

SUBSTATION	POWER TRANSFORMER CAPACITY (MVA)	VOLTAGE (kV)	NO. OF SWITCHGEAR RECLOSER		NO. OF CONTROL ROOM												NO. OF STAFF AT CONTROL STATION		NO. OF FEEDER	NO. OF RECLOSER ON DISTRIBUTION LINE		
					EXISTING TYPE		UNDER CONST. TYPE				FUTURE PLAN TYPE											
C	B	1	2	3	4	1	2	3	4	1	2	3	4	PRESENT	FUTURE PLAN	HYDRAULIC	ELECTRONIC					
1. AO PHAI	1 x 40	22														3	2					
2. BANG BUNG	1 x 25	22	V 6		1										3		5	3				
3. BANG LAMU G	2 x 25	22	V 9		1										4		8	2				
4. CHON BURI	1 x 40 2 x 25	22	V10		1										4		8	2				
5. CHACHOENGSAO	2 x 25	22	V 7		1										4		7	4				
6. CHANTHABURI	2 x 25	22	M 7		1										4		7	6				
7. KLAENG	1 x 25	22	V 5							1						3	5	1				
8. RAYONG 1	2 x 25	22	M 4	1					1							4	5	2				
9. RAYONG 2	1 x 25	22		2													2					
10. RAYONG 3	2 x 40	22	B 4						1						4		4					
11. SRIRACHA	2 x 12.5	22	M 4						1							3	5	1				
12.																						
13.																						
14.																						
TOTAL	11 19 510		56	3	2	5	1	0	0	2	1	0	0	0	1	0	0	23	13	58	21	3

SUBSTATION	POWER TRANSFORMER CAPACITY (MVA)	VOLTAGE (KV)	NO. OF SWITCHGEAR			NO. OF CONTROL ROOM												NO. OF STAFF AT CONTROL STATION			NO. OF FEEDER	NO. OF RECLOSER ON DISTRIBUTION LINE	
						EXISTING				UNDER CONST.				FUTURE PLAN									
			C	B	RECLOSER	TYPE				TYPE				TYPE				PRESENT	FUTURE PLAN				
						1	2	3	4	1	2	3	4	1	2	3	4						
1. BAN PONG 1	2 x 25	22	V 7			1										4		7	2				
2. BAN PONG 2	2 x 25	22	B 8			1										4		9		1			
3. KANCHANA BURI	1 x 25	22	V 7						1								3	7	6				
4. KAPHAENG SAE	1 x 25	22			2								1				3	5	2				
5. NAKHON CHAISRI	1 x 40 2 x 25	22	B 7			1										4		6	1				
6. SAM PHRAN 1	2 x 40	22	B 8			1										4		8	1				
7. SAMUT SAKHON 1	2 x 25	22	M 1 B 9			1										4		10					
8. SAMUT SAKHON 2	1 x 25	22			3									1			3	6	2				
9. SUPHAN BURI	2 x 25	22	V 4	1		1										4		5	4				
10. THAMUANG	1 x 25	22	B 4			1										3		4					
11.																							
12.																							
13.																							
14.																							
TOTAL	10 17 470		55	1	5	7	0	0	0	1	0	0	0	0	2	0	0	27	9	67	18	1	

SUBSTATION	POWER TRANSFORMER CAPACITY (MVA)	VOLTAGE (kV)	NO. OF SWITCHGEAR		NO. OF CONTROL ROOM												NO. OF STAFF AT CONTROL STATION		NO. OF FEEDER	NO. OF RECLOSER ON DISTRIBUTION LINE	
					EXISTING		UNDER CONST.				FUTURE PLAN										
			C	B	TYPE		TYPE				TYPE				PRESENT	FUTURE PLAN	HYDRAULIC	ELECTRONIC			
					1	2	3	4	1	2	3	4	1	2					3	4	
1. CHA AM	2 x 25	22	B 1	V 5												4		5	2		
2. CHUM PHON	1 x 25	22	V 5													3		5	7		
3. PHETCHABURI	2 x 12.5	22	B 4													3		4	4		
4. PRACHOAPKHIRI KHAN	1 x 25	22	V 4													3		3	2		
5. PRAN BURI	1 x 25	22	M 4													3		4	3		
6. RANONG	1 x 25	22	M 2	B 1										1			3	3	2		
7. RATCHABURI 1	2 x 12.5	22	M 3	1														4	1		
8. RATCHABURI 2	1 x 25	22													1		3	2	1		
9. SAMUT SONGKHAM	1 x 25	22	M 4													3		4	4		
10.																					
11.																					
12.																					
13.																					
14.																					
TOTAL	9 12 250		33	1	2	6	0	0	0	0	0	0	0	2	0	0	19	6	34	26	0

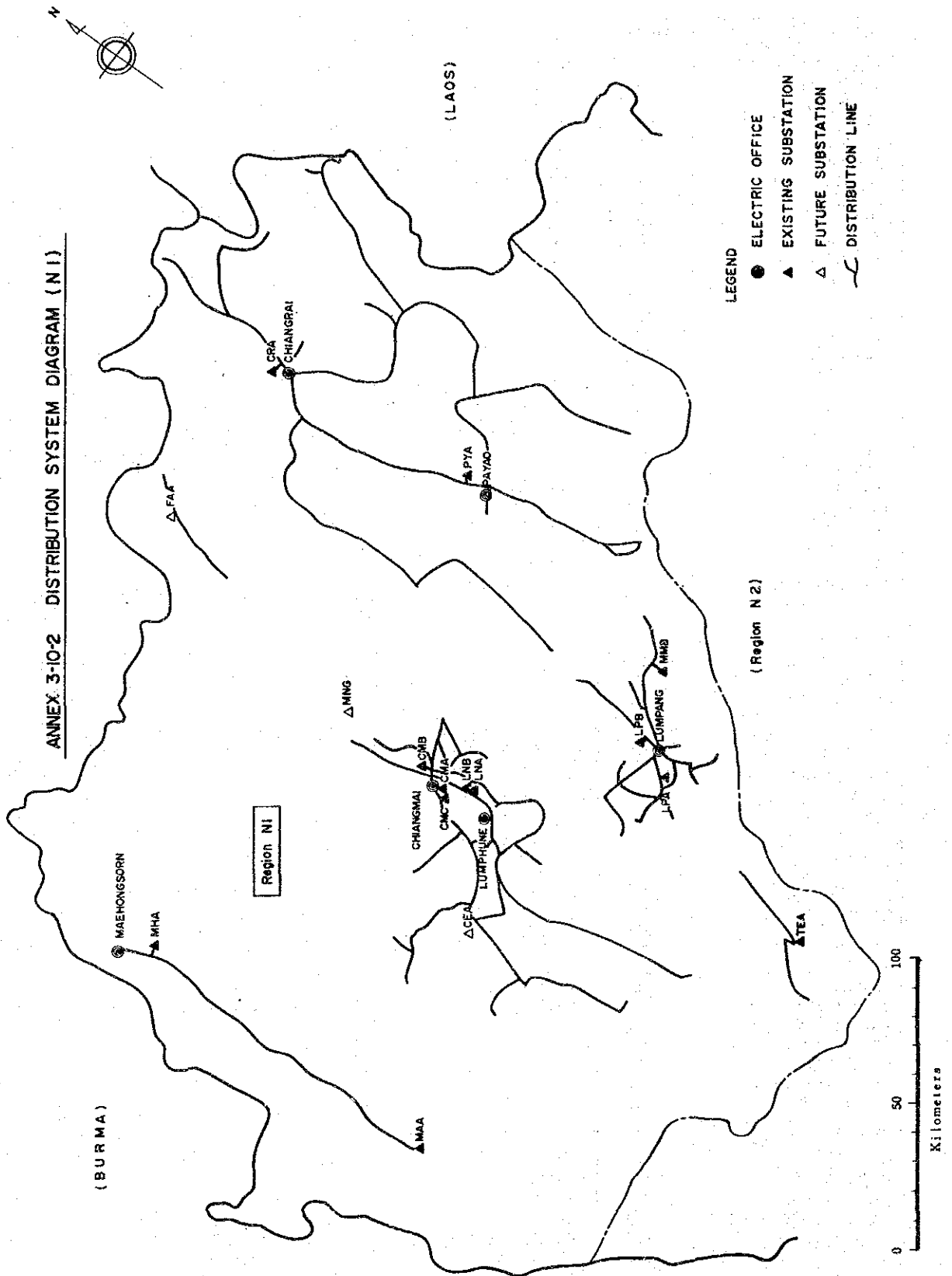
SUBSTATION	POWER TRANSFORMER CAPACITY (MVA)	VOLTAGE (KV)	NO. OF SWITCHGEAR		NO. OF CONTROL ROOM												NO. OF STAFF AT CONTROL STATION		NO. OF FEEDER	NO. OF RECLOSER ON DISTRIBUTION LINE	
					EXISTING				UNDER CONST.				FUTURE PLAN								
			C	B	RECIOSER				TYPE				TYPE				PRESENT	FUTURE PLAN		HYDRAULIC	ELECTRONIC
					1	2	3	4	1	2	3	4	1	2	3	4					
1. CHIEW LAN	1 x 7.5	33	B 1														1				
2. KRABI	1 x 25	33	B 2														2	1			
3. KHOM	1 x 25	33	B 2												1		1	2			
4. LANFOORA	4 x 7.5	33	M 2	2					1								4	3			
5. NAKHON SI THAMMARAT	2 x 25	33	B 6		1											4	6	3	2		
6. PHANG NGA	1 x 13	33															2				
7. PHUKET 1	2 x 25	33	M 2 B 6		1											4	7		1		
8. PHUKET 2	1 x 25	33												1			3		1		
9. PHUNPHIN	1 x 31.5 1 x 25	33	B 5						1								4	4			
10. TAKUA PA	1 x 6	33	B 2														2	1			
11. THUNG SONG	2 x 13	33	B 3		1											3	3	2	2		
12.																					
13.																					
14.																					
TOTAL	11 18 314		31	2	4	3	0	0	0	2	0	0	0	0	2	0	0	16	6		

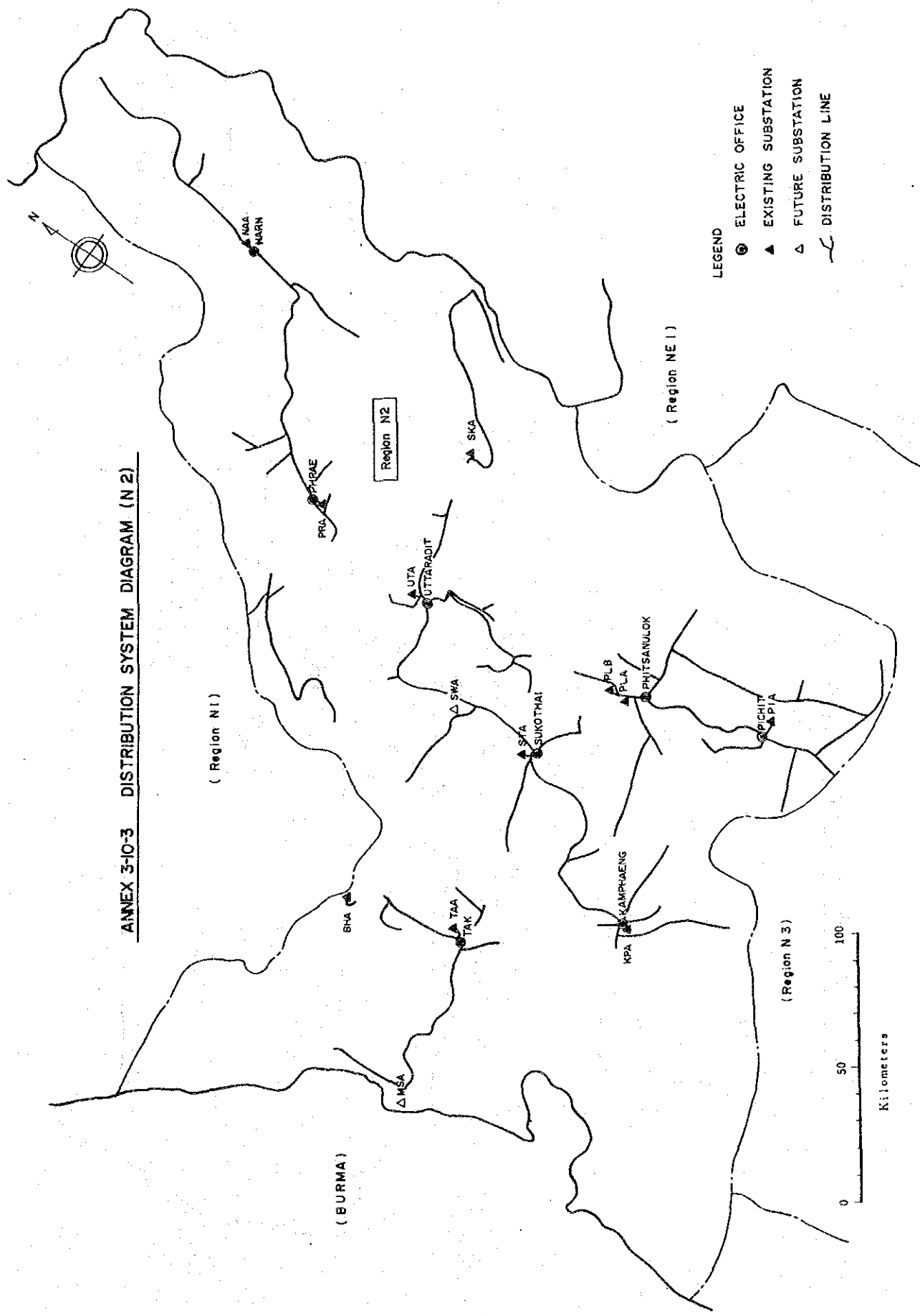
SUBSTATION	POWER TRANSFORMER CAPACITY (MVA)	VOLTAGE (kV)	NO. OF SWITCHGEAR		NO. OF CONTROL ROOM												NO. OF STAFF AT CONTROL STATION		NO. OF FEEDER	NO. OF RECLOSER ON DISTRIBUTION LINE		
					EXISTING		UNDER CONST.				FUTURE PLAN				PRESENT	FUTURE PLAN						
			C	B			1	2	3	4	1	2	3	4		1	2	3		4	HYDRAULIC	ELECTRONIC
					RECLOSER																	
1. BANG LANG	1 x 7.5	33	B 1															1	5			
2. HAT YAI 1	1 x 40 1 x 25	33	B 8		1											4		8	2			
3. HAT YAI 2	1 x 25	33	B 2		1								1				3	3		1		
4. HARATHIWAT	1 x 25	33	B 4		1										3		4	7				
5. PHATTHALUNG	1 x 25	33	B 4				1										3	4	3			
6. SADA0	1 x 7.5	33	B 4		1										3		3	1				
7. SONG KHLA	2 x 25	33			4							1				4	5					
8. YALA	1 x 31.5 1 x 25	33	B 5		1										4		5	5	6			
9.																						
10.																						
11.																						
12.																						
13.																						
14.																						
TOTAL	8 11 261.5		28	0	5	4	0	0	0	1	0	0	0	0	2	0	0	14	10	33	23	7

ANNEX 3-10-1 SUBSTATION SYMBOL LIST

Substation Name	Symbol	Substation Name	Symbol	Substation Name	Symbol
N1		N2		N3	
CHIANG MAI 1	CMA	BHUMIBOL	BHA	LOP BURI 1	LBA
CHIANG MAI 2	CMB	KAMPHAENG PHET	KPA	LOP BURI 2	LBB
CHIANG MAI 3	CMC	NAN	NAA	MANOROM	MRA
CHIANG RAI	CRA	PHRAE	PRA	NAKHON SAWAN	NSA
LAMPHUN 1	LNA	PHICHIT	PIA	PHECHABUN	PEA
LAMPHUN 2	LNB	PHITSANULOK 1	PLA	SING BURI	SBA
LAMPANG 1	LPA	PHITSANULOK 2	PLB	TAKHLI 2	TKB
LAMPANG 2	LPB	SIRIKIT	SKA	LOMSAK	LOA
FANG	FAA	SUKHO THAI	STA	CHAI BADAN	CDA
MAE HONG SON	MHA	TAK	TAA	THATAKO	TCA
MAE MHO 2	MMB	UTTARADIT	UTA	SALOKBAT	SZA
MAE SARING	MAA	SAWAN KHALOK	SWA	BANG MUN NAK	BNA
PHAYAO	PYA	MAE SOT	MSA		
THOEN	TEA				
MAE NGAT	MNG				
CHOM THONG	CEA				
NE1		NE2		NE3	
CHUM PHAE	CHA	KALASIN	KLA	BURIRAM	BRA
KHON KAEN 1	KKA	MAHA SARAKHAM	MKA	CHAIYAPHUM	CYA
LOEI	LEA	MUKDAHAN	MDA	NAKHON RATCHASIMA 1	NRA
NAKHON PHANOM	NNA	ROIET	REA	NAKHON RATCHASIMA 2	NRB
NAM PHONG	NQA	SIRINDHORN	SIA	PAK CHONG	PCA
NAM PHUNG	NPA	SI SA KET	SJA	PHON	POA
NONG KHAI	NKA	SOMDET	SDA	SHIKHIU	SFA
PHANG KHON	PFA	UBON RATCHATHANI 1	UBA	SURIN	SUA
SAKON NAKHON	SOA	YASOTHON	YTA	PHIMAI	PMA
THAT PHANOM	THA	AMNAT CHARDEN	ANA	PRAKHONCHAI	PVA
UDON THANI 1	UDA				
UDON THANI 2	UDE				
BUNG KAN	BKA				
KHON KAEN 2	KKB				
BAN PHAI	BCA				
CHULABHORN	CUA				
G1		G2		G3	
ANG THONG 1	ATA	AO PHAI	APA	BAN PONG 1	BPA
ANG THONG 2	ATB	BAN BUNG	BBA	BAN PONG 2	BPB
AYUTTHAYA 1	AYA	BANG LAMUNG	BLA	KANCHANA BURI	KCA
BANG KHAN	BKA	CHON BURI	CBA	KAMPHAENG SAEN	KSA
BAN MAI	BMA	CHACHOENG SAO	CCA	NAKHON CHAISRI	NCA
BAN PA IN	BIA	CHANTHABURI	CTA	SAM PHRAN 1	SAA
PRACHIN BURI	PAA	KLAENG	KAA	SAMUT SAKHON 1	SMA
PATHUM THANI	PQA	RAYONG 1	RAA	SAMUT SAKHON 2	SMB
SARABURI 1	SRA	RAYONG 2	RAB	SUPHAN BURI	SPA
SARABURI 2	SRB	RAYONG 3	RAC	THA MUANG	TMA
SARABURI 3	SRC	SRIRACHA	SCA	SAM PHRAN 2	SAB
SARABURI 4	SRD	TRAT	TTA	DOEMBANG NANGBUAT	DBA
THALAN	TLA	PHANOM SARAKHAM	PSA	SRINAGARIND	SVA
THANYA BURI	TYA	PHANUTNIKHOM		KHAO LAEM	KHA
WATTHANA NAKHON	WNA				
PRAPHUTTHABAT	PJA				
NAKHONNAYOK	NYA				
AYUTTHAYA 2	AYB				
NAVANAKHON	NVA				
S1		S2		S3	
CHA AM	CAA	CHIEW LARN	CLA	BANG LANG	BAA
CHUMPHON	CPA	KRABI	KBA	HAT YAI 1	HYA
PHETCHA BURI	PBA	KHANOM	KNA	HAT YAI 2	HYB
PRACHUAP KHIRI KHAN	PDA	LAMPOORA	LRA	NARATHIWAT	NWA
PRAN BURI	PNA	NAKHON SI THAMMARAT	NTA	PHATTHALUNG	PUA
RANONG	RNA	PHANGNGA	PGA	SADAO	SQA
RATCHABURI 1	RBA	PHUKET 1	PKA	SONGKHLA	SLA
RATCHABURI 2	RBB	PHUKET 2	PKB	YALA	YLA
SAMUT SONG KHRAM	SSA	PHUNPHIN	PPA	PATTANI	PTA
HUA HIN	HUA	TAKUA PA	TPA	SATUN	SEA
THAPSAKAE	TBA	THUNG SONG	TSA	RANOT	ROA
LANG SUAN	LSA	SURAT THANI	SNA		

ANNEX 3-10-2 DISTRIBUTION SYSTEM DIAGRAM (N1)

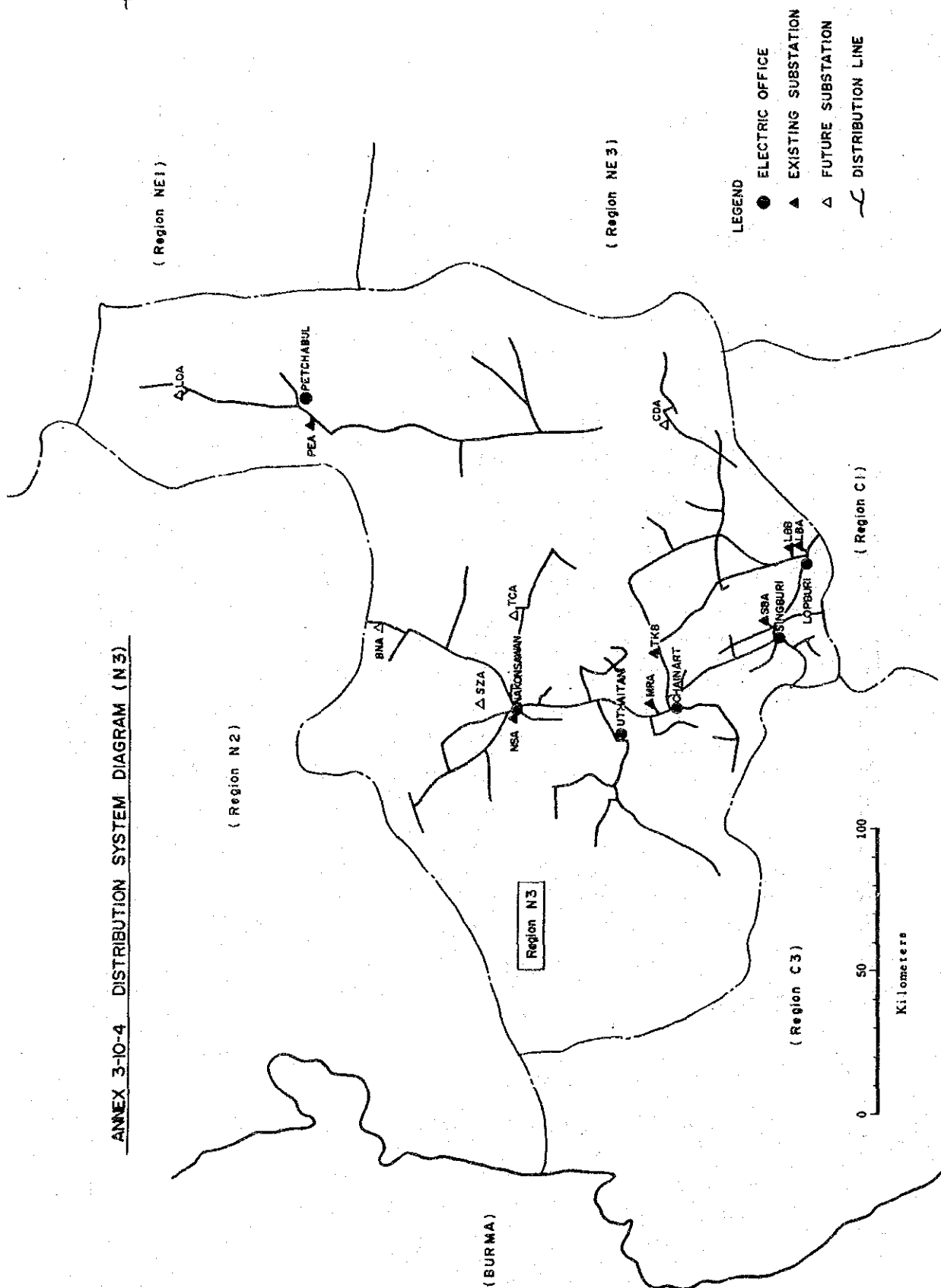




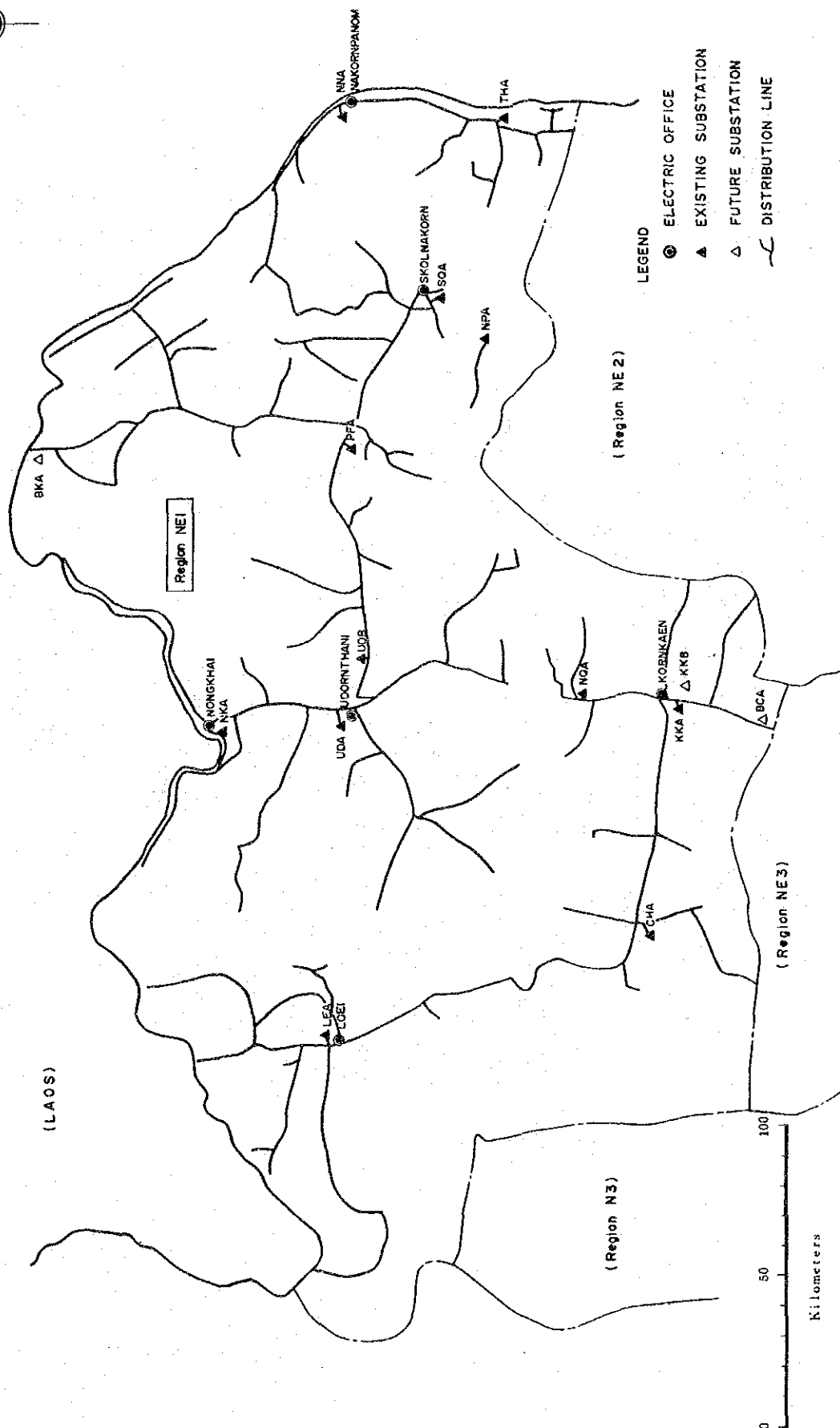
ANEX 3-10-3 DISTRIBUTION SYSTEM DIAGRAM (N 2)

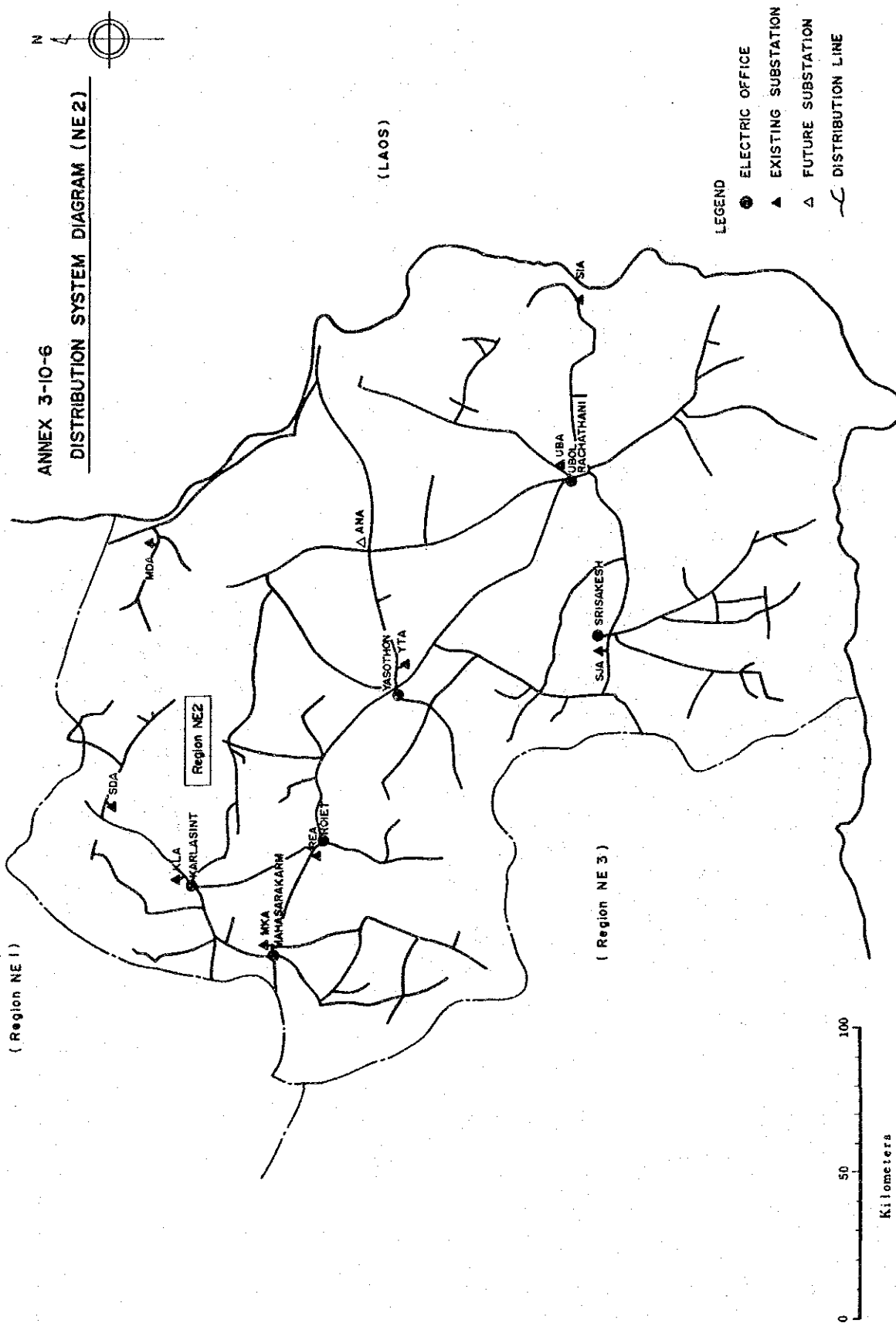


ANNEX 3-10-4 DISTRIBUTION SYSTEM DIAGRAM (N3)

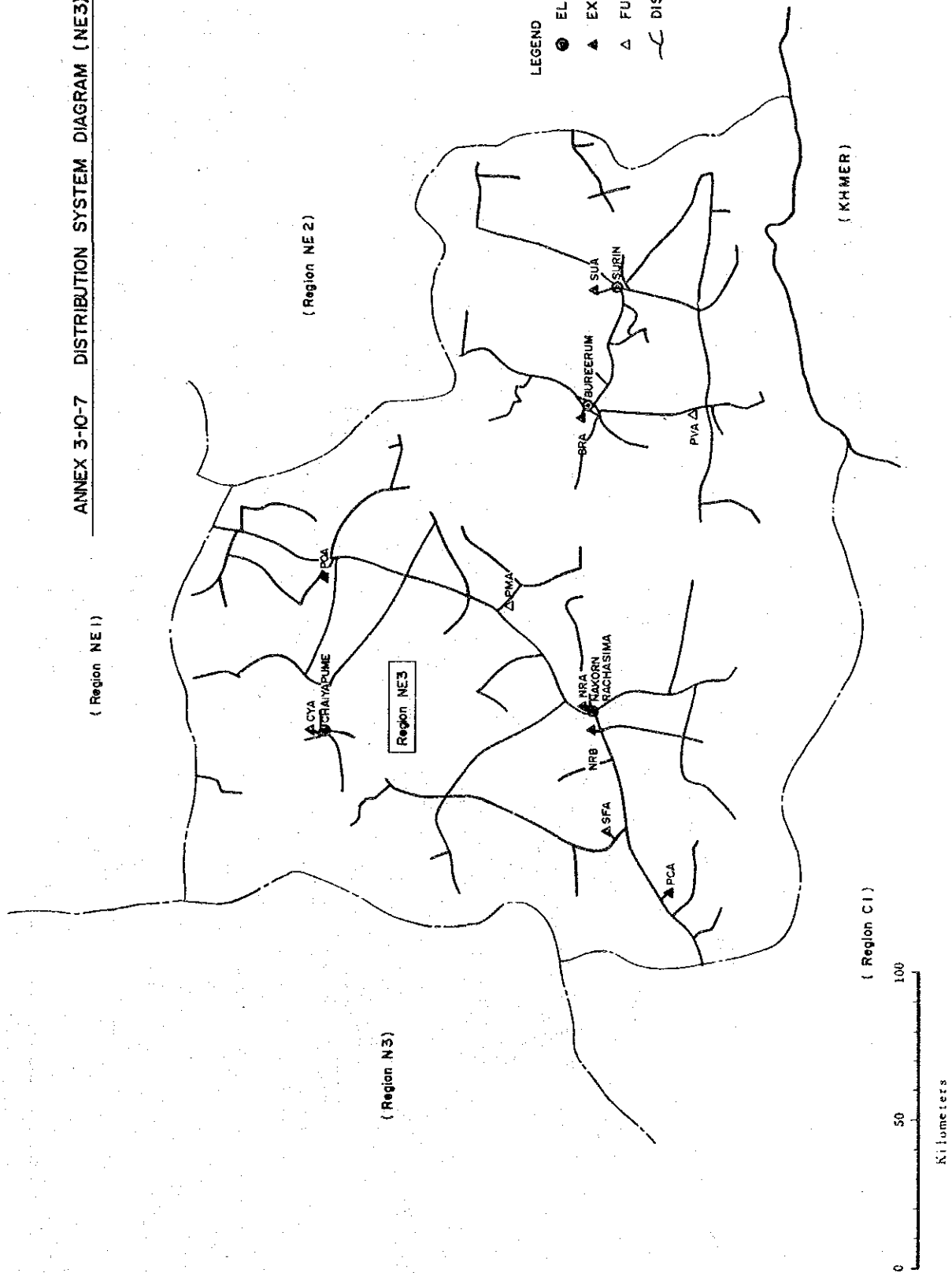
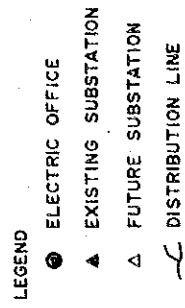


Top view of the part, showing concentric circles and a center mark.



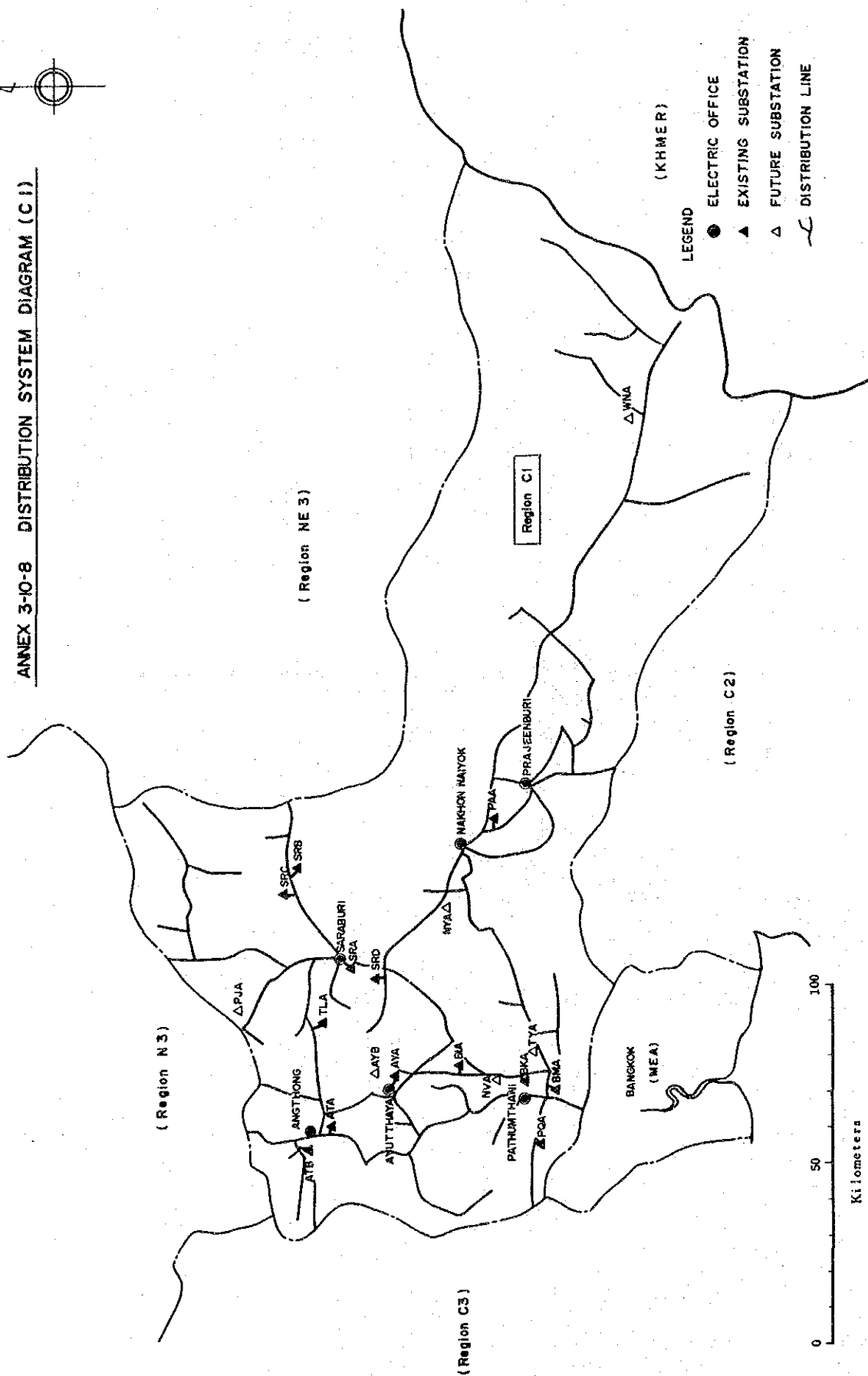


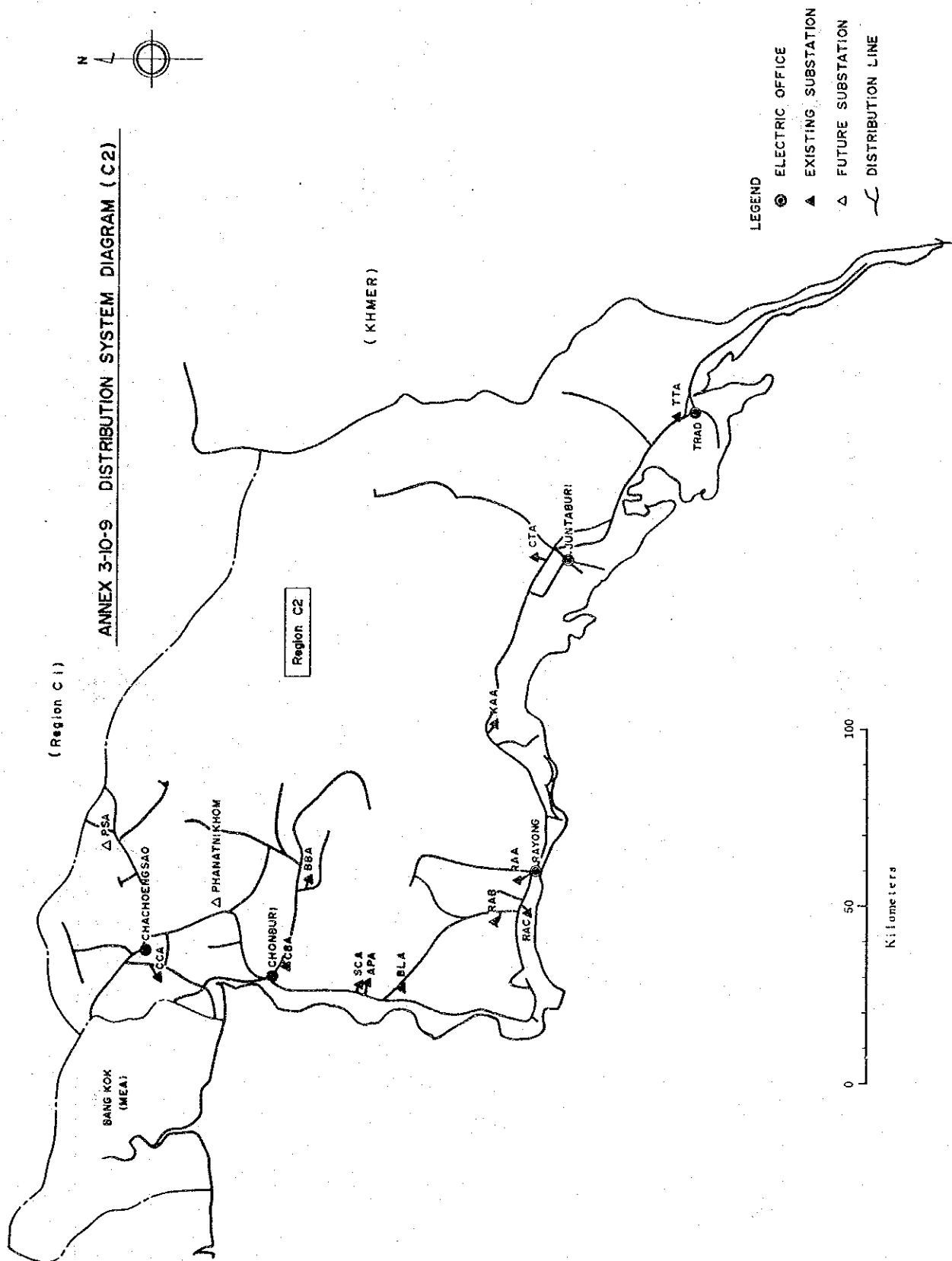
(Region NE1)



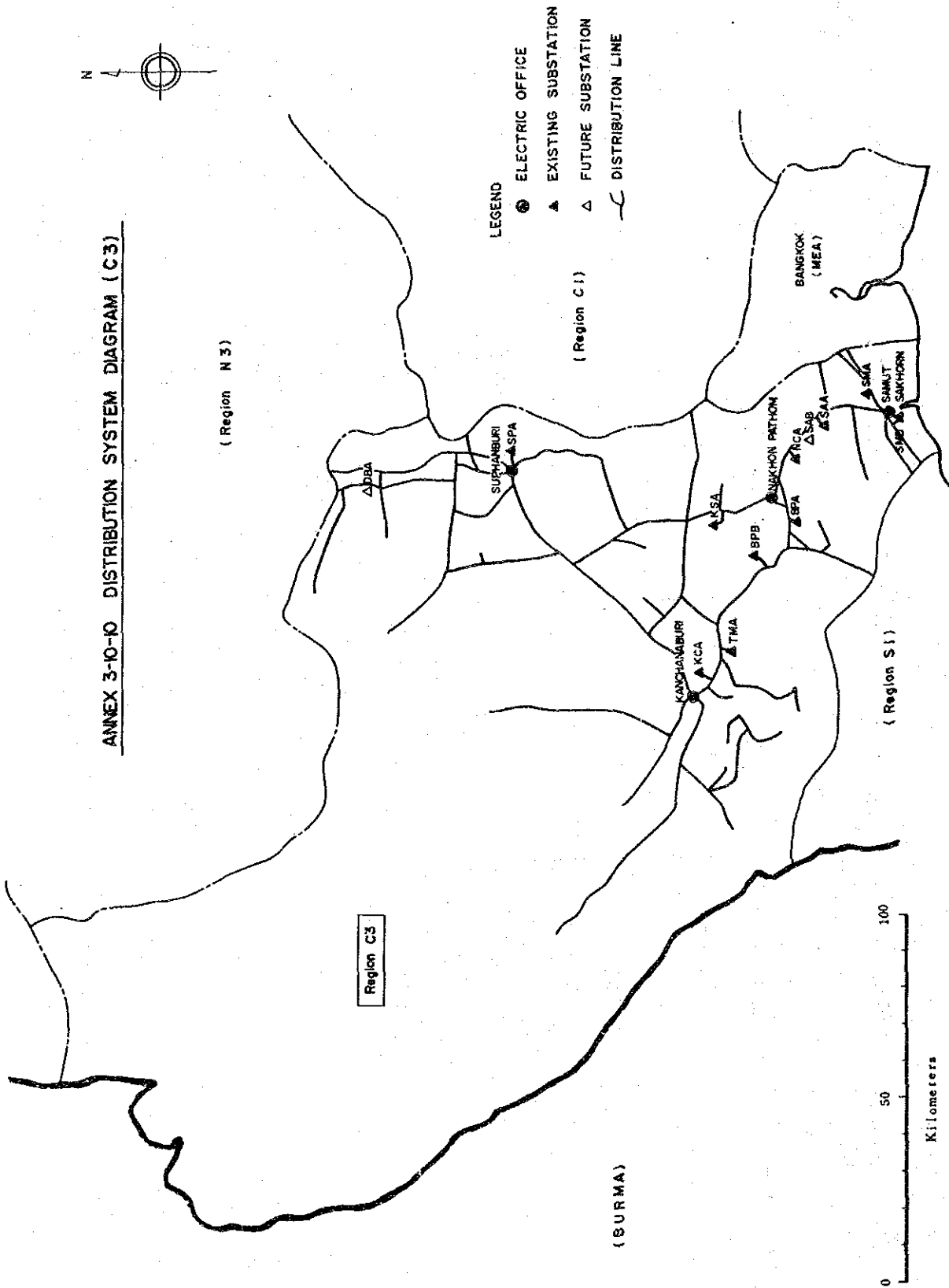


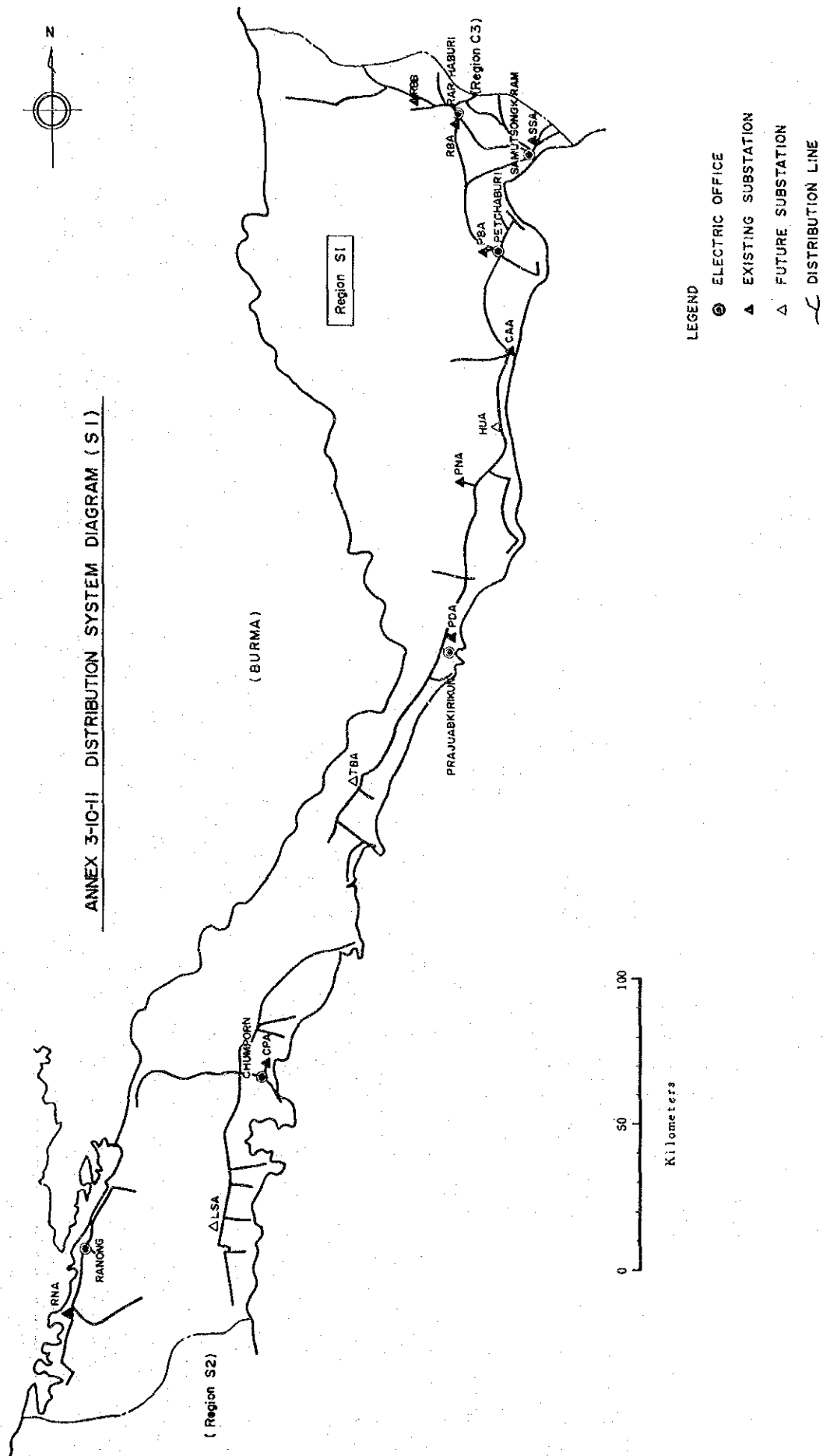
ANNEX 3-10-8 DISTRIBUTION SYSTEM DIAGRAM (C1)

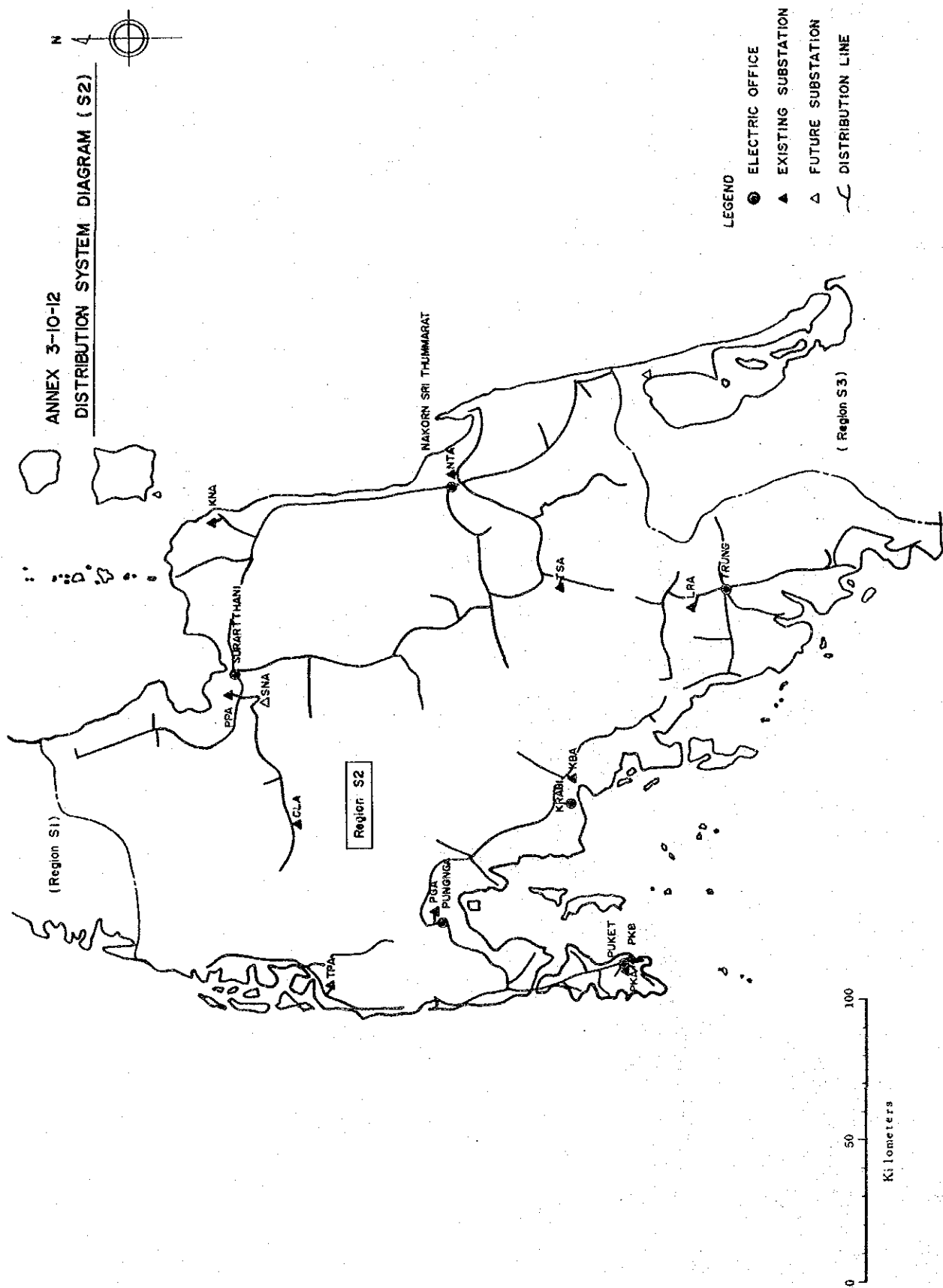




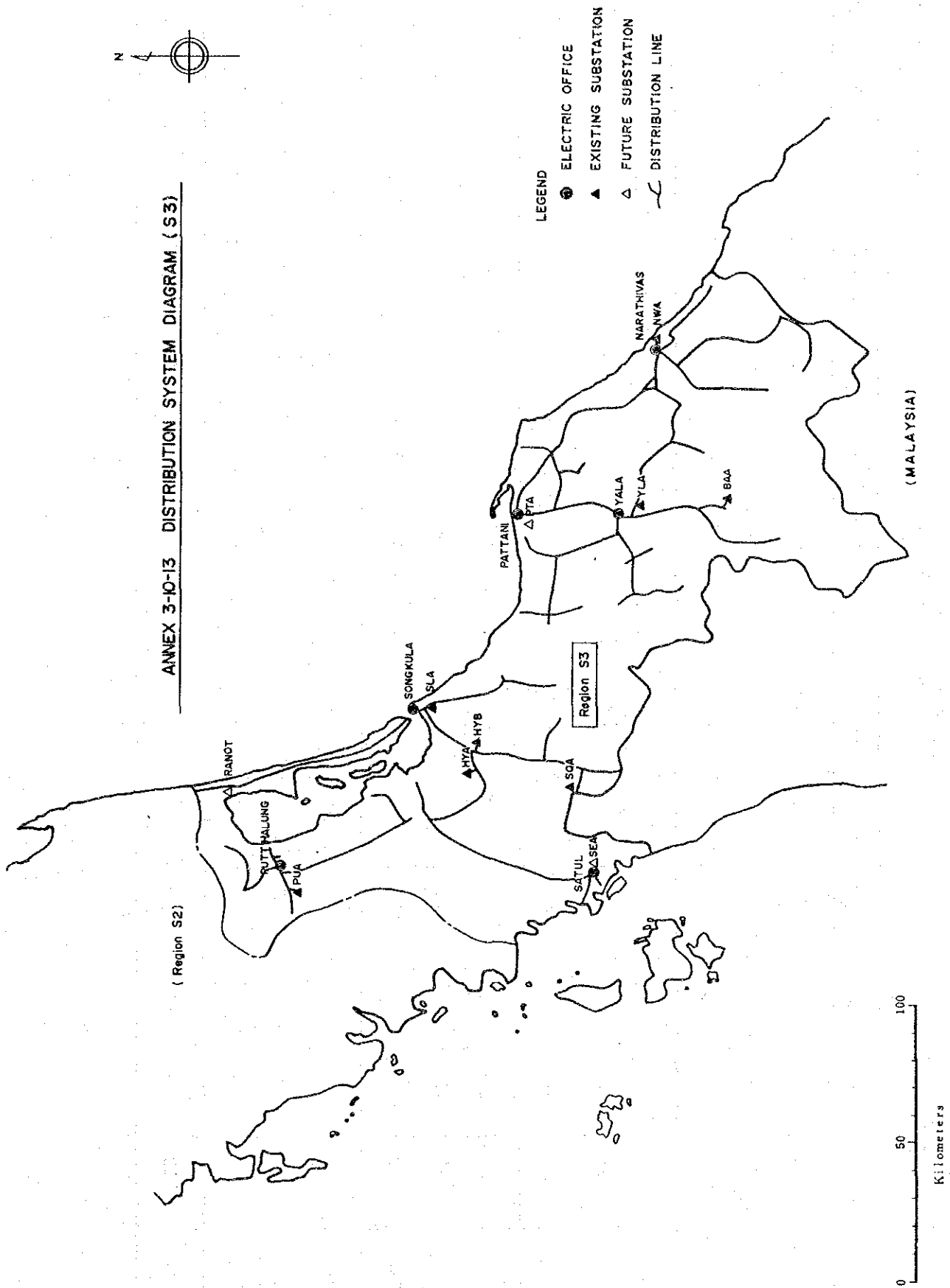
ANNEX 3-10-10 DISTRIBUTION SYSTEM DIAGRAM (C3)







ANNEX 3-10-13 DISTRIBUTION SYSTEM DIAGRAM (S3)



FREQUENCY OF FAULTS

UNIT:TIMES)

A 3-38

DURATION OF FAULTS

(UNIT: HOUR. MIN.)

ITEMS	1985						1986						TOTAL	AVE/MON
	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		
N1	84.59	121.49	63.48	41.05	42.09	44.26	50.38	73.26	238.41	166.60	94.04	139.27	1,161.34	96.48
N2	62.39	83.01	55.44	47.09	14.50	17.27	23.59	69.58	474.13	106.31	66.45	39.32	1,061.48	88.29
N3	26.53	33.25	67.15	33.45	31.21	48.18	27.17	87.39	155.52	121.18	84.35	65.52	783.30	65.18
SUB-TOTAL	174.31	238.15	186.47	121.59	88.20	110.13	101.54	231.03	868.46	394.49	245.24	244.51	3,006.52	250.34
NE1	323.06	235.39	134.17	55.06	152.41	107.22	54.55	232.15	670.36	527.50	424.07	214.34	3,132.28	261.02
NE2	165.19	72.54	181.01	52.20	36.53	23.58	54.59	184.22	195.52	114.26	86.46	97.33	1,266.23	105.32
NE3	71.17	93.32	56.25	34.38	55.03	79.57	26.38	58.32	186.52	129.13	55.10	63.56	911.13	75.56
SUB-TOTAL	559.42	402.05	371.43	142.04	244.37	211.17	136.32	475.09	1,053.20	771.29	566.03	376.03	5,310.04	442.30
C1	77.45	131.06	37.42	58.07	56.53	56.26	45.56	73.55	241.28	119.37	98.12	135.03	1,132.10	94.21
C2	188.03	76.27	86.58	54.58	30.35	15.27	37.44	38.44	59.30	156.16	91.25	92.06	928.13	77.21
C3	62.40	155.52	112.05	68.12	48.54	32.33	62.53	96.16	106.19	130.18	68.35	76.33	1,021.10	85.06
SUB-TOTAL	328.28	363.25	236.45	181.17	136.22	104.26	146.33	208.55	407.17	406.11	258.12	303.42	3,081.33	256.48
S1	155.51	51.46	60.39	128.08	104.36	72.59	98.52	126.47	161.38	310.16	185.42	95.45	1,552.59	129.25
S2	99.54	91.40	79.22	100.21	82.41	101.30	146.05	161.58	208.01	346.55	173.49	338.46	1,931.02	160.55
S3	270.37	116.18	75.48	119.32	182.49	66.41	141.26	306.30	116.53	168.31	208.23	262.21	2,035.49	169.39
SUB-TOTAL	526.22	259.44	215.49	348.01	370.06	241.10	386.23	595.15	486.32	825.42	567.54	696.52	5,519.50	459.59
GRAND TOTAL	1,589.03	1,263.29	1,011.04	793.21	839.25	667.06	771.22	1,510.22	2,815.55	2,398.11	1,637.33	1,621.28	16,918.19	1,409.52

ITEMS	CAUSE BY					TOTAL
	TREE	HUMAN/ANIMAL	EQUIPMENT	UNKNOWN	OTHERS	
N1	95	37	88	234	181	635
N2	88	35	88	88	172	471
N3	49	46	101	46	218	460
SUB-TOTAL	232	118	277	368	571	1,566
NE1	145	58	213	221	106	743
NE2	134	48	96	143	47	468
NE3	38	46	123	143	279	629
SUB-TOTAL	317	152	432	507	432	1,840
C1	46	72	290	240	158	806
C2	49	66	144	157	186	602
C3	50	76	223	115	343	807
SUB-TOTAL	145	214	657	512	687	2,215
S1	209	58	133	193	111	704
S2	195	91	125	183	83	677
S3	210	81	162	195	196	844
SUB-TOTAL	614	230	420	571	390	2,225
GRAND TOTAL	1,308	714	1,786	1,958	2,080	7,846

ITEMS	CAUSE BY				TOTAL
	TREE	HUMAN/ANIMAL	EQUIPMENT	UNKNOWN	OTHERS
N1	414.31	88.21	271.56	191.04	195.42
N2	448.03	52.13	261.46	134.55	164.51
N3	152.50	87.16	342.45	55.39	145.00
SUB-TOTAL	1,015.24	227.50	876.27	381.38	505.33
					3,006.52
NE1	882.38	230.11	1,247.01	529.03	243.35
NE2	436.39	98.35	388.42	269.17	73.10
NE3	113.15	63.00	396.07	170.41	168.10
SUB-TOTAL	1,432.32	391.46	2,031.50	969.01	484.55
					5,310.04
C1	66.35	75.56	706.51	164.36	118.12
C2	75.08	130.02	318.28	178.10	226.25
C3	98.14	109.18	481.46	131.23	200.29
SUB-TOTAL	239.57	315.16	1,507.05	474.09	545.06
					3,081.33
S1	585.06	150.28	494.45	217.10	105.30
S2	880.26	213.55	430.04	290.39	115.58
S3	900.26	115.23	489.26	265.03	265.31
SUB-TOTAL	2,365.58	479.46	1,414.15	772.52	486.59
					5,519.50
GRAND TOTAL	5,053.51	1,414.38	5,829.37	2,597.40	2,022.33
					16,918.19

DISTRIBUTION SYSTEMS OPERATION AND MAINTENANCE TRAINING COURSE

1. Objective

To promote working knowledge of PEA personnel concerning distribution systems operation and maintenance

2. Training Subjects

2.1 Lectures

- 2.1.1 Roles and responsibilities of distribution systems operation and maintenance work
- 2.1.2 PEA distribution systems
- 2.1.3 General problems concerning power distribution
- 2.1.4 Distribution systems protective equipment
- 2.1.5 Overcurrent protection coordination
- 2.1.6 Distribution systems maintenance
- 2.1.7 Distribution systems revamping
- 2.1.8 Street Lighting
- 2.1.9 Improvement of distribution systems efficiency
- 2.1.10 Use and maintenance of electrical measuring instruments
- 2.1.11 Use and maintenance of mechanical tools
- 2.1.12 General problems concerning daily-paid workers
- 2.1.13 Safety

2.2 Practices

- 2.2.1 Operate recloser
- 2.2.2 Operate oil switch
- 2.2.3 Operate load buster
- 2.2.4 Inspect and use hydraulic compression tool
- 2.2.5 Use electrical measuring instruments
- 2.2.6 First aids

DISTRIBUTION CONTROL STATION OPERATOR TRAINING COURSE

1. Objective

To promote working knowledge of PEA's distribution control station operators

2. Training Subjects

- 2.1 Structure and equipment in distribution control station
- 2.2 AC/DC power board
- 2.3 Circuit breaker
- 2.4 Recloser (Hydraulic & Electronic Controlled)
- 2.5 Protective relay
- 2.6 Control board
- 2.7 Overcurrent protection coordination
- 2.8 Battery charger
- 2.9 Battery
- 2.10 Radio communication

3. Training Methodologies

- 3.1 Lecture in the classroom with audio-visual aids such as
 - Overhead projector
 - Slide projector
 - Videogramme
- 3.2 Practice
 - At substation site

4. Type of Trainees

- Technicians

5. Number of Trainees per Course

- about 30 persons

6. Duration

- 8 days

7. Instructors from

- Research Division
- Transformer Division
- Distribution System Dispatching Center
- Training Center

DISTRIBUTION CONTROL STATION OPERATION (ON-SITE) TRAINING COURSE

1. Objective

To familiarize involving PEA technicians with the nature and functions of distribution control station operations

2. Training Subjects

- 2.1 General knowledge of switchgear
- 2.2 Overcurrent protection coordination
- 2.3 Power purchasing between EGAT and PEA
- 2.4 Operating directions for control board and circuit breaker
- 2.5 Daily load reporting and directions for substation operations

3. Training Methodologies

- 3.1 Lecture in the classroom with audio-visual aids such as

- Overhead projector
- Slide projector

- 3.2 Demonstrations

- In substation control rooms
- At substation switchyards

4. Type of Trainees

- Technicians

5. Number of Trainees per Course

- about 30 persons

6. Duration

- 2 days

7. Instructors from

- Research Division

- Transformer Division

- Distribution System Dispatching Center

- Training Center

SUBSTATION OPERATION TRAINING COURSE

1. Objective

To promote working knowledge of PEA personnel concerning substation operation

2. Training Subjects

- 2.1 Distribution systems and equipments
- 2.2 Substation equipments and installations
- 2.3 Power transformer operations
- 2.4 Circuit breaker operations
- 2.5 Substation protection
- 2.6 Substation protection
- 2.7 Principle of radio communication
- 2.8 Switching order of disconnecting equipment in substation
- 2.9 Principle of battery and battery charger
- 2.10 Operational regulations on substation operations and maintenance

3. Training Methodologies

- 3.1 Lecture in the classroom with audio-visual aids such as
 - Overhead projector
 - Slide projector
 - Videogramme
- 3.2 Practice
 - At substation site

4. Type of Trainees

- Technicians

5. Number of Trainees per Course

- about 30 persons

6. Duration

- 5 days

7. Instructors from

- Regional Electric Administration
- Distribution System Dispatching Center
- Research Division
- Electrical and Mechanical Engineering Division
- Training Center
- Transformer Division

ANNEX 3-12-5

DISTRIBUTION SYSTEM DISPATCHING CENTER OPERATION TRAINING COURSE

1. Objective

To promote working knowledge of PEA operators of distribution systems dispatching centers

2. Training Subjects

- 2.1 Structure and equipment in power substation
- 2.2 AC/DC power board
- 2.3 Power switches
- 2.4 Circuit breaker
- 2.5 Recloser (Hydraulic & Electronic controlled)
- 2.6 Voltage regulator
- 2.7 Protective relay
- 2.8 Control board
- 2.9 Overcurrent protection coordination
- 2.10 Battery charger
- 2.11 Battery

3. Training Methodologies

- 3.1 Lecture in the classroom with audio-visual aids such as
 - Overhead projector
 - Slide projector
 - Videogramme
- 3.2 Practice
 - At substation site
 - At distribution systems dispatching center

4. Type of Trainees

- Technicians

5. Number of Trainees per Course

- about 30 persons

6. Duration

- 8 days

7. Instructors from

- Research Division
- Transformer Division
- Electrical and Mechanical Engineering Division
- Distribution System Dispatching Center
- Training Center

DISTRIBUTION SYSTEM DISPATCHING CENTER OPERATIONS FOR
ENGINEERS TRAINING COURSE

1. Objective

To promote working knowledge of PEA engineer concerning distribution system dispatching center operations

2. Training Subjects

- 2.1 Working psychology and human relationship
- 2.2 Problems on distribution system dispatching center operations
- 2.3 Load flow reports and data for electricity repair
- 2.4 Improvement of Reports on distribution system dispatching center operations
- 2.5 Group discussion

3. Training Methodologies

- 3.1 Lecture in the classroom with audio-visual aids such as
 - Overhead projector
 - Slide projector
- 3.2 Seminar session

4. Type of Trainees

- Engineers working as distribution system dispatching center supervisors

5. Number of Trainees per Course

- about 30 persons

6. Duration

- 4 days

7. Instructors from

- Transformer Division
- Research Division
- Power Economics Division
- Distribution System Dispatching Center
- Project and Planning Division
- Meter Division
- Electrical and Mechanical Engineering Division
- Training Center
- General Affairs Division
- Office of Deputy General Manager for Operations

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
CHIANG MAI 1, 2 & 3	80.02	92.53	109.66	126.78	146.91	154.91	163.38	178.66	212.98	234.88	269.02	11.7
CHAIANG RAI	9.98	18.15	25.51	28.46	30.93	23.80	18.99	50.45	66.71	81.03	90.07	47.6
LANPHON 1						11.10	13.54	21.61	27.77	37.42	29.75	4.6
LANPHON 2						61.45	63.62	71.49	84.01	87.64	95.29	35.5
LANPANG 1 & 2						0.12	0.15	0.64	1.32	2.01	2.32	9.2
MAE MHAO 2						50.35	47.07	26.45	29.99	34.31	41.36	80.8
PHAYAO						2.15	2.43	5.34	6.65	7.46	8.97	(3.9)
THOEN	0.48	0.73	1.06	1.97	1.98							33.1
CHOMTONG												
BAN KHUN KLANG												0.0
BAN YANG	0.06	0.19	0.15	0.08	0.29	0.33	0.33	0.35	0.34	0.41	0.38	2.9
NEA	0.88	1.07	1.35	1.68	1.93	2.14	2.36	8.26	6.30	12.40	15.40	48.4
TOTAL	122.38	154.00	210.25	248.84	285.73	306.35	339.30	391.72	467.31	524.88	583.94	13.8

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
CHIANG MAI 1, 2 & 3	286.28	313.90	343.77	376.03	410.82	448.29	488.58	531.83	578.20	627.83		8.8
CHAIANG RAI	98.12	111.42	123.26	135.50	148.32	161.37	174.58	187.78	200.92	213.92		9.0
LANPHON 1 & 2	73.75	63.79	70.26	84.37	104.60	133.70	164.00	192.22	216.12	238.89		14.8
LANPANG 1 & 2	101.74	112.40	120.52	128.65	137.09	145.54	153.95	162.20	170.30	178.19		6.5
MAE MHAO 2	2.41	2.62	2.82	3.03	3.26	3.51	3.76	4.03	4.30	4.58		7.0
PHAYAO	44.76	51.27	57.53	63.98	70.74	77.65	84.65	91.67	98.66	105.59		9.8
THOEN	9.91	11.59	12.98	14.43	15.95	17.51	19.09	20.68	22.27	23.85		10.3
CHOMTONG		17.08	18.42	19.80	21.25	22.72	24.21	25.68	27.15	28.58		6.6
BAN KHUN KLANG												
BAN YANG	19.00	23.70	24.00	24.30	24.70	25.00	25.30	25.70	26.10	26.50		5.6
NEA												
TOTAL	635.97	707.76	773.56	850.09	936.72	1,035.28	1,138.12	1,241.78	1,344.01	1,447.94		9.5

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	(%/YEAR)
BHUMIBOL	0.16	0.16	0.27	0.35	0.46	0.50	0.85	1.10	1.34	1.57	2.06	32.8
KAMPHAENG PHET							10.50	33.02	39.74	46.92	53.22	50.1
NAN	5.27	14.64	19.30	23.81	26.70	39.26	50.30	58.17	68.72	77.20	88.03	17.5
PHARE							43.29	51.08	60.70	67.61	75.81	16.6
PHICHIT	46.16	51.12	53.13	60.39	69.47	70.79	78.64	86.78	99.80	112.54	126.14	12.2
PHITSANULOK 1							1.17	1.45	1.89	2.29	2.83	25.2
SIRIKIT	15.11	19.10	28.18	37.21	44.58	54.90	56.30	43.09	48.64	53.82	60.35	1.9
SUKHO THAI	8.14	9.54	11.34	12.81	14.48	19.20	24.82	28.02	34.30	38.40	41.86	16.9
TAK	14.09	17.94	22.28	24.94	28.21	32.02	36.55	40.26	49.77	59.23	68.87	16.6
UTTARADIT											0.73	
PHITSANULOK 2												
TOTAL	88.92	112.49	144.84	179.10	210.45	252.77	302.42	342.97	404.90	459.57	519.89	15.5

SUBSTATION	FORECAST										GROWTH RATE	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		(%/YEAR)
BHUMIBOL	2.41	2.88	3.41	4.00	4.65	5.37	6.16	7.03	7.97	8.99		15.9
KAMPHAENG PHET	56.22	63.08	69.63	76.37	83.39	90.52	97.70	104.85	111.95	118.95		8.4
NAN	92.71	37.46	41.49	46.04	50.95	56.15	61.59	67.24	73.08	79.10		9.8
PHARE	78.41	65.07	69.57	74.46	79.48	84.45	89.35	94.12	98.76	103.24		1.6
PHICHIT	122.80	87.48	95.31	103.15	111.15	119.04	126.75	134.19	141.32	148.10		6.9
PHITSANULOK 1		134.05	144.40	154.87	165.76	176.66	187.44	197.99	208.24	218.08		5.6
SIRIKIT	3.10	3.45	3.83	4.24	4.69	5.18	5.71	6.28	6.90	7.56		10.3
SUKHO THAI	63.99	71.66	78.43	85.24	92.26	99.37	106.47	113.48	120.39	127.15		7.7
TAK	44.42	49.10	53.20	57.18	61.32	65.49	69.66	73.79	77.86	81.86		6.9
UTTARADIT	72.03	79.24	86.16	93.44	101.23	109.34	117.73	126.31	135.08	143.97		7.7
PHITSANULOK 2	6.20	6.92	7.60	8.29	9.00	9.71	10.42	11.12	11.81	12.48		32.9
TOTAL	542.30	600.39	653.02	707.28	763.89	821.28	879.00	936.40	993.35	1,049.47		7.3

(UNIT: GWh)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
LOP BURI 1 & 2	41.11	53.33	64.63	72.06	74.52	79.29	91.42	91.89	102.11	114.12	125.71	9.7
MANOROM	17.73	21.98	27.09	28.02	32.86	41.56	46.14	51.99	61.50	66.88	77.39	13.2
NAKHON SAWAN	47.74	53.63	68.17	81.24	88.76	93.93	99.03	106.31	123.21	136.53	151.71	10.1
PHETCHA BUN			14.17	22.73	28.20	33.76	39.84	44.64	54.62	59.83	61.72	12.8
SING BURI	13.09	18.04	22.12	27.57	32.85	35.08	40.57	48.63	54.76	54.72	59.45	11.1
TAKHLI 2	14.06	14.89	16.56	18.15	20.19	20.89	21.90	23.59	24.94	27.00	28.31	6.3
LOMSAK												
CHAI BADAN												
TOTAL	133.72	161.87	212.74	249.76	277.37	304.51	338.91	367.05	421.15	459.08	504.29	10.6

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
LOP BURI 1 & 2 MANOROM NAKHON SAWAN PHETCHA BUN SING BURI TAKHLI 2 LOMSAK CHAI BADAN	138.70	150.63	144.92	153.53	162.55	171.66	180.81	189.90	198.96	207.94	5.2
	80.34	93.50	100.74	108.11	115.77	123.46	131.15	138.74	146.21	153.53	7.1
	165.06	182.29	195.89	209.92	224.69	239.69	254.80	269.83	284.73	299.39	7.0
	73.16	81.78	47.96	51.83	56.09	60.37	64.63	68.83	72.95	76.97	2.2
	61.64	66.93	71.33	76.65	82.14	87.66	93.17	98.60	103.96	109.23	6.3
	29.87	31.94	33.70	35.47	37.32	39.15	40.97	42.73	44.45	46.12	5.0
			28.20	30.88	33.85	36.89	39.98	43.06	46.15	49.21	8.3
			28.96	31.72	34.78	37.91	41.08	44.26	47.45	50.63	8.3
	TOTAL	548.76	607.07	651.69	698.11	747.19	796.79	846.59	895.96	944.86	993.02

(UNIT: GWh)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
CHUM PHAE	4.64	11.08	18.53	23.85	27.44	33.60	39.02	26.71	30.12	38.32	43.47	5.3
KHON KAEN 1	46.20	54.48	65.12	83.50	87.54	92.40	107.51	118.72	129.71	143.35	155.95	11.0
LOEI								24.87	30.74	35.60	42.07	19.2
NAKON PHANOM	11.99	10.16	11.56	12.73	13.17	14.62	15.20	16.79	20.24	21.76	22.70	9.2
NAM PHONG							0.68	25.78	40.83	41.64	39.25	
NAM PHUNG	0.18	0.20	0.35	0.47	0.60	0.64	0.76	0.93	1.27	1.62	2.06	26.5
NONG KHAI	11.94	14.06	15.36	20.08	23.14	24.90	29.66	33.39	39.49	44.02	47.24	13.7
PHANG KHON								18.61	22.65	28.45	29.48	
SAKON NAKHON	13.41	18.55	18.95	23.44	25.12	28.02	35.24	24.54	29.64	32.73	37.13	5.8
THAT PHANOM	2.24	2.69	3.19	4.17	5.04	4.72	5.79	7.03	7.71	10.01	11.66	19.9
UDON THANI 1 & 2	70.52	75.01	81.50	88.13	99.16	109.08	129.48	139.56	147.92	163.30	178.31	10.3
BUNG KAN												
CHULA BHOON P/S						0.03	0.06	0.07	0.09	0.11	0.11	29.8
NA KAE	0.45	0.62	0.78	1.05	1.26	1.42	1.69	1.91	2.22	0.87		(11.7)
TOTAL	161.57	186.84	215.34	257.40	282.48	309.43	365.10	438.91	502.62	561.78	509.44	14.5

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHUM PHAE	47.37	53.95	60.31	66.94	73.92	81.09	88.40	95.76	103.15	110.52	9.8
KHON KAEN 1	165.86	181.57	196.11	210.97	226.43	242.04	257.67	273.13	288.39	303.38	6.9
LOEI	44.31	49.03	53.62	58.50	63.75	69.25	75.00	80.93	87.04	93.31	8.3
NAKON PHANOM	24.44	26.88	29.20	31.60	34.14	36.74	39.39	42.03	44.67	47.28	7.6
NAM PHONG	46.39	49.13	51.58	54.14	56.91	59.76	62.65	65.56	68.48	71.38	6.2
NAM PHUNG	2.38	2.80	3.25	3.74	4.26	4.82	5.41	6.02	6.67	7.36	13.6
NONG KHAI	52.56	49.26	52.84	56.37	60.04	63.72	67.38	70.98	74.52	77.99	5.1
PHANG KHON	32.74	33.36	37.06	40.65	44.12	47.32	50.18	52.65	54.71	56.35	6.7
SAKON NAKHON	39.12	42.77	46.13	49.55	53.11	56.68	60.24	63.74	67.17	70.52	6.6
THAT PHANOM	12.49	13.87	15.17	16.49	17.86	19.25	20.64	22.01	23.37	24.69	7.8
UDON THANI 1 & 2	186.97	204.56	220.79	237.24	254.17	270.96	287.38	303.12	318.04	331.95	6.4
BUNG KAN	0.13	0.14	0.15	0.17	0.18	0.20	0.21	0.23	0.25	0.27	12.1
CHULA BHOON P/S											9.1
NA KAE											
TOTAL	654.75	721.05	781.96	844.30	909.21	974.66	1,040.09	1,104.54	1,167.79	1,229.36	7.3

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
KALASIN	20.02	27.86	36.67	49.40	53.83	60.62	75.46	75.35	27.12	50.23	63.71
MAHA SARAKHAM	2.93	3.31	3.67	4.31	6.23	8.35	9.83	12.52	71.41	69.91	74.61
MUKDAHAN									15.10	16.77	18.80
ROIET	0.09	0.62	0.68	1.27	1.91	4.61	5.51	6.48	7.23	7.71	7.32
SIRINDHON							2.41	28.52	38.08	47.51	56.53
SISAKET	0.93	1.55	2.37	3.16	4.20	5.60	9.20	17.68	13.89	15.38	17.17
SOMDET	40.95	47.07	57.23	68.61	76.07	82.74	93.42	76.12	91.82	101.55	110.44
UBON RATCHATHANI 1	6.24	8.43	12.45	15.64	18.20	22.11	29.54	36.49	43.25	50.68	57.60
YASOTHON											
TOTAL	71.16	88.84	113.07	142.40	160.44	184.02	225.36	253.16	307.91	359.73	406.18
											17.2

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
KALASIN	58.07	52.12	57.65	63.74	70.16	76.78	83.53	90.34	97.19	104.03	5.0
MAHA SARAKHAM	61.63	57.67	64.55	71.82	79.49	87.56	96.55	106.04	116.02	126.49	5.4
MUKDAHAN	20.94	23.87	26.32	28.88	31.58	34.35	37.17	40.00	42.84	45.66	9.3
ROIET	33.87	70.09	77.95	86.12	94.72	103.52	112.48	121.48	130.49	139.46	17.0
SIRINDHON	10.42	11.06	11.74	12.46	13.21	13.99	14.81	15.66	16.55	17.47	9.1
SISAKET	60.28	67.56	74.46	81.50	88.79	96.11	104.63	113.19	121.79	130.36	8.7
SOMDET	20.00	22.83	25.85	29.06	32.46	36.07	39.87	43.88	48.09	52.51	11.8
UBON RATCHATHANI 1	116.55	127.40	137.61	148.26	159.56	171.20	183.10	195.13	207.27	219.45	7.1
YASOTHON	57.89	60.27	67.29	74.55	82.14	89.89	97.71	105.53	113.30	121.66	7.8
TOTAL	439.66	492.86	543.42	596.38	652.11	709.46	769.85	831.26	893.53	957.08	8.9

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984		1985
BURI RAM												
CHAIYA PHUM												
NAKHON RATCHASIMA 1 & 2	110.53	128.43	141.59	164.25	181.97	204.34	234.78	30.56	43.21	52.59	61.26	26.1
PAK CHONG	28.14	34.30	47.72	51.86	65.28	74.35	76.71	27.87	32.74	39.84	48.54	59.8
PHON	14.43	21.12	27.34	35.15	39.29	44.77	48.70	53.25	54.70	59.03	61.57	9.6
SIKHIU								37.43	45.11	50.97	49.69	(3.7)
SURIN	19.40	25.81	34.24	43.37	51.40	59.93	65.49	50.41	64.14	73.95	73.95	2.1
								48.32	48.82	58.90	64.52	13.6
TOTAL	172.50	209.65	250.90	294.62	337.93	383.39	433.13	472.52	543.77	622.98	682.69	12.2

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
BURI RAM											
CHAIYA PHUM											
NAKHON RATCHASIMA 1 & 2	68.17	77.14	85.82	94.86	104.38	114.13	124.07	134.07	144.10	154.11	9.7
PAK CHONG	53.43	59.18	64.43	69.82	75.46	81.19	86.98	92.76	98.53	104.27	7.9
PHON	340.72	370.26	394.70	419.46	445.18	470.72	495.96	520.33	543.91	566.08	5.8
SIKHIU	66.13	72.36	77.98	83.49	88.98	94.17	99.17	104.08	108.94	113.75	6.3
SURIN	45.12	48.68	51.75	54.75	57.78	60.76	63.67	66.44	69.08	71.56	3.7
	76.54	81.83	86.48	91.18	96.03	100.78	105.39	109.73	113.78	117.71	4.8
	69.33	77.05	84.07	91.11	98.44	105.81	113.23	120.57	127.78	134.78	7.6
TOTAL	719.44	786.49	845.23	904.67	966.24	1,027.58	1,088.46	1,147.97	1,206.11	1,262.25	6.3

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
ANG THONG 1	9.94	12.69	37.72	48.08	56.71	63.00	61.46	60.88	49.54	33.78	32.26
ANG THONG 2								0.67	30.65	44.84	52.93
AYUTTHATA 1	24.30	29.43	36.33	45.35	50.06	50.18	48.43	48.03	76.21	90.95	113.90
BAN MAI									152.97	253.82	626.76
BANG PA IN	25.68	38.66	53.40	62.06	64.79	71.07	68.54	70.00	80.58	93.23	97.23
PRACHIN BURI	16.67	21.42	30.19	39.25	40.96	56.82	72.80	82.25	95.91	107.82	122.47
SARABURI 1	44.14	63.38	70.42	77.78	77.30	75.93	68.17	90.53	99.83	101.20	100.97
SARABURI 2	70.94	71.33	81.10	85.43	86.00	95.18	148.59	211.88	229.27	271.33	313.63
SARABURI 3	68.87	109.94	141.94	146.62	138.95	136.44	137.67	132.32	139.98	141.23	119.46
SARABURI 4				5.36	22.21	39.51	54.13	66.73	66.96	74.00	87.33
THALAN			6.57	8.99	11.30	24.14	44.25	59.46	54.13	65.81	89.24
WATTHANA NAKHON	3.70	4.61									
MEA	21.28	19.22	17.78	21.96	23.22	30.52	35.16	41.60	35.90	14.20	6.00
TOTAL	385.52	370.68	475.45	540.88	571.50	642.79	739.20	864.34	1,111.93	1,292.20	1,762.19
											22.3

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ANG THONG 1	33.93	35.63	37.41	39.28	41.24	43.30	45.47	47.74	50.13	52.64	5.0
ANG THONG 2	54.08	59.96	65.55	71.30	77.29	83.32	89.31	95.16	100.80	106.17	7.2
AYUTTHATA 1	120.10	132.76	144.95	157.77	171.46	185.60	200.08	214.66	229.26	243.71	7.9
BAN MAI	902.16	984.52	1,044.26	1,107.95	1,175.33	1,246.09	1,319.77	1,399.24	1,484.64	1,576.55	9.7
BANG PA IN	100.71	108.03	114.66	121.53	128.81	136.33	144.04	151.88	159.82	167.84	5.6
PRACHIN BURI	140.25	162.18	128.56	135.19	142.04	148.82	156.36	163.74	170.96	177.98	3.8
SARABURI 1	116.33	124.93	132.45	140.12	148.16	156.24	164.33	172.31	180.17	187.89	6.4
SARABURI 2	335.84	339.90	581.86	586.53	591.59	597.03	602.85	609.05	615.61	622.53	7.1
SARABURI 3	113.91	258.10	428.10	469.60	469.60	469.60	469.60	469.60	469.60	469.60	14.7
SARABURI 4	95.16	103.57	111.41	119.52	128.08	136.84	145.73	154.65	163.60	172.53	7.0
THALAN	98.27	106.28	113.69	121.39	129.57	138.00	146.65	155.41	164.28	173.21	6.9
WATTHANA NAKHON			53.17	58.28	63.55	68.84	74.54	80.20	85.80	91.30	8.0
MEA											
TOTAL	2,110.74	2,415.86	2,956.06	3,128.46	3,266.71	3,410.00	3,558.71	3,713.61	3,874.66	4,041.93	8.7

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
AO PHAI											
BAN BUNG	37.64	50.73	58.12	70.60	78.77	89.29	16.81	48.23	48.46	0.20	4.86
BANG LAMUNG	83.48	105.16	136.18	151.09	173.19	175.56	98.24	109.97	128.38	52.94	56.49
CHON BURI	36.21	38.26	36.02	50.64	59.68	77.95	177.33	169.09	195.65	147.29	156.73
CHACHOENG SAO							89.20	100.12	112.35	218.48	225.37
CHANTHABURI				34.40	65.30	84.35	103.26	114.43	132.77	126.79	152.18
KLAENG										144.54	163.23
RAYONG 1	31.95	44.38	61.51	79.02	72.15	79.62	90.27	93.43	155.26	193.56	197.76
RAYONG 2										3.53	27.25
RAYONG 3										2.27	42.27
SRIRACHA	25.55	29.96	37.03	43.18	46.57	51.00	57.39	57.70	73.23	75.95	86.90
TRAT											
SATTAPHIP 2	6.96	9.77	10.48	13.97	9.58	13.77	17.67	19.41	17.01	13.95	
TOTAL	221.79	278.24	339.34	442.89	505.24	571.53	650.16	712.38	863.11	979.52	1,113.03
											14.3

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
AO PHAI	4.90	19.30	39.60	59.40	59.40	59.40	59.40	59.40	59.40	59.40	28.4
BAN BUNG	55.80	61.31	66.63	72.21	78.20	84.44	90.92	97.55	104.34	111.26	7.0
BANG LAMUNG	166.01	182.24	195.08	207.98	221.25	234.43	247.44	260.09	272.39	284.25	6.1
CHON BURI	230.09	255.39	278.70	302.95	328.54	354.75	381.39	408.08	434.72	461.10	7.4
CHACHOENG SAO	162.20	177.81	192.46	207.72	223.88	240.47	257.34	274.26	291.17	307.92	7.3
CHANTHABURI	177.19	144.51	158.39	172.25	186.77	201.52	216.34	230.98	245.32	259.21	4.7
KLAENG	19.34	42.90	47.01	51.35	56.04	60.97	66.12	71.46	77.01	82.72	17.5
RAYONG 1	225.21	276.38	299.23	323.56	349.84	378.20	408.78	441.70	477.15	515.30	10.1
RAYONG 2	34.71	40.43	46.20	52.30	58.73	65.26	71.78	78.10	84.07	89.53	12.6
RAYONG 3	47.10	47.10	70.80	465.00	473.80	500.20	500.20	500.20	500.20	500.20	28.0
SRIRACHA	95.98	104.04	111.31	118.88	126.93	135.20	143.72	152.37	161.18	170.11	6.9
TRAT											
SATTAPHIP 2		53.96	59.61	65.21	70.93	76.56	82.13	87.55	92.74	97.63	7.7
TOTAL	1,218.52	1,405.87	1,565.01	2,098.79	2,234.31	2,391.41	2,525.56	2,661.74	2,799.69	2,938.61	10.2

(UNIT: GWh)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
BAN PONG 1	47.34	54.86	85.44	100.56	107.19	98.69	104.54	109.65	130.90	178.12	195.50	14.7
BAN PONG 2	106.36	117.07	125.02	136.36	155.53	167.55	177.02	175.27	208.73	228.40	235.09	7.0
KANCHANA BURI	26.62	28.53	31.23	45.60	52.94	52.22	58.84	58.99	75.64	63.62	72.09	6.7
KANPHAENG SAEN	102.92	118.89	143.74	165.41	196.91	229.87	247.81	254.12	246.02	270.48	282.27	4.2
NAKHON CHAISRI	69.78	93.53	100.03	102.24	136.40	157.18	188.58	197.85	236.73	239.92	299.84	13.8
SAM PHRAN 1	93.03	155.36	169.47	195.62	251.35	237.25	225.83	249.80	276.27	282.26	281.01	3.4
SAMUTSAKHON 1 & 2	18.02	23.34	26.71	28.12	43.90	50.39	52.92	60.46	62.00	81.23	89.11	12.1
SUPHAN BURI		16.64	27.49	34.15	28.42	29.30	27.00	30.08	38.55	41.10	45.68	9.3
THAMUANG				0.04	0.08	0.16	0.26	0.29	0.38	0.61	0.73	35.0
SRINAGARIND								0.15	0.50	0.77	3.93	
KHAO LAEM												
TOTAL	464.06	608.22	709.13	808.09	972.73	1,022.61	1,082.78	1,136.66	1,275.71	1,386.51	1,505.24	8.0

SUBSTATION	FORECAST											GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
BAN PONG 1	210.99	195.77	212.15	228.62	245.59	262.48	279.10	295.35	311.16	326.39		5.3
BAN PONG 2	237.03	255.20	271.55	288.57	306.74	325.40	344.45	363.64	382.94	402.23		5.5
KANCHANA BURI	125.66	140.59	153.01	165.89	179.42	193.18	207.03	220.73	234.18	247.24		7.7
KANPHAENG SAEN	33.44	75.01	82.71	90.57	98.63	107.03	115.51	124.05	132.64	141.22		17.4
NAKHON CHAISRI	620.48	680.72	738.58	800.17	866.96	937.43	1,011.46	1,088.50	1,168.72	1,251.94		8.0
SAM PHRAN 1	273.85	299.50	323.89	349.49	377.15	406.19	436.51	467.86	500.25	533.58		6.6
SAMUTSAKHON 2	99.97	113.53	126.27	138.77	151.45	163.81	176.24	188.52	200.56	212.21		9.1
SUPHAN BURI												
THAMUANG	0.89	1.02	1.16	1.32	1.48	1.65	1.83	2.01	2.20	2.38		12.6
SRINAGARIND	13.95	15.12	15.32	15.52	15.73	15.94	16.16	16.39	16.63	16.86		15.7
KHAO LAEM												
TOTAL	1,616.25	1,776.46	1,924.63	2,078.91	2,243.15	2,413.12	2,588.29	2,767.05	2,949.28	3,134.04		7.6

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)		
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984		1985	
CHA AM CHUM PHON PHETCHABURI PRACHOAPKHIRI KHAN PRAN BURI RANONG RATCHABURI 1 RATCHABURI 2 SAMUTSONGKHAM	79.63	85.68	92.91	80.15	85.39	80.67	85.44	87.99	102.39	100.23	110.08	6.4	
							28.31	51.48	61.17	68.11	76.88	28.4	
	23.98	29.75	36.32	35.43	39.12	41.30	42.14	48.46	52.48	58.53	64.16	9.2	
							15.50	26.86	31.80	35.81	41.03	27.5	
							42.87	35.91	39.49	41.53	47.18	(0.7)	
	22.84	32.66	41.54	51.39	54.61	56.08	58.94	59.94	59.77	60.04	60.16	1.4	
	53.15	59.14	60.99	57.63	94.08	70.70	66.84	73.61	67.90	68.12	55.02	(4.9)	
			15.08	23.53	29.78	30.56	32.59	45.53	64.06	72.86	86.26	23.1	
TOTAL	179.60	207.22	246.84	274.56	342.76	328.22	372.62	429.77	479.06	511.58	567.38	11.6	

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHA AM	120.22	130.80	200.46	211.41	223.06	235.44	248.57	262.47	277.18	292.72	10.3
CHUM PHON	81.46	91.26	100.25	109.72	119.84	130.32	141.09	152.11	163.33	174.67	8.6
PHETCHABURI	68.44	75.35	81.88	88.69	95.94	103.52	111.39	119.47	127.77	136.25	7.8
PRACHOAPKHIRI KHAN	45.98	52.15	57.88	63.80	69.93	76.22	82.58	88.92	95.17	101.23	9.5
PRAN BURI	51.12	57.83	62.57	68.27	74.23	80.74	87.46	94.55	101.76	109.04	8.7
RANONG	63.29	68.02	72.19	76.34	80.52	84.52	88.46	92.28	95.97	99.49	5.2
RATCHABURI 1	56.99	64.24	70.92	77.69	84.57	91.59	98.67	105.69	112.59	119.29	8.0
RATCHABURI 2	28.50	32.26	36.23	40.30	44.70	49.19	53.75	58.27	62.68	66.91	9.7
SAMUTSONGKHAM	80.11	89.72	99.16	109.16	119.85	130.97	142.44	154.09	165.87	177.65	7.5
TOTAL	596.09	661.62	781.55	845.37	912.63	982.50	1,054.40	1,127.85	1,202.32	1,277.24	8.5

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984		1985
CHIEW LAN	2.53	3.25	4.26	4.99	6.70	9.69	12.20	14.42	16.50	0.29	2.38	19.7
KRABI								1.02	5.75	20.51	23.82	
KHANOM								63.98	73.42	79.06	85.73	7.8
LAMPOORA	25.87	28.72	33.27	42.42	53.17	58.77	60.56	69.76	81.53	90.76	106.71	17.7
NAKHON SI THAMMARAT	17.68	22.42	31.48	38.73	41.63	47.20	56.48	14.88	16.25	18.17	19.56	9.9
PHANGGA	11.75	7.50	8.79	8.64	10.71	12.20	14.49	108.28	113.59	113.28	131.10	4.4
PHUKET 1 & 2	67.12	71.48	78.24	90.15	99.97	105.88	111.94	97.36	109.97	117.01	128.24	9.9
PHUNPHIN	17.67	31.07	45.86	56.24	67.88	80.10	92.43	11.98	14.91	15.93	18.83	14.1
TAKUA PA	7.32	6.27	6.75	8.16	9.36	9.72	9.80	36.22	39.13	48.46	47.28	9.0
THUNG SONG	14.56	17.91	22.35	23.56	28.63	30.73	33.94					
TOTAL	164.50	188.60	230.99	272.89	318.03	354.30	391.84	417.88	471.05	513.74	580.61	10.4

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHIEW LAN	2.83	3.33	3.75	4.14	4.54	4.97	5.42	5.88	6.38	6.89	11.2
KRABI	25.85	28.92	31.88	35.01	38.37	41.87	45.48	49.16	52.88	56.63	9.0
KHANOM	20.83	26.52	29.05	31.77	34.73	37.88	41.21	44.71	48.36	52.19	11.9
LAMPOORA	91.66	95.00	103.47	112.12	121.06	129.98	138.75	147.20	155.25	162.76	6.6
NAKHON SI THAMMARAT	117.50	125.79	137.74	150.15	163.23	176.65	190.33	204.13	218.03	231.97	8.1
PHANGGA	21.07	23.55	25.82	28.11	30.53	33.02	35.55	38.08	40.61	43.11	8.2
PHUKET 1 & 2	134.79	147.12	156.46	164.90	173.28	181.76	190.28	198.77	207.15	215.41	5.1
PHUNPHIN	133.64	148.67	162.06	175.97	190.66	205.71	221.01	236.40	251.83	267.22	7.6
TAKUA PA	20.28	22.61	24.76	26.84	29.11	31.35	33.64	35.94	38.27	40.61	8.0
THUNG SONG	50.30	56.06	61.43	67.06	73.06	79.24	85.58	91.98	98.41	104.82	8.3
TOTAL	618.73	677.57	736.42	796.08	858.57	922.42	987.25	1,052.24	1,117.18	1,181.59	7.4

(UNIT: GWh)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984		1985
BANG LANG												
HAT YAI 1 & 2	76.55	91.54	112.36	138.48	171.52	196.74	1.84	10.87	13.26	14.65	14.98	68.9
NARATHIWAT							210.05	225.37	263.99	289.48	310.31	9.5
PHATHALUNG	4.59	6.11	8.22	10.18	12.46	14.81	17.11	19.54	23.78	28.44	31.80	16.5
SADAO							9.28	14.81	18.68	22.61	26.22	29.7
SONG KHLA												
YALA		11.47	45.70	63.45	87.26	104.23	124.00	141.42	124.07	124.70	135.16	5.3
PATTANI												
SATUN												
TOTAL	81.15	109.13	166.29	212.11	271.24	315.79	362.28	412.01	481.04	528.86	577.46	12.8

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
BANG LANG	15.39	16.46	17.19	17.89	18.58	19.23	19.82	20.33	20.77	21.12	3.5
HAT YAI 1 & 2	280.70	235.22	254.92	276.01	299.04	323.53	349.49	376.81	405.62	435.91	3.5
NARATHIWAT	65.31	73.86	81.31	88.73	96.10	103.50	110.91	118.20	125.32	132.17	8.4
PHATHALUNG	35.12	40.18	44.47	48.90	53.54	58.27	63.05	67.82	72.57	77.27	9.3
SADAO	28.55	32.22	35.80	39.60	43.68	47.88	52.05	56.15	60.12	63.90	9.3
SONG KHLA	61.75	117.76	132.81	145.56	158.53	172.13	186.27	200.82	215.76	230.98	15.8
YALA	147.09	68.63	75.66	82.80	90.39	98.24	106.27	114.40	122.59	130.76	(0.3)
PATTANI		101.39	113.16	147.59	182.73	218.51	233.36	249.19	266.01	283.85	13.7
SATUN		37.29	41.23	45.39	49.80	54.32	58.89	63.39	67.75	71.91	8.6
TOTAL	633.90	723.00	796.54	892.47	992.40	1,095.60	1,180.10	1,267.11	1,356.50	1,447.87	9.6

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
CHIANG MAI 1, 2 & 3	18.11	22.36	26.30	31.24	33.14	35.20	36.06	40.45	47.13	53.34	61.18	11.7
CHAIANG RAI							12.70	17.66	23.30	25.50	28.16	22.0
LANPHUN 1	3.40	6.19	8.96	10.26	11.20	9.00	9.52	9.86	9.87	10.42	10.26	2.7
LANPHUN 2						4.54	4.54	8.05	10.12	12.68	11.79	21.0
LANPANG 1 & 2	7.43	9.35	11.44	12.93	15.11	14.47	14.69	17.09	19.18	20.08	21.78	8.5
FANG												
MAE HONG SON			0.03	0.04	0.05	0.05	0.06	0.25	0.61	0.76	0.84	74.4
MAE MHAO 2												
MAE SARING												
PRAYAO		5.13	7.92	9.90	10.26	14.26	15.40	8.91	10.48	12.62	14.24	0.0
THOEN	0.14	0.23	0.52	0.74	0.64	0.86	1.43	1.84	2.24	2.38	2.66	25.4
MAE NGAT												
CHONTONG	0.29	0.34	0.42	0.54	0.56	0.58	0.64	3.58	3.69	2.30	4.50	50.6
NEA												
TOTAL	29.37	43.61	55.60	65.64	70.96	78.96	95.04	107.68	126.62	140.07	155.41	14.5

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
CHIANG MAI 1, 2 & 3	64.08	69.85	76.05	82.71	89.84	97.48	105.63	114.33	123.60	133.47		8.1
CHAIANG RAI	31.11	34.85	38.03	41.25	44.56	47.85	51.10	54.27	57.34	60.30		7.9
LANPHUN 1 & 2	21.60	17.99	19.31	23.44	29.26	37.53	45.31	51.71	56.27	60.21		10.6
LANPANG 1 & 2	23.00	25.28	26.98	28.66	30.39	32.10	33.80	35.44	37.03	38.56		5.9
FANG												
MAE HONG SON	0.82	0.88	0.93	0.99	1.05	1.11	1.18	1.24	1.31	1.38		5.1
MAE MHAO 2												
MAE SARING												
PHAYAO	15.72	17.74	19.60	21.48	23.41	25.33	27.22	29.07	30.86	32.58		8.6
THOEN	2.94	3.39	3.75	4.12	4.50	4.88	5.25	5.62	5.98	6.33		(7.8)
MAE NGAT												
CHONTONG	4.90	5.13	5.46	5.80	6.14	6.49	6.82	7.15	7.47	7.77		5.3
NEA		5.50	5.50	5.60	5.60	5.70	5.70	5.80	5.80	5.90		2.7
TOTAL	164.17	180.60	195.62	214.04	234.75	258.46	282.01	304.62	325.66	346.48		8.3

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
BHUMBOL	0.07	0.10	0.12	0.13	0.21	0.17	0.27	0.30	0.44	0.55	0.66	31.0
KAMPHAENG PHET												18.4
NAN	3.86	5.25	6.97	8.27	8.52	13.48	15.28	18.08	18.38	22.64	24.96	13.1
PHARE												16.4
PHICHIT												12.4
PHITSANULOK 1	10.16	12.90	12.84	13.43	14.78	15.31	17.29	19.91	21.80	24.24	27.48	20.8
SIRIKIT												0.2
SUKHO THAI	4.10	5.35	7.80	9.72	11.01	13.77	16.15	10.28	11.19	12.41	13.94	14.3
TAK	1.89	2.26	2.79	3.07	3.48	5.19	5.96	6.42	8.01	9.19	10.14	15.9
UTTARADIT	3.86	4.79	5.82	6.51	7.10	7.91	8.93	10.42	12.55	15.02	16.57	
PHITSANULOK 2											1.73	
TOTAL	23.94	30.64	40.37	46.23	52.61	65.18	81.64	87.74	98.05	112.91	128.67	14.6

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
BHUMBOL	0.74	0.88	1.04	1.21	1.40	1.60	1.83	2.07	2.33	2.61		14.8
KAMPHAENG PHET	13.37	14.92	16.39	17.88	19.43	20.98	22.53	24.06	25.56	27.02		7.6
NAN												8.4
PHARE	27.39	11.11	12.15	13.31	14.54	15.83	17.15	18.50	19.86	21.25		0.8
PHICHIT	18.80	18.80	19.86	20.99	22.13	23.23	24.29	25.28	26.22	27.09		6.2
PHITSANULOK 1	19.46	21.59	23.40	25.19	27.00	28.76	30.46	32.08	33.61	35.04		4.8
SIRIKIT	25.72	27.95	29.97	32.00	34.09	36.17	38.21	40.18	42.07	43.87		8.4
SUKHO THAI	1.11	1.21	1.33	1.45	1.58	1.71	1.86	2.02	2.19	2.36		6.7
TAK	14.05	15.66	17.05	18.45	19.87	21.30	22.72	24.10	25.45	26.76		5.8
UTTARADIT	10.57	11.56	12.39	13.19	14.00	14.80	15.59	16.36	17.09	17.80		5.6
PHITSANULOK 2	17.13	18.65	20.07	21.55	23.11	24.72	26.35	28.00	29.65	31.31		6.8
	1.86	2.05	2.23	2.40	2.57	2.74	2.90	3.06	3.21	3.35		
TOTAL	131.39	144.39	155.87	167.60	179.72	191.85	203.89	215.70	227.25	238.46		6.4

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
LOP BURI 1 & 2	9.80	13.87	14.85	15.63	16.98	16.27	18.89	19.26	21.60	23.62	26.22	10.0
MANOROM	4.17	5.36	6.45	6.58	9.72	9.78	10.85	12.86	14.20	16.34	17.60	12.5
NAKHON SAWAN	11.06	12.54	15.82	18.06	19.80	21.96	22.36	25.00	27.16	29.88	32.32	8.0
PHETCHA BUN			5.04	6.16	7.00	8.24	9.36	12.16	14.80	15.02	15.70	15.3
SING BURI	4.95	5.24	7.30	8.62	8.98	8.92	10.00	12.22	12.74	13.68	14.36	10.0
TAKHLI 2	3.13	3.30	3.52	3.77	5.04	5.96	4.06	4.54	5.50	5.46	5.43	(1.8)
LONSAK												
CHAI BADAN												
TOTAL	33.11	40.30	52.97	58.83	67.52	71.13	75.51	86.04	96.00	104.00	111.63	9.4

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
LOP BURI 1 & 2	28.90	31.13	29.02	30.48	31.99	33.50	34.98	36.43	37.85	39.24	4.1
MANOROM	18.34	21.14	22.55	23.96	25.41	26.85	28.25	29.60	30.91	32.16	6.2
NAKHON SAWAN	34.89	38.39	41.11	43.89	46.81	49.75	52.69	55.60	58.46	61.25	6.6
PHETCHA BUN	18.56	20.52	11.90	12.72	13.62	14.51	15.37	16.20	17.00	17.75	1.2
SING BURI	14.51	15.59	16.45	17.50	18.57	19.62	20.65	21.65	22.61	23.53	5.1
TAKHLI 2	5.78	6.16	6.48	6.79	7.12	7.45	7.77	8.08	8.37	8.66	4.8
LONSAK		0.00	7.00	7.58	8.22	8.87	9.51	10.14	10.75	11.35	7.2
CHAI BADAN		0.00	7.19	7.79	8.45	9.11	9.77	10.42	11.06	11.68	7.2
TOTAL	120.98	132.93	141.69	150.72	160.20	169.65	178.99	188.12	197.00	205.60	6.3

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
CHUM PHAE	1.31	3.74	5.46	6.84	7.80	9.04	10.44	9.96	10.68	12.48	13.44	8.3
KHON KAEN 1 & 2	11.34	12.68	14.48	18.58	19.64	20.70	25.28	28.56	28.68	32.16	33.40	10.0
LOEI								8.92	10.72	13.76	14.19	16.7
NAKON PHANOM	3.28	3.15	3.22	3.26	3.49	3.53	3.75	4.32	6.41	5.39	5.88	10.7
NAM PHONG							3.05	7.95	11.89	12.37	13.18	44.2
NAM PHUNG	0.05	0.06	0.18	0.17	0.22	0.24	0.28	0.37	0.51	0.67	1.62	47.2
NONG KHAI	3.77	4.30	4.38	5.68	6.80	6.07	7.88	8.74	12.04	11.96	15.76	21.0
PHANG KHON								6.77	8.09	9.47	11.35	18.8
SAKON NAKHON	4.57	5.56	5.72	6.79	6.85	8.58	11.34	6.87	8.42	9.48	10.54	4.2
THAT PHANOM	0.92	1.15	1.41	2.22	2.13	1.74	2.32	2.45	2.72	3.78	4.02	18.2
UDON THANI 1 & 2	17.32	17.47	20.64	20.94	23.90	25.64	30.56	32.20	37.28	41.40	45.92	12.4
BUNG KAN												
CHULA BHOEN P/S												
NA KAE	0.18	0.22	0.23	0.42	0.48	0.63	0.63	0.05	0.06	0.06	0.07	18.3
								0.79	1.06	1.05		10.7
TOTAL	42.74	48.33	55.71	64.91	71.30	76.19	95.57	117.95	138.55	154.03	169.37	17.3

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHUM PHAE	14.42	16.21	17.88	19.59	21.36	23.14	24.92	26.66	28.37	30.04	8.4
KHON KAEN 1 & 2	35.06	38.24	41.15	44.11	47.17	50.24	53.29	56.28	59.21	62.07	6.4
LOEI	13.67	15.03	16.32	17.69	19.15	20.67	22.24	23.84	25.48	27.14	6.7
NAKON PHANOM	6.56	7.14	7.66	8.20	8.76	9.32	9.88	10.43	10.97	11.48	6.9
NAM PHONG	13.24	13.85	14.36	14.89	15.47	16.05	16.63	17.21	17.77	18.31	3.3
NAM PHUNG	0.82	0.96	1.11	1.27	1.43	1.61	1.79	1.98	2.18	2.38	3.9
NONG KHAI	15.18	13.88	14.71	15.51	16.32	17.11	17.89	18.63	19.33	20.01	2.4
PHANG KHON	10.92	10.88	11.92	12.89	13.80	14.60	15.28	15.82	16.22	16.49	3.8
SAKON NAKHON	11.03	11.98	12.84	13.71	14.61	15.50	16.37	17.22	18.04	18.83	6.0
THAT PHANOM	4.26	4.66	5.02	5.38	5.74	6.10	6.45	6.79	7.11	7.42	6.3
UDON THANI 1 & 2	46.91	50.77	54.20	57.62	61.08	64.44	67.64	70.62	73.35	75.79	5.1
BUNG KAN		4.36	4.93	5.54	6.18	6.87	7.58	8.31	9.05	9.81	10.7
CHULA BHOEN P/S	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.12	0.12	6.7
NA KAE											
TOTAL	172.13	188.02	202.19	216.48	231.17	245.74	260.06	273.88	287.20	299.89	5.9

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	(%/YEAR)
KALASIN	6.16	8.84	10.32	12.52	14.28	16.14	21.36	22.08	11.21	14.90	18.42	28.2
MAHA SARAKHAM	0.89	0.96	1.06	1.39	1.96	2.60	2.94	3.75	24.32	23.08	24.22	8.5
MUKDAHAN									4.60	4.92	5.43	15.8
ROIET	0.04	0.17	0.23	0.97	1.23	1.78	1.94	2.08	2.28	2.79	2.42	6.3
SIRINDHON							6.57	8.40	11.80	14.88	17.16	27.1
SISAKET	0.45	0.71	0.97	1.30	1.69	2.61	4.59	5.40	5.37	5.19	5.80	17.3
SOMDET	10.70	13.04	14.84	16.95	19.80	20.58	22.78	18.68	22.76	24.80	28.28	6.6
UBON RATCHATHANI 1	2.17	2.99	3.84	4.83	5.60	7.48	9.64	11.39	15.70	16.90	19.16	20.7
YASOTHON												
TOTAL	20.41	26.71	31.26	37.97	44.55	51.19	69.82	71.78	98.04	107.46	120.88	18.7

SUBSTATION	FORECAST										GROWTH RATE	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		(%/YEAR)
KALASIN	18.37	16.08	17.55	19.15	20.81	22.47	24.14	25.78	27.40	28.97		4.6
MAHA SARAKHAM	24.46	18.04	19.91	21.86	23.88	25.96	28.26	30.65	33.11	35.65		3.9
MUKDAHAN	5.90	6.68	7.31	7.96	8.65	9.34	10.03	10.72	11.40	12.07		8.3
ROIET	16.78	19.05	20.94	22.86	24.86	26.86	28.85	30.82	32.74	34.61		8.4
SIRINDHON	2.16	2.29	2.41	2.55	2.69	2.84	2.99	3.15	3.31	3.48		3.7
SISAKET	17.20	19.16	20.99	22.83	24.72	26.60	28.78	30.95	33.10	35.22		7.5
SOMDET	7.03	7.90	8.81	9.76	10.74	11.76	12.82	13.92	15.04	16.20		10.8
UBON RATCHATHANI 1	29.57	31.96	34.15	36.40	38.76	41.14	43.55	45.93	48.29	50.61		6.0
YASOTHON	18.71	18.35	20.21	22.10	24.04	25.98	27.89	29.74	31.55	33.47		5.7
TOTAL	140.17	139.50	152.29	165.48	179.14	192.95	207.31	221.65	235.93	250.27		7.5

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
BURI RAM												15.4
CHAIYA PHUM	23.35	26.87	30.35	34.97	39.07	41.84	6.77	10.41	11.64	14.54	16.00	19.7
NAKHON RATCHASIMA 1 & 2	5.64	6.68	10.64	11.48	12.06	12.75	46.30	45.58	53.78	61.92	67.06	9.9
PAK CHONG	4.30	5.52	7.22	9.20	10.34	11.00	13.94	12.96	10.20	11.60	11.88	(1.4)
PHON							12.38	9.44	14.10	16.40	14.98	6.4
SIKHU							15.62	13.40	14.70	16.04	15.68	5.4
SURIN	5.58	6.94	8.64	10.56	12.80	13.64		15.58	12.32	15.72	16.76	4.2
TOTAL	38.87	46.01	56.85	66.21	74.27	79.23	95.01	115.44	126.97	147.48	156.26	14.5

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
BURI RAM	17.29	19.35	21.30	23.29	25.35	27.43	29.51	31.56	33.57	35.54	8.3
CHAIYA PHUM	14.35	15.71	16.91	18.12	19.36	20.60	21.82	23.02	24.19	25.33	6.2
NAKHON RATCHASIMA 1 & 2	67.64	73.19	77.69	82.20	86.87	91.46	95.96	100.25	104.35	108.15	4.9
PAK CHONG	12.48	13.60	14.59	15.56	16.52	17.41	18.26	19.09	19.90	20.69	5.7
PHON	13.56	14.25	14.77	15.24	15.71	16.13	16.52	16.86	17.14	17.38	1.5
SIKHU	15.07	16.02	16.85	17.67	18.52	19.34	20.12	20.84	21.50	22.14	3.5
SURIN	17.70	19.33	20.75	22.13	23.53	24.91	26.25	27.53	28.74	29.87	6.0
TOTAL	158.08	171.45	182.85	194.21	205.85	217.27	228.43	239.14	249.40	259.10	5.2

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
ANG THONG 1	3.21	6.00	8.46	9.72	10.86	11.76	10.78	11.00	11.88	6.40	4.41	(17.8)
ANG THONG 2								1.87	14.07	12.06	11.94	85.5
AYUTHAYA 1	5.80	8.15	9.10	10.01	11.27	10.90	10.08	12.44	16.80	18.10	21.30	14.3
BAN MAI									38.44	41.58	128.87	49.7
BANG PA IN	5.36	6.56	9.22	9.83	10.16	11.23	11.54	12.06	14.28	16.52	17.50	9.3
PRACHIN BURI	4.69	5.66	7.84	10.58	10.68	15.62	16.38	18.62	20.16	25.72	26.84	11.4
SARABURI 1	9.56	12.45	14.66	14.78	14.32	13.20	14.46	16.86	17.48	18.54	19.46	8.1
SARABURI 2	12.21	12.81	14.93	14.54	13.97	16.40	39.43	41.88	50.72	51.68	55.24	27.5
SARABURI 3	17.08	20.50	22.80	23.28	21.96	20.88	22.72	23.88	22.32	22.20	21.72	0.8
SARABURI 4				4.78	6.58	8.48	12.18	15.93	15.88	16.35	16.93	14.8
THAIAN	1.24	1.55	2.34	3.05	3.28	5.74	16.43	15.56	14.02	15.84	15.84	22.5
WATTHANA NAKHON												
MEA	21.28	19.22	17.78	21.96	23.22	30.52	35.16	41.60	35.90	14.20	6.00	(27.8)
TOTAL	80.43	92.90	107.13	122.54	126.30	144.72	189.16	211.71	271.95	259.19	346.05	19.0

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
ANG THONG 1	4.84	5.08	5.34	5.61	5.89	6.18	6.49	6.81	7.15	7.51	5.5	
ANG THONG 2	12.47	13.72	14.88	16.05	17.27	18.47	19.64	20.77	21.84	22.82	6.7	
AYUTHAYA 1	22.85	25.05	27.13	29.29	31.57	33.90	36.25	38.59	40.89	43.13	7.3	
BAN MAI	138.54	151.23	160.44	170.27	180.66	191.57	202.94	215.19	228.37	242.54	6.5	
BANG PA IN	17.97	19.18	20.26	21.38	22.55	23.76	24.99	26.23	27.48	28.73	5.1	
PRACHIN BURI	30.48	34.90	27.18	28.32	29.48	30.61	31.87	33.08	34.24	35.34	2.8	
SARABURI 1	21.42	22.82	24.00	25.19	26.43	27.65	28.86	30.03	31.16	32.25	5.2	
SARABURI 2	58.53	58.97	99.45	99.99	100.58	101.24	101.95	102.73	103.55	104.43	6.6	
SARABURI 3	20.00	51.09	78.09	78.09	78.09	78.09	78.09	78.09	78.09	78.09	13.7	
SARABURI 4	15.79	18.68	20.00	21.35	22.77	24.22	25.67	27.12	28.56	29.98	5.9	
THAIAN	17.53	18.87	20.09	21.35	22.69	24.05	25.44	26.84	28.24	29.64	6.5	
WATTHANA NAKHON			11.56	12.55	13.56	14.55	15.61	16.65	17.65	18.61	7.0	
MEA												
TOTAL	360.42	419.58	508.41	529.43	551.53	574.29	597.81	622.12	647.21	673.07	6.9	

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
AO PHAI												
BAN BUNG	9.13	11.65	12.41	15.20	15.52	18.28	20.44	11.22	11.22	0.89	1.29	15.1
BANG LAMUNG	17.46	21.26	27.03	28.57	33.68	31.56	33.96	25.60	28.16	11.16	12.26	14.2
CHON BURI	7.47	8.43	9.74	10.73	13.50	14.82	16.24	29.44	34.68	31.92	35.56	6.3
CHACHOENG SAO								19.54	23.08	23.46	28.40	13.9
CHANTHABURI				11.80	13.46	17.84	20.74	23.16	25.76	28.12	32.18	15.4
KLAENG												
RAYONG 1	7.68	10.43	13.12	17.18	14.36	16.24	17.42	17.88	28.36	34.52	33.60	15.7
RAYONG 2										4.14	7.34	
RAYONG 3										3.72	6.70	
SRIRACHA	6.39	6.77	8.17	8.93	9.09	9.86	11.04	11.58	13.80	15.32	15.58	9.6
TRAT	2.70	2.94	4.97	3.53	3.49	3.76	4.53	4.77	4.31	4.66		4.4
SATTAPHIP 2												
TOTAL	50.83	61.48	75.45	95.94	103.10	112.36	131.34	143.19	169.37	197.07	215.83	13.9

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
AO PHAI	1.30	3.23	6.46	9.70	9.70	9.70	9.70	9.70	9.70	9.70		22.4
BAN BUNG	12.12	13.26	14.32	15.44	16.62	17.85	19.11	20.40	21.70	23.01		6.5
BANG LAMUNG	37.90	41.20	43.67	46.10	48.57	50.97	53.30	55.50	57.58	59.54		5.3
CHON BURI	39.20	43.38	47.20	51.16	55.32	59.55	63.84	68.11	72.34	76.51		6.0
CHACHOENG SAO	29.86	32.53	34.98	37.52	40.19	42.89	45.62	48.32	50.98	53.58		6.6
CHANTHABURI	34.44	27.73	30.14	32.50	34.95	37.41	39.83	42.19	44.45	46.60		3.8
KLAENG	7.13	7.86	8.57	9.32	10.12	10.96	11.83	12.73	13.65	14.60		8.3
RAYONG 1	42.39	45.63	49.38	53.36	57.65	62.27	67.22	72.54	78.25	84.35		9.6
RAYONG 2	7.48	8.63	9.77	10.95	12.19	13.42	14.63	15.78	16.84	17.77		9.2
RAYONG 3	7.00	7.00	14.60	89.60	92.40	99.50	99.50	99.50	99.50	99.50		31.0
SRIRACHA	16.86	18.19	19.37	20.59	21.89	23.21	24.56	25.92	27.30	28.68		6.3
TRAT		10.53	11.53	12.51	13.50	14.45	15.37	16.25	17.08	17.83		6.8
SATTAPHIP 2												
TOTAL	235.68	259.15	289.99	388.75	413.10	442.18	464.51	486.92	509.36	531.67		9.4

(UNIT: MW)

SUBSTATION	ACTUAL										GROWTH RATE	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	(%/YEAR)
BAN PONG 1	11.79	12.74	21.00	21.79	21.80	21.62	21.24	22.80	30.40	34.92	39.92	13.0
BAN PONG 2	21.92	24.46	22.56	24.00	27.00	32.05	30.70	28.85	36.70	37.80	38.85	3.9
KANCHANA BURI	6.63	6.63	7.34	10.38	10.29	9.20	10.98	11.48	16.12	13.66	14.50	9.5
KANPHAENG SAEN	18.67	20.61	26.27	26.88	32.97	38.58	38.61	42.42	41.13	41.46	42.72	2.1
NAKHON CHAISRI	13.69	18.70	18.73	20.20	25.48	30.68	32.72	37.58	43.04	43.68	51.72	11.0
SAM PHRAN 1	22.19	26.51	30.14	32.92	39.24	39.40	37.01	38.04	40.80	43.36	46.13	3.2
SAMUTSAKHON 1 & 2	4.39	5.47	6.05	6.53	9.63	10.21	11.01	13.70	17.20	20.38	21.42	16.0
SUPHAN BURI		5.33	7.51	12.37	6.33	7.80	7.95	7.66	11.34	10.60	10.60	6.3
THAMUANG				0.04	0.08	0.08	0.10	0.13	0.14	0.27	0.27	29.2
SRINAGARIND												
KHAO LAEM												
TOTAL	99.28	120.45	139.60	155.12	172.82	189.62	190.31	202.84	237.00	246.37	267.80	7.1

SUBSTATION	FORECAST										GROWTH RATE	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		(%/YEAR)
BAN PONG 1	48.61	36.94	39.70	42.44	45.22	47.94	50.57	53.10	55.50	57.77		3.8
BAN PONG 2	39.79	42.59	45.06	47.60	50.31	53.07	55.85	58.63	61.40	64.13		5.1
KANCHANA BURI	25.62	28.40	30.64	32.93	35.31	37.70	40.06	42.35	44.56	46.65		6.4
KANPHAENG SAEN	14.83	16.47	17.98	19.51	21.06	22.63	24.19	25.75	27.28	28.79		7.7
NAKHON CHAISRI	101.19	110.70	119.76	129.38	139.79	150.72	162.17	174.03	186.33	199.05		7.7
SAM PHRAN 1	45.31	49.19	52.82	56.59	60.64	64.85	69.21	73.67	78.23	82.87		6.0
SAMUTSAKHON 1 & 2	24.03	27.00	29.72	32.33	34.93	37.40	39.84	42.20	44.46	46.59		8.1
SUPHAN BURI												
THAMUANG												
SRINAGARIND	0.29	0.33	0.37	0.42	0.46	0.51	0.56	0.61	0.66	0.71		10.1
KHAO LAEM	2.49	2.68	2.70	2.72	2.75	2.77	2.80	2.82	2.85	2.88		5.6
TOTAL	302.14	314.30	338.75	363.92	390.46	417.58	445.25	473.15	501.26	529.42		7.1

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985		
CHA AM CHUM PHON PHETCHABURI PRACHOAPKHIRI KHAN PRAN BURI RANONG RATCHABURI 1 RATCHABURI 2 SAMUTSONGKHAM	14.44	15.96	17.56	18.16	15.92	15.24	15.60	17.28	18.40	19.40	20.04	5.6	
							8.86	10.60	12.14	13.82	15.30	14.6	
	5.99	7.36	8.43	9.30	9.24	9.32	9.28	10.28	13.34	12.56	13.90	8.3	
							4.97	5.89	6.45	7.61	8.29	13.6	
				7.41	8.37	10.79	12.69	8.48	8.31	9.29	9.45	(2.6)	
	4.40	5.80	7.60	8.80	9.30	9.20	10.06	9.74	9.48	10.81	10.88	3.4	
	16.42	17.48	19.91	15.10	16.08	15.12	13.38	16.42	12.28	13.14	10.16	(7.6)	
										5.00	5.64		
			5.47	6.28	7.02	6.93		7.88	11.92	12.90	17.54	17.42	20.2
	TOTAL	41.25	46.60	58.96	65.04	65.93	66.60	82.72	90.61	93.30	109.17	111.08	10.8

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHA AM	22.14	23.89	35.56	37.33	39.19	41.16	43.22	45.39	47.67	50.05	9.6
CHUM PHON	15.76	17.51	19.07	20.70	22.43	24.19	25.98	27.78	29.60	31.40	7.5
PHETCHABURI	14.88	16.23	17.47	18.75	20.10	21.49	22.91	24.35	25.82	27.29	7.0
PRACHOAPKHIRI KHAN	9.37	10.54	11.59	12.67	13.76	14.87	15.98	17.06	18.11	19.10	8.7
PRAN BURI	10.06	11.28	12.11	13.10	14.12	15.23	16.37	17.55	18.74	19.92	7.7
RANONG	11.38	12.13	12.78	13.42	14.03	14.62	15.19	15.72	16.23	16.70	4.4
RATCHABURI 1	10.84	12.12	13.27	14.42	15.57	16.73	17.88	19.00	20.08	21.11	7.6
RATCHABURI 2	5.61	6.29	7.01	7.73	8.50	9.28	10.06	10.82	11.54	12.22	8.0
SAMUTSONGKHAM	16.04	17.81	19.52	21.30	23.19	25.13	27.10	29.08	31.04	32.98	6.6
TOTAL	116.08	127.81	148.38	159.40	170.89	182.69	194.68	206.75	218.82	230.77	7.6

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
CHIEW LAN	0.76	0.96	1.09	1.29	1.78	2.31	2.64	2.77	3.43	0.50	0.71	15.5
KRABI								0.79	1.39	4.36	4.75	
KHANOM								12.35	14.54	15.22	16.94	9.6
LAMPOORA	5.73	6.54	6.82	8.86	9.98	10.70	11.55	16.20	17.32	19.24	22.68	
NAKHON SI THAMMARAT	4.88	6.18	7.71	8.94	10.43	11.39	13.38	18.78	19.24	22.34	24.20	14.8
PHANGNGA	2.26	1.97	2.21	1.89	2.28	2.67	3.09	3.29	3.40	3.63	3.92	
PHUKET 1 & 2	11.97	13.34	14.13	16.33	18.12	18.48	19.83	18.78	20.35	20.30	23.23	4.7
PHUNPHIN	4.70	7.35	9.44	11.00	12.96	15.21	17.53	18.01	21.22	22.34	24.20	
TAKUA PA	1.70	1.52	1.68	1.91	2.18	2.24	2.21	2.74	3.37	3.33	4.39	9.7
THUNG SONG	3.41	4.13	5.27	5.41	6.14	6.73	6.92	7.68	8.33	10.08	10.60	
TOTAL	35.41	41.99	48.35	55.62	63.88	69.74	77.15	82.61	93.34	101.77	114.66	10.5

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
CHIEW LAN	0.73	0.86	0.95	1.04	1.13	1.22	1.32	1.42	1.52	1.62	8.6
KRABI	5.13	5.70	6.24	6.81	7.41	8.03	8.67	9.31	9.95	10.58	
KHANOM	3.87	5.18	5.66	6.18	6.74	7.32	7.94	8.58	9.25	9.94	11.9
LAMPOORA	17.86	18.23	19.69	21.16	22.66	24.13	25.55	26.99	28.13	29.26	
NAKHON SI THAMMARAT	27.03	27.38	29.69	32.06	34.54	37.03	39.54	42.02	44.48	46.91	7.5
PHANGNGA	4.18	4.64	5.04	5.44	5.86	6.28	6.71	7.13	7.54	7.94	
PHUKET 1 & 2	23.67	25.64	27.25	28.40	29.62	30.84	32.04	33.22	34.37	35.48	4.3
PHUNPHIN	25.01	27.60	29.84	32.14	34.55	36.98	39.42	41.84	44.23	46.57	
TAKUA PA	4.45	4.95	5.39	5.82	6.29	6.75	7.22	7.68	8.15	8.62	7.0
THUNG SONG	11.04	12.19	13.23	14.31	15.44	16.60	17.76	18.92	20.06	21.18	
TOTAL	122.96	132.34	142.98	153.36	164.22	175.18	186.16	197.00	207.67	218.09	6.6

(UNIT: MW)

SUBSTATION	ACTUAL											GROWTH RATE (%/YEAR)
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
BANG LANG HAT YAI 1 & 2 NARATHIWAT PHATTHALUNG SADAO SONG KHLA YALA PATTANI SATUN	16.61	19.27	22.84	27.34	33.51	36.68	2.08 39.60	2.64 43.77	2.98 49.60 11.34	3.35 53.92 13.04	3.47 57.32 14.98	13.6 9.3 14.9
	1.45	1.95	2.41	2.77	3.27	3.93	4.40 2.52	5.41 4.15	6.65 4.16	8.06 5.29	8.50 5.83	16.7 23.3
		8.80	12.00	16.31	20.25	23.07	29.31	34.25	34.28	27.66	30.12	5.5
TOTAL	18.06	30.02	37.25	46.43	57.02	63.67	77.91	90.23	109.01	111.32	120.22	13.6

SUBSTATION	FORECAST										GROWTH RATE (%/YEAR)
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
BANG LANG	3.58	3.82	3.97	4.12	4.26	4.39	4.51	4.60	4.68	4.75	3.2
HAT YAI 1 & 2	64.59	42.96	46.19	49.62	53.34	57.26	61.38	65.67	70.16	74.83	2.7
NARATHIWAT	15.86	17.71	19.26	20.76	22.21	23.63	25.02	26.35	27.62	28.79	6.8
PHATHALUNG	9.13	10.31	11.28	12.27	13.29	14.30	15.31	16.30	17.26	18.19	7.9
SADAO	6.39	7.14	7.86	8.61	9.41	10.22	11.00	11.76	12.48	13.14	8.5
SONG KHLA	21.58	23.79	26.82	28.98	31.29	33.68	36.14	38.63	41.16	43.69	8.2
YALA	33.00	15.45	16.82	18.14	19.54	20.96	22.38	23.79	25.17	26.51	(1.3)
PATTANI		22.26	24.60	32.07	39.65	47.31	50.12	53.08	56.20	59.47	13.1
SATUN		7.96	8.72	9.51	10.34	11.17	12.00	12.81	13.57	14.28	7.6
TOTAL	154.13	151.39	165.51	184.07	203.31	222.92	237.86	252.99	268.29	283.65	9.0

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHIANG MAI 1	1 x 13.3	1 x 13.3	1 x 13.3	1 x 13.3	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0
2.	CHIANG MAI 2	2 x 25.0 3 x 3.3	2 x 25.0 3 x 3.3	2 x 25.0 3 x 3.3	2 x 25.0 3 x 3.3	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0	2 x 50.0 2 x 25.0
3.	CHIANG MAI 3	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0
4.	CHIANG RAI	2 x 25.0	2 x 25.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0
5.	LAMPHUN 1	1 x 6.5 1 x 4.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0
6.	LAMPHUN 2	1 x 13.3	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
7.	LAM PANG 1	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0	3 x 6.5 1 x 5.0
8.	LAM PANG 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
9.	FANG	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0	1 x 4.0 2 x 2.0
10.	MAE HONG SON	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0	2 x 1.0
11.	MAE MHAO 2	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0	1 x 4.0
12.	MAE SARING	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8	1 x 2.0 2 x 0.8
13.	PHAYAO	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7	1 x 25.0 1 x 16.7
14.	THOEN	2 x 2.5	2 x 2.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5
15.	MAE NGAT		2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0	2 x 5.0
16.	CHON THONG		1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		310.8	422.0	492.0	492.0	618.8	618.8	618.8	618.8	652.1	652.1	672.1	672.1	672.1	672.1	672.1
NO. OF SUBSTATIONS		14	16	16	16	16	16	16	16	16	16	16	16	16	16	16
NO. OF BANKS		22	24	24	24	25	25	25	25	25	25	25	25	25	25	25
NO. OF TRANSFORMERS		30	33	33	33	32	32	32	32	32	32	32	32	32	32	32

SUBSTATION EXPANSION PLAN OF REGION N2

(UNIT: MVA)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BHUMIBOL	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5	1 x 2.5
2.	KAMPHAENG PHET	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0
3.	NAN	1 x 4.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
4.	PHARE	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
5.	PHICHIT	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0
6.	PHITSANULOK 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
7.	PHITSANULOK 2	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
8.	SIRIKIT	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 5.0	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5
9.	SUKHO THAI	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
10.	TAK	1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5	1 x 25.0 1 x 12.5
11.	UTTARADIT	1 x 25.0	1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0	1 x 50.0 1 x 25.0
12.	SAWAN KHALOK					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
13.	MAE SOT					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		236.5	322.5	397.5	397.5	462.5	487.5	487.5	487.5	525.0	525.0	525.0	532.5	532.5	532.5	532.5
NO. OF SUBSTATIONS		11	11	11	11	12	13	13	13	13	13	13	13	13	13	13
NO. OF BANKS		13	15	17	17	19	20	20	20	21	21	21	21	21	21	21
NO. OF TRANSFORMERS		14	16	18	18	19	20	20	20	21	21	21	21	21	21	21

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	LOP BURI 1	1 x 25.0 2 x 6.25	1 x 25.0 2 x 6.25	1 x 25.0 2 x 6.25	1 x 25.0 2 x 6.25	1 x 25.0 2 x 6.25	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0
2.	LOP BURI 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
3.	MANOROM	2 x 12.5	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
4.	NAKHON SAWAN	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
5.	PHECHABUN	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
6.	SING BURI	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
7.	TAKHLI 2	1 x 6.25	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
8.	LOMSAR		1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
9.	CHAI BADAN		1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
10.	THATAKO				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
11.	SALOKBAT				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
12.	BANG MUN NAK					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		223.75	305.00	305.00	355.00	380.00	417.50	460.00	460.00	460.00	460.00	460.00	460.00	460.00	460.00	460.00
NO. OF SUBSTATIONS		7	9	9	11	12	12	12	12	12	12	12	12	12	12	12
NO. OF BANKS		9	12	12	14	15	16	16	16	16	16	16	16	16	16	16
NO. OF TRANSFORMERS		11	13	13	15	16	16	16	16	16	16	16	16	16	16	16

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHUM PHAE	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	3 x 6.25 1 x 13.3	2 x 6.25 1 x 13.3 1 x 25.0	2 x 6.25 1 x 13.3 1 x 25.0	2 x 6.25 1 x 13.3 1 x 25.0	2 x 6.25 1 x 13.3 1 x 25.0	2 x 6.25 1 x 13.3 1 x 25.0	2 x 6.25 1 x 13.3 1 x 25.0
2.	KHON KHAEN 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
3.	LOEI	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
4.	NAKHON PHANOM	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
5.	NAM PHONG	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5
6.	NAM PHUNG	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6	1 x 3.6
7.	NONG KHAI	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5
8.	PHANG KHON	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0
9.	SAKON NAKHON	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
10.	THAT PHANOM	1 x 6.3	1 x 6.3	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
11.	UDON THANI 1	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5
12.	UDON THANI 2	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
13.	BUNG KAN	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
14.	KHON KHAEN 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
15.	BAN PHAI	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		292.65	380.95	399.65	474.65	474.65	474.65	502.15	502.15	502.15	554.40	604.40	629.40	629.40	644.55	644.55
NO. OF SUBSTATIONS		12	14	14	15	15	15	15	15	15	15	15	15	15	15	15
NO. OF BANKS		14	18	18	21	21	21	21	21	21	22	23	24	24	24	24
NO. OF TRANSFORMERS		17	21	21	24	24	24	24	24	24	24	25	26	26	26	26

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	KALASIN	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0
2.	MAHA SARAKHAM	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0
3.	MUKDAHAN	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
4.	ROIET	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0
5.	SIRINDHON	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 12.5	1 x 12.5
6.	SISAKET	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	1 x 25.0 2 x 10.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0	3 x 25.0
7.	SOMDET	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5
8.	UBON RATCHATHANI 1	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5
9.	YASOTHON	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
10.	AMNAT CHARDEN					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
	CAPACITY (MVA)	289.5	289.5	314.5	439.5	489.5	489.5	489.5	501.5	501.5	556.5	556.5	556.5	571.5	593.0	593.0
	NO. OF SUBSTATIONS	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10
	NO. OF BANKS	13	13	14	17	19	19	19	19	19	21	21	21	21	21	21
	NO. OF TRANSFORMERS	14	14	15	18	20	20	20	20	20	21	21	21	21	21	21

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BURI RAM	2 x 12.5	2 x 12.5	2 x 12.5	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0
2.	CHAIYA DRUM	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
3.	NAKHON RACHASIMA 1	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5	2 x 31.5
4.	NAKHON RACHASIMA 2	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0
5.	PAK CHONG	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
6.	PHON	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
7.	SHIKHIU	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 31.5	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0
8.	SURIN	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
9.	PHIMAI				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
10.	PRAKHONCHAI				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		270.5	320.5	320.5	460.5	485.5	485.5	510.5	534.5	553.0	553.0	553.0	553.0	553.0	553.0	553.0
NO. OF SUBSTATIONS		8	8	8	9	10	10	10	10	10	10	10	10	10	10	10
NO. OF BANKS		10	11	11	15	16	16	17	18	18	18	18	18	18	18	18
NO. OF TRANSFORMERS		12	13	13	16	17	17	18	18	18	18	18	18	18	18	18

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	ANG THONG 1	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 10.0	1 x 25.0	1 x 25.0	1 x 25.0
2.	ANG THONG 2	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
3.	AYUTTHAYA 1	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
4.	BANG KHAN	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
5.	BAN NAI	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
6.	BAN PA IN	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
7.	PRACHIN BURI	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
8.	PATHUM THANI	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
9.	SARABURI 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
10.	SARABURI 2	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0	2 x 50.0
		1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
11.	SARABURI 3	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
12.	SARABURI 4	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
13.	THALAN	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
		1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0	1 x 6.0
14.	THANYA BURI	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
15.	WATTHANA NAKHON	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
16.	PRAPHUTTHABAT				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
17.	NAKHONNAYOK				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
18.	AYUTTHAYA 2					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
19.	NAVANAKHON					1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
	CAPACITY (MVA)	546.0	711.0	761.0	811.0	876.0	876.0	916.0	956.0	956.0	971.0	971.0	971.0	1,026.0	1,026.0	1,026.0
	NO. OF SUBSTATIONS	13	15	15	17	19	19	19	19	19	19	19	19	19	19	19
	NO. OF BANKS	19	23	25	27	29	29	30	31	31	31	31	31	32	32	32
	NO. OF TRANSFORMERS	19	23	25	27	29	29	30	31	31	31	31	31	32	32	32

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	AO PHAI	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
2.	BAN BUNG	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
3.	BANG LAMUNG	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
4.	CHON BURI	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
5.	CHACHOENGSAO	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
6.	CHANTRABURI	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
7.	KLAENG	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
8.	RAYONG 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
9.	RAYONG 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
10.	RAYONG 3	2 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0	3 x 40.0
11.	SRI RACHA	2 x 12.5	2 x 12.5	2 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5	1 x 12.5
12.	TRAT	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
13.	PHANOM SARAKHAM					1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
14.	PHANUTIKHOM						1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		510.0	615.0	655.0	707.5	732.5	757.5	757.5	787.5	817.5	832.5	877.5	920.0	935.0	935.0	935.0
NO. OF SUBSTATIONS		11	12	12	12	13	14	14	14	14	14	14	14	14	14	14
NO. OF BANKS		18	21	22	24	25	26	26	26	26	26	26	26	26	26	26
NO. OF TRANSFORMERS		19	22	23	24	25	26	26	26	26	26	26	26	26	26	26

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BANG PONG 1	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0	2 x 25.0 1 x 40.0
2.	BANG PONG 2	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
3.	KANCHANA BURI	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
4.	KAMPHAENG SAEN	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
5.	NAKHON CHAISRI	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0
6.	SAM PHRAN 1	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
7.	SAMUT SAKHON 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
8.	SAMUT SAKHON 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
9.	SUPHAN BURI	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
10.	THAMUANG	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
11.	SAM PHRAN 2				1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0	1 x 50.0
12.	DOEMBANG NANGBUAT				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		500.0	565.0	565.0	670.0	670.0	670.0	795.0	795.0	795.0	835.0	835.0	835.0	835.0	850.0	850.0
NO. OF SUBSTATIONS		10	10	10	12	12	12	12	12	12	12	12	12	12	12	12
NO. OF BANKS		17	19	19	21	21	21	24	24	24	25	25	25	25	25	25
NO. OF TRANSFORMERS		17	19	19	21	21	21	24	24	24	25	25	25	25	25	25

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHA AM	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
2.	CHUM PHON	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
3.	PHETCHA BURI	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
4.	PRACHOAPKHIRI KHAN	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
5.	PRAN BURI	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
6.	RAMONG	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
7.	RATCHABURI 1	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	2 x 12.5	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0	1 x 12.5 1 x 25.0
8.	RATCHABURI 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
9.	SAMUT SONGKHAM	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
10.	HUA HIN						1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
11.	THAPSAKAE						1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
12.	LANG SUAN						1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
CAPACITY (MVA)		250.0	250.0	250.0	250.0	275.0	350.0	365.0	365.0	377.5	377.5	377.5	377.5	377.5	377.5	377.5
NO. OF SUBSTATIONS		9	9	9	9	9	12	12	12	12	12	12	12	12	12	12
NO. OF BANKS		10	10	10	10	11	14	14	14	15	15	15	15	15	15	15
NO. OF TRANSFORMERS		12	12	12	12	12	15	15	15	15	15	15	15	15	15	15

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHIEW LAN	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5
2.	KRABI	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
3.	KHANOM	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
4.	LAMPOORA	4 x 7.5	4 x 7.5	4 x 7.5	4 x 7.5	4 x 7.5	4 x 7.5	3 x 7.5 1 x 25.0	3 x 7.5 1 x 25.0	3 x 7.5 1 x 25.0	3 x 7.5 1 x 25.0	3 x 7.5 1 x 25.0	3 x 7.5 1 x 25.0	2 x 7.5 2 x 25.0	2 x 7.5 2 x 25.0	2 x 7.5 2 x 25.0
5.	NAKHON SI THANMARAT	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0	2 x 40.0
6.	PHANGNGA	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 13.0	1 x 25.0	1 x 25.0	1 x 25.0
7.	PHUKET 1	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
8.	PHUKET 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
9.	PHUNPHIN	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5	1 x 40.0 1 x 31.5
10.	TAKUA PA	1 x 6.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
11.	TRUNG SONG	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 13.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
12.	SURAT THANI				1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
	CAPACITY (MVA)	314.0	333.0	333.0	338.0	358.0	358.0	375.5	390.5	390.5	469.5	469.5	469.5	499.0	499.0	499.0
	NO. OF SUBSTATIONS	11	11	11	12	12	12	12	12	12	12	12	12	12	12	12
	NO. OF BANKS	14	14	14	15	15	15	16	16	16	18	18	18	19	19	19
	NO. OF TRANSFORMERS	18	18	18	19	19	19	19	19	19	20	20	20	20	20	20

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BANG LANG	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 7.5	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
2.	HAT YAI 1	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 1 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0	1 x 40.0 2 x 25.0
3.	HAT YAI 2	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
4.	NARATHINAT	1 x 25.0	1 x 25.0	1 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0
5.	PHATTHALUNG	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
6.	SADAO	1 x 7.5	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
7.	SONG KHIA	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	2 x 25.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 25.0 1 x 40.0	1 x 50.0 1 x 40.0	1 x 50.0 1 x 40.0	1 x 50.0 1 x 40.0	1 x 50.0 1 x 40.0	1 x 50.0 1 x 40.0
8.	YALA	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0	1 x 31.5 1 x 25.0
9.	PATTANI		2 x 25.0	2 x 25.0	2 x 25.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0 1 x 50.0	1 x 25.0							
10.	SATUN		1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 40.0	1 x 40.0	1 x 40.0	1 x 40.0
11.	RANOT						1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0	1 x 25.0
	CAPACITY (MVA)	261.5	354.0	354.0	379.0	404.0	429.0	429.0	444.0	469.0	469.0	531.5	566.5	591.5	591.5	591.5
	NO. OF SUBSTATIONS	8	10	10	10	10	11	11	11	11	11	11	11	11	11	11
	NO. OF BANKS	11	14	14	15	15	16	16	16	16	16	17	17	18	18	18
	NO. OF TRANSFORMERS	11	14	14	15	15	16	16	16	16	16	17	17	18	18	18

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHIANG MAI 1	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4
2.	CHIANG MAI 2	9	9	9	9	9	9	9	9	9	9	9	9	11	11	11
3.	CHIANG MAI 3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
4.	CHIANG RAI	7	7	7	7	8	8	8	8	8	8	8	10	10	10	10
5.	LAPHUN 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6.	LAPHUN 2	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
7.	LAM PANG 1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
8.	LAM PANG 2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
9.	PANG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10.	MAE HONG SON	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11.	MAE PHAO 2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.	MAE SARING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13.	PHAYAO	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7
14.	THOEN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15.	MAE NGAT		2	2	2	2	2	2	2	2	2	2	2	2	2	2
16.	CHOM THONG		4	4	4	4	4	4	4	4	4	4	4	4	4	4
17.																
18.																
19.																
	TOTAL	56	62	62	62	66	66	66	66	66	66	66	68	71	71	71

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BHUMIBOL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.	KAMPHAENG PHET	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5
3.	NAN	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
4.	PHARE	5	5	5	5	8	8	8	8	8	8	8	8	8	8	8
5.	PRICHIT	3	3	3	3	6	6	6	6	6	6	6	6	6	6	6
6.	PHYTSANULOK 1	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8
7.	PHYTSANULOK 2	2	2	2	2	2	2	2	2	5	5	5	5	5	5	5
8.	SIRIKIT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.	SUKHO THAI	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6
10.	TAK	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
11.	UTTARADIT	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6
12.	SAVAN KHALOK					4	4	4	4	4	4	4	4	4	4	4
13.	MAE SOT						4	4	4	4	4	4	4	4	4	4
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		39	39	39	39	52	56	56	56	59	59	59	60	60	62	62

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	LOP BURI 1	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7
2.	LOP BURI 2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
3.	MANOROM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
4.	NAKHON SAVAN	6	6	6	6	6	10	10	10	10	10	10	10	10	10	10
5.	PHECHARUN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
6.	SING BURI	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7.	TAKHLI 2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8.	LONSAK		4	4	4	4	4	4	4	4	4	4	4	4	4	4
9.	CHAI BADAN		4	4	4	4	4	4	4	4	4	4	4	4	4	4
10.	THATAKO				4	4	4	4	4	4	4	4	4	4	4	4
11.	SALOKBAT				4	4	4	4	4	4	4	4	4	4	4	4
12.	BANG MUN NAK					4	4	4	4	4	4	4	4	4	4	4
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		34	42	42	50	54	60	60	60	60	60	60	60	60	60	60

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHUM PHAE	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2.	KHON KHAEN 1	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8
3.	LOEI	5	5	5	5	9	9	9	9	9	9	9	9	9	9	9
4.	NAKHON PHANOM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5.	NAM PHONG	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4
6.	NAM PHUNG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.	NONG KHAI	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7
8.	PHANG KHON	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
9.	SAKON NAKHON	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10.	THAT PHANOM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11.	UDON THANI 1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
12.	UDON THANI 2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
13.	BUNG KAN		4	4	4	4	4	4	4	4	4	4	4	4	4	4
14.	KHON KHAEN 2		4	4	4	4	4	4	4	4	4	4	4	4	4	4
15.	BAN PHAI				4	4	4	4	4	4	4	4	4	4	4	4
16.																
17.																
18.																
19.																
TOTAL		47	55	55	59	69	69	69	69	69	69	73	75	75	79	79

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	KALASIN	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5
2.	MAHA SARAKHAM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
3.	MUKDAHAN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4.	ROIET	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5.	SIRINDHON	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6.	SISAKET	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7.	SOMDET	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8.	UBON RATCHATHANI 1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
9.	YASOTHON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
10.	ANNAT CHARDEN															
11.																
12.																
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		36	36	40	40	47	47	47	47	47	54	54	55	55	55	55

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BURI RAM	5	5	5	8	8	8	8	8	8	8	8	8	8	8	8
2.	CHAIYA DHUM	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3.	NAKHON RACHASIMA 1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
4.	NAKHON RACHASIMA 2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
5.	PAK CHONG	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
6.	PHON	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6
7.	SHIKHIU	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
8.	SURIN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9.	PHIMAI				4	4	4	4	4	4	4	4	4	4	4	4
10.	PRACHONCHAI					4	4	4	4	4	4	4	4	4	4	4
11.																
12.																
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		50	50	50	59	63	63	64	64	64	64	64	64	64	64	64

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	ANG THONG 1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2.	ANG THONG 2	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6
3.	AYUTTAYA 1	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5
4.	BANG KHAN	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8
5.	BAN MAI	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
6.	BAN PA IN	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7.	PRACHIN BURI	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
8.	PATUM THANI	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9.	SARABURI 1	5	5	5	5	5	5	5	9	9	9	9	9	9	9	9
10.	SARABURI 2	5	9	9	9	9	9	9	9	9	9	9	9	9	9	9
11.	SARABURI 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
12.	SARABURI 4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
13.	THALAN	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
14.	THANYA BURI		4	4	4	4	4	8	8	8	8	8	8	8	8	8
15.	WATTHANA NAKHON		4	4	4	4	4	4	4	4	4	4	4	4	4	4
16.	PRAPHUTTHABAT				4	4	4	4	4	4	4	4	4	4	4	4
17.	NAKHONNAYOK				4	4	4	4	4	4	4	4	4	4	4	4
18.	AYUTTHAYA 2					4	4	4	4	4	4	4	4	4	4	4
19.	NAVANAKHON					5	5	5	5	5	5	5	5	5	5	5
TOTAL		75	87	89	97	107	107	111	115	115	115	115	116	116	116	116

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	AO PHAI	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4
2.	BAN BUNG	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7
3.	BANG LAMUNG	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9
4.	CHON BURI	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9
5.	CHACHOENGSAO	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8
6.	CHANTHABURI	7	7	7	7	7	7	7	10	10	10	10	10	10	10	10
7.	KLAENG	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
8.	RAYONG 1	5	5	5	9	9	9	9	9	9	9	9	9	9	9	9
9.	RAYONG 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10.	RAYONG 3	4	4	8	8	10	10	10	10	10	10	10	10	10	10	10
11.	SRIRACHA	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
12.	TRAT		4	4	4	4	4	4	4	4	4	4	4	4	4	4
13.	PHANOM SARAKHAM					4	4	4	4	4	4	4	4	4	4	4
14.	PHANUTNIKHOM						4	4	4	4	4	4	4	4	4	4
15.																
16.																
17.																
18.																
19.																
TOTAL		58	62	66	70	82	86	86	89	90	90	90	90	90	90	90

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BANG PONG 1	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8
2.	BANG PONG 2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
3.	KANCHANA BURI	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4.	KAMPHAENG SAEN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5.	NAKHON CHAISI	6	7	7	7	7	7	7	7	7	8	8	9	9	9	9
6.	SAM PHRAN 1	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
7.	SAMUT SAKHON 1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
8.	SAMUT SAKHON 2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
9.	SUPHAN BURI	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6
10.	THAMUANG	4	4	4	4	4	4	6	6	6	6	6	6	6	6	6
11.	SAM PHRAN 2				6	6	6	10	10	10	10	10	10	10	10	10
12.	DOEMBANG NANGBUAT				4	4	4	4	4	4	4	4	4	4	4	4
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		67	69	69	80	80	80	86	86	86	87	87	88	88	88	88

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHA AM	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2.	CHUM PHON	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3.	PHETCHA BURI	4	4	4	4	6	6	6	6	6	6	6	6	6	6	6
4.	PRACHOAPKHIRI KHAN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5.	PRAN BURI	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6.	RANONG	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7.	RATCHABURI 1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
8.	RATCHABURI 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9.	SANUT SONGKHAM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10.	HUA HIN						4	4	4	4	4	4	4	4	4	4
11.	THAPSAKAE						4	4	4	4	4	4	4	4	4	4
12.	LANG SUAN						4	4	4	4	4	4	4	4	4	4
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		34	34	34	34	36	48	48	48	48	48	48	48	48	48	48

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	CHIEW LAN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.	KRABI	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.	KHANOM	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
4.	LAMPOORA	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5
5.	NAKHON SI THAMARAT	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
6.	PHANGNGA	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3
7.	PHUKET 1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8.	PHUKET 2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4
9.	PHUNPHIN	4	4	4	4	4	5	5	6	6	6	7	7	8	8	9
10.	TAKUA PA	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3
11.	THUNG SONG	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5
12.	SURAT THANI				4	4	4	4	4	4	4	4	4	4	4	4
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		35	35	35	39	43	44	44	45	45	45	46	47	50	50	51

(UNIT: cct)

NO.	SUBSTATION NAME	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1.	BANG LANG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.	HAT YAI 1	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3.	HAT YAI 2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4.	NARATHIWAT	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5.	PHATTHALUNG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6.	SADAO	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7.	SONG KHLEA	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
8.	YALA	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9.	PATTANI	5	5	5	5	7	7	7	7	10	10	10	10	10	10	10
10.	SATUN		4	4	4	4	4	4	4	4	4	4	4	4	4	4
11.	RANOT						4	4	4	4	4	4	4	4	4	4
12.																
13.																
14.																
15.																
16.																
17.																
18.																
19.																
TOTAL		33	42	42	42	46	50	50	51	54	54	57	57	57	57	57

ANNEX 5-3 INTERCONNECTION OF H.V. DISTRIBUTION LINE

Region	1986		1987		1988		1989		1990		1991		1992		1993		1994		1995	
	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)
CMA, CMB, CMC A LNA, LNE LPA, LPB T	20	335.9	20	356.4	20	388.8	20	428.4	20	474.5	20	529.1	20	586.5	20	644.5	20	701.5	20	759.9
	15	125.9	15	133.7	15	145.8	15	160.7	15	178.0	15	198.4	15	220.0	15	241.7	15	263.1	15	285.0
	35	461.8	35	490.1	35	534.6	35	589.1	35	652.5	35	727.5	35	806.5	35	886.2	35	964.6	35	1,044.9
FLA, FLB STA, SWA T	4	79.4	4	86.8	4	93.5	4	100.4	8	152.6	8	163.3	8	173.9	8	184.3	10	206.3	10	216.8
	5	49.6	5	54.2	5	58.5	5	62.8	12	114.5	12	122.5	12	130.4	12	138.3	13	134.1	13	141.0
	9	129.0	9	141.0	9	152.0	9	163.2	20	267.1	20	285.8	20	304.3	20	322.6	23	340.4	23	357.8
LBA, LBB MRA TKB NSA SZA	6	124.5	6	138.0	6	139.7	10	266.8	10	284.4	14	334.9	14	354.6	14	374.0	14	393.4	14	412.4
	12	124.4	12	138.0	12	139.6	18	240.2	18	255.9	20	239.2	20	253.2	20	267.1	20	281.0	20	294.5
	18	248.9	18	276.0	18	279.3	28	507.0	28	540.3	34	574.1	34	607.8	34	641.1	34	674.4	34	706.9
UDA, UDB KKA, KKB T	4	106.9	8	220.7	8	238.2	8	256.1	10	300.4	10	320.6	10	340.7	10	360.1	10	379.0	10	397.1
	6	80.1	12	165.5	12	178.7	12	192.1	12	180.2	12	192.4	12	204.4	12	216.1	12	227.4	12	238.2
	10	187.0	20	386.2	20	416.9	20	448.2	22	480.6	22	513.0	22	545.1	22	576.2	22	606.4	22	635.3
REA MKA KLA T	4	76.8	4	90.0	6	109.1	6	120.9	6	133.3	6	146.1	6	159.6	6	173.3	6	187.5	8	219.3
	8	76.8	8	89.9	10	91.0	10	100.7	10	111.1	10	121.8	10	133.0	10	144.5	10	156.2	11	150.7
	12	153.6	12	179.9	16	200.1	16	221.6	16	244.4	16	267.9	16	292.6	16	317.8	16	343.7	19	370.0
NRA, NRB SFA T	8	196.3	8	212.8	8	226.4	8	240.3	8	254.7	8	268.9	8	283.0	8	296.5	8	309.5	8	321.8
	18	220.9	18	239.3	18	254.8	18	270.4	18	286.5	18	302.6	18	318.4	18	333.5	18	348.2	18	362.0
	26	417.2	26	452.1	26	481.2	26	510.7	26	541.2	26	571.5	26	601.4	26	630.0	26	657.7	26	683.8

Region	1986		1987		1988		1989		1990		1991		1992		1993		1994		1995	
	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)	cct	Energy (GWh)
ATA, ATB	22	1,038.0	26	1,209.1	28	1,563.6	28	1,650.2	32	1,811.9	32	1,886.3	34	1,966.9	36	2,051.2	36	2,136.5	36	2,225.8
AYA, AYB																				
SRA, SRB, SRC, SRD	26	613.4	30	697.5	30	837.6	30	884.0	35	990.9	35	1,031.6	37	1,070.2	39	1,111.1	39	1,157.3	39	1,205.7
BKA, BMA, PQA	48	1,651.4	56	1,906.6	58	2,401.2	58	2,534.2	67	2,802.8	67	2,917.9	71	3,037.1	75	3,162.3	75	3,293.8	75	3,431.5
APA	14	401.7	14	468.9	14	485.0	16	785.4	16	792.0	16	798.7	16	832.8	16	868.0	16	904.4	16	941.8
BLA																				
SCA	12	172.2	12	201.0	16	277.2	18	441.8	23	497.9	23	574.0	23	598.5	23	623.9	23	650.1	23	676.9
RAA, RAB, RAC, RAT	26	573.9	26	669.9	30	762.2	34	1,227.2	39	1,289.9	39	1,372.7	39	1,431.3	39	1,491.9	39	1,554.5	39	1,618.7
KCA	26	919.7	26	973.0	26	1,051.8	28	1,103.6	28	1,189.8	28	1,279.4	32	1,415.8	32	1,513.6	32	1,613.9	32	1,699.3
TMA																				
BPA, BPB	31	548.3	32	598.8	32	647.3	37	729.2	37	786.1	37	845.3	39	862.8	39	922.4	39	983.4	40	1,062.0
NCA																				
SAA, SAB, SMC, SMA, SMB	57	1,468.0	58	1,571.8	58	1,699.1	65	1,832.8	65	1,975.9	65	2,124.7	71	2,278.6	71	2,436.0	71	2,597.3	72	2,761.3
RBA, RBB	6	170.2	6	188.3	6	234.6	6	253.1	8	313.4	14	450.2	14	483.4	14	517.5	14	552.2	14	587.3
SSA																				
PBA	13	184.3	13	204.0	13	254.1	13	274.2	13	254.7	15	241.2	15	258.9	15	277.2	15	295.8	15	314.6
CAA																				
HBA	19	354.5	19	392.3	19	488.7	19	527.3	21	568.1	29	691.4	29	742.3	29	794.7	29	848.0	29	901.9
PNA																				
PKA, PKB	4	77.0	4	84.1	4	89.4	8	209.8	8	224.0	8	229.6	8	243.7	8	248.7	8	262.3	8	275.8
PFA																				
SNA	6	57.8	6	63.0	6	67.1	10	131.1	10	140.0	11	157.9	11	167.6	12	186.5	12	196.7	12	206.8
T	10	134.8	10	147.1	10	156.5	18	340.9	18	364.0	19	387.5	19	411.3	20	435.2	20	459.0	20	482.6
HYA, HYB	6	186.8	6	192.5	6	211.5	6	230.0	6	249.5	6	270.3	6	292.3	6	301.4	6	324.2	6	347.9
SLA	10	155.7	10	160.5	10	176.2	10	191.6	10	208.0	10	225.3	10	243.5	11	276.2	11	297.2	11	319.0
T	16	342.5	16	353.0	16	387.7	16	421.6	16	457.5	16	495.6	16	535.8	17	577.6	17	621.4	17	666.9

Note: A: Interconnected Feeder B: Radial Feeder T: Total Feeder

ANNEX 5-4

INSTALLATION STATUS OF RECLOSERS

Region	Main Line							Branch Line	Total
	1 unit/feeder		2 units or more/ feeder			Sub-total			
	No. of feeders	No. of units	No. of feeders	No. of units	No. of units	No. of feeders	No. of units		
N1	4	4	8	19	12	23	11	34	
N2	13	13	6	13	19	26	11	37	
N3	7	7	9	19	16	26	7	33	
NE1	11	11	17	55	28	66	6	72	
NE2	16	16	11	33	27	49	10	59	
NE3	11	11	12	28	23	39	3	42	
C1	6	6	4	9	10	15	7	22	
C2	12	12	1	3	13	15	9	24	
C3	5	5	2	4	7	9	10	19	
S1	8	8	4	9	12	17	9	26	
S2	9	9	5	10	14	19	3	22	
S3	6	6	6	21	12	27	3	30	
Total	108	108	85	223	193	331	89	420	

ANNEX 5-5-1

REQUIRED NUMBER OF SECTIONALIZERS (1994)

Region	No. of Interconnected feeders A	No. of Radial feeders B	No. of feeders with reclosers		No. of sectionalizers		
			1 unit on main line	2 units or more on main line	Case 1 1.5A + B - C - D	Case 2 2.5A + B - C - D	Case 3 2.5A + 2B - C - 2D
			C	D			
N1	20	39	4	8	57	77	108
N2	10	48	13	6	44	54	96
N3	14	46	7	9	51	65	102
NE1	10	58	11	17	45	55	96
NE2	6	41	16	11	23	29	59
NE3	8	56	11	12	45	53	97
C1	36	79	6	4	123	159	234
C2	16	74	12	1	85	101	174
C3	32	54	5	2	95	127	179
S1	14	34	8	4	43	57	87
S2	8	37	9	5	35	43	75
S3	6	48	6	6	45	51	93
Total	180	614	108	85	691	871	1,400

ANNEX 5-5-2 REQUIRED NUMBER OF SECTIONALIZERS (2000)

Region	No. of Interconnected feeders A	No. of Radial feeders B	No. of feeders with reclosers			No. of sectionalizers			
			1 unit on main line C	2 units or more on main line D		Case 1 1.5A + B - C - D	Case 2 2.5A + B - C - D	Case 3 2.5A + 2B - C - 2D	
N1	20	44	4	8		62	82		118
N2	10	51	13	6		47	57		102
N3	14	46	7	9		51	65		102
NE1	10	68	11	17		55	65		116
NE2	8	47	16	11		32	40		76
NE3	8	56	11	12		45	53		97
C1	36	80	6	4		124	160		236
C2	16	74	12	1		85	101		174
C3	32	56	5	2		97	129		183
S1	14	34	8	4		43	57		87
S2	8	43	9	5		41	49		87
S3	6	51	6	6		48	54		99
Total	182	650	108	85		730	912		1,477

ANNEX 5-6-1 FACILITIES TO BE SUPERVISORY CONTROLLED (1994)

NO.	REGION N1	NO. OF UNITS	REGION N2	NO. OF UNITS	REGION N3	NO. OF UNITS
1.	CHIANG MAI 1	3	KANPHAENG PHET	4	LOP BURI 1	7
2.	CHIANG MAI 2	9	NAN	3	LOP BURI 2	6
3.	CHIANG MAI 3	4	PHARE	8	MANOROM	4
4.	CHIANG RAI	8	PHICHIT	6	NAKHON SAWAN	10
5.	LAMPHUN 1	2	PHITSANULOK 1	8	PHECHABUN	7
6.	LAMPHUN 2	8	PHITSANULOK 2	5	SING BURI	3
7.	LAM PANG 1	5	SIRIKIT	1	TAKHLI 2	3
8.	LAM PANG 2	4	SUKHO THAI	6	LOMSAK	4
9.	PHAYAO	7	TAK	4	CHAI BADAN	4
10.	THOEN	3	UTTARADIT	5	THATAKO	4
11.	MAE NGAT	2	SAWAN KHALOK	4	SALOKBAT	4
12.	CHOM THONG	4	MAE SOT	4	BANG MUN NAK	4
13.						
14.						
15.						
16.						
17.						
18.						
19.						
TOTAL	CIRCUIT BREAKER	59	CIRCUIT BREAKER	58	CIRCUIT BREAKER	60
	CASE 1	57	CASE 1	44	CASE 1	51
	CASE 2	77	CASE 2	54	SECTIONALIZER	65
	CASE 3	108	CASE 3	96	CASE 2	
	RECLOSER	34	RECLOSER	37	CASE 3	102
					RECLOSER	33

ANNEX 5-6-2 FACILITIES TO BE SUPERVISORY CONTROLLED (1994)

NO.	REGION NE1	NO. OF UNITS	REGION NE2	NO. OF UNITS	REGION NE3	NO. OF UNITS
1.	CHUN PHAE	5	KALASIN	4	BURI RAM	8
2.	KHON KHAEN 1	8	MAHA SARAKHAM	6	CHAIYA DHUM	5
3.	LOEI	9	MUKDAHAN	3	NAKHON RACHASIMA 1	10
4.	NAKHON PHANOM	3	ROJET	6	NAKHON RACHASIMA 2	10
5.	NAM PHONG	4	SIRINDHON	2	PAK CHONG	6
6.	NONG KHAI	7	SISAKET	4	PHON	6
7.	PHANG KHON	4	SOMDET	6	SHIKHIU	6
8.	SAKON NAKHON	4	UBON RATCHATHANI 1	6	SURIN	5
9.	THAT PHANOM	2	YASOTHON	6	PHIMAI	4
10.	UDON THANI 1	4	AMNAT CHARDEN	4	PRAKHONCHAI	4
11.	UDON THANI 2	6				
12.	BUNG KAN	4				
13.	KHON KHAEN 2	4				
14.	BAN PHAI	4				
15.						
16.						
17.						
18.						
19.						
	CIRCUIT BREAKER	68	CIRCUIT BREAKER	47	CIRCUIT BREAKER	64
	CASE 1	45	CASE 1	23	CASE 1	45
	CASE 2	55	CASE 2	29	CASE 2	53
	CASE 3	96	CASE 3	59	CASE 3	97
	SECTIONALIZER		SECTIONALIZER		SECTIONALIZER	
	RECLOSER	72	RECLOSER	59	RECLOSER	42
TOTAL						

ANNEX 5-6-3 FACILITIES TO BE SUPERVISORY CONTROLLED (1994)

NO.	REGION C1	NO. OF UNITS	REGION C2	NO. OF UNITS	REGION C3	NO. OF UNITS
1.	ANG THONG 1	3	AO PHAI	4	BANG PONG 1	8
2.	ANG THONG 2	6	BAN BUNG	7	BANG PONG 2	9
3.	AYUTTHAYA 1	4	BANG LAMUNG	9	KANCHANA BURI	7
4.	BANG KHAN	8	CHON BURI	9	KAMPHAENG SAEN	5
5.	BAN MAI	8	CHACHOENGSAO	8	NAKHON CHAISRI	7
6.	BAN PA IN	6	CHANTHABURI	10	SAM PHRAN 1	8
7.	PRACHIN BURI	10	KLAENG	5	SAMUT SAKHON 1	10
8.	PATHUM THANI	8	RAYONG 1	9	SAMUT SAKHON 2	6
9.	SARABURI 1	9	RAYONG 2	2	SUPHAN BURI	6
10.	SARABURI 2	9	RAYONG 3	10	THAMUANG	6
11.	SARABURI 3	3	SRI RACHA	5	SAM PHRAN 2	10
12.	SARABURI 4	5	TRAT	4	DOEMBANG NANGBUAT	4
13.	THALAN	7	PHANOM SARAKHAM	4		
14.	THANYA BURI	8	PHANUTNIKHOM	4		
15.	WATTHANA NAKHON	4				
16.	PRAPHUTTHABAT	4				
17.	NAKHONNAYOK	4				
18.	AYUTTHAYA 2	4				
19.	NAVANAKHON	5				
	CIRCUIT BREAKER	115	CIRCUIT BREAKER	90	CIRCUIT BREAKER	86
TOTAL	CASE 1	123	CASE 1	85	CASE 1	95
	CASE 2	159	CASE 2	101	SECTIONALIZER	127
	CASE 3	234	CASE 3	174	CASE 2	179
	RECLOSER	22	RECLOSER	24	CASE 3	179
					RECLOSER	19

ANNEX 5-6-4 FACILITIES TO BE SUPERVISORY CONTROLLED (1994)

NO.	REGION S1	NO. OF UNITS	REGION S2	NO. OF UNITS	REGION S3	NO. OF UNITS
1.	CHA AM	5	CHIEW LAN	1	BANG LANG	1
2.	CHUM PHON	5	KRABI	2	HAT YAI 1	8
3.	PHETCHA BURI	6	KHANOM	1	HAT YAI 2	3
4.	PRACHOAPKHIRI KHAN	3	LAMPOORA	4	NARATHIWAT	6
5.	PRAN BURI	4	NAKHON SI THAMMARAT	6	PHATTHALUNG	4
6.	RANONG	3	PHANGNGA	3	SADAO	3
7.	RATCHABURI 1	4	PHUKET 1	7	SONG KHLA	6
8.	RATCHABURI 2	2	PHUKET 2	3	YALA	5
9.	SAMUT SONGKHRAM	4	PHUNPHIN	6	PATTANI	10
10.	HUA HIN	4	TAKUA PA	3	SATUN	4
11.	THAPSAKAE	4	THUNG SONG	5	RANOT	4
12.	LANG SUAN	4	SURAT THANI	4		
13.						
14.						
15.						
16.						
17.						
18.						
19.						
	CIRCUIT BREAKER	48	CIRCUIT BREAKER	45	CIRCUIT BREAKER	54
	CASE 1	43	CASE 1	35	CASE 1	45
	CASE 2	57	CASE 2	43	SECTIONALIZER	51
	CASE 3	87	CASE 3	75	CASE 2	93
	SECTIONALIZER		SECTIONALIZER		CASE 3	
	RECLOSER	26	RECLOSER	22	RECLOSER	30
TOTAL						

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R.		Re.Ry LOCK	
								INST.	DELAY	INST.	DELAY		
1. CHIANG MAI 1	4	12	4	4	2	22	4	12	12	4	4	4	41
2. CHIANG MAI 2	11	33	11	11	5	60	11	33	33	11	11	11	111
3. CHIANG MAI 3	4	12	4	4	2	22	4	12	12	4	4	4	41
4. CHIANG RAI	10	30	10	10	5	55	10	30	30	10	10	10	101
5. LAMPHUN 1	2	6	2	2	3	13	2	6	6	2	2	2	21
6. LAMPHUN 2	8	24	8	8	2	42	8	24	24	8	8	8	81
7. LAM PANG 1	5	15	5	5	3	28	5	15	15	5	5	5	51
8. LAM PANG 2	4	12	4	4	2	22	4	12	12	4	4	4	41
9. PHAYAO	7	21	7	7	3	38	7	21	21	7	7	7	71
10. THOEN	3	9	3	3	2	17	3	9	9	3	3	3	31
11. MAE NGAT	2	6	2	2	2	12	2	6	6	2	2	2	21
12. CHOM THONG	4	12	4	4	2	22	4	12	12	4	4	4	41
13.													
14.													
15.													
16.													
17.													
18.													
19.													
CIRCUIT BREAKER	64	192	64	64	33	353	64	192	192	64	64	64	652
CASE 1	62						62						62
CASE 2	82						82						82
CASE 3	118						118						118
RECLOSER	34						34					34	68

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	
								INST.	DELAY	INST.	DELAY		
1. KAMPHAENG PHET	5	15	5	5	3	28	5	15	15	5	5	5	51
2. NAN	4	12	4	4	2	22	4	12	12	4	4	4	41
3. PHARE	8	24	8	8	3	43	8	24	24	8	8	8	81
4. PHICHIT	6	18	6	6	3	33	6	18	18	6	6	6	61
5. PHITSANULOK 1	8	24	8	8	3	43	8	24	24	8	8	8	81
6. PHITSANULOK 2	5	15	5	5	2	27	5	15	15	5	5	5	51
7. SIRIKIT	1	3	1	1	2	7	1	3	3	1	1	1	11
8. SUKHO THAI	6	18	6	6	3	33	6	18	18	6	6	6	61
9. TAK	4	12	4	4	3	23	4	12	12	4	4	4	41
10. UTTARADIT	6	18	6	6	3	33	6	18	18	6	6	6	61
11. SAWAN KHALOK	4	12	4	4	2	22	4	12	12	4	4	4	41
12. MAE SOT	4	12	4	4	2	22	4	12	12	4	4	4	41
13.													
14.													
15.													
16.													
17.													
18.													
19.													
CIRCUIT BREAKER	61	183	61	61	31	336	61	183	183	61	61	61	622
SECTIONALIZER	CASE 1						47						47
	CASE 2						57						57
	CASE 3						102						102
RECLOSER	37						37					37	74

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	
								INST.	DELAY	INST.	DELAY		
1. LOP BURI 1	7	21	7	7	4	39	7	21	21	7	7	7	71
2. LOP BURI 2	6	18	6	6	2	32	6	18	18	6	6	6	61
3. MANOROM	4	12	4	4	3	23	4	12	12	4	4	4	41
4. NAKHON SAWAN	10	30	10	10	3	53	10	30	30	10	10	10	101
5. PHECHABUN	7	21	7	7	2	37	7	21	21	7	7	7	71
6. SING BURI	3	9	3	3	2	17	3	9	9	3	3	3	31
7. TAKHLI 2	3	9	3	3	2	17	3	9	9	3	3	3	31
8. LOMSAB	4	12	4	4	2	22	4	12	12	4	4	4	41
9. CHAI BADAN	4	12	4	4	2	22	4	12	12	4	4	4	41
10. THATAKO	4	12	4	4	2	22	4	12	12	4	4	4	41
11. SALOKBAT	4	12	4	4	2	22	4	12	12	4	4	4	41
12. BANG MUN NAK	4	12	4	4	2	22	4	12	12	4	4	4	41
13.													
14.													
15.													
16.													
17.													
18.													
19.													
CIRCUIT BREAKER	60	180	60	60	28	328	60	180	180	60	60	60	612
SECTIONALIZER	CASE 1						51						51
	CASE 2						65						65
	CASE 3						102						102
RECLOSER	33						33					33	66

ANNEX 5-7-4 ESTIMATED DATA QUANTITIES TO BE TRANSMITTED NEI (2000)

SUBSTATION 14 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION								
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	LOCAL CONTROL	TOTAL
								INST.	DELAY	INST.	DELAY			
1. CHUN PHAE	5	15	5	5	3	28	5	15	15	5	5	5	1	51
2. KHON KHAEN 1	8	24	8	8	3	43	8	24	24	8	8	8	1	81
3. LOEI	9	27	9	9	3	48	9	27	27	9	9	9	1	91
4. NAKHON PHANOM	3	9	3	3	2	17	3	9	9	3	3	3	1	31
5. NAM PHONG	6	18	6	6	3	33	6	18	18	6	6	6	1	61
6. NONG KHAI	7	21	7	7	3	38	7	21	21	7	7	7	1	71
7. PHANG KHON	4	12	4	4	2	22	4	12	12	4	4	4	1	41
8. SAKON NAKHON	8	24	8	8	2	42	8	24	24	8	8	8	1	81
9. THAT PHANOM	2	6	2	2	2	12	2	6	6	2	2	2	1	21
10. UDON THANI 1	5	15	5	5	2	27	5	15	15	5	5	5	1	51
11. UDON THANI 2	7	21	7	7	3	38	7	21	21	7	7	7	1	71
12. BUNG KAN	4	12	4	4	2	22	4	12	12	4	4	4	1	41
13. KHON KHAEN 2	6	18	6	6	2	32	6	18	18	6	6	6	1	61
14. BAN PHAI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	78	234	78	78	34	424	78	234	234	78	78	78	14	794
SECTIONALIZER	CASE 1	55					55							55
	CASE 2	65					65							65
	CASE 3	116					116							116
RECLOSER	72						72					72		144

SUBSTATION 10 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION								
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	LOCAL CONTROL	TOTAL
								INST.	DELAY	INST.	DELAY			
1. KALASIN	5	15	5	5	3	28	5	15	15	5	5	5	1	51
2. MAHA SARAKHAM	6	18	6	6	3	33	6	18	18	6	6	6	1	61
3. MUKDAHAN	3	9	3	3	2	17	3	9	9	3	3	3	1	31
4. ROJET	9	27	9	9	3	48	9	27	27	9	9	9	1	91
5. SIRINDHON	2	6	2	2	2	12	2	6	6	2	2	2	1	21
6. SISAKET	8	24	8	8	3	43	8	24	24	8	8	8	1	81
7. SOMDET	6	18	6	6	3	33	6	18	18	6	6	6	1	61
8. UBON RATCHATHANI 1	6	18	6	6	5	35	6	18	18	6	6	6	1	61
9. YASOTHON	6	18	6	6	3	33	6	18	18	6	6	6	1	61
10. ANNAT CHARDEN	4	12	4	4	2	22	4	12	12	4	4	4	1	41
11.														
12.														
13.														
14.														
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	55	165	55	55	29	304	55	165	165	55	55	55	10	560
SECTIONALIZER	CASE 1	32					32							32
	CASE 2	40					40							40
	CASE 3	76					76							76
RECLOSER	59						59					59		118

SUBSTATION 10 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION								
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	LOCAL CONTROL	TOTAL
								INST.	DELAY	INST.	DELAY			
1. BURI RAM	8	24	8	8	3	43	8	24	24	8	8	8	1	81
2. CHAIYA DHUM	5	15	5	5	3	28	5	15	15	5	5	5	1	51
3. NAKHON RACHASIMA 1	10	30	10	10	4	54	10	30	30	10	10	10	1	101
4. NAKHON RACHASIMA 2	10	30	10	10	3	53	10	30	30	10	10	10	1	101
5. PAK CHONG	6	18	6	6	3	33	6	18	18	6	6	6	1	61
6. PHON	6	18	6	6	3	33	6	18	18	6	6	6	1	61
7. SHIKHIU	6	18	6	6	2	32	6	18	18	6	6	6	1	61
8. SURIN	5	15	5	5	3	28	5	15	15	5	5	5	1	51
9. PHIMAI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
10. PRAKHONCHAI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
11.														
12.														
13.														
14.														
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	64	192	64	64	28	348	64	192	192	64	64	64	10	650
SECTIONALIZER	CASE 1						45							45
	CASE 2						53							53
	CASE 3						97							97
RECLOSER	42						42					42		84

SUBSTATION 19 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	
								INST.	DELAY	INST.	DELAY		
1. ANG THONG 1	3	9	3	3	2	17	3	9	9	3	3	3	31
2. ANG THONG 2	6	18	6	6	3	33	6	18	18	6	6	6	61
3. AYUTHAYA 1	5	15	5	5	2	27	5	15	15	5	5	5	51
4. BANG KHAN	8	24	8	8	3	43	8	24	24	8	8	8	81
5. BAN MAI	8	24	8	8	3	43	8	24	24	8	8	8	81
6. BAN PA IN	6	18	6	6	3	33	6	18	18	6	6	6	61
7. PRACHIN BURI	10	30	10	10	3	53	10	30	30	10	10	10	101
8. PATHUM THANI	8	24	8	8	2	42	8	24	24	8	8	8	81
9. SARABURI 1	9	27	9	9	4	49	9	27	27	9	9	9	91
10. SARABURI 2	9	27	9	9	4	49	9	27	27	9	9	9	91
11. SARABURI 3	3	9	3	3	2	17	3	9	9	3	3	3	31
12. SARABURI 4	5	15	5	5	3	28	5	15	15	5	5	5	51
13. THALAN	7	21	7	7	3	38	7	21	21	7	7	7	71
14. THANYA BURI	8	24	8	8	3	43	8	24	24	8	8	8	81
15. WATTHANA NAKHON	4	12	4	4	2	22	4	12	12	4	4	4	41
16. PRAPHUTTHABAT	4	12	4	4	2	22	4	12	12	4	4	4	41
17. NAKHONNAYOK	4	12	4	4	2	22	4	12	12	4	4	4	41
18. AYUTHAYA 2	4	12	4	4	2	22	4	12	12	4	4	4	41
19. NAVANAKHON	5	15	5	5	2	27	5	15	15	5	5	5	51
CIRCUIT BREAKER	116	348	116	116	50	630	116	348	348	116	116	116	1,179
SECTIONALIZER	CASE 1						124						124
	CASE 2						160						160
	CASE 3						236						236
RECLOSER	22						22					22	44

SUBSTATION 14 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						TOTAL		
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R			Re.Ry LOCK	LOCAL CONTROL
								INST.	DELAY	INST.	DELAY			
1. AO PHAI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
2. BAN BUNG	7	21	7	7	3	38	7	21	21	7	7	7	1	71
3. BANG LAMUNG	9	27	9	9	4	49	9	27	27	9	9	9	1	91
4. CHON BURI	9	27	9	9	4	49	9	27	27	9	9	9	1	91
5. CHACHOENGSAO	8	24	8	8	3	43	8	24	24	8	8	8	1	81
6. CHANTHABURI	10	30	10	10	3	53	10	30	30	10	10	10	1	101
7. KLAENG	5	15	5	5	2	27	5	15	15	5	5	5	1	51
8. RAYONG 1	9	27	9	9	4	49	9	27	27	9	9	9	1	91
9. RAYONG 2	2	6	2	2	2	12	2	6	6	2	2	2	1	21
10. RAYONG 3	10	30	10	10	4	54	10	30	30	10	10	10	1	101
11. SRIRACHA	5	15	5	5	3	28	5	15	15	5	5	5	1	51
12. TRAT	4	12	4	4	2	22	4	12	12	4	4	4	1	41
13. PHANOM SARAKHAM	4	12	4	4	2	22	4	12	12	4	4	4	1	41
14. PHANUTNIKROM	4	12	4	4	2	22	4	12	12	4	4	4	1	41
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	90	270	90	90	40	490	90	270	270	90	90	14	914	
SECTIONALIZER	CASE 1						85						85	
	CASE 2	101					101						101	
	CASE 3	174					174						174	
RECLOSER	24						24				24		48	

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL	
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R				Re.Ry LOCK
								INST.	DELAY	INST.	DELAY			
1. BANG PONG 1	8	24	8	8	4	44	8	24	24	8	8	8	1	81
2. BANG PONG 2	9	27	9	9	4	49	9	27	27	9	9	9	1	91
3. KANCHANA BURI	7	21	7	7	3	38	7	21	21	7	7	7	1	71
4. KAMPHAENG SAEN	5	15	5	5	2	27	5	15	15	5	5	5	1	51
5. NAKHON CHAISRI	9	27	9	9	4	49	9	27	27	9	9	9	1	91
6. SAM PHRAN 1	8	24	8	8	3	43	8	24	24	8	8	8	1	81
7. SAMUT SAKHON 1	10	30	10	10	3	53	10	30	30	10	10	10	1	101
8. SAMUT SAKHON 2	6	18	6	6	2	32	6	18	18	6	6	6	1	61
9. SUPHAN BURI	6	18	6	6	3	33	6	18	18	6	6	6	1	61
10. THAMJANG	6	18	6	6	3	33	6	18	18	6	6	6	1	61
11. SAM PHRAN 2	10	30	10	10	4	54	10	30	30	10	10	10	1	101
12. DOEMBANG NANGBUAT	4	12	4	4	2	22	4	12	12	4	4	4	1	41
13.														
14.														
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	88	264	88	88	37	477	88	264	264	88	88	88	12	892
SECTIONALIZER	CASE 1	97					97							97
	CASE 2	129					129							129
	CASE 3	183					183							183
RECLOSER	19						19					19		38

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL	
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R				Re.Ry LOCK
								INST.	DELAY	INST.	DELAY			
1. CHA AM	5	15	5	5	3	28	5	15	15	5	5	5	1	51
2. CHUM PHON	5	15	5	5	2	27	5	15	15	5	5	5	1	51
3. PHETCHA BURI	6	18	6	6	3	33	6	18	18	6	6	6	1	61
4. PRACHOAPKHIRI KHAN	3	9	3	3	2	17	3	9	9	3	3	3	1	31
5. PRAN BUKI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
6. RANONG	3	9	3	3	2	17	3	9	9	3	3	3	1	31
7. RATCHABURI 1	4	12	4	4	3	23	4	12	12	4	4	4	1	41
8. RATCHABURI 2	2	6	2	2	2	12	2	6	6	2	2	2	1	21
9. SAMUT SONGKHAM	4	12	4	4	2	22	4	12	12	4	4	4	1	41
10. HUA HIN	4	12	4	4	2	22	4	12	12	4	4	4	1	41
11. THAPSAKAE	4	12	4	4	2	22	4	12	12	4	4	4	1	41
12. LANG SUAN	4	12	4	4	2	22	4	12	12	4	4	4	1	41
13.														
14.														
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	48	144	48	48	27	267	48	144	144	48	48	48	12	492
SECTIONALIZER	CASE 1						43							43
	CASE 2	57					57							57
	CASE 3	87					87							87
RECLOSER	26						26					26		52

SUBSTATION 12 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION								
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R		Re.Ry LOCK	LOCAL CONTROL	TOTAL
								INST.	DELAY	INST.	DELAY			
1. CHIEW LAN	1	3	1	1	2	7	1	3	3	1	1	1	1	11
2. KRABI	2	6	2	2	2	12	2	6	6	2	2	2	1	21
3. KHANOM	2	6	2	2	2	12	2	6	6	2	2	2	1	21
4. LAMPOORA	5	15	5	5	2	27	5	15	15	5	5	5	1	51
5. NAKHON SI THAMMARAT	6	18	6	6	3	33	6	18	18	6	6	6	1	61
6. PHANGGA	3	9	3	3	2	17	3	9	9	3	3	3	1	31
7. PHUKET 1	7	21	7	7	3	38	7	21	21	7	7	7	1	71
8. PHUKET 2	4	12	4	4	2	22	4	12	12	4	4	4	1	41
9. PHUNPHIN	9	27	9	9	3	48	9	27	27	9	9	9	1	91
10. TAKUA PA	3	9	3	3	2	17	3	9	9	3	3	3	1	31
11. THUNG SONG	5	15	5	5	2	27	5	15	15	5	5	5	1	51
12. SURAT THANI	4	12	4	4	2	22	4	12	12	4	4	4	1	41
13.														
14.														
15.														
16.														
17.														
18.														
19.														
CIRCUIT BREAKER	51	153	51	51	27	282	51	153	153	51	51	12	522	
SECTIONALIZER	CASE 1						41						41	
	CASE 2	49					49						49	
	CASE 3	87					87						87	
RECLOSER	22						22					22	44	

SUBSTATION 11 S/S	NO. OF UNITS	MEASURED VALUE				STATUS INDICATION						LOCAL CONTROL	TOTAL
		CURRENT	ACTIVE POWER	REACTIVE POWER	VOLTAGE	TOTAL	ON/OFF	OCR		G.R.		Re.Ry LOCK	
								INST.	DELAY	INST.	DELAY		
1. BANG LANG	1	3	1	1	2	7	1	3	3	1	1	1	11
2. HAT YAI 1	8	24	8	8	3	43	8	24	24	8	8	8	81
3. HAT YAI 2	3	9	3	3	2	17	3	9	9	3	3	3	31
4. NARATHIWAT	6	18	6	6	3	33	6	18	18	6	6	6	61
5. PHATTHALUNG	4	12	4	4	2	22	4	12	12	4	4	4	41
6. SADO	3	9	3	3	2	17	3	9	9	3	3	3	31
7. SONG KHLA	9	27	9	9	3	48	9	27	27	9	9	9	91
8. YALA	5	15	5	5	3	28	5	15	15	5	5	5	51
9. PATTANI	10	30	10	10	3	53	10	30	30	10	10	10	101
10. SATUN	4	12	4	4	2	22	4	12	12	4	4	4	41
11. RANOF	4	12	4	4	2	22	4	12	12	4	4	4	41
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													
CIRCUIT BREAKER	57	174	57	57	27	312	57	171	171	57	57	57	581
CASE 1	48						48						48
CASE 2	54						54						54
CASE 3	99						99						99
RECLOSER	30						30					30	60

