Database Information for Overhead Lines

Reference No. 1L30 Title : POLPITIYA - KOTMALE

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	29.5
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

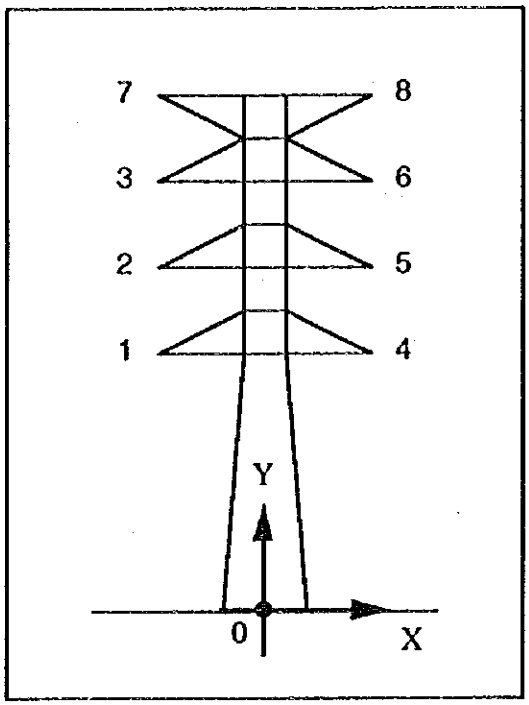
TOWER CONFIGURATION 1

Ref No.	1L30 (same as 1L5)
Title	POLPITIYA - KOTMALE
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE XXAL

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	- 3.66	26.37	23.71
	8	3.66	26.37	23.71

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L31 Title : KOTMALE - KIRIBATHKUMBURA

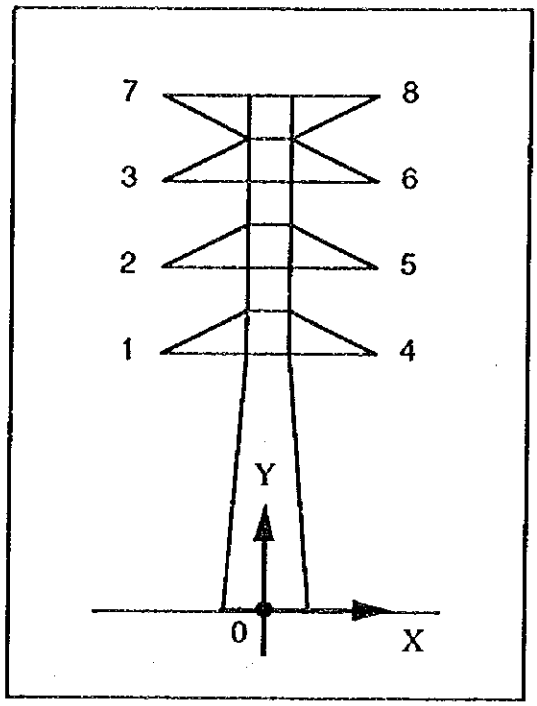
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	22.5
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

TOWER CONFIGURATION 1

Ref No.	1L31 (same as 1L5)
Title	KOTMALE - KIRIBATHKUMBURA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE XXAL



Phase(R-Y-B)	
3	B
2	R
1	Y

Phase(R-Y-B)	
6	
5	
4	

Phase Transposition Occurs

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	- 3.66	26.37	23.71
	8	3.66	26.37	23.71

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L32A Title : KIRIBATHKUMBURA - ANURADHAPURA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	95.0 (Total A + B = 143.9)
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

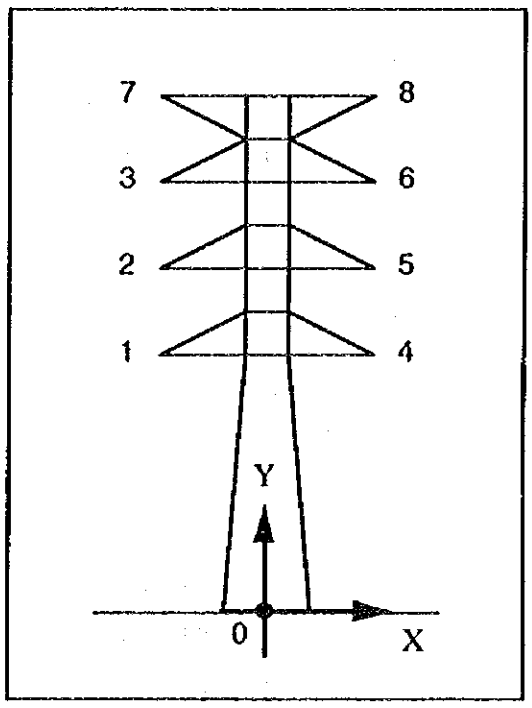
TOWER CONFIGURATION 1

Ref No.	1L32A (same as 1L5)
Title	KIRUBATHKUMBURA - HABARANA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE XXAL

Phase(R-Y-B)	
3	Y
2	R
1	B



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	- 3.66	26.37	23.71
	8	- 3.66	26.37	23.71

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L32B Title : KIRIBATHKUMBURA - ANURADHAPURA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	48.9
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

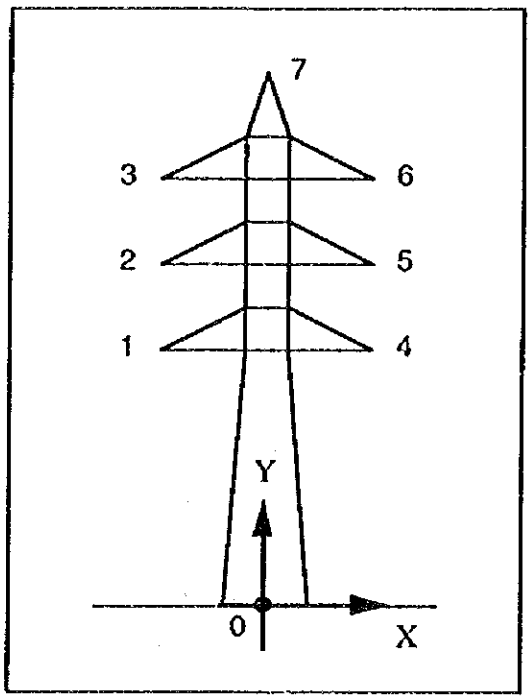
TOWER CONFIGURATION 2

Ref No.	1L32B (same as 1L35)
Title	HABARANA - ANURADHAPURA
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE YAL

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV} Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	0	27.28	24.62

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L33 Title : POLPITIYA - UKUWELA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	59.3
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

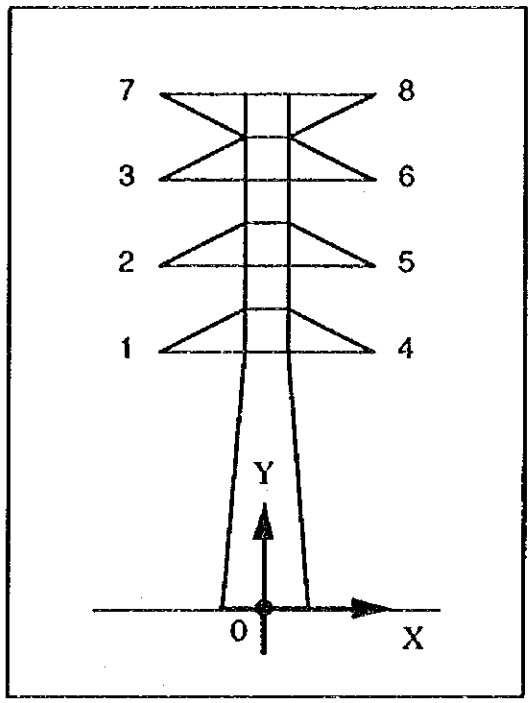
TOWER CONFIGURATION 1

Ref No.	1L33 (same as 1L5)
Title	POLPITIYA - UKUWELA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE XXAL

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	- 3.66	26.37	23.71
	8	3.66	26.37	23.71

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L34 Title : UKUWELA - HABARANA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	82.3
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	---
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm²	83.1
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

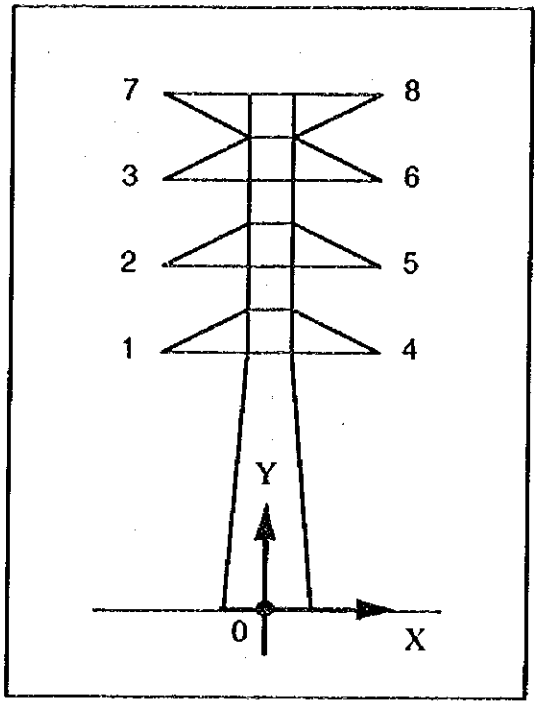
TOWER CONFIGURATION 1

Ref No.	1L34 (same as 1L5)
Title	UKUWELA - HABARANA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE XXAL

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	B
5	Y
4	R

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	- 3.66	26.37	23.71
	8	3.66	26.37	23.71

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. IL35 Title : HABARANA - ANURADHAPURA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	48.9
3	No. of Circuits		1 (DOUBLE CIRCUIT TOWER)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.1
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

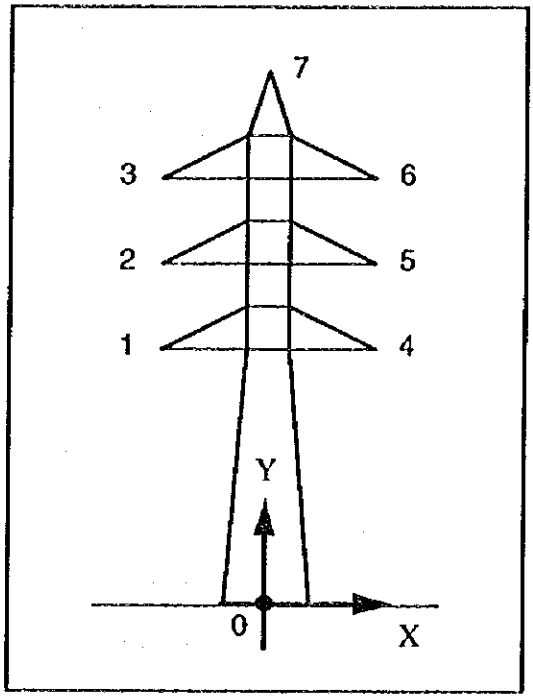
TOWER CONFIGURATION 2

Ref No.	1L35 (same as 1L32B)
Title	HABARANA - ANURADHAPURA
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE YAL

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	B
5	Y
4	R

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	0	27.28	24.62

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L36 Title : UKUWELA - BOWATENNA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	30.0
3	No. of Circuits		1
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.5
9	Earthwire Size	mm^2	
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.3
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		3
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.2 *
25	Mechanical Rating - Suspension	kN	
26	Mechanical Rating - Tension	kN	
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SAE, INDIA
30	Conductor Manufacturer		
31	Main Contractor		TATA EXPORTS, INDIA
32	Date of Completion		1983

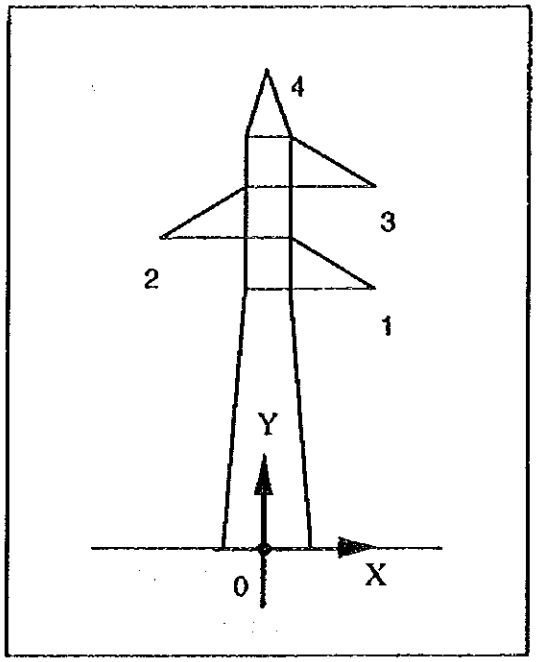
TOWER CONFIGURATION 3

Ref No.	1L36
Title	UKUWELA - BOWATENNA
Voltage	132 kV

Single Circuit, Semi Delta Formation, 1 Earthwire

TOWER TYPE NSAL

Phase(R-Y-B)	
3	
2	
1	



Insulator length + 2/3 sag 6.40

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	3.45	15.82	9.42
	2	- 3.28	17.76	11.36
	3	3.28	19.66	13.26
Earthwire Attachment Point	4	0	23.29	20.63

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L37 Title : KIRIBATHKUMBRA - KURUNEGALA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	34.6 *
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19 / 2.36
9	Earthwire Size	mm²	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	286
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		11
24	Suspension Insulator Set Length	m	2.490
25	Mechanical Rating - Suspension	kN	80
26	Mechanical Rating - Tension	kN	160
27	Specific Creepage of Set	mm / kV	23.7
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		SAE, ITALY
30	Conductor Manufacturer		LAMITREF, BELGIUM
31	Main Contractor		SAE, ITALY
32	Date of Completion		1963 (132 kV 1988)

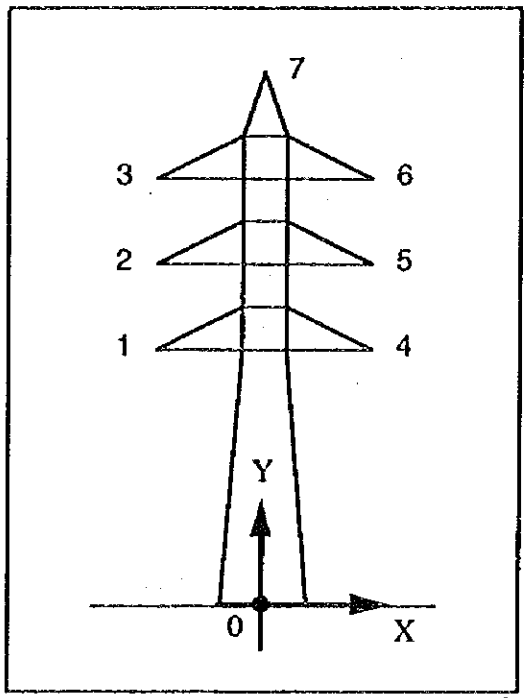
TOWER CONFIGURATION 2

Ref No.	1L37 (same as 1L10)
Title	KIRIBATHKUMBRA - KURUNEGALA
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE HAL

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	B
5	Y
4	R

Insulator length + 2/3 sag 6.69

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.60	15.80	9.11
	2	- 3.50	19.90	13.21
	3	- 3.50	24.00	17.31
	4	3.60	15.80	9.11
	5	3.50	19.90	13.21
	6	3.50	24.00	17.31
Earthwire Attachment Point	7	0	27.58	24.92

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L38 Title : HABARANA - VALAICHCHENAI

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	99.7 *
3	No. of Circuits		1
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7 / 3.5
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	7.88
14	Earthwire Sag at EDT	m	4.89
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		5
17	Insulator Type		CAP & PIN
18	Insulator Material		
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.2 *
25	Mechanical Rating - Suspension	kN	
26	Mechanical Rating - Tension	kN	
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		
30	Conductor Manufacturer		
31	Main Contractor		SRI U-THONG, THAILAND
32	Date of Completion		1995

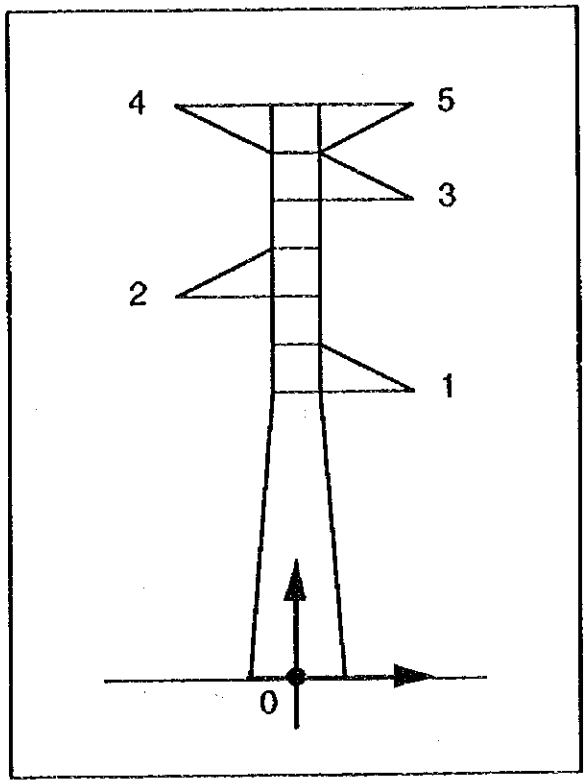
TOWER CONFIGURATION 5

Ref No.	1L38
Title	HABARANA - VALAICHCHENAI
Voltage	132 kV

Single Circuit, Semi Delta Formation, 2 Earthwires

TOWER TYPE KKAL

Phase(R-Y-B)	
3	
2	
1	



Insulator length + 2/3 sag 7,45

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	3.50	15.49	8,04
	2	- 3.37	17.49	10.04
	3	3.37	19.49	12.04
Earthwire Attachment Point	4	- 3.50	22.44	19.18
	5	3.50	22.44	19.18

2/3 E/W sag 3.26

Database Information for Overhead Lines

Reference No. 1L39 Title : ANURADHAPURA - TRINCOMALEE

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	103.3
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm²	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.3
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.134
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		
29	Tower Manufacturer		HIND GALVANIZING, INDIA
30	Conductor Manufacturer		
31	Main Contractor		CEB
32	Date of Completion		1971 (2nd circuit 1985)

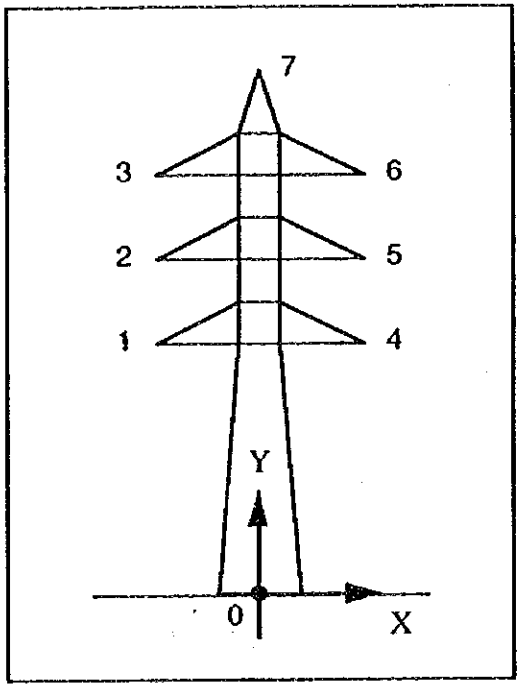
TOWER CONFIGURATION 2

Ref No.	1L39
Title	ANURADHAPURA - TRINCOMALEE
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE MDAL

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.33

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.85	15.45	9.12
	2	- 3.50	19.45	13.12
	3	- 3.35	23.45	17.12
	4	3.85	15.45	9.12
	5	3.50	19.45	13.12
	6	3.35	23.45	17.12
Earthwire Attachment Point	7	0	27.25	24.59

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L40 Title : NEW LAXAPANA - BALANGODA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	43.9
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	286
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.311
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	80
27	Specific Creepage of Set	mm / kV	23.7
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		SAE, ITALY
30	Conductor Manufacturer		LAMITREF, BELGIUM
31	Main Contractor		SAE, ITALY
32	Date of Completion		1963

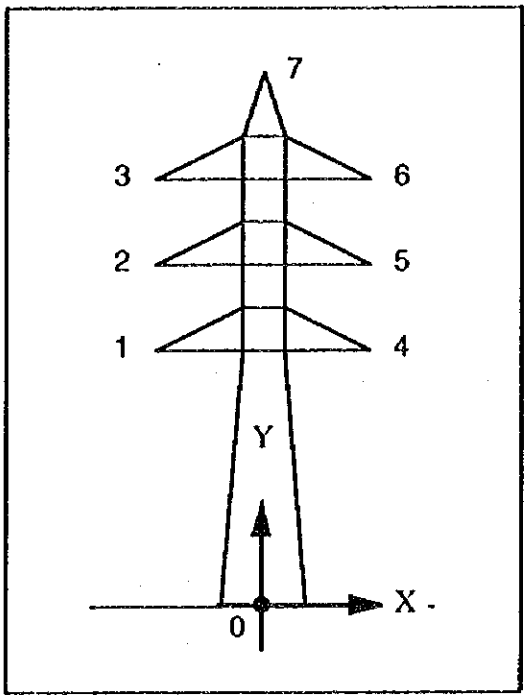
TOWER CONFIGURATION 2

Ref No.	1L40 (same as 1L10)
Title	NEW LAXAPANA - BALANGODA
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE HAL

Phase(R-Y-B)	
3	Y
2	R
1	B



Phase(R-Y-B)	
6	B
5	R
4	Y

Insulator length + 2/3 sag 6.51

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.60	15.80	9.29
	2	- 3.50	19.90	13.39
	3	- 3.50	24.00	17.49
	4	3.60	15.80	9.29
	5	3.50	19.90	13.39
	6	3.50	24.00	17.49
Earthwire Attachment Point	7	0	27.58	24.92

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L41 Title : BALANGODA - SAMANALAWEWA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	19
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "ZEBRA"
5	Conductor Size	mm^2	428.9
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	---
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	410
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.96
14	Earthwire Sag at EDT	m	10.63
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	320
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		11
23	No. of Discs - Tension		11
24	Suspension Insulator Set Length	m	2.26
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	160
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		CGEE ALSTHOM, FRANCE
30	Conductor Manufacturer		
31	Main Contractor		GEC ALSTHOM, FRANCE
32	Date of Completion		1992

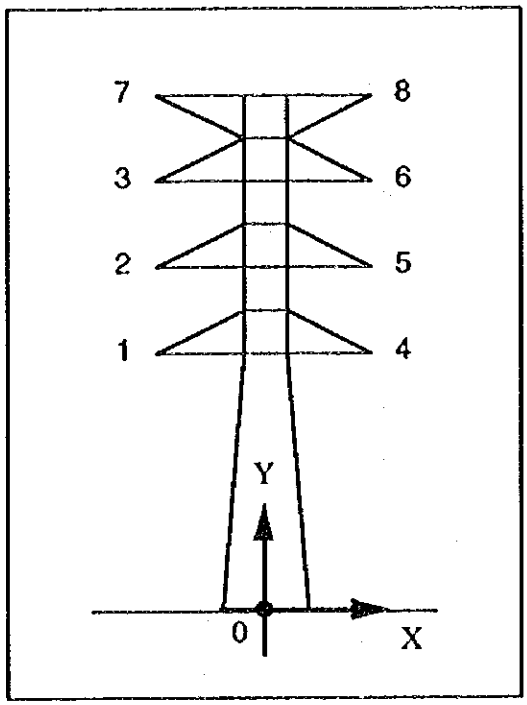
TOWER CONFIGURATION 1

Ref No.	1L41
Title	BALANGODA - SAMANALAWEWA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE DLZ

Phase(R-Y-B)	
3	B
2	Y
1	R



Phase(R-Y-B)	
6	B
5	Y
4	R

Insulator length + 2/3 sag 11.57

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.10	23.30	11.73
	2	- 3.90	27.80	16.23
	3	- 3.90	32.30	20.73
	4	4.10	23.30	11.73
	5	3.90	27.80	16.23
	6	3.90	32.30	20.73
Earthwire Attachment Point	7	- 3.90	34.70	27.61
	8	3.90	34.70	27.61

2/3 E/W sag 7.09

Database Information for Overhead Lines

Reference No. 1L42 Title : SAMANALAWEWA - EMBILIPITIYA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	38.0
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	410
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	14.17
14	Earthwire Sag at EDT	m	10.90
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	320
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		11
23	No. of Discs - Tension		11
24	Suspension Insulator Set Length	m	2.26
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	160
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		CGEE ALSTHOM, FRANCE
30	Conductor Manufacturer		
31	Main Contractor		GEC ALSTHOM, FRANCE
32	Date of Completion		1992

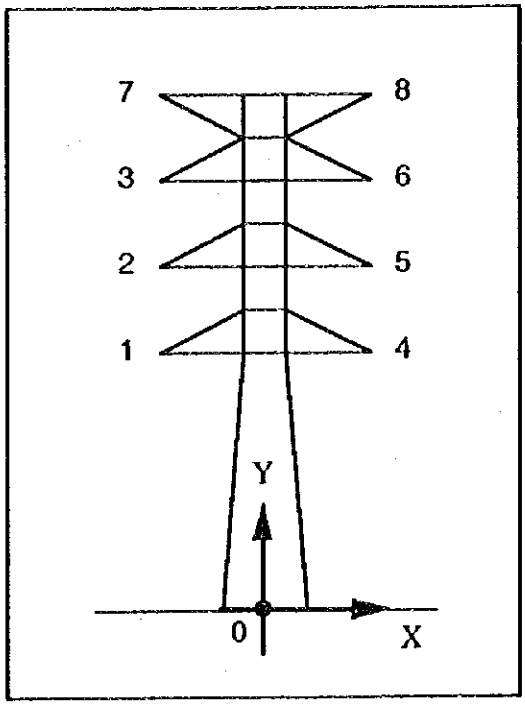
TOWER CONFIGURATION 1

Ref No.	1L42
Title	SAMANALAWEWA - EMBILIPITIYA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

TOWER TYPE DLL

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	R
5	Y
4	B

Insulator length + 2/3 sag 11.71

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.00	23.30	11.59
	2	- 3.80	27.80	16.09
	3	- 3.80	32.30	20.59
	4	4.00	23.30	11.59
	5	3.80	27.80	16.09
	6	3.80	32.30	20.59
Earthwire Attachment Point	7	- 3.80	34.70	27.43
	8	3.80	34.70	27.43

2/3 E/W sag 7.27

Database Information for Overhead Lines

Reference No. 1L43 Title : BALANGODA - DENIYAYA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	44.2
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "TIGER"
5	Conductor Size	mm^2	131.1
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	7.0
14	Earthwire Sag at EDT	m	4.65
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	286
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.311
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	80
27	Specific Creepage of Set	mm / kV	23.7
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		SAE, ITALY
30	Conductor Manufacturer		LAMITREF, BELGIUM
31	Main Contractor		SAE, ITALY
32	Date of Completion		1964

TOWER CONFIGURATION 2

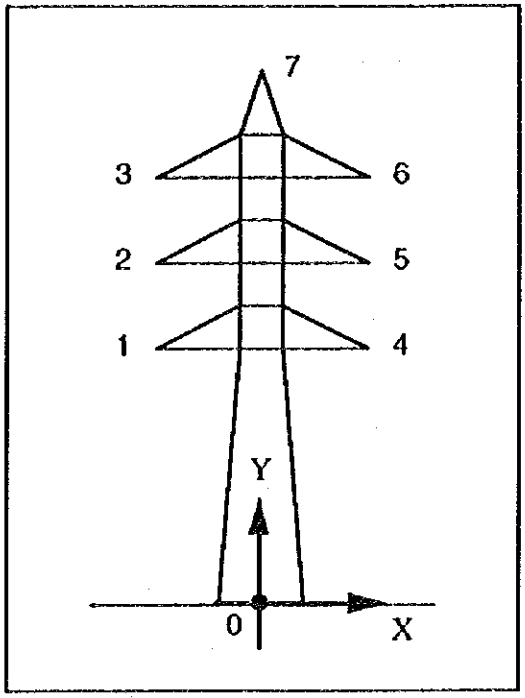
Ref No.	1L43
Title	BALANGODA - DENIYAYA
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE PAL

Phase(R-Y-B)	
3	B
2	R
1	Y

Phase Transposition Occurs



Phase(R-Y-B)	
6	Y
5	R
4	B

Insulator length + 2/3 sag 6.94

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.60	16.80	9.86
	2	- 3.50	20.90	13.96
	3	- 3.50	25.00	18.06
	4	3.60	16.80	9.86
	5	3.50	20.90	13.96
	6	3.50	25.00	18.06
Earthwire Attachment Point	7	0	28.58	25.48

2/3 E/W sag 3.10

Database Information for Overhead Lines

Reference No. 1L44 Title : DENIYAYA - GALLE

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	57.3
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "TIGER"
5	Conductor Size	mm²	131.1
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm²	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.95
14	Earthwire Sag at EDT	m	4.65
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	286
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.311
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	80
27	Specific Creepage of Set	mm / kV	23.7
28	Insulator Manufacturer		SEDIVER, FRANCE
29	Tower Manufacturer		SAE, ITALY
30	Conductor Manufacturer		LAMITREF, BELGIUM
31	Main Contractor		SAE, ITALY
32	Date of Completion		1964

TOWER CONFIGURATION 2

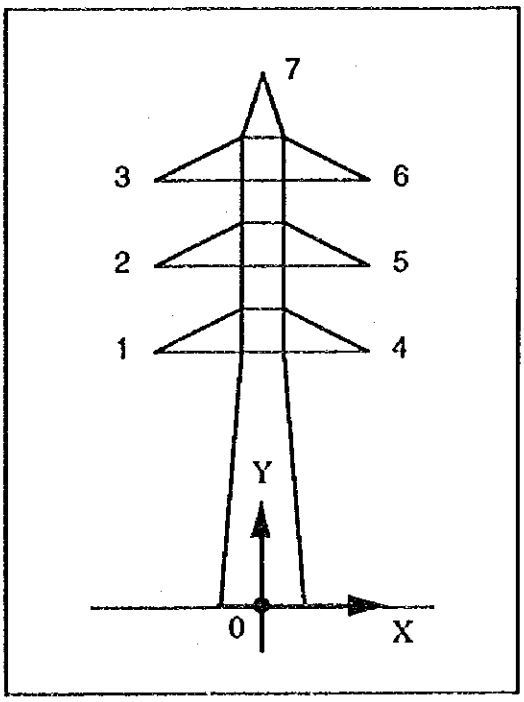
Ref No.	1L44 (same as 1L43)
Title	DENIYAYA - GALLE
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE PAL

Phase(R-Y-B)	
3	Y
2	B
1	R

Phase Transposition Occurs



Phase(R-Y-B)	
6	R
5	B
4	Y

Insulator length + 2/3 sag 6.94

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.60	16.80	9.86
	2	- 3.50	20.90	13.96
	3	- 3.50	25.00	18.06
	4	3.60	16.80	9.86
	5	3.50	20.90	13.96
	6	3.50	25.00	18.06
Earthwire Attachment Point	7	0	28.58	25.48

2/3 E/W sag 3.10

Database Information for Overhead Lines

Reference No. 1L45 Title : RANTEMBE - BADULLA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	37.0 *
3	No. of Circuits		1
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19 / 2.50
9	Earthwire Size	mm²	93.27
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	7.88
14	Earthwire Sag at EDT	m	4.89
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		6
17	Insulator Type		CAP & PIN
18	Insulator Material		GLASS
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		11
23	No. of Discs - Tension		11
24	Suspension Insulator Set Length	m	1.89
25	Mechanical Rating - Suspension	kN	80
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	22
28	Insulator Manufacturer		ITALISOLATORI, ITALY
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		ECHEVARRIA, SPAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		1986

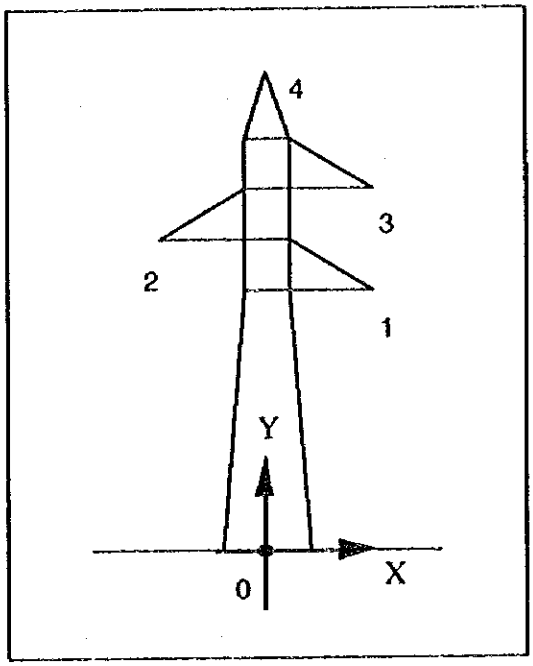
TOWER CONFIGURATION 6

Ref No.	1L45
Title	RANTEMBE - BADULLA
Voltage	132 kV

Single Circuit, Semi Delta Formation, 1 Earthwire

TOWER TYPE 5SL

Phase(R-Y-B)	
3	B
2	Y
1	R



Insulator length + 2/3 sag 7.14

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	3.75	17.23	10.09
	2	- 3.60	19.38	12.24
	3	3.60	21.53	14.39
Earthwire Attachment Point	4	0	27.23	23.97

2/3 E/W sag 3.26

Database Information for Overhead Lines

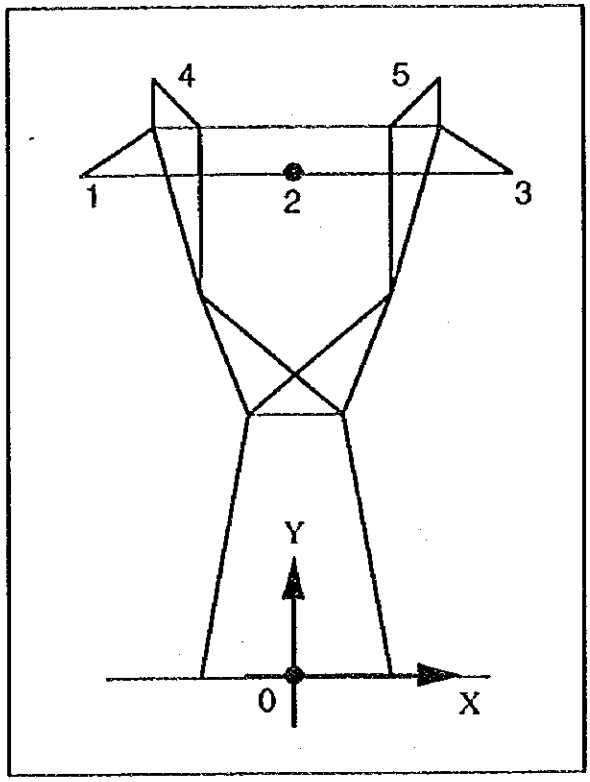
Reference No. 1L46 Title : BADULLA - INGINIYAGALA

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	79.9 *
3	No. of Circuits		1
4	Conductor Type / Name		ACSR "ORIOLE"
5	Conductor Size	mm²	170.5
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/2.77
9	Earthwire Size	mm²	42.18
10	No. of Earthwires		2
11	Basic Span	m	350
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	7.92
14	Earthwire Sag at EDT	m	6.00
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		4
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		14
24	Suspension Insulator Set Length	m	1.98 + 0.42 hanger
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		OHIO BRASS , USA
29	Tower Manufacturer		COBRA INDUSTRIES, CANADA
30	Conductor Manufacturer		
31	Main Contractor		
32	Date of Completion		1963

TOWER CONFIGURATION 4

Ref No.	1L46
Title	BADULLA - INGINIYAGALA
Voltage	132 kV

Single Circuit, Flat Formation, 2 Earthwires



Insulator length + 2/3 sag 7.68

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	
Conductor Attachment Point	1	- 6.40	17.07	9.39
	2	0.00	17.07	9.39
	3	6.40	17.07	9.39
Earthwire Attachment Point	4	- 4.57	19.51	15.51
	5	4.57	19.51	15.51

2/3 E/W sag 4.0

Database Information for Overhead Lines

Reference No. 1L47 Title : ANURADHAPURA - KILINOCHCHI

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	128.8
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	---
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm^2	83.11
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.3
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

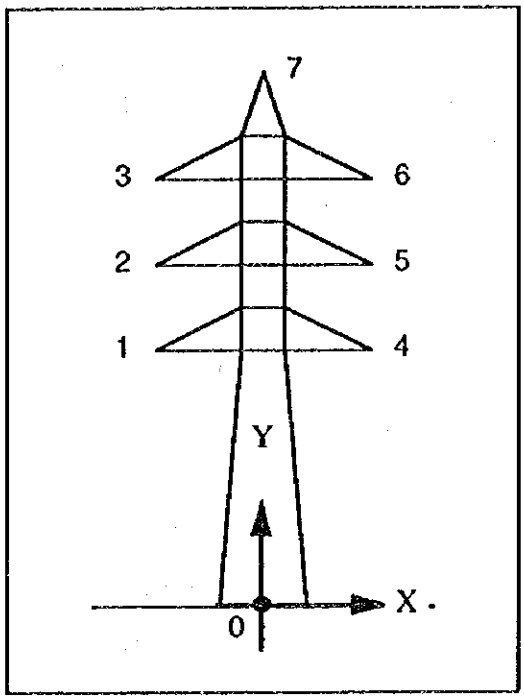
TOWER CONFIGURATION 2

Ref No.	1L47 (same as 1L35)
Title	ANURADHAPURA - KILINOCHCHI
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE YAL

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	0	27.28	24.62

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L48 Title : KILINOCHCHI - CHUNNAKAM

No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	67.2
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 19/2.36
9	Earthwire Size	mm²	83.1
10	No. of Earthwires		1
11	Basic Span	m	305
12	Max Operating Temperature	deg C	54
13	Basic Span Sag at max Temp.	m	6.30
14	Earthwire Sag at EDT	m	3.99
15	Minimum Ground Clearance	m	6.71
16	Tower Configuration		2
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	140
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.086
25	Mechanical Rating - Suspension	kN	67
26	Mechanical Rating - Tension	kN	125
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SUMITOMO, JAPAN
30	Conductor Manufacturer		SUMITOMO, JAPAN
31	Main Contractor		SUMITOMO, JAPAN
32	Date of Completion		1971

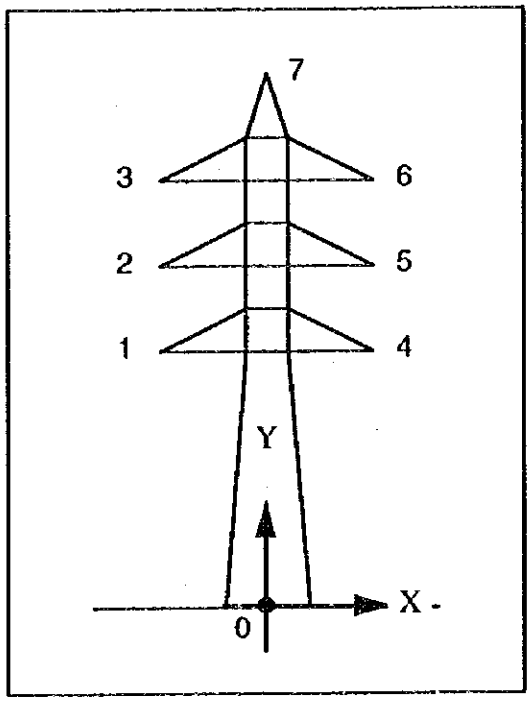
TOWER CONFIGURATION 2

Ref No.	1L48 (same as 1L35)
Title	KILINOCHCHI - CHUNNAKAM
Voltage	132 kV

Double Circuit, Vertical Formation, 1 Earthwire

TOWER TYPE YAL

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 6.29

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.66	15.65	9.36
	2	- 3.66	19.49	13.20
	3	- 3.66	23.32	17.03
	4	3.66	15.65	9.36
	5	3.66	19.49	13.20
	6	3.66	23.32	17.03
Earthwire Attachment Point	7	0	27.28	24.62

2/3 E/W sag 2.66

Database Information for Overhead Lines

Reference No. 1L49 Title : LAXAPANA - NUWARA ELIYA

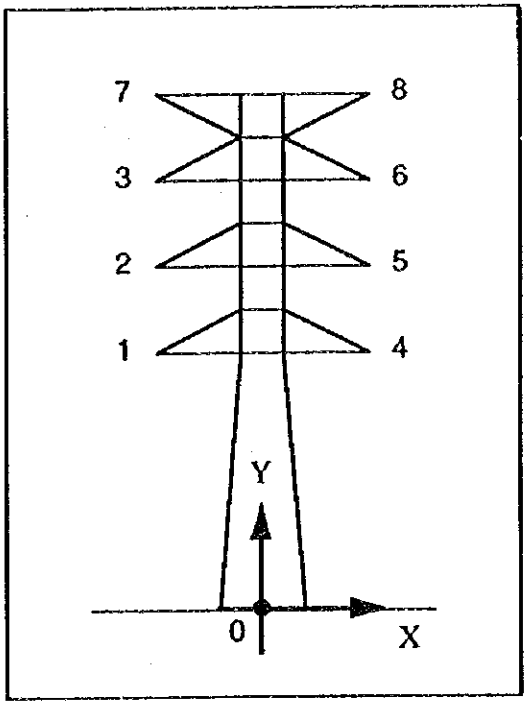
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	38.8
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	7.88
14	Earthwire Sag at EDT	m	4.89
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		11
23	No. of Discs - Tension		12
24	Suspension Insulator Set Length	m	2.27
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	22
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SAE, INDIA
30	Conductor Manufacturer		ALUMINIUM INDUSTRIES, INDIA
31	Main Contractor		SRI U-THONG, THAILAND
32	Date of Completion		1996

TOWER CONFIGURATION 1

Ref No.	1L49	(same as 1L24)
Title	LAXAPANA - NUWARA ELIYA	
Voltage	132 kV	

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	R
2	Y
1	B



Phase(R-Y-B)	
6	B
5	Y
4	R

Insulator length + 2/3 sag 7.52

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.90	17.25	9.73
	2	- 3.67	21.44	13.92
	3	- 3.67	25.58	18.06
	4	3.90	17.25	9.73
	5	3.67	21.44	13.92
	6	3.67	25.58	18.06
Earthwire Attachment Point	7	- 3.67	27.25	23.99
	8	3.67	27.25	23.99

2/3 E/W sag 3.26

Database Information for Overhead Lines

Reference No. 1L50 Title : NUWARA ELIYA - BADULLA

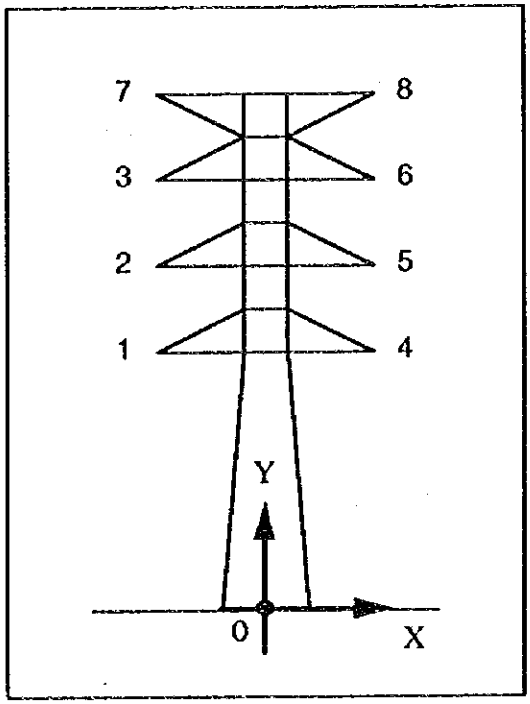
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	35.4
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	7.88
14	Earthwire Sag at EDT	m	4.89
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		11
23	No. of Discs - Tension		12
24	Suspension Insulator Set Length	m	2.27
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	22
28	Insulator Manufacturer		NGK, JAPAN
29	Tower Manufacturer		SAE, INDIA
30	Conductor Manufacturer		ALUMINIUM INDUSTRIES, INDIA
31	Main Contractor		SRI U-THONG, THAILAND
32	Date of Completion		1996

TOWER CONFIGURATION 1

Ref No.	1L50 (same as 1L49)
Title	NUWARA ELIYA - BADULLA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 7.52

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 3.90	17.25	9.73
	2	- 3.67	21.44	13.92
	3	- 3.67	25.58	18.06
	4	3.90	17.25	9.73
	5	3.67	21.44	13.92
	6	3.67	25.58	18.06
Earthwire Attachment Point	7	- 3.67	27.25	23.99
	8	3.67	27.25	23.99

2/3 E/W sag 3.26

Database Information for Overhead Lines

Reference No. 1L51 Title : PUTTALAM - ANURADHAPURA

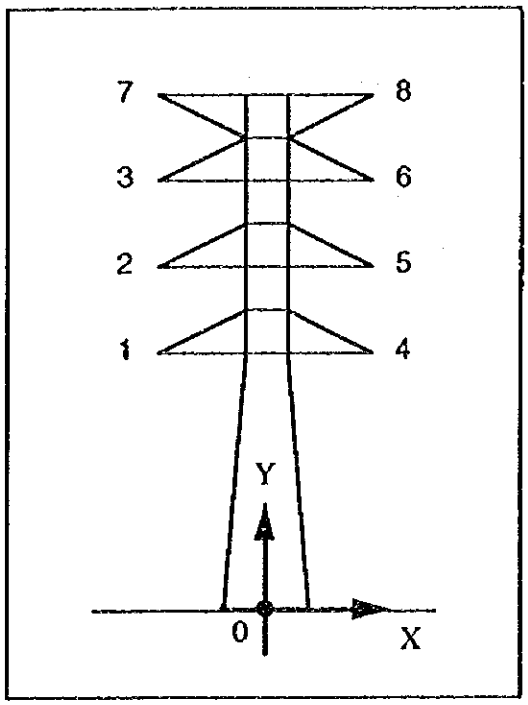
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	75
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	400
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.45
14	Earthwire Sag at EDT	m	10.30
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.205
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		WSI, INDIA
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		MIDAL CABLES, BAHRAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		ANTICIPATED 11/97

TOWER CONFIGURATION 1

Ref No.	1L51
Title	PUTTALAM - ANURADHAPURA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 11.18

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.29	22.94	11.76
	2	- 4.07	27.44	16.26
	3	- 4.00	31.94	20.76
	4	4.29	22.94	11.76
	5	4.07	27.44	16.26
	6	4.00	31.94	20.76
Earthwire Attachment Point	7	- 4.00	34.14	27.27
	8	4.00	34.14	27.27

2/3 E/W sag 6.87

Database Information for Overhead Lines

Reference No. IL52 Title : EMBILIPITIYA - MATARA

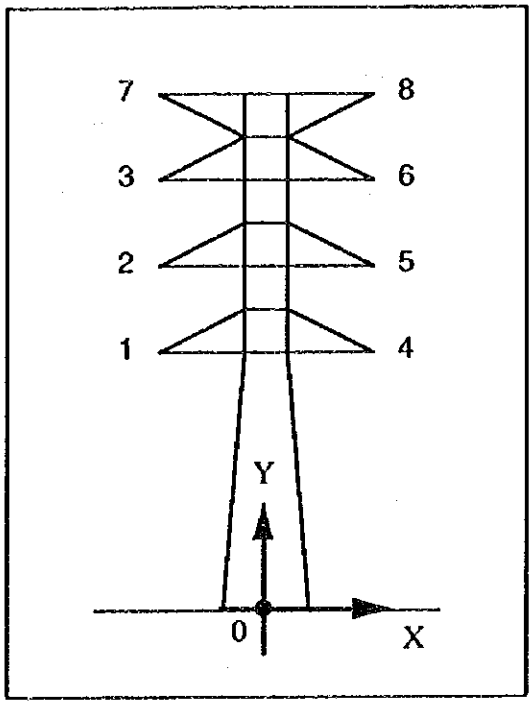
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	52
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	---
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	400
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.45
14	Earthwire Sag at EDT	m	10.30
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.205
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		WSI, INDIA
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		MIDAL CABLES BAHRAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		ANTICIPATED 11/97

TOWER CONFIGURATION 1

Ref No.	1L52 (same as 1L51)
Title	EMBILIPITIYA - MATARA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 11.18

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.29	22.94	11.76
	2	- 4.07	27.44	16.26
	3	- 4.00	31.94	20.76
	4	4.29	22.94	11.76
	5	4.07	27.44	16.26
	6	4.00	31.94	20.76
Earthwire Attachment Point	7	- 4.00	34.14	27.27
	8	4.00	34.14	27.27

2/3 E/W sag 6.87

Database Information for Overhead Lines

Reference No. 1L53 Title : UKUWELA SPUR

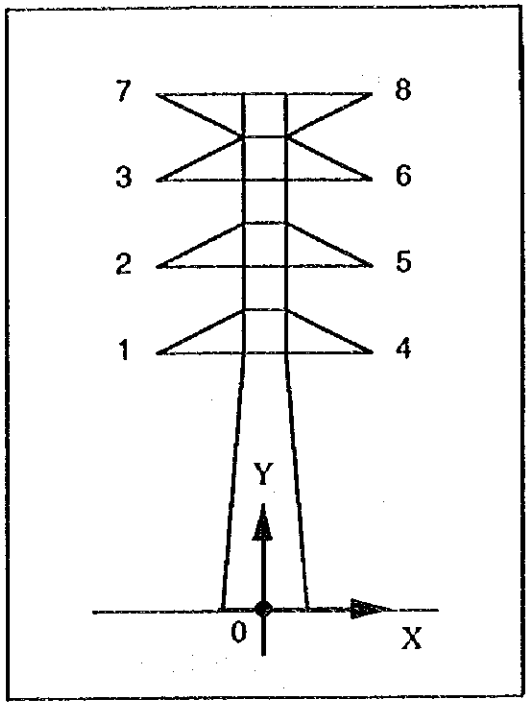
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	11
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	400
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.45
14	Earthwire Sag at EDT	m	10.30
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.205
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		WSI, INDIA
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		MIDAL CABLES, BAHRAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		ANTICIPATED 11/97

TOWER CONFIGURATION 1

Ref No.	1L53	(same as 1L51)
Title	UKUWELA SPUR	
Voltage	132 kV	

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 11.18

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.29	22.94	11.76
	2	- 4.07	27.44	16.26
	3	- 4.00	31.94	20.76
	4	4.29	22.94	11.76
	5	4.07	27.44	16.26
	6	4.00	31.94	20.76
Earthwire Attachment Point	7	- 4.00	34.14	27.27
	8	4.00	34.14	27.27

2/3 E/W sag 6.87

Database Information for Overhead Lines

Reference No. 1L54 Title : KOTUGODA - BOLAWATTA

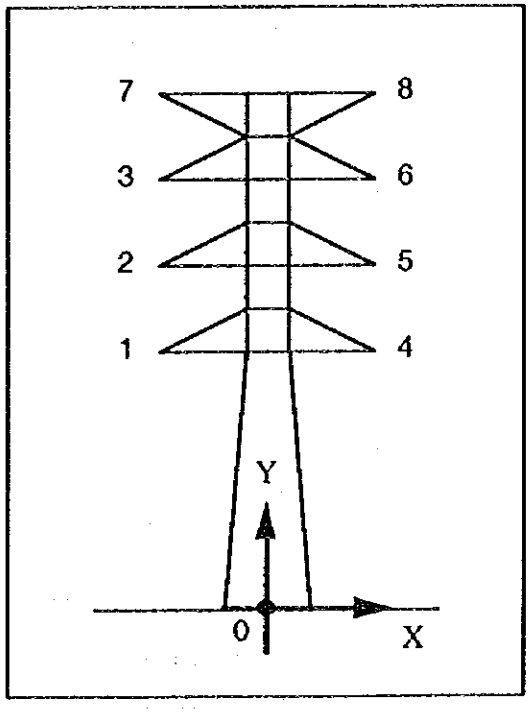
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	21 (new construction to replace 1L9)
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "ZEBRA"
5	Conductor Size	mm^2	428.9
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7/3.25
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	400
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.30
14	Earthwire Sag at EDT	m	10.30
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.205
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	160
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		WSI, INDIA/NGK, JAPAN
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		MIDAL CABLES, BAHRAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		ANTICIPATED 11/97

TOWER CONFIGURATION 1

Ref No.	1L54
Title	KOTUGODA - BOLAWATTA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1			
	2			
	3			
	4			
	5			
	6			
Earthwire Attachment Point	7			
	8			

2/3 E/W sag

Database Information for Overhead Lines

Reference No. 1L55 Title : KOTMALE SPUR - SS

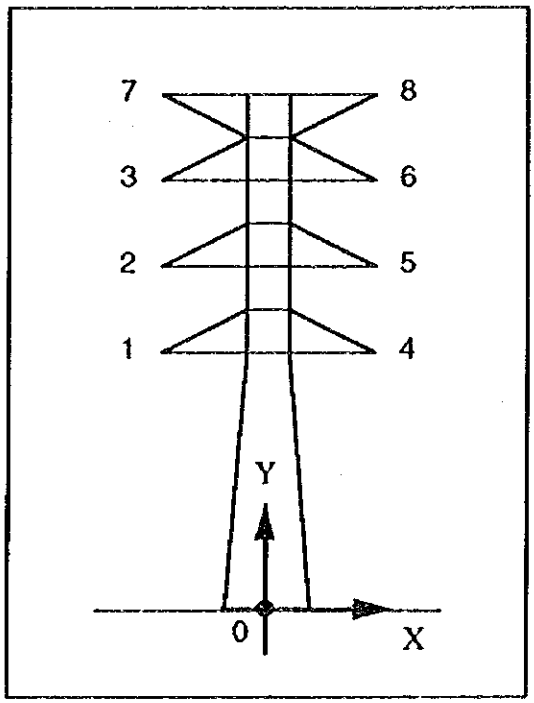
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	6.8
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7 / 3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	400
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	13.45
14	Earthwire Sag at EDT	m	10.30
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		12
23	No. of Discs - Tension		13
24	Suspension Insulator Set Length	m	2.205
25	Mechanical Rating - Suspension	kN	70
26	Mechanical Rating - Tension	kN	120
27	Specific Creepage of Set	mm / kV	24
28	Insulator Manufacturer		WSI, INDIA
29	Tower Manufacturer		KEC, INDIA
30	Conductor Manufacturer		MIDAL CABLES, BAHRAIN
31	Main Contractor		KEC, INDIA
32	Date of Completion		ANTICIPATED 11/97

TOWER CONFIGURATION 1

Ref No.	1L55 (same as 1L51)
Title	KOTMALE SPUR - SS
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag 11.18

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1	- 4.29	22.94	11.76
	2	- 4.07	27.44	16.26
	3	- 4.00	31.94	20.76
	4	4.29	22.94	11.76
	5	4.07	27.44	16.26
	6	4.00	31.94	20.76
Earthwire Attachment Point	7	- 4.00	34.14	27.27
	8	4.00	34.14	27.27

2/3 E/W sag 6.87

Database Information for Overhead Lines

Reference No. 1L56 Title : KIRIBATHKUMBURA SPUR - SS

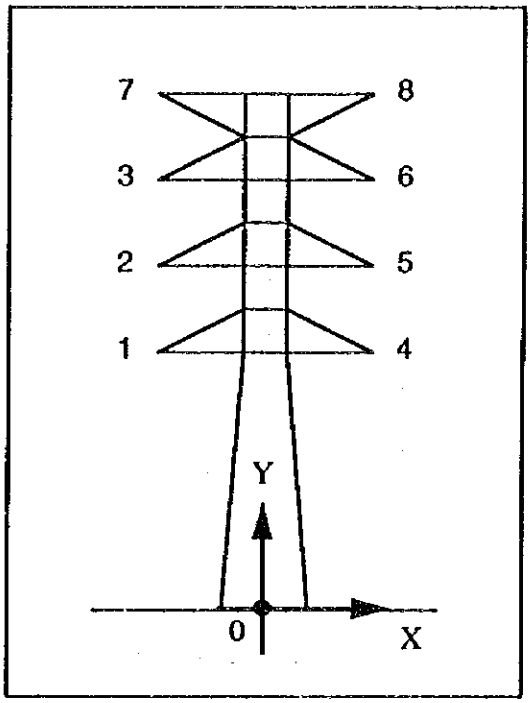
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	3.9
3	No. of Circuits		2
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm²	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7 / 3.25
9	Earthwire Size	mm²	58.07
10	No. of Earthwires		2
11	Basic Span	m	
12	Max Operating Temperature	deg C	
13	Basic Span Sag at max Temp.	m	
14	Earthwire Sag at EDT	m	
15	Minimum Ground Clearance	m	
16	Tower Configuration		
17	Insulator Type		
18	Insulator Material		
19	Insulator Design		
20	Creepage / Disc	mm	
21	Disc Spacing	mm	
22	No. of Discs - Suspension		
23	No. of Discs - Tension		
24	Suspension Insulator Set Length	m	
25	Mechanical Rating - Suspension	kN	
26	Mechanical Rating - Tension	kN	
27	Specific Creepage of Set	mm / kV	
28	Insulator Manufacturer		
29	Tower Manufacturer		
30	Conductor Manufacturer		
31	Main Contractor		CEB
32	Date of Completion		1992 (not connected due to lack of s/s equipment)

TOWER CONFIGURATION 1

Ref No.	1L56
Title	KIRIBATHKUMBURA SPUR - SS
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1			
	2			
	3			
	4			
	5			
	6			
Earthwire Attachment Point	7			
	8			

2/3 E/W sag

Database Information for Overhead Lines

Reference No. 1L57 Title : RANTEMBE - BADULLA

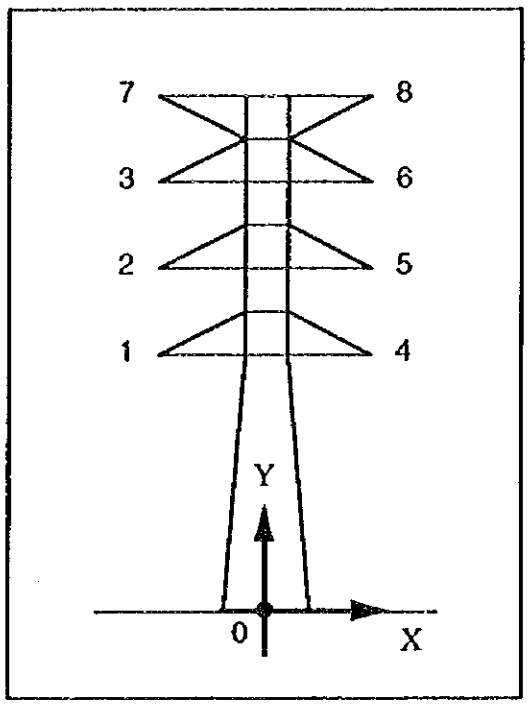
No.	Item	Unit	Data
1	Voltage	kV	132
2	Line Length	km	33.0
3	No. of Circuits		1 (Double Circuit Tower)
4	Conductor Type / Name		ACSR "LYNX"
5	Conductor Size	mm^2	183.4
6	No. of Subconductors / Phase		1
7	Subconductor Spacing	mm	—
8	Earthwire Type / Name		GS 7 / 3.25
9	Earthwire Size	mm^2	58.07
10	No. of Earthwires		2
11	Basic Span	m	305
12	Max Operating Temperature	deg C	75
13	Basic Span Sag at max Temp.	m	7.88
14	Earthwire Sag at EDT	m	4.89
15	Minimum Ground Clearance	m	7.01
16	Tower Configuration		1
17	Insulator Type		CAP & PIN
18	Insulator Material		PORCELAIN
19	Insulator Design		STANDARD
20	Creepage / Disc	mm	292
21	Disc Spacing	mm	146
22	No. of Discs - Suspension		
23	No. of Discs - Tension		
24	Suspension Insulator Set Length	m	
25	Mechanical Rating - Suspension	kN	
26	Mechanical Rating - Tension	kN	
27	Specific Creepage of Set	mm / kV	
28	Insulator Manufacturer		
29	Tower Manufacturer		
30	Conductor Manufacturer		
31	Main Contractor		SRI U-THONG, THAILAND
32	Date of Completion		anticipated 3 / '97

TOWER CONFIGURATION 1

Ref No.	1L57
Title	RANTEMBE - BADULLA
Voltage	132 kV

Double Circuit, Vertical Formation, 2 Earthwires

Phase(R-Y-B)	
3	
2	
1	



Phase(R-Y-B)	
6	
5	
4	

Insulator length + 2/3 sag

Suspension Tower Dimensions (m)		X	Y	Y_{AV}
Centre Point of Tower Base		0	0	0
Conductor Attachment Point	1			
	2			
	3			
	4			
	5			
	6			
Earthwire Attachment Point	7			
	8			

2/3 E/W sag

A11.2 Database Information for Substations

No.	Name of Substation
1	Anuradhapura
2	Avissawella
3	Badulla
4	Balangoda
5	Biyagama
6	Bolawatta
7	Chilaw
8	Canyon
9	Deniyaya
10	Embilipitiya
11	Fort
12	Galle
13	Habarana
14	Kelanitissa
15	Kilinochchi
16	Kiribathkumbura
17	Kollupitiya
18	Kolonnawa
19	Kotmale
20	Kotugoda
21	Kurunegala
22	Matugama
23	New Nuwara Eliya
24	Padukka
25	Panadura
26	Pannipitiya
27	Puttalam
28	Ratmalana
29	Sapugaskanda
30	Thulhiriya
31	Trincomalee
32	Ukuwela
33	Old Laxapana
34	New Laxapana
35	Samanalawewa
36	Wimalasurendra

Database Information

Equipment Name	Main Transformer

1. Name of Substation : ANURADHAPURA

(Address : Ceylon Electricity Board, Dharmapala Mawatha, Anuradhapura)

2. Number of Units & Capacity : 3 x 10 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase	3 phase	
(2) Capacity (MVA)	10.0	10.0	10.0	
(3) Rated Voltage (kV)	132/33	132/33	132/33	
(4) Basic Insulation Level (kV)	550	550	550	
(5) Impedance (%/MVA)	10.72/10	10.90/10	10.65/10	
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Yndl	Yndl	Yndl	
(7) Cooling System	ONAN/ONAF	ONAN/ONAF	ONAN/ONAF	
(8) Number of Taps	21	21	21	
(9) Voltage Range	+12.8% -12.8%	+12.8% -12.8%	+12.8% -12.8%	
(10) Weight - Total (tons)	32	32	32	
- Transportation (tons)	N/A	N/A	N/A	
(11) Year of Manufacturer	1969	1975	1968	
(12) Manufacturer	ALSTHOM	ALSTHOM	ALSTHOM	

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : ANURADHAPURA

2. Number of Units : 8

3. Particulars :

Items \ Data		Identification Number			
		D80/D150/D160 D170/D180	D190	D100	D140
(1) Type		HPGE12/15E SMALL OIL CB	ELF145nc Intv SF6 CB	ORIG SMALL OIL CB	ORIG SMALL OIL CB
(2) Rated Voltage	(kV)	170	145	132	132
(3) Rated Current	(A)	1000	2000	1250	1250
(4) Rated Interrupting Current	(kA/MVA)	11/1250	20/4500	11/2500	15.3/3500
(5) Making Current	(kA)	27.5	N/A	28	38
(6) Rated Short Time Withstand Current/Duration	(kA/S)	11/3	N/A	11/1	15.3/1
(7) Basic Insulation Level	(kV)	550	650	550	550
(8) Total Weight	(kg)	3090	N/A	2788	2788
(9) Year of Manufacturer		1968	1983	1973	1975
(10) Manufacturer		N/A	BBC	N/A	N/A

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : AVISSAWELLA

(Address : Ceylon Electricity Board, Ratnapura Road, Avissawella)

2. Number of Units & Capacity : 2 x 6 MVA

3. Particulars :

Items \ Data		Unit Number			
		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	6	6		
(3) Rated Voltage	(kV)	66/33	66/33		
(4) Basic Insulation Level	(kV)	N/A	N/A		
(5) Impedance	(%/MVA)	9.2/6.0	9.2/6.0		
Primary - Secondary	(%/MVA)				
Primary - Tertiary	(%/MVA)				
Secondary - Tertiary	(%/MVA)				
(6) Connection Symbol		Yyo	Yyo		
(7) Cooling System		ONAN	ONAN		
(8) Number of Taps		17	17		
(9) Voltage Range		+1.25% -1.25%	+1.25% -1.25%		
(10) Weight - Total	(tons)	31.5	31.5		
- Transportation	(tons)	28.5	28.5		
(11) Year of Manufacturer		1964	1964		
(12) Manufacturer		FERRENTI (FERRENTI-Engrand)	FERRENTI (FERRENTI-Engrand)		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : AVISSAWELLA

2. Number of Units : 3

3. Particulars :

Items \ Data		Identification Number			
		105/205	120		
(1) Type		Oil Circuit Breaker SB429	N/A		
(2) Rated Voltage	(kV)	66	66		
(3) Rated Current	(A)	400	N/A		
(4) Rated Interrupting Current	(kA/MVA)	1.316/(N/A)	N/A		
(5) Making Current	(kA)	N/A	N/A		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	1.31/1	N/A		
(7) Basic Insulation Level	(kV)	N/A	N/A		
(8) Total Weight	(kg)	N/A	N/A		
(9) Year of Manufacturer		1951	N/A		
(10) Manufacturer		Thomson-Houston Co. Ltd.	N/A		

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : BADULLA

(Address : Ceylon Electricity Board, Pahala Raja Veediya, Badulla)

2. Number of Units & Capacity : 2 x 31.5 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase		
(2) Capacity (MVA)	31.5	31.5		
(3) Rated Voltage (kV)	132/33 or 66	132/33 or 66		
(4) Basic Insulation Level (kV)	550	550		
(5) Impedance (%/MVA)	11/31.5	11/31.5		
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Yndl	Yndl		
(7) Cooling System	ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps	13	13		
(9) Voltage Range	+5% -15%	+5% -15%		
(10) Weight - Total (tons)	53.1	53.1		
- Transportation (tons)	40.5	40.5		
(11) Year of Manufacturer	1983	1987		
(12) Manufacturer	TAKAOKA ELECT. CO. LTD. TOKYO	TAKAOKA ELECT. CO. LTD. TOKYO		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : BADULLA

2. Number of Units : 12

3. Particulars :

Items \ Data		Identification Number			
		L45/L55	105/110/205 /210	L15/L25 /H10/H20	1T0/2T0
(1) Type		FA1-S GAS CB	HRL145 /250IE1	FXT13 SF6 CB	72.5/2000B OIL CB
(2) Rated Voltage	(kV)	145	145	170	72.5
(3) Rated Current	(A)	1250	2500	1250	2000
(4) Rated Interrupting Current	(kA/MVA)	25/5700	31.5/7200	31.5/(N/A)	25/(N/A)
(5) Making Current	(kA)	63	79	79	62.5
(6) Rated Short Time Withstand Current/Duration	(kA/S)	(N/A)/3	50/3	(N/A)/3	25/3
(7) Basic Insulation Level	(kV)	650	650	750	325/140
(8) Total Weight	(kg)	2000	4410	2040	2435
(9) Year of Manufacturer		1993	1983	1995	1983/1987
(10) Manufacturer		NISSAN ELECT. CO. JAPAN	N/A	GEC ALSTHOM FRANCE	ASEA

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : BALANGODA

(Address : Ceylon Electricity Board, Rassagala Road, Balangoda)

2. Number of Units & Capacity : 2 x 10 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase		
(2) Capacity (MVA)	10	10		
(3) Rated Voltage (kV)	132/33	132/33		
(4) Basic Insulation Level (kV)	550	550		
(5) Impedance (%/MVA)	11.4/10	11.4/10		
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Yndl	Yndl		
(7) Cooling System	ONAN	ONAN		
(8) Number of Taps	17	17		
(9) Voltage Range	+10.5% -10.5%	+10.5% -10.5%		
(10) Weight - Total (tons)	32.5	32.5		
- Transportation (tons)	N/A	N/A		
(11) Year of Manufacturer	1963	1963		
(12) Manufacturer	SAVOISIENNE FRANCE	SAVOISIENNE FRANCE		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : BALANGODA
2. Number of Units : 9
3. Particulars :

Items \ Data		Identification Number			
		L15/L25/L35 /L45/L55/L65 /W10/H10/H20			
(1) Type		FX11			
(2) Rated Voltage	(kV)	132			
(3) Rated Current	(A)	3150			
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200			
(5) Making Current	(kA)	80			
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/3			
(7) Basic Insulation Level	(kV)	650			
(8) Total Weight	(kg)	1300			
(9) Year of Manufacturer		1989			
(10) Manufacturer		ALSTHOM FRANCE			

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : BIYAGAMA

(Address : Ceylon Electricity Board, Biyagama)

2. Number of Units & Capacity : 2 x 250 MVA

3. Particulars :

Items \ Data		Unit Number			
		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	250	250		
(3) Rated Voltage	(kV)	220/132/33	220/132/33		
(4) Basic Insulation Level	(kV)	850	850		
(5) Impedance	(%/MVA)				
Primary - Secondary	(%/MVA)	13.8/250	13.8/(N/A)		
Primary - Tertiary	(%/MVA)	90.3/250	90.0/(N/A)		
Secondary - Tertiary	(%/MVA)	155.7/250	156.3/250		
(6) Connection Symbol		YnaOdl	YnaOdl		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps		13	13		
(9) Voltage Range		+15% -5%	+15% -5%		
(10) Weight - Total	(tons)	58.5	58.5		
- Transportation	(tons)	42.0	42.0		
(11) Year of Manufacturer		1983	1983		
(12) Manufacturer		TAKAOKA ELECT. CO. LTD.TOKYO	TAKAOKA ELECT. CO. LTD.TOKYO		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : BIYAGAMA

2. Number of Units : 16

3. Particulars :

Items \ Data		Identification Number			
		x105/x205 /x305/x405	x110/x130 /x210	105/205/305 /405/505/605 /130/180/280	
(1) Type		HLR245 /2502E1	HLR245 /2502E1	HLR145 /2501E1	
(2) Rated Voltage	(kV)	245	245	145	
(3) Rated Current	(A)	2500	2500	2500	
(4) Rated Interrupting Current	(kA/MVA)	40/15000	40/15000	31.5/7200	
(5) Making Current	(kA)	100	100	79	
(6) Rated Short Time Withstand Current/Duration	(kA/S)	50/3	50/3	50/3	
(7) Basic Insulation Level	(kV)	1050/480	1050/480	650/275	
(8) Total Weight	(kg)	5190	4530	4410	
(9) Year of Manufacturer		1983	1983	1983	
(10) Manufacturer		ASEA	ASEA	ASEA	

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : BOLAWATTA

(Address : Ceylon Electricity Board,Bolawatta)

2. Number of Units & Capacity : 2 x 31.5 MVA

3. Particulars :

Items \ Data		Unit Number			
		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	31.5	31.5		
(3) Rated Voltage	(kV)	132/33	132/33		
(4) Basic Insulation Level	(kV)	550	550		
(5) Impedance	(%/MVA)	10.84/31.5	10.86/31.5		
Primary - Secondary	(%/MVA)				
Primary - Tertiary	(%/MVA)				
Secondary - Tertiary	(%/MVA)				
(6) Connection Symbol		Yndl	Yndl		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps		13	13		
(9) Voltage Range		+5% -15%	+5% -15%		
(10) Weight - Total	(tons)	46.55	46.55		
- Transportation	(tons)	40.0	40.0		
(11) Year of Manufacturer		1986	1986		
(12) Manufacturer		EBG AUSTRIA	EBG AUSTRIA		

Remarks

Database Information

Equipment Name	Main Circuit Braker
1. Name of Substation :	BOLAWATTA
2. Number of Units :	2
3. Particulars :	

Items \ Data		Identification Number			
		D110/D120			
(1) Type		HPGE12-15-A CB			
(2) Rated Voltage	(kV)	170			
(3) Rated Current	(A)	1000			
(4) Rated Interrupting Current	(kA/MVA)	10.9/2500			
(5) Making Current	(kA)	27.5			
(6) Rated Short Time Withstand Current/Duration	(kA/S)	11/3			
(7) Basic Insulation Level	(kV)	550			
(8) Total Weight	(kg)	4200			
(9) Year of Manufacturer		1963			
(10) Manufacturer		DELLE GCE FRANCE			

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : CHILAW

(Address : Ceylon Electricity Board, Chilaw)

2. Number of Units & Capacity : 2 x 31.5 MVA

3. Particulars :

Items \ Data		Unit Number			
		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	31.5	31.5		
(3) Rated Voltage	(kV)	132/33	132/33		
(4) Basic Insulation Level	(kV)	550	550		
(5) Impedance	(%/MVA)	10.16/31.5	9.97/31.5		
Primary - Secondary	(%/MVA)				
Primary - Tertiary	(%/MVA)				
Secondary - Tertiary	(%/MVA)				
(6) Connection Symbol		Yndl	Yndl		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps		18	18		
(9) Voltage Range		+10.5% -15.0%	+10.5% -15.0%		
(10) Weight - Total	(tons)	65.5	65.5		
- Transportation	(tons)	57.5	57.5		
(11) Year of Manufacturer		1993	1993		
(12) Manufacturer		ABB	ABB		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : CHILAW

2. Number of Units : 2

3. Particulars :

Items \ Data		Identification Number			
		H10/H20			
(1) Type		ELF SF2-1 SF6 CB			
(2) Rated Voltage	(kV)	145			
(3) Rated Current	(A)	1606			
(4) Rated Interrupting Current	(kA/MVA)	31.5 / 200			
(5) Making Current	(kA)	N/A			
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5 / 35			
(7) Basic Insulation Level	(kV)	650			
(8) Total Weight	(kg)	1750			
(9) Year of Manufacturer		1994			
(10) Manufacturer		ABB, INDIA			

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : CANYON

(Address : N/A)

2. Number of Units & Capacity : 2 x 38 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase		
(2) Capacity (MVA)	38	38		
(3) Rated Voltage (kV)	132/12.5	132/12.5		
(4) Basic Insulation Level (kV)	550	550		
(5) Impedance (%/MVA)	N/A	10.82/38		
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Yndl	Yndl		
(7) Cooling System	ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps	7	7		
(9) Voltage Range	+7.5% -7.5%	+7.5% -7.5%		
(10) Weight - Total (tons)	44.2	41.0		
- Transportation (tons)	30.7	32.0		
(11) Year of Manufacturer	1985	1985		
(12) Manufacturer	CEM	FUJI ELECTRIC		

Remarks

Database Information

Equipment Name	Main Circuit Braker
1. Name of Substation :	CANYON
2. Number of Units :	2
3. Particulars :	

Items \ Data		Identification Number			
		CB1	CB2		
(1) Type		HLR145 /2501EI	HLR145 /2501EI		
(2) Rated Voltage	(kV)	145	145		
(3) Rated Current	(A)	2500	2500		
(4) Rated Interrupting Current	(kA/MVA)	25/5700	40/9200		
(5) Making Current	(kA)	62.5	40.0		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	40/3	40/3		
(7) Basic Insulation Level	(kV)	650/275	650/275		
(8) Total Weight	(kg)	N/A	N/A		
(9) Year of Manufacturer		1980	1985		
(10) Manufacturer		ASEA	ASEA		

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : DENIYAYA

(Address : Electrical Consumer Service Unit, Deniyaya)

2. Number of Units & Capacity : 3 x 10 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1 (TR01A)	No. 2 (TR01)	No. 3 (TR02)	No. 4
(1) Number of Phase	3 phase	3 phase	3 phase	
(2) Capacity (MVA)	10	10	10	
(3) Rated Voltage (kV)	132/33	132/33	132/33	
(4) Basic Insulation Level (kV)	550	550	550	
(5) Impedance (%/MVA)	10.3/10	10.3/10	10.76/10	
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Ydl	Ydl	Ydl	
(7) Cooling System	ONAN	ONAN	ONAN	
(8) Number of Taps	21	21	21	
(9) Voltage Range	+10% -15%	+10% -15%	+10% -15%	
(10) Weight - Total (tons)	32.0	32.0	32.0	
- Transportation (tons)	N/A	N/A	N/A	
(11) Year of Manufacturer	1975	1972	1969	
(12) Manufacturer	ALSTHOM	ALSTHOM	ALSTHOM	

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : DENIYAYA

2. Number of Units : 3

3. Particulars :

Items \ Data		Identification Number			
		D170	D180	3	
(1) Type		ELF145nclrt SF6 CB	HPGE12/15E SMALL OIL VOLUME CB	HLRE12/15B	
(2) Rated Voltage	(kV)	132	170	170	
(3) Rated Current	(A)	2000	1000	1000	
(4) Rated Interrupting Current	(kA/MVA)	25/5700	11/2500	11/2500	
(5) Making Current	(kA)	N/A	27.5	N/A	
(6) Rated Short Time Withstand Current/Duration	(kA/S)	25/(N/A)	11/3	11/3	
(7) Basic Insulation Level	(kV)	550	550	N/A	
(8) Total Weight	(kg)	N/A	3090	3090	
(9) Year of Manufacturer		1981	1968	1966	
(10) Manufacturer		BBC	ALSTHOM	ORTHOJECTURE	

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : EMBILIPITIYA

(Address : Ceylon Electricity Board, New Town, Embilipitiya)

2. Number of Units & Capacity : 2 x 10 MVA

3. Particulars :

Items \ Data		Unit Number			
		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	10	10		
(3) Rated Voltage	(kV)	132/33	132/33		
(4) Basic Insulation Level	(kV)	550	550		
(5) Impedance	(%/MVA)	11/(N/A)	10.6/10		
Primary - Secondary	(%/MVA)				
Primary - Tertiary	(%/MVA)				
Secondary - Tertiary	(%/MVA)				
(6) Connection Symbol		Ydl	Ydl		
(7) Cooling System		ON	ON		
(8) Number of Taps		21	21		
(9) Voltage Range		+5% -15%	+5% -15%		
(10) Weight - Total	(tons)	31.6	32.0		
- Transportation	(tons)	26.0	N/A		
(11) Year of Manufacturer		1978	1975		
(12) Manufacturer		ALSTHOM	ALSTHOM		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : EMBILIPITIYA
2. Number of Units : 4
3. Particulars :

Items \ Data		Identification Number			
		H10/H20/L25	L15		
(1) Type		FX11 CB	N/A		
(2) Rated Voltage	(kV)	132	132		
(3) Rated Current	(A)	3150	3150		
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200	31.5/7200		
(5) Making Current	(kA)	N/A	N/A		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	80/3	80/3		
(7) Basic Insulation Level	(kV)	N/A	N/A		
(8) Total Weight	(kg)	1300	N/A		
(9) Year of Manufacturer		1989	1989		
(10) Manufacturer		ALSTHOM FRANCE	ALSTHOM FRANCE		

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : FORT

(Address : Transward Building, Colombo 1)

2. Number of Units & Capacity : 2 x 30 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase		
(2) Capacity (MVA)	30	30		
(3) Rated Voltage (kV)	132/11	132/11		
(4) Basic Insulation Level (kV)	550	550		
(5) Inpedance (%/MVA)	30/(N/A)	30/(N/A)		
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	YnynO	YnynO		
(7) Cooling System	ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps	13	13		
(9) Voltage Range	+5% -15%	+5% -15%		
(10) Weight - Total (tons)	N/A	N/A		
- Transportation (tons)	47.0	47.0		
(11) Year of Manufacturer	1984	1984		
(12) Manufacturer	BBC	BBC		

Remarks

Database Information

Equipment Name	Main Circuit Braker

1. Name of Substation : FORT

2. Number of Units : 4

3. Particulars :

Items \ Data		Identification Number			
		105/205 /110/210			
(1) Type		SF6 CB			
(2) Rated Voltage	(kV)	132			
(3) Rated Current	(A)	1250			
(4) Rated Interrupting Current	(kA/MVA)	25/5700			
(5) Making Current	(kA)	63			
(6) Rated Short Time Withstand Current/Duration	(kA/S)	25/3			
(7) Basic Insulation Level	(kV)	650			
(8) Total Weight	(kg)	1020			
(9) Year of Manufacturer		1983			
(10) Manufacturer		BBC			

Remarks

Database Information

Equipment Name	Main Transformer

1. Name of Substation : GALLE

(Address : Ceylon Electricity Board, Makuluwa, Galle)

2. Number of Units & Capacity : 2 x 30 MVA, 1 x 20 MVA

3. Particulars :

Items \ Data	Unit Number			
	No. 1	No. 2	No. 3	No. 4
(1) Number of Phase	3 phase	3 phase	3 phase	
(2) Capacity (MVA)	30	30	20	
(3) Rated Voltage (kV)	132/33	132/33	132/5.9	
(4) Basic Insulation Level (kV)	550	550	550	
(5) Impedance (%/MVA)	10.4/30	10.4/30	10/20	
Primary - Secondary (%/MVA)				
Primary - Tertiary (%/MVA)				
Secondary - Tertiary (%/MVA)				
(6) Connection Symbol	Ydl	Ydl	N/A	
(7) Cooling System	ONAN/ONAF	ONAN/ONAF	ONAN	
(8) Number of Taps	21	21	N/A	
(9) Voltage Range	+5% -15%	+5% -15%	N/A	
(10) Weight - Total (tons)	56.6	56.6	N/A	
- Transportation (tons)	47.0	47.0	N/A	
(11) Year of Manufacturer	1980	1980	1987	
(12) Manufacturer	ALSTHOM SAVOISIENNE	ALSTHOM SAVOISIENNE	ASEA	

Remarks