	Dutabat	30 II ROTTIO			
Equipment Name		M	Iain Circuit B	raker	
1. Name of Substation:		·	GALLE		
2. Number of Units:			8		· · · · · · · · · · · · · · · · · · ·
3. Particulars:					
	Data		Identificati	on Number	
Items		D111/D121	D150/D170 /D180/D190	D110/D120	
(1) Туре		HPL145 /25AI	ORIG SMALL OIL CB	HPGE12-15-A SMALL OIL CB	
(2) Rated Voltage	(kV)	145	132	170	
(3) Rated Current	(A)	2500	1250	2500	
(4) Rated Interrupting Current	(kA/MVA)	40/9200	11/2500	10.9/2500	·
(5) Making Current	(kA)	100	27.5	27.5	<u></u>
(6) Rated Short Time Withstand Current/Duration	(kA/S)	40/3	11/3	11/3	
(7) Basic Insulation Level	(kV)	650	550	550	
(8) Total Weight	(kg)	3640	2788	4550	:
(9) Year of Manufacturer	1	1986	1972	1963	
(10) Manufacturer		ASEA SWEDDEN	N/A	CGE FRANCE	
Remarks		:			·
		. :			
	:				

Equipment Name		1	Main Transfo	rmer	
1. Name of Substation:	Angele and programmer performance		HABARANA		
(Address:	Ceylon Ele	etricity Board, D	ambulla Road, l	Habarana)
2. Number of Units & Capac	ity :		3 x 10 MVA		. ·
3. Particulars:					
	Data		Unit N	umber	
Items		No. 1	No. 2	No. 3	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)	10.84/10	10.57/10	10.60/10	
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)	32.0	32.0	32.0	
- Transportation	(tons)	N/A	N/A	N/A	
(11) Year of Manufacturer		1969	1968	1968	
(12) Manufacturer		ALSTHOM SAVOISIENNE	ALSTHOM SAVOISIENNE	ALSTHOM SAVOISIENNE	
Remarks					

Data (kV)	L25/L45/S10 ELF SF2-1 SF6 CB	ABARANA (1/2 7 Identificatio L65 ELF145nc1rty		D170
	ELF SF2-1	Identificatio L65		D170
	ELF SF2-1	L65		D170
	ELF SF2-1	L65		D170
	ELF SF2-1		D40	D170
(kV)		ELF145nc1rtv		
(kV)		SF6 CB	SF6 CB	HPGE12/15E SMALL OIL VOLUME CB
	145	145	132	170
(Λ)	2000	2000	2000	1000
(kA/MVA)	25/5700	20/4600	25/5700	11/2500
(kA)	N/A	N/A	N/A	27.5
(kA/S)	25/(N/A)	20/(N/A)	25/(N/A)	11/3
(kV)	650	650	550	550
(kg)	N/A	N/A	N/A	3090
	1986	1983	N/A	1969
	ввс	ввс	BBC	N/A
				
			·	
	(A) (kA/MVA) (kA) (kA/S)	(kV) 145 (A) 2000 (kA/MVA) 25/5700 (kA) N/A (kA/S) 25/(N/A) (kV) 650 (kg) N/A 1986	(kV) 145 145 (A) 2000 2000 (kA/MVA) 25/5700 20/4600 (kA) N/A N/A (kA/S) 25/(N/A) 20/(N/A) (kV) 650 650 (kg) N/A N/A 1986 1983	(kV) 145 145 132 (A) 2000 2000 2000 (kA/MVA) 25/5700 20/4600 25/5700 (kA) N/A N/A N/A (kA/S) 25/(N/A) 20/(N/A) 25/(N/A) (kV) 650 650 550 (kg) N/A N/A N/A 1986 1983 N/A

Equipment Name	Main Circuit Braker				
1. Name of Substation:	1	HABARANA (2/	2)		
2. Number of Units:		7			
3. Particulars:					
Data		Identification	on Number		
Items	L35				
(1) Type	N/A				
(2) Rated Voltage (kV)	N/A				
(3) Rated Current (A)	N/A				
(4) Rated Interrupting Current (kA/MVA)	N/A		·	·	
(5) Making Current (kA)	N/A				
(6) Rated Short Time Withstand Current/Duration (kA/S)	N/A			: .	
(7) Basic Insulation Level (kV)	N/A				
(8) Total Weight (kg)	N/A				
(9) Year of Manufacturer	N/A				
(10) Manufacturer	N/A				
Remarks				ing set in	
	•				
			·		

Equipment Name	Main Transformer

1. Name of Substation: KELANITISSA (1/2)

(Address : Ceylon Electricity Board, New Kelani Bridge Road, Wellampitiya

2. Number of Units & Capacity: 2 x 60 MVA, 1 x 28.7 MVA, 2 x 32 MVA

3. Particulars:

Data		Unit N	lumber	
Items	No. 1	No. 2	No. 3 (GT01)	No. 4 (GT02)
(1) Number of Phase	3 phase	3 phase	3 phase	N/A
(2) Capacity (MVA)	60	60	28.7	N/A
(3) Rated Voltage (kV)	132/33	132/33	132/11.5	N/A
(4) Basic Insulation Level (kV)	N/A	N/A	N/A	N/A
(5) Impedance (%/MV/	A) 15.05/60	15.15/60	N/A	N/A
Primary - Secondary (%/MV/	A)			N/A
Primary - Tertiary (%/MV/	A)			N/A
Secondary - Tertiary (%/MV/	۸)			N/A
6) Connection Symbol	Yndl	Yndl	Ydli	N/A
7) Cooling System	ONAN/ONAF	ONAN/ONAF	ONAN/ONAF	N/A
8) Number of Taps	17	17	7	N/A
9) Voltage Range	+5% -15%	+5% -15%	+10.15% -5.00%	N/A
10) Weight - Total (tons)	65.0	65.0	N/A	N/A
- Transportation (tons)	N/A	N/A	. N/A	N/A
11) Year of Manufacturer	1980	1980	1980	N/A
12) Manufacturer	PAUWELS TRAFO BELGIUM	PAUWELS TRAFO BELGIUM	N/A	N/A
Remarks				

Equipment Name			Main Transfo	ormer	·
1. Name of Substation:		K	ELANITISSA ((2/2)	
(Address: Ceyton	Electricity B	oard, New Ke	elani Bridge Road	d, Wellampitiya)
2. Number of Units & Capac	ity :	2 x 60 MV	A, 1 x 28.7 MVA	, 2 x 32 MVA	
3. Particulars:					
	Data		Number		
Items		No. 1 (GT03)	No. 2	No. 3	No. 4
(1) Number of Phase		N/A		1	
(2) Capacity	(MVA)	N/A			
(3) Rated Voltage	(kV)	N/A			
(4) Basic Insulation Level	(kV)	N/A			
(5) Impedance	(%/MVA)	N/A			
Primary - Secondary	(%/MVA)	N/A			
Primary - Tertiary	(%/MVA)	N/A			
Secondary - Tertiary	(%/MVA)	N/A			
(6) Connection Symbol		N/A			: .
(7) Cooling System		N/A			
(8) Number of Taps		N/A			
(9) Voltage Range		N/A			
(10) Weight - Total	(tons)	N/A		:	
- Transportation	(tons)	N/A			
(11) Year of Manufacturer		N/A			
(12) Manufacturer		N/A		. 4	
Remarks					÷. N

Equipment Name	Main Circuit Braker				
1. Name of Substation:		KE	LANITISSA (1/2)	
2. Number of Units:			11		
3. Particulars:					
	Data		Identificati	on Number	
Items		M10/M20	505/605	405	M40/105/110
(1) Туре		HLR145/2501G1 SMALL OIL CB	SMALL OIL CB	ELF145nc1rtv SF6 CB	FG1
2) Rated Voltage	(kV)	145	N/A	145	145
(3) Rated Current	(A)	2500	N/A	2000	2500
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200	31.5/(N/A)	25/5700	25/5700
(5) Making Current	(kA)	78	79	N/A	62.5
(6) Rated Short Time Withstand Current/Duration	(kA/S)	(N/A)/3	50/3	N/A	25/3
(7) Basic Insulation Level	(kV)	N/A	N/A	850	200
(8) Total Weight	(kg)	2510	4410	N/A	N/A
(9) Year of Manufacturer		1985	1983	1983	1981
10) Manufacturer		N/A	ASEA	ввс	GEC GREAT BRITIA
		<u></u>			

Equipment Name			Main Circuit	Braker	
1. Name of Substation:		K	ELANITISSA	(2/2)	
2. Number of Units:			11		· · · · · · · · · · · · · · · · · · ·
3. Particulars:					·
	Data		Identifica	tion Number	
Items		210	205	130	
(1) Type		N/A	N/A	N/A	
(2) Rated Voltage	(kV)	N/A	N/A	N/A	
(3) Rated Current	(A)	N/A	N/A	N/A	
(4) Rated Interrupting Current	(kA/MVA)	N/A	N/A	N/A	
(5) Making Current	(kA)	N/A	N/A	N/A	
(6) Rated Short Time Withstand Current/Duration	(kA/S)	N/A	N/A	N/A	
(7) Basic Insulation Level	(kV)	N/A	N/A	N/A	
(8) Total Weight	(kg)	N/A	N/A	N/A	
(9) Year of Manufacturer		N/A	N/A	N/A	
(10) Manufacturer		N/A	N/A	N/A	
Remarks					
•					
					:

Main Transformer				
INOCHCH	I			
ıochchi)		
x 10 MVA				
Unit N	Number			
No. 2	No. 3	No. 4		
- 				
				
		1		

Main Circuit Braker				
	Ī	KILINOCHCHI		
		3		
Data		Identificati	on Number	
	D110	D180	D120	
	ORIG	HPG12/15E	N/A	
(kV)	145	170	N/A	
(A)	1250	1000	N/A	
(kA/MVA)	15.3/3500	11/2500	N/A	
(kA)	N/A	N/A	N/A	
(kA/S)	15.3/3	11/3	N/A	
(kV)	N/A	N/A	N/A	
(kg)	2790	3090	N/A	:
	1979	1969	'N/A	
	ALSTHOM	ALSTHOM	N/A	
	•		•	
			* Value	
				the state of the s
				art + 1
	(kV) (A) (kA/MVA) (kA) (kA/S) (kV)	Data D110 OR1G (kV) 145 (A) 1250 (kA/MVA) 15.3/3500 (kA/MVA) 15.3/3 (kA) N/A (kA/S) 15.3/3 (kV) N/A (kg) 2790 1979	N/A N/A	Name

Equipment Name		Main Transformer				
1. Name of Substation:		KIRIBATHKUMBURA				
(Address :	Ceylon Ele	etricity Board, K	Kilibathkumbura	1 2 1 2 1)	
2. Number of Units & Capac	city:		2 x 31.5 MVA		•	
3. Particulars:						
	Data		Unit Nu	mber		
Items	(MVA)	No. I	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)	10.87/31.5	10.91/31.5			
Primary - Secondary	y (%/MVA)					
Primary - Tertiary	y (%/MVA)					
Secondary - Tertiary	y (%/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	n (tons)	40.0	40.0			
(11) Year of Manufacturer	~-	1986	1986			
		EBG	EBG			

		Aain Circuit I	Sraker		
KIRIBATHKUMBURA					
		7			
ata		Identificat	ion Number		
	H10/H20/L15 /L25/L35/L45 /S10				
	ELF SF2-1 SF6 CB				
(kV)	145			:	
(A)	2000				
VMVA)	25/5700			~~~~	
(kA)	N/A		,		
kA/S)	25/(N/A)				
(kV)	650				
(kg)	N/A				
	1986		·	: 	
	BBC				
		. 1.	• .		
	:		e e e e e e e e e e e e e e e e e e e		
		·		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	(kV) (A) (kA) (kA) (kV)	KIR H10/H20/L15	Table Tabl	Identification Number	

Equipment Name		1	Main Transfor	mer	
1. Name of Substation:			KOLLUPITIYA		
(Address :	Kollupitiya, Colombo 3				
2. Number of Units & Capac	ity:		2 x 30 MVA		
3. Particulars:					
	Data Unit Number				
Items		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) Impedance	(%/MVA)	29.2/30	29.2/30		
Primary - Secondary	/ (%/MVA)				
Primary - Tertiary	/ (%/MVA)	<u> </u>		÷	
Secondary - Tertiary	/ (%/MVA)				
(6) Connection Symbol		YnynO	YnynO		to the second
(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		ВВС	ввс		
Remarks			<u> </u>		

Equipment Name		Main Circuit l	Braker	
1. Name of Substation:		KOLLUPITIY	Α	·
2. Number of Units:		4		
3. Particulars:				
Data		Identificat	ion Number	
Items	105/205 /110/210			
(1) Type	SF6 CB			
(2) Rated Voltage (kV)	132	· .		
(3) Rated Current (A)	1250			
(4) Rated Interrupting Current (kA/MV	(A) 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	ВВС			
Remarks			1	
	. :			
	: .			
			· :	

	Dutabas	JO 111101111011			
Equipment Name	:.	Main Transformer			
1. Name of Substation:	KOLONNAWA (1/2)				
(Address :	Ceylon Elect	Ceylon Electricity Board, Kolonnawa, Wellampitiya			
2. Number of Units & Cap	acity :	4 x 30 MVA, 2 x 15 MVA			
3. Particulars:					
	Data	Unit Number			

	Data			Unit Number					
Items		No. 1	No. 2	No. 3	No. 4 gnter connector)				
(1) Number of Phase		3 phase	3 phase	3 phase	3 phase				
(2) Capacity	(MVA)	30	30	30	30				
(3) Rated Voltage	(kV)	132/33	132/33	132/33	132/69.3/34.57				
(4) Basic Insulation Level	(kV)	N/A	N/A	N/A	N/A				
(5) Impedance	(%/MVA)	11.85/30	12.15/30	13/30					
Primary - Secondary	(%/MVA)				11.9/30				
Primary - Tertiary	(%/MVA)				10.85/30				
Secondary - Tertiary	(%/MVA)				6.15/30				
(6) Connection Symbol		Ydl	Ydl	Ydl	Dyl Yyo				
(7) Cooling System		ON/OB	ON/OB	ON/OB	ONAF				
(8) Number of Taps		23	23	23	N/A				
(9) Voltage Range		+10% -10%	+10% -10%	+10% -10%	N/A				
(10) Weight - Total	(tons)	83.0	83.0	51.8	83.2				
- Transportation	(tons)	N/A	N/A	N/A	N/A				
(11) Year of Manufacturer	·	1957	1957	1962	1957				
(12) Manufacturer		SAVOISSINNE FRANCE	SAVOISSINNE FRANCE	SAVOISSINNE FRANCE	SAVOISSINNE FRANCE				
Damodo									

Remarks

Equipment Name		Ν	1ain Transfor	mer	
1. Name of Substation:		KO	LONNAWA (2	/2)	· .
(Address :	Ceylon Elec	ctricity Board, K	olonnawa, Well	ampitiya	:)
2. Number of Units & Capaci	ty:	4 x 30	MVA, 2 x 15 N	MVA	
3. Particulars:					
	Data		Unit N	umber	
Items		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		:
(2) Capacity	(MVA)	15	15		
(3) Rated Voltage	(kV)	66/11	66/11		
(4) Basic Insulation Level	(kV)	N/A	N/A		
(5) Impedance	(%/MVA)	N/A	N/A		:
Primary - Secondary	(%/MVA)	N/A	N/A	٠	
Primary - Tertiary	(%/MVA)	N/A	N/A		
Secondary - Tertiary	(%/MVA)	N/A	N/A		
(6) Connection Symbol		N/A	N/A		
(7) Cooling System		N/A	N/A		
(8) Number of Taps		N/A	N/A	· .	
(9) Voltage Range		N/A	N/A		
(10) Weight - Total	(tons)	N/A	N/A		
- Transportation	(tons)	N/A	N/A		
(11) Year of Manufacturer		N/A	N/A		
(12) Manufacturer		N/A	N/A		
Remarks					

	Databa	ase iniorma	HOD		
Equipment Name		N	1ain Circuit B	raker	
1. Name of Substation:			KOLONNAWA		
2. Number of Units:			20		
3. Particulars :					
	Data		Identificati	on Number	
Items	Dani	D200/D210/D230/D236 /D240/D250/D250/D270 /D290/D300/D310/D320 /D330/D349	D280/D350	205/105/120	D420
(1) Type		HLR145/2501EI MINIMUM OIL TYPE	ELF145 nclrtv SF6 CB	N/A	N/A
(2) Rated Voltage	(kV)	145	145	N/A	N/A
(3) Rated Current	(A)	2500	2000	N/A	N/A
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200	20/4600	N/A	N/A
(5) Making Current	(kA)	79	N/A	N/A	N/A
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/3	20/(N/A)	N/A	N/A
(7) Basic Insulation Level	(kV)	650/275	650	N/A	N/A
(8) Total Weight	(kg)	2685	N/A	N/A	N/A
(9) Year of Manufacturer		1985	1983	N/A	N/A
(10) Manufacturer		ASEA SWEEDEN	BBC	N/A	N/A
Remarks					. :
en e					
	-:				

1

Equipment Name	Main Transformer				
1. Name of Substation:			KOTMALE		
(Address :	Ceylon Elec)			
2. Number of Units & Capac	ity :		3 x 90 MVA		· .
3. Particulars:					
	Data		Unit ?	Number	
Items		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase	3 phase	
(2) Capacity	(MVA)	90	90	90	
(3) Rated Voltage	(kV)	220/13.8	220/13.8	220/132/13.8	
(4) Basic Insulation Level	(kV)	N/A	N/A	N/A	
(5) Impedance	(%/MVA)	10/90	10/90		
Primary - Secondary	(%/MVA)			10/90	
Primary - Tertiary	(%/MVA)			13.7/90	
Secondary - Tertiary	(%/MVA)			10.2/90	
(6) Connection Symbol		Yndl	Yndl	YnaOd2	
(7) Cooling System		OFAF	OFAF	N/A	
(8) Number of Taps		9	9	N/A	
(9) Voltage Range		+15% -5%	+15% -5%	N/A	
(10) Weight - Total	(tons)	N/A	N/A	N/A	
- Transportation	(tons)	N/A	N/A	N/A	
(11) Year of Manufacturer	-	1982	1982	N/A	<u></u>
(12) Manufacturer		ASEA	ASEA	N/A	
Remarks			·		

Equipment Name		M	lain Circuit Br	aker	
1. Name of Substation:			KOTMALE		
2. Number of Units:			17		· ·
3. Particulars:					
Da	nta		Identificatio	n Number	
Items		110/120/130/210 /220/230/330/430 /530/320/420/520	L15/L25/T130		
(1) Type		OIL MINIMUM TYPE84-420 /250XE	N/A		
(2) Rated Voltage	(kV)	245	N/A		
(3) Rated Current	(A)	2500	N/A		
(4) Rated Interrupting Current (k/	√MVA)	40/15000	N/A		
(5) Making Current	(kA)	N/A	N/A	·	
(6) Rated Short Time Withstand Current/Duration	(kA/S)	50/1	N/A		,
(7) Basic Insulation Level	(kV)	N/A	N/A		
(8) Total Weight	(kg)	N/A	N/A		
(9) Year of Manufacturer		1982	N/A		
(10) Manufacturer	<u> </u>	ASEA	N/A		
Remarks			. :		
			e de la companya de l		
				e e e e e e e e e e e e e e e e e e e	
				: :	,

Equipment Name			Main Transfo	rmer	
1. Name of Substation:	KOTUGODA				
(Address :	Ceylon Electricity Board, Opatha, Kotugoda)				
2. Number of Units & Capaci	ity :		2 x 250 MVA	:	
3. Particulars :			-		
	Data		Unit N	umber	
Items		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	13.8/250		
Primary - Tertiary	(%/MVA)	89/250	89/250		
Secondary - Tertiary	(%/MVA)	153.3/250	153.3/250		
(6) Connection Symbol		YnaOdl	YnaOdl		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		11
(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					

Equipment Name		М	ain Circuit B	raker	
1. Name of Substation:	KOTUGODA				
2. Number of Units:			6		
3. Particulars:					
	Data		Identification	on Number	
Items		LD100/LD110 /LD120/LD130	180/280		
(1) Type		FLX 145 SF6 CB	HLR145 /2501E		
(2) Rated Voltage	(kV)	145	145		
(3) Rated Current	(A)	3000	2500		
(4) Rated Interrupting Curren	(kA/MVA)	40/9100	31.5/7200		
(5) Making Current	(kA)	100	79		
(6) Rated Short Time Withstand Current/Duration	on (kA/S)	40/3	50/3		
(7) Basic Insulation Level	(kV)	650	N/A		
(8) Total Weight	(kg)	3870	2610		
(9) Year of Manufacturer		1981	N/A		
(10) Manufacturer		N/A	ASEA		
Remarks					
		: '			
	.*				
		ata ing pangangan			

Equipment Name		Main Transformer					
1. Name of Substation:		KURUNEGALA					
(Address :	Ceylon Elec	Ceylon Electricity Board, Mallawapitiya, Kurunegala					
2. Number of Units & Capa	city:		2 x 16 MVA				
3. Particulars:					,		
	Data		Unit Nu	mber			
Items		No. 1	No. 2	No. 3	No. 4		
(1) Number of Phase		3 phase	3 phase				
(2) Capacity	(MVA)	16	16				
(3) Rated Voltage	(kV)	132/33	132/33				
(4) Basic Insulation Level	(kV)	550	550				
(5) Impedance	(%/MVA)	10.87/16	10.81/16				
Primary - Seconda	ry (%/MVA)						
Primary - Tertia	ry (%/MVA)						
Secondary - Tertia	гу (%/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)	32.0	32.0				
- Transportation	on (tons)	27.4	27.4				
(11) Year of Manufacturer		1986	1986				
(12) Manufacturer		EBG AUSTRIA	EBG AUSTRIA				

Equipment Name		Main Circuit Braker					
1. Name of Substation:		KURUNEGALA					
2. Number of Units:			5				
3. Particulars:							
	Data		Identification	on Number			
Items		\$10/L25/L15	H10/H20				
(1) Туре		ELF SF2-1	N/A				
(2) Rated Voltage	(kV)	145	145	-			
(3) Rated Current	(A)	2000	N/A				
(4) Rated Interrupting Current	(kA/MVA)	25/5700	N/A				
(5) Making Current	(kA)	N/A	N/A	<u> </u>			
(6) Rated Short Time Withstand Current/Duration	n (kA/S)	N/A	N/A				
(7) Basic Insulation Level	(kV)	650	N/A				
(8) Total Weight	(kg)	N/A	N/A				
(9) Year of Manufacturer		1986	N/A				
(10) Manufacturer		BBC	N/A				
Remarks		:		,			
			•				
	•						

Equipment Name		Main Transformer				
1. Name of Substation:			MATUGAMA	·	· · · · · · · · · · · · · · · · · · ·	
(Address :	Ceylon Ele	ectricity Board, N	Matugama)	
2. Number of Units & Capaci	ty:		2 x 31.5 MVA		·.	
3. Particulars :						
	Data		Unit N	umber		
Items		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)	\$50	550			
(5) Impedance	(%/MVA)	9.98/31.5	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%	+10.5% -15%	,		
(10) Weight - Total	(tons)	54.8	54.8			
- Transportation	(tons)	38.5	38.5			
(11) Year of Manufacturer		1993	1993			
(12) Manufacturer		HYUNDAI KOREA	HYUNDAI KOREA			
Remarks						



Equipment Name	Main Circuit Braker					
1. Name of Substation:	MATUGAMA					
2. Number of Units:			5			
3. Particulars:						
	Data		Identificat	ion Number		
Items		DH0/D150/D120 /D170/D180	······································			
(1) Type		FLX145 SF6 CB				
(2) Rated Voltage	(kV)	145			1	
(3) Rated Current	(A)	3000				
(4) Rated Interrupting Current	(kA/MVA)	40/9100				
(5) Making Current	(kA)	100				
(6) Rated Short Time Withstand Current/Duration	(kA/S)	40/3				
(7) Basic Insulation Level	(kV)	650				
(8) Total Weight	(kg)	1710			 	
(9) Year of Manufacturer	. —	1982				
(10) Manufacturer		ALSTHOM FRANCE				
Remarks						
				·		
	. •		•			

Equipment Name	Main Transformer					
1. Name of Substation:	NEW NUWARA ELIYA					
(Address : Ceylon	Ceylon Electricity Board, Magastota, Nuwara Eliya					
2. Number of Units & Capacity:		2 x 250 MVA				
3. Particulars:						
Data	Data Unit Number					
Items	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)	650	650				
(5) Impedance (%/MV	'A) 9.55/31.5	9.64/31.5				
Primary - Secondary (%/MV	'A)		<u> </u>			
Primary - Tertiary (%/MV	'A)					
Secondary - Tertiary (%/MV	/A)	:	· · · · · · · · · · · · · · · · · · ·			
(6) Connection Symbol	Yndl	Yndl				
(7) Cooling System	ONANONAF	ONAN/ONAF				
(8) Number of Taps	18	18				
(9) Voltage Range	+10.5% -15%	+10.5% -15%				
(10) Weight - Total (tons	65.0	65.0				
- Transportation (tons	3) 48.0	48.0				
(11) Year of Manufacturer	1994 -5	1994 -5				
(12) Manufacturer	NYUNDAI KOREA	NYUNDAI KOREA				
Remarks						
		•				

Equipment Name	Main Circuit Braker					
1. Name of Substation:	NEW NUWARA ELIYA					
2. Number of Units:			4		·	
3. Particulars:						
	Data		Identificat	ion Number		
Items		L15/L25 /H10/H20				
(1) Type		FXT 13				
(2) Rated Voltage	(kV)	170				
(3) Rated Current	(A)	1250				
(4) Rated Interrupting Current	(kA/MVA)	N/A				
(5) Making Current	(kA)	N/A				
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/3				
(7) Basic Insulation Level	(kV)	750				
(8) Total Weight	(kg)	2040	·			
(9) Year of Manufacturer		1995				
(10) Manufacturer		G.E.C ALSTHOM			<u></u>	
Remarks						
					:	

Equipment Name	Main Transformer						
1. Name of Substation:		PADUKKA					
(Address :	Ceylon Ele	Ceylon Electricity Board, Horana Road, Padukka)					
2. Number of Units & Capaci	ty:		4 x 3 MVA				
3. Particulars:							
	Data	Unit Number					
ltems		No. 1	No. 2	No. 3	No. 4		
(1) Number of Phase		3 phase	3 phase	3 phase	3 phase		
(2) Capacity	(MVA)	3	3	3 .	3		
(3) Rated Voltage	(kV)	66/33	66/33	66/33	66/33		
(4) Basic Insulation Level	(kV)	N/A	N/A	N/A	N/A		
(5) Impedance	(%/MVA)	10/(N/A)	10/(N/A)	10/(N/A)	10/(N/A)		
Primary - Secondary	(%/MVA)						
Primary - Tertiary	(%/MVA)						
Secondary - Tertiary	(%/MVA)						
(6) Connection Symbol		Yyo	Yyo	Yyo	Yyo		
(7) Cooling System		ONAN	ONAN	ONAN	ONAN		
(8) Number of Taps		17	17	17	17		
(9) Voltage Range		+1.25% -1.25%	+1.25% -1.25%	+1.25% -1.25%	+1.25% -1.25%		
(10) Weight - Total	(tons)	N/A	N/A	N/A	N/A		
- Transportation	(tons)	28.5	28.5	28.5	28.5		
(11) Year of Manufacturer		N/A	N/A	N/A	N/A		
(12) Manufacturer		METROPOLYTON VICKERS	METROPOLYTON VICKERS	METROPOLYTON VICKERS	METROPOLYTON VICKERS		
Remarks		<u> </u>					



Equipment Name		N	1ain Circuit E	Braker			
1. Name of Substation:	PADUKKA						
2. Number of Units:	3						
3. Particulars:							
	Data		Identificati	ion Number			
Items		D610/D620 /D690					
(1) Type		OIL CIRCUIT BREAKER JB429					
(2) Rated Voltage	(kV)	66					
(3) Rated Current	(A)	400					
(4) Rated Interrupting Current	(kA/MVA)	1.31/150					
(5) Making Current	(kA)	N/A					
(6) Rated Short Time Withstand Current/Duration	(kA/S)	N/A					
(7) Basic Insulation Level	(kV)	N/A					
(8) Total Weight	(kg)	N/A					
(9) Year of Manufacturer		1951					
(10) Manufacturer		THOMPSON- HOUSTON COLLTD					
Remarks							
·	k1		-				

Equipment Name	Main Transformer						
1. Name of Substation:		PANADURA					
(Address :	Ceylon Ele	Ceylon Electricity Board, Courts Road, Panadura)					
2. Number of Units & Capac	ity :		2 x 31.5 MVA				
3. Particulars:							
	Data	Unit Number					
Items		No. 1	No. 2	No. 3	No. 4		
(1) Number of Phase		3 phase	3 phase		: - 		
(2) Capacity	(MVA)	31.5	31.5		<u> </u>		
(3) Rated Voltage	(kV)	132/33	132/33				
(4) Basic Insulation Level	(kV)	N/A	N/A				
(5) Impedance	(%/MVA)	9.98/31.5	9.95/31.5				
Primary - Secondary	(%/MVA)						
Primary - Tertiary	(%/MVA)	· · · · · · · · · · · · · · · · · · ·					
Secondary - Tertiary	(%/MVA)						
(6) Connection Symbol		Yndl	Yndl		31		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF				
(8) Number of Taps		18	18				
(9) Voltage Range		+10.5% -15%	+10.5% -15%				
(10) Weight - Total	(tons)	54.8	54.8				
- Transportation	(tons)	38.5	38.5				
(11) Year of Manufacturer		1993	1994				
(12) Manufacturer		HYUNDAI KOREA	HYUNDAI KOREA				
Remarks							
				•			



Equipment Name	Main Circuit Braker						
1. Name of Substation:	PANADURA						
2. Number of Units:	4						
3. Particulars:	·			,			
	Data		Identifica	tion Nu	mber		
Items		L15/L25 /H110/H20					
(1) Type		FA1-5 SF6 CB					
(2) Rated Voltage	(kV)	145					
(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)	(N/A)/3					
(7) Basic Insulation Level	(kV)	N/A				×	
(8) Total Weight	(kg)	2000					
(9) Year of Manufacturer		1993					
(10) Manufacturer		NISSIN ELECT. CO. LTD. JAPAN					
Remarks							
					;		
	·				÷		:
and the state of t						· .	ı
· ·					4		

Equipment Name	Main Transformer							
1. Name of Substation:	PANNIPITIYA							
(Address: Ce	Ceylon Electricity Board, Highlevel Road, Pannipitiya							
2. Number of Units & Capacity	Number of Units & Capacity: 1 x 31.5 MVA, 2 x 30 MVA							
3. Particulars:								
D	Data Unit Number							
Items		No. 1	No. 2	No. 3	No. 4			
(1) Number of Phase		3 phase	3 phase	3 phase				
(2) Capacity ((MVA)	30	30	31.5				
(3) Rated Voltage	(kV)	132/33	132/33	132/33	er talk dar i Verte i i i i i i i i i i i i i i i i i i i			
(4) Basic Insulation Level	(kV)	N/A	N/A	N/A				
(5) Impedance (9	%/MVA)	11.15/(N/A)	11.15/(N/A)	11.15/(N/A)				
Primary - Secondary (9	%/MVA)							
Primary - Tertiary (9	⁄г/MVA)				· ·			
Secondary - Teitiary (9	%/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		N/A	N/A	+1.25% -1.25%				
(10) Weight - Total	(tons)	44.2	44.2	65.5	**************************************			
- Transportation	(tons)	34.3	34.3	57.5				
(11) Year of Manufacturer		1982	1982	1994				
(12) Manufacturer		BBC	ввс	ABB				
Remarks	<u></u>							

Equipment Name		M	Iain Circuit I	Braker	-
1. Name of Substation:			PANNIPITIYA	4	-
2. Number of Units:			3		
3. Particulars:					
Ε	Data		Identificat	ion Number	
Items		N/A			
(1) Туре		ELF SF2-1			
(2) Rated Voltage	(kV)	132			
(3) Rated Current	(A)	1600			
(4) Rated Interrupting Current (k	kA/MVA)	31.57			
(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		1982, 1994			
(10) Manufacturer		ABB, INDIA			
Remarks	- Males die Cider Co		-		
·			•		
	_ **				

Equipment Name	Main Transformer				
1. Name of Substation:			PUTTALAM		
(Address :	Ceylon Ele	ectricity Board, I	Puttalam	<u> </u>)
2. Number of Units & Capac	ity :		2 x 31.5 MVA		1.00
3. Particulars:					
	Data		Unit N	lumber	
Items		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)	9.95/31.5	9.99/31.5		
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%	+10.5% -15%		
(10) Weight - Total	(tons)	54.8	54.8		4, 377
- Transportation	(tons)	38.5	38.5		
(11) Year of Manufacturer		1993	1993		
(12) Manufacturer		HYUNDAI KOREA	HYUNDAI KOREA		
Remarks					
		. *			



Equipment Name	Main Circuit Braker					
1. Name of Substation:	PUTTALAM					
2. Number of Units:	4					
3. Particulars:						
Data	Identification Number					
Items	L15/L20 /H10/H20					
(1) Туре	FA1-S GAS CB					
(2) Rated Voltage (kV)	145					
(3) Rated Current (A)	N/A					
(4) Rated Interrupting Current (kA/MV/	A) 25/750					
(5) Making Current (kA)	63					
(6) Rated Short Time Withstand Current/Duration (kA/S)	13.1/3					
(7) Basic Insulation Level (kV)	650					
(8) Total Weight (kg)	2000					
(9) Year of Manufacturer	1993					
(10) Manufacturer	NISSAN CO JAPAN					
Remarks						
		g in the second				

Equipment Name	Main Transformer							
1. Name of Substation:	RATMALANA							
(Address: Ceylon Electricity Board, NO. 688, Galle Road, Ratmalana)								
2. Number of Units & Capacity: 2 x 30 MVA, 1 x 31.5 MVA								
3. Particulars:								
	Data	Unit Number						
Items		No. 1	No. 2	No. 3	No. 4			
(1) Number of Phase		3 phase	3 phase	3 phase				
(2) Capacity	(MVA)	30	30	31.5	. 11			
(3) Rated Voltage	(kV)	132/33	132/33	132/33				
(4) Basic Insulation Level	(kV)	N/A	550	550				
(5) Impedance	(%/MVA)	N/A	N/A	10.2/31.5				
Primary - Secondary	(%/MVA)	N/A	N/A					
Primary - Tertiary	(%/MVA)	N/A	N/A		:			
Secondary - Tertiary	(%/MVA)	N/A	N/A					
(6) Connection Symbol		Yndl	Yndl	Yndl				
(7) Cooling System		N/A	ONAN/ONAF	ONAN/ONAF	: '			
(8) Number of Taps		N/A	21	21				
(9) Voltage Range		N/A	+10% -15.5%	+10% -15.5%				
(10) Weight - Total	(tons)	N/A	44.2	65.5				
- Transportation	(tons)	N/A	34.3	57.5				
(11) Year of Manufacturer		N/A	1973	1994				
(12) Manufacturer		N/A	ABB	ABB				
Remarks								

Equipment Name	Main Circuit Braker						
1. Name of Substation:		RATMALANA					
2. Number of Units:			5				
3. Particulars:							
	Data		Identificati	on Number			
Items		ALL 132kV BREAKERS L15/L25/10/20/30					
(1) Туре		ELF SF2-1 SF6 CB					
(2) Rated Voltage	(kV)	145					
(3) Rated Current	(A)	1600					
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200					
(5) Making Current	(kA)	N/A					
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/3					
(7) Basic Insulation Level	(kV)	650					
(8) Total Weight	(kg)	1750					
(9) Year of Manufacturer		1994		·			
(10) Manufacturer		ABB					
Remarks					·		
:							
:							
the state of the s		e e e e e e e e e e e e e e e e e e e		t - +			
	·				· .		

Equipment Name	Main Transformer				
1. Name of Substation:	SAPUGASKANDA				
(Address :	Ceylon Electricity Board, Palliwila, Sapugaskanda)				
2. Number of Units & Capac	ity:		3 x 30 MVA		
3. Particulars:					
	Data		Unit Nu	mber	
Items		No. I	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		3 phase
(2) Capacity	(MVA)	30	30		30
(3) Rated Voltage	(kV)	132/33	132/33		132/33
(4) Basic Insulation Level	(kV)	550	550		550
(5) Impedance	(%/MVA)	9.9/30	9.9/30		9.9/30
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		+10% -15%	+10% -15%		+10% -15%
(10) Weight - Total	(tons)	44.2	44.2		44.2
- Transportation	(tons)	34.3	34.3		34.3
(11) Year of Manufacturer		1981	1981		1981
(12) Manufacturer		CEM	СЕМ		CEM
Remarks	-				
			·		

Equipment Name	Main Circuit Braker					
1. Name of Substation:	SAPUGASKANDA					
2. Number of Units:	7					
3. Particulars:						

	Data	Identification Number					
Items	D	D100/D120	D160/D180 /D190	D170	D130		
(1) Type		HPGE12/15E SMALL OIL VOLUME CB	ORIG SMALL OIL VOLUME CB	ORIG SMALL OIL VOLUME CB	SF6 CB		
(2) Rated Voltage	(kV)	170	132	132	132		
(3) Rated Current	(A)	1000	1250	1250	2000		
(4) Rated Interrupting Current	(kA/MVA)	11/2500	11/2500	15.3/3500	25/5700		
(5) Making Current	(kA)	27.5	27.5	38	N/A		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	11/3	11/3	15.3/3	25/(N/A)		
(7) Basic Insulation Level	(kV)	550	550	550	550		
(8) Total Weight	(kg)	3090	2788	2788	N/A		
(9) Year of Manufacturer		1968	1972	1975	1981		
(10) Manufacturer		ALSTHOM	ALSTHOM	ALSTHOM	BBC		

Remarks

Equipment Name	Main Transformer					
1. Name of Substation:		THULHIRIYA				
(Address :	Ceylon Ele	ectricity Board, I	Thulhiriya)	
2. Number of Units & Capac	ity :		2 x 31.5 MVA			
3. Particulars:						
	Data		Unit N	umber		
Items		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)	10/31.5	10.3/31.5	·		
Primary - Secondary	(%/MVA)					
Primary - Tertiary	(%/MVA)					
Secondary - Tertiary	(%/MVA)					
(6) Connection Symbol	X 1.	Yndi	Yndl			
(7) Cooling System		ONAN/ONAF	ONAN/ONAF			
(8) Number of Taps		16	16			
(9) Voltage Range		+10% -15%	+10% -15%			
(10) Weight - Total	(tons)	44.0	44.0			
- Transportation	(tons)	38.0	38.0			
(11) Year of Manufacturer		1989	1989			
(12) Manufacturer		ALSTHOM- FRANCE	ALSTHOM- FRANCE			
Remarks			·			
•						

	Dalaba	se monta	autori				
Equipment Name		Main Circuit Braker					
1. Name of Substation:		THULHIRIYA					
2. Number of Units:		2					
3. Particulars:							
	Data		Identificati	ion Number			
Items		D110	D120				
(1) Type		HPGE12/ISE SMALL OIL VOLUME CB	HPGE12/15E SMALL OIL VOLUME CB				
(2) Rated Voltage	(kV)	170	170				
(3) Rated Current	(A)	1000	1000				
(4) Rated Interrupting Curren	t (kA/MVA)	11/2500	11/2500				
(5) Making Current	(kA)	27.5	27.5				
(6) Rated Short Time Withstand Current/Durati	on (kA/S)	11/1	11/3				
(7) Basic Insulation Level	(kV)	550	550				
(8) Total Weight	(kg)	3090	3090				
(9) Year of Manufacturer		1968	1968				
(10) Manufacturer	·	N/A	N/A				
Remarks							
					1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		
				. •			

Equipment Name	Main Transformer					
1. Name of Substation:	TRINCOMALEE					
(Address : Cey	Ceylon Electricity Board, Love Lane, Trincomalee)					
2. Number of Units & Capacity	•		2 x 10 MVA		÷	
3. Particulars:						
Dat	a		Unit N	lumber		
Items		No. 1	No. 2	No. 3	No. 4	
(1) Number of Phase		3 phase	3 phase			
(2) Capacity (M	IVA)	10	10			
(3) Rated Voltage (1	kV)	132/33	132/33			
(4) Basic Insulation Level (1	kV)	N/A	N/A			
(5) Impedance (%/	MVA)	10/(N/A)	10/(N/A)			
Primary - Secondary (%/)	MVA)	,				
Primary - Tertiary (%/)	MVA)			:		
Secondary - Tertiary (%/	MVA)					
(6) Connection Symbol		Yndl	Yndl		: .	
(7) Cooling System		ONAN	ONAN			
(8) Number of Taps		21	21			
(9) Voltage Range		+10% -15%	+10% -15%			
10) Weight - Total (1	ons)	N/A	N/A			
- Transportation (e	ons)	N/A	N/A			
11) Year of Manufacturer		1978	1978			
12) Manufacturer		ALSTHOM	ALSTHOM		 	
Remarks				1	·	

Equipment Name	Main Circuit Braker				
1. Name of Substation:	TRINCOMALEE				
2. Number of Units:			2		
3. Particulars:			-,,-		·
	Data		Identifica	ation Number	
Items		D110/D120			
(1) Type		ORIG			
(2) Rated Voltage	(kV)	132			
(3) Rated Current	(A)	1250			
(4) Rated Interrupting Current	(kA/MVA)	15.3/3500			
(5) Making Current	(kA)	N/A			
(6) Rated Short Time Withstand Current/Duration	(kA/S)	N/A			
(7) Basic Insulation Level	(kV)	N/A			
(8) Total Weight	(kg)	N/A			
(9) Year of Manufacturer		1975			
(10) Manufacturer		DELLE ALSTHOM			
Remarks				·	
v.				. :	
a 1					5.

Equipment Name	Main Transformer					
1. Name of Substation:			UKUWELA			
(Address:	Ceylon Ele	ctricity Board, U	Ukuwela)	
2. Number of Units & Capaci	ity:		2 x 15 MVA			
3. Particulars :						
	Data		-			
Items		No. 1	No. 2	No. 3	No. 4	
(1) Number of Phase		3 phase	3 phase			
(2) Capacity	(MVA)	15	15			
(3) Rated Voltage	(kV)	132/33	132/33			
(4) Basic Insulation Level	(kV)	N/A	N/A	:		
(5) Impedance	(%/MVA)	10.05/15	9.92/15			
Primary - Secondary	(%/MVA)					
Primary - Tertiary	(%/MVA)			: : : : : : : : : : : : : : : : : : :		
Secondary - Tertiary	(%/MVA)					
(6) Connection Symbol		Yndl	Yndl	.:		
(7) Cooling System		ONAF	ONAF			
(8) Number of Taps		10	10			
(9) Voltage Range		+5% -15%	+5% -15%			
(10) Weight - Total	(tons)	N/A	N/A			
- Transportation	(tons)	N/A	N/A			
(11) Year of Manufacturer		1968	1968			
(12) Manufacturer		СЕМ	СЕМ			
Remarks	· · · · · · · · · · · · · · · · · · ·	The second secon				





	Datava	ise initima			
Equipment Name		N	Aain Circuit B	raker	
1. Name of Substation:	:	U	JKUWELA (1/2	2)	· .
2. Number of Units:			9		
3. Particulars:					
	Data	:	Identificati	ion Number	
Iterns	Duin	D120	D110	152-1/152-2 /152-3/152-4 /152/-5	D52
(1) Type		ELF nelrtv SF6 CB	OR1G CB	ORIG CB	140 PO OIL CB
(2) Rated Voltage	(kV)	132	132	132	145
(3) Rated Current	(A)	2000	1250	1250	600
(4) Rated Interrupting Current	(kA/MVA)	25/5700	15.3/3500	11/2500	12.5/2500
(5) Making Current	(kA)	N/A	38	28	31.5
(6) Rated Short Time Withstand Current/Duration	(kA/S)	N/A	15.3/1	11/1	(N/A)/3 CYCLES
(7) Basic Insulation Level	(kV)	550	550	550	N/A
(8) Total Weight	(kg)	N/A	2788	2788	4600
(9) Year of Manufacturer		1981	1975	1973	1977
(10) Manufacturer		ввс	N/A	N/A	TAKAOKA ELECT CO. TOKYO
Remarks					
					į
		•			
·					

Equipment Name	Main Circuit Braker				
1. Name of Substation:		1	UKUWELA (2/	2) : - : - : :	
2. Number of Units:			9		
3. Particulars:					
	Data		Identificati	on Number	
Items		152 - 8			
(1) Туре		N/A			
(2) Rated Voltage	(kV)	N/A		. (1	
(3) Rated Current	(A)	N/A			
(4) Rated Interrupting Current	(kA/MVA)	N/A			
(5) Making Current	(kA)	N/A			·
(6) Rated Short Time Withstand Current/Duration	(kA/S)	N/A			
(7) Basic Insulation Level	(kV)	N/A			
(8) Total Weight	(kg)	N/A			
(9) Year of Manufacturer		N/A			·
(10) Manufacturer		N/A			
Remarks					
			<u> </u>		<u></u> J

Equipment Name	Main Transformer					
1. Name of Substation:		0	LD LAXAPA	NA		
(Address:	Ceylon Elect	ricity Board, L	axapana)	
2. Number of Units & Capaci	ity:		1 x 13.33 MV	4		
3. Particulars:						
	Data		Unit l	Number		
Items		No. 1	No. 2	No. 3	No. 4	
(1) Number of Phase				3 phase		
(2) Capacity	(MVA)			13.33		
(3) Rated Voltage	(kV)			(132/√3)/11		
(4) Basic Insulation Level	(kV)			550	_	
(5) Impedance	(%/MVA)			12.5/13.33		
Primary - Secondary	(%/MVA)					
Primary - Tertiary	(%/MVA)					
Secondary - Tertiary	(%/MVA)					
(6) Connection Symbol				N/A		
(7) Cooling System				ONAN/ONAF		
(8) Number of Taps				13		
(9) Voltage Range				+10% -10%		
(10) Weight - Total	(tons)			9.9		
- Transportation	(tons)			8.55		
(11) Year of Manufacturer				1989		
(12) Manufacturer				ALSTHOM		
Remarks			4		- · · - - · - · · · · · · · · · · · · · · · · 	
		٠				

Equipment Name		Λ	Main Circuit E	Braker	· · · · · · · · · · · · · · · · · · ·
1. Name of Substation:		(OLD LAXAPAN	!A 	
2. Number of Units:			12		
3. Particulars:					
	Data		Identificati	on Number	
Items		CB1/CB2	ALL OTHER BREAKERS		
(1) Type		FX11	HLR145 /2501E1	. :.	
(2) Rated Voltage	(kV)	N/A	145		
(3) Rated Current	(A)	3150	2500		
(4) Rated Interrupting Current	(kA/MVA)	31.5/(N/A)	31.5/7200		
(5) Making Current	(kA)	80	79		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/3	31.5/3		
(7) Basic Insulation Level	(kV)	650	650/275		
(8) Total Weight	(kg)	1300	2350		
(9) Year of Manufacturer		1989	1985		
(10) Manufacturer		ALSTHOM	ASEA		
Remarks		:			
				• 10	
		:			

Equipment Name		1	Main Transforn	ner	
1. Name of Substation:		N	EW LAXAPANA		
(Address :	Ceylon Ele	etricity Board, I	axapana (New))
2. Number of Units & Capa	city :		2 x 72 MVA		
3. Particulars:					
	Data		Unit Nu	mber	
Items		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	72	12		
(3) Rated Voltage	(kV)	(132/√3)/12.5	(132/√3)/12.5		
(4) Basic Insulation Level	(kV)	550	550		
(5) Impedance	(%/MVA)	8.55/15	8.55/15		
Primary - Secondar	y (%/MVA)				
Primary - Tertiar	y (%/MVA)				
Secondary - Tertiar	y (%/MVA)				·
(6) Connection Symbol		N/A	N/A		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps		5	5		
(9) Voltage Range		+10%	+10%		
(10) Weight - Total	(tons)	40.86	40.86		
- Transportatio	n (tons)	N/A	N/A		
(11) Year of Manufacturer		1972	1972		
(12) Manufacturer		ALSTHOM SAVOISRENNE	ALSTHOM SAVOISRENNE		
Remarks		l	1		

Equipment Name		N	lain Circuit B	raker	
1. Name of Substation:		N	EW LAXAPAN	IA.	
2. Number of Units:			9		
3. Particulars:					
	Data		Identificati	on Number	
Items		32-6	AUL OTHER BREAKERS 32-10 #32-9/32-8/32-7 #32-5/32-3		
(1) Type		FLX145	HLR145 /2501E1		
(2) Rated Voltage	(kV)	145	145		
(3) Rated Current	(A)	3000	2500		
(4) Rated Interrupting Current	(kA/MVA)	40/9100	31.5/7200		
(5) Making Current	(kA)	100	79		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	40/3	31.5/3		
(7) Basic Insulation Level	(kV)	650	650/275		
(8) Total Weight	(kg)	3870	2350		
(9) Year of Manufacturer		1981	1985		∵.
(10) Manufacturer		ALSTHOM	ASEA		: '
Remarks					
			e e e e e e e e e e e e e e e e e e e		
					÷
	÷				· · · · · · · · · · · · · · · · · · ·
					Carlotte Comment

Equipment Name		1	Main Transforn	ier	
1. Name of Substation:		SA	MANALAWEWA	A	
(Address :	Samanalaw	rewa Power Stat	ion, Handagiriya)
2. Number of Units & Capa	city:		2 x 71 MVA		
3. Particulars:					
	Data		Unit Nu	mber	
Items		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	71	71		
(3) Rated Voltage	(kV)	138/10.5	138/10.5		
(4) Basic Insulation Level	(kV)	650	650		
(5) Impedance	(%/MVA)	10.89/(N/A)	10.89/(N/A)		
Primary - Secondar	y (%/MVA)	· 			
Primary - Tertiar	y (%/MVA)				
Secondary - Tertiar	y (%/MVA)				
(6) Connection Symbol		Yndll	Yndll		
(7) Cooling System		ONAN/ONAF	ONAN/ONAF		
(8) Number of Taps		5 5	5		
(9) Voltage Range		+7.5% -2.5%	+7.5% -2.5%		
(10) Weight - Total	(tons)	N/A	N/A		
- Transportation	n (tons)	N/A	N/A		
(11) Year of Manufacturer		N/A	N/A		
(12) Manufacturer		GES ALSTHOM	GES ALSTHOM		
Remarks	· · · · · · · · · · · · · · · · · · ·		·		

Equipment Name		М	ain Circuit B	raker	
1. Name of Substation:		SA	MANALAWEW	/A	
2. Number of Units:			7		
3. Particulars:					
	Data		Identification	on Number	
Items		L15/L25/L35/L45 /M15/M20/W10			
(1) Туре		FGIAb			
(2) Rated Voltage	(kV)	145			· · · · · · · · · · · · · · · · · · ·
(3) Rated Current	(A)	2500			
(4) Rated Interrupting Current	(kA/MVA)	31.5/7200			
(5) Making Current	(kA)	79	:		
(6) Rated Short Time Withstand Current/Duration	(kA/S)	31.5/1			
(7) Basic Insulation Level	(kV)	650		<u> </u>	
(8) Total Weight	(kg)	N/A			
(9) Year of Manufacturer		1985			:
(10) Manufacturer		GES ALSTHOM			
Remarks					
				dis	

Equipment Name		ì	Main Transforn	ner	
1. Name of Substation:	Range attacked and a second	WI	MALASURENDR	RA	·
(Address :	Ceylon Ele	etricity Board, N	Vorton Bridge)
2. Number of Units & Capac	ity :		2 x 31.5 MVA	· - · · · · · · · · · · · · · · · · · ·	
3. Particulars:					
	Data		Unit Nu	mber	
Items		No. 1	No. 2	No. 3	No. 4
(1) Number of Phase		3 phase	3 phase		
(2) Capacity	(MVA)	31.5	31.5		<u> </u>
(3) Rated Voltage	(kV)	132/33	132/33		
(4) Basic Insulation Level	(kV)	170	170		
(5) Impedance	(%/MVA)	10.3/31.5	N/A		
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		16	16		
(9) Voltage Range		+10% -15%	+10% -15%		
(10) Weight - Total	(tons)	44.0	44.0		
- Transportation	(tons)	38.0	38.0		
(11) Year of Manufacturer		1989	1989		
(12) Manufacturer		ALSTHOM	ALSTHOM		
Remarks		<u> </u>	<u> </u>		

	Equipment Name		Ŋ	Main Circuit B	raker	
l,	Name of Substation:		WI	MALASURENE	DRA	
2.	Number of Units:			8		
3.	Particulars:					
		Data		ldentificati	on Number	
	Items		170	H10/L15/L20 /L25/S10	M20/M10	
(1)	Туре		EP36-25C	FX11	ELF145cc1rt	
(2)	Rated Voltage	(kV)	N/A	132	132	
(3)	Rated Current	(A)	N/A	3150	2000	
(4)	Rated Interrupting Current	(kA/MVA)	25/(N/A)	31.5/7200	25/5700	
(5)	Making Current	(kA)	62.5	80	N/A	
(6)	Rated Short Time Withstand Current/Duration	(kA/S)	25/3	31.5/3	N/A	
(7)	Basic Insulation Level	(kV)	170	650	550	
(8)	Total Weight	(kg)	N/A	1300	N/A	
(9)	Year of Manufacturer		1989	1989	1981	
(10)	Manufacturer		ALSTHOM	ALSTHOM	ввс	
	Remarks					
		·				
						1
			•		** .	
					··	

A11.3 Database Information for Communication Facilities

Table A11.3 - 1 Base Data for Existing PLC System
Table A11.3 - 2 Data for Existing PLC System of d.c. Power

220 kV Transmission Lines

Table A11.3 - 1 Base Data for Existing PLC System (1/5)

10 10 10 10 10 10 10 10		Kanamiyanat Ling		L.	Power Line (Power Line Camer (PLC)	1111				Link trap	CVIX C 10 Company device	aw.
17.00 17.0	Stath		TANK C	NI)		With No. Year	3 8 5 YE	0 1 5 AB	5	Consent bachachage p	There's the		
1300 2000	integral,	-	4.01			0.0		1	1				
STEPL STANGONSTR 20	lyagam.		2 acris	i l	17-172/456-464	8.		1	1				7
1 2008 2008 2008 2	Sollegeria				268-272/272-376	Ε.		1	1				
No. Procession 2 20 1 1 1 1 1 1 1 1 1	Rivagam		_	ETIE	272-XACA72-272	2, 1	1	1	1				T-
Seve (FTC) Ship Surface Seve FTC Ship Surface Seve FTC Ship Surface Seve FTC Ship Surface Seve	Biyagam.	a	70.5	ETIC	CH TOI/roj-w				-				
TTCL 13-12-12-12-12-12-12-12-12-12-12-12-12-12-	Контак		2 cets 11		103-112/96-201			-	-				1-
No. CTC2 CALLOW DATE 1	Biyagam	ī,	i		821-124/12H2H	0. 1		1	-				-
Sp. lw(1)&14 2 2 20	Kulmale		_	i I	124-12/01/20-124	07		ŀ	-				Т-
Total Control Contro	Kotomak		9.		12x-134/136-144				-	-			
First interfector 1 391	Victoria		2 octs		36-144/12K-136	92 3		-	-				Τ-
1772 164-1701/2-116 1 20	Kotamak				112-116/116-120			,	-				
10.4 CTC2 10.0 IACA CTC2 10.0 IACA CTC2 IACA	Victoria		_	LTIZI				1	-				1
	Victoria		16.4	ETT22 1	160-168/168-176	02 2		-	-				
STI21 1444-1487 1-20 1	Rundens	7a1a	133	ETT22	168-176/160-168	2 : 20 :			-				<u> </u>
FITTE 134-1529/164-168 1 2	Victoria		-	ETIZI	144-14X148-152	- 20	-	ı	ļ				
3.1 ETI22 382,869,386,2 29 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 2 1	Randenig	rala		ETTELL	4N-152/144 148	1 : 30		ı	1				
1 C	Kandenig	'ala		ET122	352-360V360L368	2 30			-				
	Rantemb		13	1.1122	140_36W352.360	2 20		-	-				1
			1										
							-						1
			1			- ;	-						
											-		
										-			1
			i										
									-		-		T-
					-	- 1						-	<u> </u>
					***								1
				-			, :						
										-			7
			1	-			,				-		
			_					-	-			-	1
			1										
													T
			J	,									
													· •



Table A11.3-1 Base Data for Existing PLC System (2/5)

1

132 kV Transmission Lines (1/3)

Vidiated	Transmission Line			Power Lake Cartier (PLC)	rtPLC)	131			L			Line trap	r.	SAIME	ONA, THE	-	
Lite No.	Station People station	(Aura)	Type TX/RX (4.19)	Ē	Wast No. Now	Dypotherine (PLC) (Fix	Operation (Fo Year	Char Operation	Š	Operation	Citan Operation Current Inductines, Blacking	PRO BRACKING	Bhakhee Ohne Ole You	Mener	Energy Tegs (A16)	n) Kemarky	,
	Biyagama	\ <u>\sigma_1</u>	ŝ.	(1		1 1			 -	1	1						
11.1	Ганирицуа	2 ccts	2 ccts 177122 316-324/308-316	r.	30			1			1600 0.2	2711-502	rı	JULIAN	₽AF	<u>. </u>	
VA SE	មាកម្មការ	<u>::</u>	ASC-SECONDO COURT SECTION	۲,	30			-	-			' '		_			
11.2	Kelaminsa	2 (01)	HUTTED CON-CONCLAINED ON		50			: -	-				r: }-				
VA SCI	Kelemawa	:1 : 1	FCC-91CATC-80C CCITCH	•	20			1	1 : 2				د ا ح	9159	6530pF MCDW 7-500		
11.4	Kelandissa	2 ccts	ALC: XOCACCALC CORTS	e 1	30			-	-		ļ		cı ×			r	
SE KV	Kolonnawa	Ž	042-2120212-421 22H3		20				C1		 - 			_			
1.5	Pannipitiya	2008	ET122 232-240/224-232	. 7	20			-	-					JOHN'S	-100	F	
132 kV	Kohnnawa	71 	17122 276-284/284-292		20			1	- 2		ļ		· ·	_			
IL.A.	Sapagaskanda (T)	2 ccts	ET122 284-292/276-284	C-4	20			_	1 2							<u>,</u>	
132 KV	Kolennams - Sapapachinda (T)	7	FTT22 2-92-3000/3000-309K	e a	20			-	1 2		ļ			5575pF	pl- MCDW 116-410		
1.7	Kengeda	2 octs	errea	300,300/292,300 2	20			-	1 2							т	
13CKV	Kotupeda	0.12	ETTB	204-208/200-204 1 15				1	-	<u> </u>							
11.9	Balawatta (T)	.2 ccts	ETB 200-204/204-20X	204-20K 1 (5	(\$	NSD41			-		 					т-	
	Kotugoda		ETB 216-220/2006-212	-	.\$1			-		ı							
	Balawatta (T)		ETTB 208-213/216-220	1	1.5			-	1	1						т	
132 kV	Kestupeda - Bolawada - Chiluw	0301	ET122 308-316/316-324	Ç 4	20			-	-			-			*		
11.44.11	Puttalam	2 ccts	ET122 316-304/308-316	۲1	20	NSD41		-	-		ļ			_		By TNADP	
132 8.V	Bolawata (T)		ETL41 260-264236-260	-	40			1	-		-						
1,19-11	Puttalam	2.00	2 WW ETLAI 256-260/260-264	160-264	40)			-	-							By TSADP	
132 KV	Katagosta - Batawata (T)	3 3	0XL-572/XXL-0XP	172-180 2													
11.9-12	Chillaw (C)	2000	472-480/480-488	1Kh.4KR 2			. ,			-						By POTP	
132 KV	Kolonnawa	₹. 22	17.4 ET122 352-36075	352-360/360-368 2	20		-	1 1 1	-	l			Y : 2 :				
1 4	ILILA Orowala (T)	2 00 ts	2 cccs ETT22 360-368/352-360 2 20	352,360 2	20	-		1	I	ı	ļ					_	
132 KV	Thulhinya (1)	ş X	28,0 ET122 424-432/4	424-432/432-440) - 2	20				1 1					_			
1	II. ta-17 Polpitiya	2 00%	ET122	432-4407424-432 2 20	30				1 1				-		*		
> 25.5	Kolomawa	<u>,</u>	ET122 136-144/128-136 2 20	128-136 2	50				-		400 0.2	Y-005-A11	¥ 2.	5575	5575pF MCDW 116-500		
2	IL. IK-19 Avissawella (T)	2 0018	2 ccrs E7122 128-136/136-144	2	20						800 0.2	116-148		_	MCD40 70-500 By TSADP	By TSADP	
132 KV	Aviscawella (T)	_1 3	ETT. 124-128/120-124		20			,			800 0.2	116-14X			MCD40 70-500	70-500 By TSADP	
Ş.	it. 19-20 Polpitiya	SISS	2 cc 18 187121 1205124/124-128	-	39				-	,	400 0.2	116-200		}	MCD40 70-500		
133.67	Kolomawa	ž I	E1133	7	20	-		1 2	1		400 0.2	002-911 2			MCD40 70-500		
8.	IL, 15-70 Polpinya	2 octs	E	N	20	-			-		400 0.2	114-200			MCD80 70-500		
•	Kohmawa			- · I	20]		1	1							
	Pripriva		1	404-408/412-416-1	0.7	*		1 : 1	1	I							
1	Kolonnawa	• i	- 1	160-164/156-160 1 15	15		-								;		
٦	Polpitiya		ET8 156-16071	156-160/160-164 1 15	15												

Table A11.3 - 1 Base Data for Existing PLC System (3/5)

2 1996 647 2 1996 647 2 1996 647 2 1996 647 2 1996 647	Cachey	Sur Louvantania I		_	C VILTE STEEN STATES (SMC)	· · · · · · · · · · · · · · · · · · ·		•					-				,	111 Contibine charge		
	N. Sec.	Bullials observed sensicis.	District	<u>.</u>						Operation		4	HARE CHIRCO	d hubschery p	in Long		- 4		<u> </u>	
	1	W. others and	3		1			t		2	Υ.	2	$^{+}$	(Pag	4 ct (7) I flav		Cipricing	j. J.	_	Kamark
Exemple Control Cont	 À	Automassa		-	×71×77	-					-	ı				,				
Microphysics Micr	6; 1	Рирпу	137	ž	148-1527144-1	-	5				-	1	_						Ţ-	
		Kalamawa	97t.	ETHE	176-184/184-1	r.	OL.					**								
	\neg		2 cers	15TH 102	183-1927176-1	٠,	•				-	-	-						Γ	
Particular 1,000 ETTS SUNDAY 1,000 ETTS		Pannapeliya	ş		. 1	*1	0,				-	-	NX	0.2	××	FI	CACKON		-	
Paneloging 1.00 FILES SCANOROPASIN 2.00 NEGLE 1.1 1.2 2.00 NEGLE 1.1 1.2 2.00 NEGLE 1.1 2.00 NEGLE 2.00 NEGLE		Katmalima	2 cets		-		Ç				 - -								Τ	
Application A color	2	Pannipitiya	0,71	ETIT		e i	Q	NSD	_		 - -						-		-	
Panding Pand	22-21		2000			c:	¢	NSD	-		 - -	2	Š	0.3	09(2)	L	-		1	4
Managema 2 cost FTATA 20c. STATA STATE 2 control 3 control		Panadura (T)	×	14. 14. 14. 14. 14. 14. 14. 14. 14. 14.	2002-2002-00E	3	=						ŝ	5	500		╽.		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ģ
Paperiory A First 2-bas27245-504 2 5 5 5 5 5 5 5 5 5			2 ecets	E P	200,204/204-2	ı	0		İ		1	-	KCK	5	(A)	.	+		2 2 2	Ì
Habitation 2 cots FTIZ2 256-24/254-272 2 30 NNID31 1 1 2 NNID 1 2 256-24/254 2 2 2 2 2 2 2 2 2		Pannipitrya	7.	£T122	264-272/256-2	"	0	NSD	-		-	-	XXX	ä	4.11.0		Service		+	
Pulphuyou P. ETTS 15.000 Pulphuyou 1.000 Pulphuyou 2.000 ETTS 20.000 ETT	7. 62.		2 ccts			٦,	9 .	ZCISN		-	-	-	XOX	0.2	24		-		T	
Example Cock ETP (Ak-16M/16N-172 1 15 15 15 15 15 15 15		Peripitya	ž,	£TB	168-173/164-1	-	S :												-	
Polytitya			2 ccls	ET8	I SALINALIAN	-	\$		ļ 			-							7	
Lavelenus 51 ETT22 248-254/204-208 1 1 1 2 Winabisurradus 2 cut ETT2 248-254/204-208 2 20 1 1 1 2 Winabisurradus 2 cut ETT2 248-254/204-208 2 20 1 1 1 1 2 Old Lavapana 2 cut ETT2 248-254/204-208 1 15 1 1 2 Cold Lavapana 2 cut ETT2 248-24/204-208 1 15 1 1 1 2 Cold Lavapana 2 cut ETT2 248-24/204-208 1 1 1 1 2 Carapana 1 cut ETT2 248-24/204-208 2 20 1 1 1 2 Ednova 2 cut ETT2 248-24/204-208 2 20 1 1 1 2 Kormale 1 cut ETT2 248-24/204-208 2 20 1 <td< td=""><td></td><td>Polpitiya</td><td></td><td>ETTS</td><td>2007/802-502</td><td> -</td><td>0</td><td>-</td><td></td><td></td><td></td><td> </td><td>-</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>		Polpitiya		ETTS	2007/802-502	-	0	-					-						-	
Laxarpunu 5-1 ETT22 24x-2540-241x 2-20 1 1 1 2 Wimalisuuredra 2 cets ETT22 24x-2540-24x 2-20 1 2 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 1 1 1 2		Сахираль		ETT:	2002/06/2004-2	-	a				-		-						T	
Winsilssuredra 2 ccts ETT22 248-254/240-248 2 20 Old Laxapana 0.6 ETB 195-194/194-270 1 15 — 1 1 1 1 Clazapana 2 ccts ETB 195-194/194-270 1 15 — 1 1 1 1 1 2 Clazapana 2 ccts ETD 195-204/192-198 1 15 — 1 1 1 2 1 1 1 2 1 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 20 1 1 1 2 1 2 1 2 1 2 2 20 1 1 1 2 2 20 1 1 1 2 2 20 1 1 1 2 2 20 1 1 1 2 2 20		Гахирайз		ETITS		1 X	•	_	_		1	-	L						-	
Old Lasapana OA ETB 192-194/194-200 1 1 2 3 4			2006	ETTES		48 2 3				-	-	1 2	L					-	T	
Caraphana 2 cets ETB 196-203V192-196 1 15 15 15 15 15 15 15	~	Old Laxapana	90		192-196/196-2	00:1:1														
Canoprana 1000 GTT22 316-3324/2016-316 2.20 1 1 1 2 2 2 2 2 2 2	- 1	(New) Laxapana	2 00 ts	£	196-2007192-1	1 %				Ė	i	-	_						Τ	
Canyon 1 ccr ETT22 34x-316A1x-324 2 20 1 1 2 Rotings 29.5 ETT22 75x0000000 2 20 1 1 1 2 Kormale 1-ccr ETT22 72x00000000 2 20 1 1 1 2 Kormale 1-ccr ETT22 2xxx30xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	_	Laxapana	90	CT122	316-324/2018-3	16 2 2	0			<u> </u>	-	2 -	-	-					-	
Rothings 29-5 FFT122 NO.NWO-28/0 2 20 Kormalç 1 cct FFT122 72.50000-88 2 20 1 1 2 Konnalç 1 cct FFT122 220-000-20-80 1 1 1 2 Konnalç 1 cct FFT122 230-000-20-80 1 1 1 2 Kinhalkumbra 1 cct FFT101 300-300-30-30 1 1 1 2 Anuradhapun 1 cct FFT101 300-300-30-30 1	1					24 2 20	0			-	-						ļ		Ţ	
Kormale I cer FF122 72.5NUMBARS 2 20 1 1 2 Kornbalkumbara 1 cer EF122 20x-20x/25x-29x 2 1 1 1 2 Kinhalikumbara 1 cer EF1101 20x-312/25x-20x 2 1 1 1 2 Kinhalikumbara 1 cer EF1101 30x-312/25x-20x 1 1 1 1 1 2 Kinhalikumbara 1 cer EF1101 30x-312/35x-20x 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1	_	Polpitiya				2 2				-	 - -		-						-	
Komple 25.5 FT122 20xx-2xx/2xxxxxxx 1 1 2 Kinhalikumbara 1 cct ET122 2xxxxxxxxxxx 2xxxxxxxxxxx 1 1 1 2 Kinhalikumbara 1 cct ET101 3xxxxxxxxxxxx 1 1 1 2 Kinhalikumbara 1 cct ET1101 3xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	_			ELIZ		2 34	0			-	-	-	_				ļ		-T-	
Kinhalikumbara I GRI (ET) 226-304288-296 2.20 1 1 1 2 Kinhalikumbara 1 43.9 ET101 308-312/304-498 1 60 1 1 1 1 Antiradhapina 1 ct ET1101 304-308/204-312 1 60 1 1 1 1 Kinhalikumbara ET1101 304-308/204-324 1 60 1 1 1 1 1 1 Rolpitiva ET1101 304-308/204-324 2 20 1 1 1 2 1 1 Polpitiva 1 ct 2 224-256/246-232 2 20 1 1 1 2 Habarana 48.9 ETB 204-256/246-232 1 1 1 1 2 Habarana ETB 205-266/246-232 1 1 1 1 1 2 Habarana ETB 205-266/246-232 1 1 1 1 1 1 Abharana ETB 205-266/246-232 1 1 1 1 1 1 Abharana ETB 205-266/246-232 1 1 1 1 1 1 Abharana ETB 205-266/246-232 1 1 1 1 1 1 Abhar				1111	288-296/296-3	C-1	0	 		-		1 2							-	
Kinhubkumbara IAAV ETTI01 308.312508.4.50g 1 (60) 1 1 1 — Annradiapura 1 cct ETTI01 304.30x708.312 100 1 1 —	1		155	ET122	296-304/28X-2						 - -	ı	-		-				T	
Annizadiapura 1 cct ETI101 304-30x/20x,312 i 100 1 i — 1 i —	-	Kirihalhkumhera	143.9	ETT101	308.312/304.3	01 1 80	. 0				-	!							-	
Kiirhaubkombura ETTIOI 324-324/324-324 100 1 2 1 1 1 2 1 1 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 4	T		1 cct	ET1104	304-308/308-3	12 - 4 - 10	Q			-		1	_		-	-			Т	
Anuradhapura FTI (0) 320, 324/24.50; 1 (0) 1 (1) 1 (1) 2 Polipitiva 59,3 ETT2 224,232/25.260 2.0 1 (1) 1 (2) Ukowela 1 (xt) 25,25,250/24.25; 2.0 1 (1) 1 (2) Habrana 4Kly ETT2 25,25/20/24.25; 1 (1) 1 (1) 1 (2) Anuradhapura (xt) ETB 268,272/20/24.25; 1 (5) 1 (1) 1 (1) 1 (1) Anuradhapura (xt) ETB 208,272/20/24.25; 1 (2) 1 (2) 1 (2) 1 (2) Anuradhapura (xt) ETB 208,272/20/24.21; 1 (2) 1 (2) 1 (2) 1 (2)	_	Kirihathkumhura	.	E7101	324-328/320-3	10	•			 	۱.								 	
Polytivea 1907 244,252,252,260,2 20 1 1 1 2 Ukowela 1901 ETIZ2 252,260,744,252 2 20 1 1 1 2 Habarana 48,9 ETB 244,289,264,272 1 15 1 1 1 1 1 Anuradhapura 1901 ETB 246,272,274,288 1 15 1 1 1 1 1 1 Habarana ETB 236,242,284,288 1 15 1 1 1 1 1 1 1 Anuradhapura ETB 236,242,284,281 1 15 1 1 1 1 1 1 1	Ì	Anuradhapuna		ETHOL	320-324024-3		C#		ļ			-							7	٠
Uktowela 1 oct ETT22 252-260/244-252 2 20 Habbarine 48,9 ETB 204-280/264-272 1 1		Polpitiva		CT122	244-252/252-3	60 2 20				_	1 1 1	61			-				-	
Habarana 48,9 GTB 2x4-28x24xx121 1 1 — — Anuradhapura 1 cri £7B 2x6-272/2x4-2xx 1 1 — — Habarana 2fB 2x6-242/2x3-2x3 1 15 — — 1 1 Anuradhapura 6TB 2x8-22x3-2x3-1 15 — — 1 1					252-260/244-2	č	t.				-	C+							T	
Anuradhapura 1 ccr ETB 26x242028x1115 1 1 Hahazana ETB 23x24028x212 115 — — — Anuradhapura ETB 20x223x248 115 — — —		Haharana			284-288/268-2	-					-							-		
Habarana	7	Anuradhapura	<u> </u>	1 13 13	268-272/284-2	XX					-	-							1	
ETB 2004-21/2/23/6-240 1 15		Haharana		ETB	236-24V21K-2	1 1 1				-									-	
	Ť	Anuradhapura		8	208-212/236-2	-					1	-							-1-	

Table A11.3 - 1 Base Data for Existing PLC System (4/5)

132 kV Transmission Lines (3/3)

Valuev	Transmission Lans			Power Ling Carree (PLC)	(2) (4) Dani		Ē.	ST.19	NVd	PAN	Concession		CVT/CV HF Conjense des que	
Line Na	Statem fram/to states	eken i	Type T.V.		CI War No	New York	Type/Scheme PLC Ofty Year	Ofter 19.C. Year	City PLC Year	(A) mills	Breching City North	Capter Harte's	Tyles 4kles	Remarks
25	132 kV (Ikaweki - Hakarana (C) bepena	ı	1812 ETTHE TRANSPACE	24/224-232	(6)							Н		
\$ T	II. Marie Americal American	3	EFF102 224-232/216-224	32/216-224	2 (0)									
2100	Ukuwela	O'HE	1.18	210-11/11/118	1 15			-						
4	Himpippina	186	TETE BLE	PPT-USTATESTE	15.			-	1 1					
1	Ukuwela		3725F 8133	452-456/448-452	1 15									
	Bowalenna	1	ETB	451-551/551-811	SI 1				1 1	•	-			
132 KV	_	9.77	E113	176-184/184-192	2 20				1 2					
11,37	Кыптерия	2 ects ETI22		181-1927/201-184	2 30			1 1 1	1 2 :	,				
133.64	Anandhapara	103.3		PTT-VEE/251-TT	51 - 2			1 1 1 1	1 2					
¥.1	Trincomulee	S S S	ET8A	336-344/344-352	S1 . 2			1 1	1 2					
132 KV	Laxapana	4.3.9	ETIC	300-308/292-300	'''			1 1	1 . 2					
<u>ا</u>	Ralanginta	COUR ETTE		XXX TXX ARX TAC	2 20			1 1 1						
-X-K-	_	19.0 ETT22	,	348-356/340-348	· ' '			1 2	1 1					
7	Sumanalawewa	13.00 Z	COURT STITE SANA	340-348/348-356	2 20		-	1 2 .	-					
3.55		38.0	CTT22 412-420M404-412	SITT TOTAL	2 23 24			- 2	 				-	
7	Embilipitya	COURT ETTES		404-412/412-420	02 2			1 2 :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-				
132 KV	Balangyda	4	5-916 CTT3 S.16-3	316-324/308-316	2 30			2 1	1 1 1 1 1					
11.43	Deniyaya (T)	2 ccts ET122		308-316/316-324	20			1 2	1 1 1					
132 KV	Balangoda - Deniyaya (T) -	87.3	ETHOS 324-332/332-340	332/332-340	2 100	-		-	1 2					
7	Galle	1200	ET1102 : 332-340/324-332	340324-332	2 100			1 1 1	1 2		1			
132 KV	Runtembe	37.0	ET122 176-1	261-PX1/PX1-921	2 20			1		;	-			
11.45	Budulla	3	1 on ET122 184-192/176-184 2	192/176-184	2 : 20 ·	,						_	-	
132 KV	Badulla	77.9	ET122 +192-2002/00/20X+ 20TT3	2007-002/005	30		1 IVOSN	1 1 1	1 2				-	
15.46	inginiyagala	1 001	ET122 200-2	208/192-200	2 30		NSD41	1 1 1	1 2		-			
132 kV	Anuradhagarta	128,X	128,8 FF1102 200-208/192-200 2 100	20W192-20X	2 : 100		1 1	1 1	1 2					
11,47	Kilinochchi (T)	2 18755	2 Nes ET1102 192-200200-208	2007-00-2005	2 : 100.			1	1 2	-				
132 KV	Kilimwhchi (T)	67,2	ETB	244-248/252-256	1. 15			1 1 1	1					
7	Chunnakam	2 wts	ETB	252-256/244-248	1 : 15 :			1	1					
	Kilimochchi (T)	•	ETB 236-2	236-240/22K-232	1 15				1 1 1					
	Chunnakam		ETB 22%2	228-232/236-240	1 + 15 :		1 1		1 1		-			
									-					
		-									-		-	
		1							-					
			-						-					
		f -							-					

Note: Two.(2) sets of blocking frequency of 232-420 [kHz] are supplied for Nowra Eliya (132 kV) by TSADP.

Table A11.3 - 1 Base Data for Existing PLC System (5/5)

66 - 33 kV Transmission Lings

							-												
/25 Place	Transmission Line			Power Line Carner (PLC)	Similar (PLA)		Telep	Hon	_	81781				Line isan		CVTATE	The Canadana d		Ī
Line No.	Station from the statum	Pressure Arms	<u>بر</u> آثر	TNRN BUD	CH Wall	Noted Operations	Tendstone of Com		Оретиния	Ī,		Operation	CIT in Operation Current Induction Rischorg	History)	Nanata dimensia		
3 5	Ž,			168-172/172-176			'	1	+-			¥2.	#(iii)	land of the land	- 1	Усле Сапителия	ž F	Remarks	_
11.1	Pattokka (T)	Teens Little		172-176/168-172	<u>~</u>											-			
k	Kedemnawa	,	ı	1 961-201/002-961	1		l				-								٦
	Paduka (T)		Ŧ.	1 (302-961/361-26)	1 1		'		1		- -	1							
23.65	Padekka (T)		FTI21	156-16W466-161	g. -											+			7
2	Avissawella (T)	2 ccts (67/2)	1 1	140-16-1/456-160	<u>-</u>							+		.		-			
<u>}</u>	Avissawella (T)	'	ETICS	20X-216/216-234	5.50				-	-									Т
11.3	Laxupana	2 ects	ITT 22	216-224/208-216	8		ŀ		-			\dagger				-			
86 kV	Laxapana			144-152/152-160	200		' '		-		ŀ	\dagger	- -						1
11.4	Norms Bridge (T)	2.00%	ETI22	152-160/144-152	1				-		, - 	+		- .					
%¥ %			ETITE	260-26K/26K-276	92		.' 		-	-		+			- -	-			
25	Nuwara Eliya (T)	2 cels	22173	26K-27K/2KK-2KK	e,				-	-	-	-		.	. .	-			
₹	Nuwara Eliya (T)		ET122	160-168/168-176	92 C		'		-		-	+	- -	-	. .				- _T
1.6		2 cets	ET122	ET122 168-176/160-168	5 5 7 7				-		-	1			. .				
						-									.				-
														-		-			
33 KV	Balangoda		ETB	200-204/204-208	\ -		<u>.</u>]	-	-	1	 							٦
11.1	Uda Watawe	2 ccts	Ē	204-208/200-204 1 15	- 18		'		-		-		. .		-	1			
1	Balangoda	ì.	E	172-176/176-180 1 15	-		•			1					-	1			٦
	Uda Watawe	1	ı	176-180/172-176 1 15	1		1		+	Ι.	- -	1							
			•				-[3	1	-	1					-		
									+										Γ
							.		-				+	-					
		-1-										_				_			Ţ
								-								-			
		-1.			-				-	1	-		-						Т
		· . L								-									Τ
I					-	-			_			F		 		-			_
							-				-			ļ		-			Т
				-										-	-	-			
			-		-				ļ	 	-			-		 - -			-[
1						-		-	-	-	-	1	-		- -				
						-						-	_		. .				7
									_				-	-					
					-		,						-	.		-			1
1							l		-	-			-			_			
																_	-		





Table A11.3 - 2 Data for Existing PLC System of d.c. power (1/3)

0

8

8

			Battery		Batt	Battery charger	Distribu	Distribution board/circuits	cuite	Lond data	Required caracity
No. Nan	Name of station	Type	Capacity	Operation	Турс	Capacity year	Used Rating circuits [A/AF]	Rating Equipped Rating IA/AFT circuits IA/AFT	Rating [A/AF]	Existing Additional	Battery Charger
1 Kotugoda	da	Pb/Ac	200 Ah		Systronic	60A					
2 Biyagama	กฉ	N-Cd N-Cd	200 Ah		Systronic	60A			on land out o		
3 Kotmale	63	Pb/Ac	700 Ah	-	PS DC						
4 Victoria		Ni/Cd	105 + 200 Ah		Systronic	40+80 A					er kullen i
5 Randenigla	gla	P5/Ac			PS DC						
6 Rantembe	þç	Pb/Ac			PS DC						
7 Sapugas	7 Sapugaskanda DPS	Ni/Cd	170 Ah		Systronic	60A		es.l., t-s.d			- (red)) d=
8 Bolawatta	c)	Pb/Ac	120 Ah		Gutor	40A					
9 Puttalam	ı.	Pb/Ac	120 Ah		Gutor	40A					
10 Chillaw: PDTP	: PDTP				Nife				Spannings (1)-s		
11 Kolonnawa	awa	Pb/Ac	120 Ah		EAO	40 A	····-				
12 Sapugaskanda	skanda	Pb/Ac	120 Ah		Gutor	40 A		···bennani			
13 Pannipitiya	tiya	Pb/Ac	200 Ah		Systronic	40 A					
14 Ratamalana	lana	Pb/Ac	90 Ah		Electrona	15 A		- a best of below			
15 Matugama	ma	Pb/Ac	120 Ah		Orelikon	40 A		I yanga sha'			-eduja takka
16 Fort (Future)	ıture)						-4		-4164-14-1		
17 Kollpiti	17 Kollpitiya (Future)										-40 H (1) - 1 - 2
18 Kelanitissa	issa	Pb/Ac	210 Ah		Gutor	40A					
19 Padukka (66 kV)	a (66 kV)			·	Gutor						*eq)-*ed
20 Avissav	20 Avissawella: TSADP	Ni/Cd	100 Ah	9661	Apollon- Diamond	25 A 1996	3 2P	9	10 A 2P	12 (4 A x 3)	Minimum 100 Ah
Note											

Note
I PS/Ac and Ni/Cd denotes Lead-Acid and Nickel-Cadmium respectively.
Z Time of power stopping at station is required for battery capacity calculation.
TSADP: 8 hours is guarantee time at 80 % charged.

Table A11.3 - 2 Data for Existing PLC System of d.c. power (2/3)

		Battery			Battery charger		Distribut	ion board	/circuits	Load data	Remired canacity	pacity
No. Name of station	Type	Capacity	Operation year	Ty	Capacity C	eration vear	Used Rating Equipped Rating circuits [A/AF]	ing Equip	ped Ranng nits 1A/AF		Battery	Charger
21 Oruwala		Aberre		EAO								
22 Polipitiya	Pb/Ac	400 Ah x 2		Statron	105 A							
23 Thulihiriya	Pb/Ac	120 Ah		OLTEN	40 A			-***>>				
24 Ukuwela	Pb/Ac	400 Ah		Gutor	40 A		6.8 2 2 1 1 6 6 7 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
25 Bowatenna	Pb/Ac	200 Ah		Orelikon	40 A							
26 Anuradhapura	Pb/Ac	300 Ah		Statron	85 A							
27 Kiribathkumbra	Ni/Cd	170 Ah	-	Systronic	60 A				- Is I brogged -			
28 Kurunegala	Ni/Cd	170 Ah		Systronic	60 A							
29 Trincomalee	Pb/Ac	90 Ah		Orelikon	40 A							
30 Kikinochchi	Pb/Ac	120 Ah		Gutor	40 A							
31 Chunnakam	Pb/Ac	120 Ah	,	Gutor	40 A			ctory b ban t c				
32 Habarana	Ni/Cd	200 Ah		Systronic	60 A					-300(1)(0)		
33 New Laxapana	Pb/Ac	400 Ah x 2		Statron	105 A				.1000-			
34 Wimalasurenda	Pb/Ac	120 Ah		Gutor	40 A					MILLIONE	# 11 ()	
35 Canyon	Pb/Ac	200 Ah		Orelikon	40 A					-to-pacifie		<u> </u>
36 Balangoda		200 Ah		Systronic	40 A			#1139M(133-	·			
37 Deniyaya	Pb/Ac	120 Ah		Gutor	40 A				**********			
38 Galle	Pb/Ac	120 Ah		Gutor	40 A				- Millbeak]
39 Samanalawewa	Pb/Ac	1400 Ah		Yuasa								
40 Embilipitiya	Pb/Ac	170 Ah	·	Gutor	40 A							
Note												

I Pb/Ac and Ni/Cd denotes Lead-Acid and Nickel-Cadmium respectively.

2 Time of power stopping at station is required for battery capacity calculation.
TSADP: 8 hours is guarantee time at 80 % charged.

Table A11.3 - 2 Data for Existing PLC System of d.c. power (3/3)

			Battery		1	cry char	Battery charger	Distri	Jution	ward/circuit	x	Load d	ata	Required capacity	capacity
S.	Name of station	Type	Capacity year	Operation year		Capacity	Operation year	Used circuits	Rating [A/AF]	Used Raing Equipped Raing circuits [A/AF]	ating EX.	Existing Additional [A]	ditional [시]	Battery	Charger
4	41 Uda Walawe	·			EAO							·····			
42	42 Norton Bridge (66 kV)		-		Gutor							- 2.48 87 1 7 - 11		**1********	
43	43 Nuwala Eliya : TSADP	Ni/Cd	100 Ah	1996	Apollon- Diamond	25 A	1996	4	10 A 2P	6 2P	10 A 12 (2P (x 3)	12(4A x3)	C	Minimum 100 Ah	
4	44 Inginiyagala				Gutor	,441, ,4-41				***************************************					
55	45 Badulla	Ni/Cd			Gutor	60 A			>+#**						
3	46 Panadura: TSADP	Ni/Cd	100 Ah	9661	Apolion- Diamond	25 A	1996	3	10 A 2P	6 2P	10 A 12 (2P x 3)	12 (4 A x 3)	<u> </u>	Minimum 100 Ah	
47	47 Matara: TGDP			on discount		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						**************************************			
												••••••			
<u> </u>								- L					ļ		
<u> </u>											-		-		
					,					<u> </u>	_			Inta I Is	
												,			
												ļ			
L.,											<u> </u>				
] Bertana (-	[
											-			,	
														···········	
Note	ę,														

I Pb/Ac and Ni/Cd denotes Lead-Acid and Nickel-Cadmium respectively.

2 Time of power stopping at station is required for battery capacity calculation.
TSADP: 8 hours is guarantee time at 80 % charged.

CHAPTER A13

ENVIRONMENTAL PROBLEMS ASSOCIATED WITH CONSTRUCTION OF TRANSMISSION SYSTEM FACILITIES

CHAPTER A13



A13.1 Calculation of Electromagnetic Induction Voltage

(Reference to Clause 13.3.4 Electomagnetic Induction)

In case that zero-phase current flows in a transmission line, induction voltage is induced on a communication line due to the mutual induction phenomena. The mutual inductance of an earth-return circuit is calculated with the Carson-Pollaczek formula. The formula is very complex due to current through the earth. An application formula to calculate induction voltage on a communication line, which is used in Japan, is given below:

$$V = \lambda \left(\sum (lp.Zmp) + \sum (lc.Zmc) \right) x I$$

where:

1

λ: Coefficient; Reduction factor due to effects of shielding wires, etc.

lp: Projected route length of communication line on the transission line (km)

1: Current causing electromagnetic induction (A)

le: Projected route length of communication line of crossing section on the transmission line (km)

Zmp: Average mutual impedance (ohnt/km) in parallel or diagonal running section, which is obtained from Fig.A13.1-2 showing relation between mutual impedance and equivalent spacing dm'.

dm',dc': Equivalent spacing against standard ground conductivity ($\sigma_o = 0.01$ S/m), in case of ground conductivity of σ (S/m), dm' is as follows:

 $dm' = /100 \sigma x dm$ and $dc' = /100 \sigma x dc$

dm: Spacing of parallel section, or average spacing of diagonal section (m)

de: Average spacing of crossing section (m)

dm = (d1 + d2)/2 or dc = (dc1 + dc2)/2

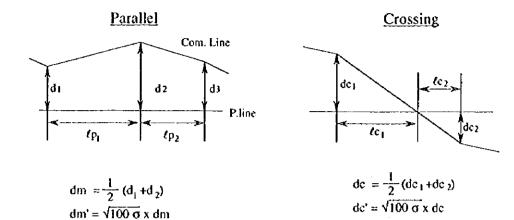
dc1, dc2: Spacing at the both ends of diagonal section (m)

Regarding mutual location of transmission line and communication line Fig. A13.1-1 is referred to. Prior to calculation the mutual location of the transmission line and communication line shall be confirmed from maps and supplemental survey.

In Japan, the standard earth resistivity is 100 ohm.cm, and the above mutual impedance values are calculated assuming that the above resistivity is uniform in the ground up to deep location.

If the earth resistivity is a known figure, such figure shall be used. In case that the earth resistivity is not known measured value shall be used.

In calculation, sections with separation of exceeding 5000 m are not taken into account.



σ: Earth conductivity (s/m)

Fig. A13.1 - 1 Mutual Relation of Power and Communication Lines

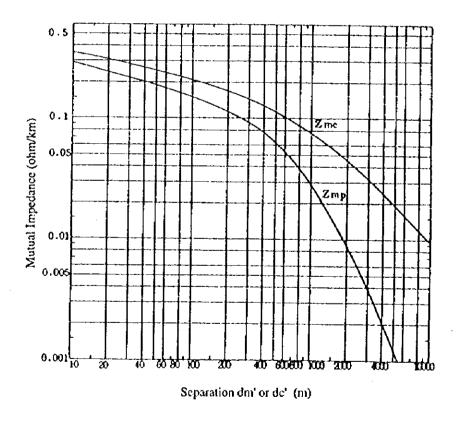


Fig. A13.1 - 2 Mutual Impedance of Power and Communication Lines

CEYLON ELECTRICITY	JAPAN INTERNATIONAL COOPERATION AGENCY	MASTER PLAN STUDY FOR DEVELOPMENT OF THE TRANSMISSION SYSTEM	TITLE
BOARD	NIPPON KOEI CO., LTD. Consulting Engineer	OF THE CEYLON ELECTRICITY BOARD IN THE DEMOCRATIC SOCIALIST REPUBRIC OF SRI LANKA	

