch and Earth Switch	Pcs	7	50,519.72
6.	132kV Current Transformer	Pcs	9	123,100.05
7.	132kV Capacitive Voltage Transformer	Pcs	6	52,517.24
8.	33kV Current Transformer	Pcs	12	62,196.75
9.	Power and Control Cables	Lot	1	213,915.95
10.	Protection and Control Equipment	Lot	1	326,843.04
11.	110VDC Battery and Battery Chargers	Lumpsum	1	17,455.05
12.	48VDC Battery and Battery Chargers	Lumpsum	1	26,182.56
13.	AC and DC Distribution Panels	Lumpsum	1	82,839.22
14.	Telecommunication & SCADA	Lot	1	320,827.88
15.	Control Building	Lumpsum	1	202,017.62
16.	Auxiliary Transformer	Pcs	1	10,622.22
	TOTAL INSURABLE			2,689,734.15

36) Machakos 132/33kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1.	132/33kV, 23MVA Power Transformer	pcs	1	675,793.09
2.	132kV Circuit Breakers	set	1	65,814.00
3.	132kV Disconnecter Switch and Earth Switch	No.	2	21,767.10
4.	Circuit Breakers 33kV	pcs	5	174,579.60
5.	33kV Disconnecter Switch and Earth Switch	Pcs	7	50,519.72
6.	132kV Current Transformer	pcs	3	61,550.21
7.	132kV Capacitive Voltage Transformer	Pcs	6	52,517.24
8.	33kV Current Transformer	Pcs	12	62,196.75
9.	Power and Control Cables	Lot	1	163,620.20
10.	Protection and Control Equipment	Lot	1	150,850.63

11.	110VDC Battery and Battery Chargers	Lumpsum	1	17,455.05
12.	48VDC Battery and Battery Chargers	Lumpsum	1	26,182.56
13.	AC and DC Distribution Panels	Lumpsum	1	82,839.22
14.	Telecommunication & SCADA	Lot	1	143,605.23
15.	Control Building	Lumpsum	1	202,017.62
16.	Auxiliary Transformer	Pcs	1	10,622.22
	TOTAL INSURABLE			1,832,690.44

37) Suswa 220kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Reactor 60Mvar 220kV	pcs	1	1,212,200.00
2	40 Mvar 220kV Reactor	pcs	1	947,340.36
3	Circuit Breakers 220kV	pcs	17	1,365,244.50
4	Control Cables	Lot	1	286,384.35
5	Protection and Control Equipment 220kV	pcs	17	726,843.04
6	Auxiliary Transformer 33/.430kV	pc	1	10,500.00
7	110V Battery Chargers and Batteries	set	2	55,220.00
8	48V Battery Chargers	set	2	44,220.00
9	Control Building		1	240,000.00
10	Staff Residential Buildings		12	1,363,363.00
	TOTAL INSURABLE			6,251,315.25

38) Sondu 132kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit breakers 132kV, 2000A, 31.5kA	set	3	40,749.00	122,247.00
2	Control Cables	lot	1	19,412.00	19,412.00
3	Protection and Control Cabinets 132 & 33kV	lot	1	162,544.00	162,544.00
4	110V & 48V Battery and Battery Chargers	lot	1	132,216.00	132,216.00
5	Telecommunication & SCADA equipment	lot	1	208,078.00	208,078.00
6	Control Building	Lumpsum	1	74,416.00	74,416.00
	TOTAL INSURABLE				718,913.00

39) Sangoro 132kV Substation

S/No	Equipment To Insure	Unit	Qty	Unit Value (USD)	Total Insurable Value (USD)
1	Circuit breakers 132kV, 2000A, 31.5kA	set	1	40,749.00	40,749.00
2	Control Cables	lot	1	19,412.00	19,412.00
3	Protection and Control Cabinets 132 & 33kV	lot	1	62,544.00	62,544.00
4	110V & 48V Battery and Battery Chargers	lot	1	132,216.00	132,216.00
5	Telecommunication & SCADA equipment	lot	1	108,078.00	108,078.00
6	Control Building	Lumpsum	1	74,416.00	74,416.00
	TOTAL INSURABLE				437,415.00

40) Olkaria 1AU 220/132kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Power Transformer 105MVA 220/132kV	pcs	1	1,320,500.00
2	Circuit Breakers 220kV	pcs	7	562,159.50
3	Circuit Breakers 132kV	pcs	3	122,247.00
4	Control Cables	Lot	1	86,384.35
5	Protection and Control Equipment 220kV	pcs	7	299,288.31
6	110V Battery Chargers and Batteries	set	2	55,220.00
7	48V Battery Chargers	set	2	44,220.00
8	Control Building		1	240,000.00
	TOTAL INSURABLE			2,460,719.16

41) Olkaria IV 220/132kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Circuit Breakers 220kV	pcs	4	321,243.00
2	Current Transformers 220kV	pcs	4	82,067.00
3	Control Cables	Lot	1	86,384.35
4	Protection and Control Equipment 220kV	pcs	4	299,288.31
5	110V Battery Chargers and Batteries	set	2	55,220.00
6	48V Battery Chargers	set	2	44,220.00
	TOTAL INSURABLE			888,422.66

42) Isinya 220kV Substation

S/No	Equipment To Insure	Unit	Qty	Total Insurable Value (USD)
1	Circuit Breakers 220kV	pcs	8	281,823.56
2	Disconnectors	pcs	22	296,781.81
3	Post Type Current Transformer	pcs	24	232,448.22
4	Control Cables	Lot	1	286,384.35
5	Protection and Control Equipment 220kV	lot		324,935.04
6	Power VT's	set	1	47,482.43
7	110V Battery Chargers and Batteries	set	2	55,220.00
8	48V Battery Chargers	set	2	44,220.00
9	SCADA & Telecoms equipment	Lot	1	174,851.15
10	Control Building		1	240,000.00
11	Staff Residential Buildings		15	545,454.54
	TOTAL INSURABLE			2,529,601.10

43. Loiyangalani 400kV Grid Substation

S/No	Equipment to Insure	Unit	Qty	Total Insurable Value (USD)
1	Circuit Breakers 400kV	pcs	12	2,543,989.44
2	Disconnectors with ES 400kV	pcs	20	556,980.00
3	Post Type Current Transformer	pcs	36	618,984.00
4	Protection and Control Equipment 220kV including control cables	lot	1	959,091.50
5	Capacitive VT's 400/0.110kV	pcs	9	154,746.00
6	110V Battery Chargers and Batteries	set	2	55,220.00
7	48V Battery Chargers	set	2	44,220.00
8	SCADA & Telecoms equipment	Lot	1	214,800.00
9	Control Building		1	240,000.00
10	Shunt Reactors 100MVar inclusive of Neutral reactors	pcs	2	4,140,763.45
	TOTAL INSURABLE			9,528,794.39