No. 57

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
ELECTRICITY GENERATING AUTHORITY OF THAILAND (EGAT)
THE KINGDOM OF THAILAND

FEASIBILITY STUDY ON BULK POWER SUPPLY PROJECT FOR THE GREATER BANGKOK AREA

FINAL REPORT

AUGUST 1993

ELECTRIC POWER DEVELOPMENT CO., LTD.

M P N J R 93 - 113

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

ELECTRICITY GENERATING AUTHORITY OF THAILAND (EGAT)

THE KINGDOM OF THAILAND

FEASIBILITY STUDY ON BULK POWER SUPPLY PROJECT FOR THE GREATER BANGKOK AREA

FINAL REPORT

APPENDIX

JIE LIBRARY

MMMIMMMM 1108700[4]

AUGUST 1993

ELECTRIC POWER DEVELOPMENT CO., LTD.

国際協力事業団

27120

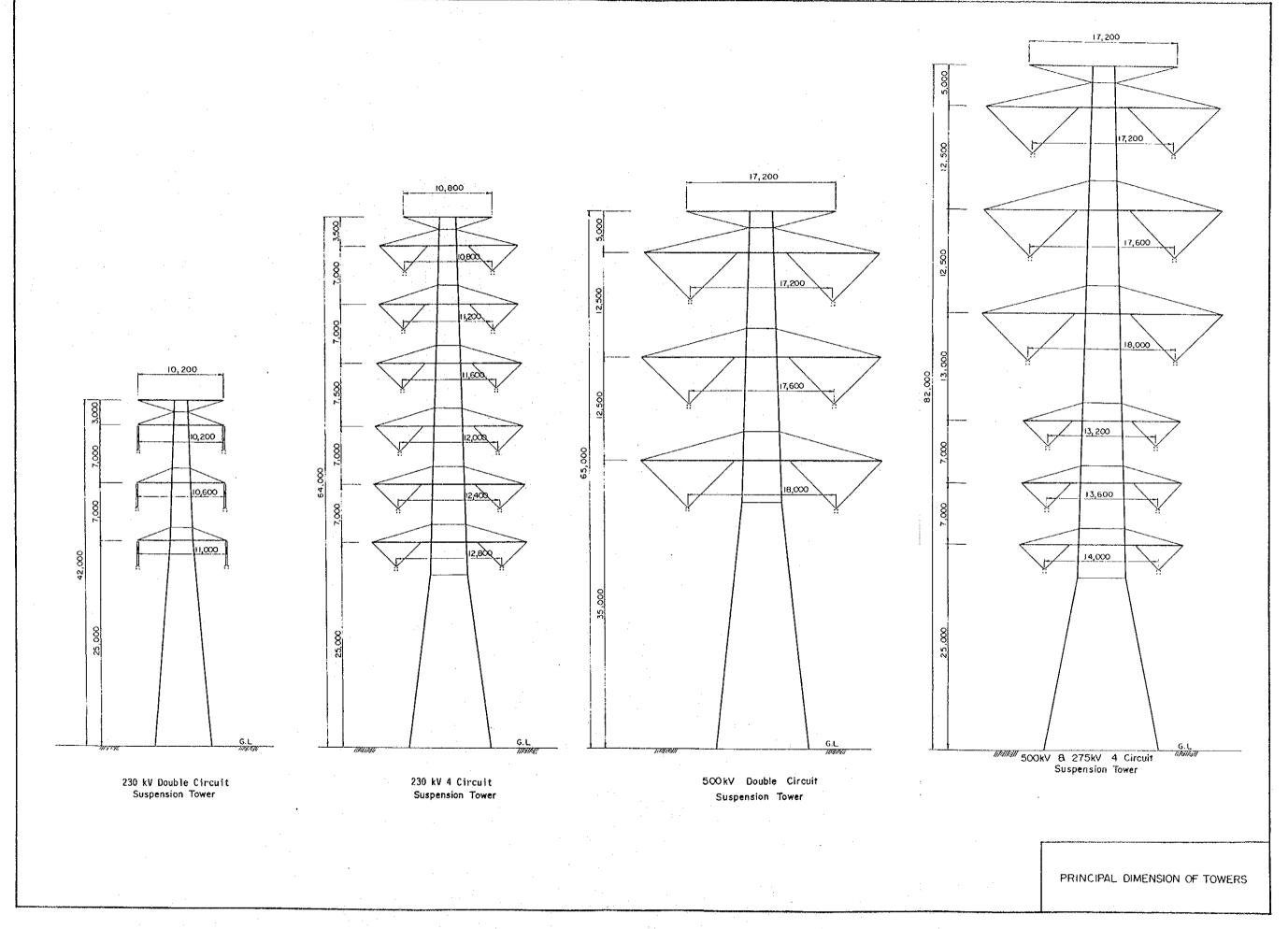
APPENDIX 1

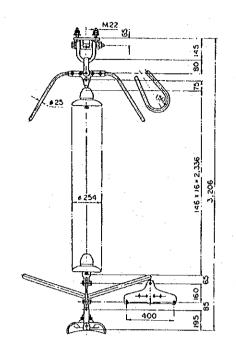
Appendix
Table 6-A
full name and abbreviation of each substation in Thailand

1. MAY CHANGEN M. 31. LAN TANGING L. K. 1. PIRAC	ABBR -	SUBSTATIONS	NO.	ABBR.	SUBSTATIONS	NO.	ABBR.	SUBSTATIONS	NO.
3. AD PRIATE APPLE 59. APPRINE 162 191.2 195. PRINEPHINE AU	PR								1.
1. A. D. UDON	PK175								
S. ALAMA PRATIET									
1. AVOIT	PA1 & 2								
7. BANNET MADURC BAS JAM BURG BAS JAM BUR	PKK	PRACHUAP KHIRI KHAN							
9. BAN DOS CHANG 10. BAN DON 10. BAN BAN I BAN 10. BAN BAN I BAN	PKC								7.
10, BAN DÓN 800 80	PRB								
11. BAN FUND BOC 9RC 9RC 19. OVER HAS PIEC 12. 17. RADIDIC	PRP RPB	PRAR BURT POWER STATION	169.						
12. BAN KHUN KLANG	RS					1			
14. SAN PHAIN BPT	RN								
15.5 BAN FORD 14.2 BF14.2	RA								
15. BAN SANT BST 96. MAR KOK MIKC 176. MATONE 1,23.	R81&2								
17. BAN TANG	RPS RY1,283								
18. BANG KAPI BK 96. NAK KUANG MRC 178. SARA YOI	RE				MAE KUM LUANO (NEA)				
20. BANG LANG BLG 100. MAC MONI 1,24.3 MM1.24.3 180. SAI MONI	SBY								
21. BANG FUN MAK	\$00								19.
22. BANG PA-TN 112	SHO								
23. BANG PAKONG BPK 103. MAE SARI MAIG NSK 183. SARI NAMA SARI MAIG SARI	SBR SO.	SVI ROHI	181.						
24. BANG PHILL	SLB								
25. BANG SAPHAN	SA1&2	SAM PHRAN 162							
27. BETOND BT DT NAMORDIN MR 187. SAN KAMPHARDE 29. BO WIN BWN D9. HUKDAHAN MD 199. SARABURI 132 29. BO WIN BWN D9. HUKDAHAN MD 199. SARABURI 132 29. BO WIN BWN D9. HUKDAHAN MD 199. SARABURI 132 27. BURG SAN PINAN BGS 111. NAKHON CHAIST MCS 191. SATUM 27. BURG SAN PINAN BGS 111. NAKHON CHAIST MCS 191. SATUM 27. BURG SAN PINAN BGS 111. NAKHON CHAIST MCS 191. SATUM 28. BURG SAN PINAN BGS 111. NAKHON CHAIST MCS 191. SATUM 28. BURG SAN PINAN BGS D11. NAKHON CHAIST MCS D19. SATUM 28. BURG SAN PINAN BGS D11. NAKHON CHAIST MCS D19. SATUM 28. BURG SAN PINAN BGS D11. NAKHON CHAIST MCS D19. SATUM 28. BURG SAN PINAN BGS D19. SATUM 29. SARABURI 132 D19. SATUM BGS D19. SATUM 29. SANAMINIADK MCS D19. SATUM 20. CHAIST SATUM BGS D19. SATUM B19. SATUM 20. CHAIST SATUM BGS BGS BGS BGS BGS BGS BGS 29. CHAITARDH BGS BGS BGS BGS BGS BGS BGS BGS 29. CHAITARDH BGS BGS BGS BGS BGS BGS BGS BGS BGS 29. CHAITARDH BGS 29. CHAITARDH BGS 29. CHAITARDH BGS 29. CHAITARDH BGS BG	SN142		185.	MTG		105.	BSP	BANG SAPHAN	
28. BHUMIBOL 98. 109. 109. 100.	SM								
29. BD WIN	SKP SRI&2								
30. BUNG KAN	SR3&4								
12. BURT RAH BR 112. NAKHON NATOK RY 192. SAMANKHAL DK 33. CHA-AN CA 113. NAKHON PATHOM NPT 193. SI RACHA 34. CHACHGENGSAO CC 114. NAKHON PHANOT NN 194. SI SA RET 35. CHAE BAGAR CBD 116. NAKHON SALAN NS 195. SI KIKU 195. CHAE BAGAR CBD 116. NAKHON SALAN NS 195. SI KIKU 197. SI NP DW 197. SI NP D	SH1 & 2								
133. CHA-MI	\$10			NCS	NAKHON CHAISI		BGS		
14. CHADHOENGSAO CC 114. NAKHON PHANON: NN 194. SI SA KET	SL								
15.5 CHAENG WAITHMAN	SC								
156. CIAT BADAN CBD 116. MAKHON SAWAN NS 196. STRUE BURE 37. CHAT LAPPHUM CYP 17. MAKHON ST I THANKARAT NT 197. STA PUPN 198. STRUE BURE 198. STRUE BURE BURE 198. STRUE BURE BURE BURE BURE BURE BURE BURE B	SKI								
37. CHALYAPHUM	SI								
SP	SPU	SIN PUN							
OF CHIANG MAI 1,263 CR1,243 120, MAM HARBG NHA CR1	SK								
CHI ANG RAI	SRD SD								
122 CHOK CHAT	ŠKL								
1-35 CHOPT THONG	SB								
45. CHON BUR! 46. CHONG KLAM 46. CHONG MEK 47. CHONG MEK 47. CHONG MEK 48. OHULABHORN 48. OHULABHORN 48. OHULABHORN 48. OHULABHORN 48. OHULABHORN 48. OHULABHORN 49. CHIPHON 50. CHUIPHON 50. CHUIPHON 60. CHONG MEK 51. DET UDON 61. OD 131. NAM THEUN 51. DET UDON 62. CARREST BANGBUAT 63. OREATER BANGBUAT 64. OREATER BANGKOK 65. MAN TYAN 64. OREATER BANGKOK 65. MAN TYAN 64. OREATER BANGKOK 65. HUA HTN 65. HUA HTN 66. HUA FARE 67. HUAL KUM 68. HUAL KUM 68. HUAL KUM 68. HUAL KUM 68. HUAL KUM 69. HUAL SAK 60. HUAL S	SIB								
46. GHONG KLAM 47. CHONG MEK 47. CHONG MEK 48. GHUL ABRIGN 48. GHUL ABRIGN 49. CHUM PHAE 49. SUR IN 40. SUR	SNR								
47. CHONG MEK 48. GHULABHORN CLB 128. NAM PUNG NP 208. SURAT THATI 49. CHUM PHAE CPA 129. NAM SAN NSN 209. SURAT 131 50. CHUMPHON CP 130. HAM SAN NSN 209. SURAT 171 171. GET UDON CP 130. HAM SAN NSN 210. TAK 162 172. TAK 162 173. DET UDON DD 131. NAM THEUN NTU 212. TAKHLI 162 173. OET UDON NSS 210. TAK 162 174. TAKHLI 162 175. DET UDON NSS 210. TAK 162 174. TAKHLI 162 175. DET UDON NSS 210. TAK 162 174. TAKHLI 162 175. DET UDON NSS 210. TAK 162 174. TAKHLI 162 175. DET UDON NSS 210. TAK 162 174. TAKHLI 162 175. TAKHLI 162 175. TAKHLI 162 176. TAKHLI 162 177. TAKHLI 162 178. T	SUK								
48. CHULABHORN CLB 128. NAM PUNC CHUM PHAE CPA 129. NAM SAN NSN 209. SURAI THANTI 49. CHUM PHAE CPA 129. NAM SAN NSN 209. SURIN CHUMPHON CP 130. NAM SU NSS 210. TAK 162 210. TAK 162 51. DET UDON DD 131. NAM THEUN MTN 211. TAK 162 132. NAN NAM NYU 212. TAKUA PA 333. FANG FA 133. NAN NA 213. TA HOON 64. OREATER BANGKOK BKK 134. NARATHIWAT NW 214. THA HUANG 55. HAT YAI 142 HY 182 135. HONG CHOK SF, HOAT KUM HK 137. NONG HAN NH 217. THA TAKO 56. HUAI KUM HK 137. NONG HAN NH 219. THAT THANG THA THANG 60. HUAI SAK HSK 140. NUCLEAR NC 220. THEPHARAK 61. KABIN BURI KBB 141. ON NUCLEAR NC 220. THEPHARAK 62. KAENG KRUNG KKU 142. PAK CHONG FA 143. PAK MUN PIN 223. THOENG 64. KALASIN KC 144. PAK SE PSE 224. THOENG 65. KAMPHAENGPHET KP 145. PATHANI HANI PIN 225. TRANG 66. KAMPHAENGPHET KP 146. PATHANI RI 147. PHANGH PHANG SAEN KSC 148. PHANG HANI RI 147. PHANGH PHANG SAEN KSC 148. PHANG HANI PIN 226. TRANG 66. KAMPHAENGPHET KP 149. PHANGH HANI RI 147. PHANGH PHANG SAEN KSC 148. PHANG HANI RI 147. PHANGH PHANG SAEN KSC 148. PHANG HANI PHANG SAEN KSC 149. PHANGH HANI PH 227. UBON HATHANI PH 228. UBON HATHANI PH 229. UBON HATHANI PH 230. UPPER MAE PHIG 70. KANTHARALAK KKL 149. PHANGH NIKHOM PHANG SAEN KSC 71. KHONG KKL 143. PHANGH NIKHOM PHANG SAEN KSC 148. PHANGH NIKHOM PHANG SAEN KSC 149. PHANGH NIKHOM PHANG SAEN RAHARABURI RAH RAH RAH RAH RAH RAH RAH R	SP								
400 CHUM PHRE	SRT								
ST. DET UDDH DD	SU			NSN					
S2. DOEMBANG NANGBUAT DBN 132. NAM YUAM NYU 212. TAKUA PA	TA182								
53. FANG	TK162								
The color of the	TMO								
SS. HAT YAI 142	TM								
S6. HUA HIN	Tl. 1 . 26	THALAN 1.263	215.	NÐL	NONG BUA LAM PHU	135	HYI & 2		_
S8. HUAT NGAED	TIH								
The proof of the	TIK								
SOL HUAL SAK	TH								
61. KABIN BURI KBB 141. ON NUCH ON 221. THI KHONG 62. KAENG KRUNG KKU 142. PAK CHONG PCH 222. THOEN 63. KAENG SUA TEN KST 143. PAK HUW PHW 223. THOENG 64. KALASIN KL 144. PAK SE PSE 224. THUNG SONG 65. KAMPHAENGPHET KP 145. PATHUM THANI PT 225. TRANG 66. KAMPHAENG SAEN KS 146. PATHANI PT 226. TRANG 67. KANCHANABURI KB 147. PHACHI PH 227. UBOI RATANA 68. KAENG KRACHAN KKC 148. PHANAT NIKHOM PNN 228. UBOH RAICHATHANI 182 69. KANTANG KT 149. PHANG KHON PNN 229. UBOH THANI 142 70. KANTANG KT 150. PHANGON PNK 229. UBOH THANI 142 71. KHANOH KN 151. PHATTHALUNG PN 230. UPPER NAE PING 72. KHAO LAEM KHL 152. PHATTHALUNG PN 230. UPPER NAE PING 73. KHONG MAI KLM 153. PHAYANO PY 231. UPPER PA SAK 74. KHONG MAI KLM 153. PHAYANO PY 233. UTLARABIT 75. KHONG KAEN 1.283 KKI.283 KKI.283 TS4. PHETCHABUN PE 234. MAIG NOT 76. KRONG KAEL KA 158. PHON PE 235. WITHANA NAKHON	TPR								
63. KAENG SUA TEN KST 143. PAK MUN PMN 223. THOERG 64. KALASTN KL 144. PAK SE PSE 224. THOURG SONG 65. KAMPHAENGPHET KP 145. PATHUM THANL PT 225. TRANG 66. KAMPHAENG SAEN KS 146. PATTANL PTN 226. TRANG 67. KANCHANABURT KB 147. PHACHL PH 227. UBOLRATAHA 68. KAENG KRACHAN KKC 148. PHANAT NIKHOM PNN 228. UBON RATCHATHAHI 132 69. KANTANG KT 149. PHANG KHÖN PHK 229. UBON RATCHATHAHI 132 70. KANTHARALAK KRL 150. PHANGKHÖN PHK 229. UDON THANT 132 71. KHANOM KN 151. PHATTHALUNG PN 230. UPPER MAE PHG 72. KHAO LAEH KHL 152. PHANGHOA PN 230. UPPER MAE PHG 73. KHLONG MAI KLM 153. PHAYAO PY 233. UT LARABIT 74. KHCN KAEN 1.243 KK1.243 75. KHONG KN 155. PHETCHABUN PE 234. WANG NOIL 75. KHONG KAEN 1.243 KK1.243 76. KIRLOMARN HUNJ SAPHAN HIN KNO 156. PHICHIT PE 235. WALTHANA NAKHON 77. KLAENG KABI KA 158. PHON PO 238. YALA	TKH							KABIN BURI	
64. KALASIN KL 144. PAK SE PSE 224. IHUNG SDNG 65. KAMPHAENGPHET KP 145. PATHUM THANL PT 225. TRANG 66. KAMPHAENG SAEN KS 146. PATHUM THANL PTN 226. TRANG 67. KANCHANABURI KB 147. PHACHL PH 227. UBDI RATANA 68. KAENG KRACHAN KKC 148. PHANAT NIKHOM PNN 228. UBDI RAICHATHANJ 182 69. KANTANG KT 149. PHANAT NIKHOM PNN 229. UDDI THANL 182 70. KANTANG KT 150. PHANG KHON PHK 229. UDDI THANL 182 71. KHANOH KN 151. PHATTHALUNG PN 230. UPPER NAE PHNG 71. KHANOH KN 151. PHATTHALUNG PU 231. UPPER NAE PHNG 72. KHAO LAEM KHL 152. PHATAKHAPHULI PHISAL PYK 232. U THONG 73. KHLONG MAI KLM 153. PHAYAO PY 233. UTLARADIT 74. KHGN KAEN 1.283 KK1.283 KK1.283 75. KHONG KNC 155. PHETCHABUN PE 234. HANG NOI 76. KIRLOHARN (HUA) SAPHAN HIN KND 156. PHICHI PE 234. HANG NOI 77. KLAEMG KAEL KAEL 78. KROIL KAEL 79. KRAGI KAEL 79. KRAGI PP 238. VALA	TE-								
65. KAMPHAENGPHET KP	THG								
TABLE TABL	10	TRANG	225.						
67: KANCHANABURT KB 147. PHACHI PH 227. UBDI RATAHA 68: KAENG KRACHAN KKC 148. PHANAT NIKHOM PNN 228. UBDI RATAHA 69: KANTANG KT 149. PHANG KHÖN PHA 229. UDDI THANI 142 70: KANTHARALAK KRL 150. PHANGKOA PN 230. UPPER MAE PHIG 71: KHANOM KN 151. PHATTHALUNG PU 231. UPPER MAE PHIG 72: KHAO LAEH KHL 152. PHATAKHAPHUI PHISAI PYK 232. U THONG 73: KHL ONG MAI KLM 153. PHATAG 74: KHONG MAI KLM 153. PHATAG 75: KHONG MAI KKI 243 KK1.243 KK1.24	18	TRAT	226.	PIN	PATTANI	146.			
69. KANTANG KT 149. PHANG KHON PHK 229. UDDI THAN 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UR		227.	\$					
70. KANTHARALAK	UD182								
71. KHANOM KN 151. PHATTHALUNG PU 231. UPPER PA SAK 72. KHAO LAEH KHL 152. PHATAKRHAPHULI PHISAI PYK 232. U THONG 73. KHLONG MAI KLM 153. PHAYAO PY 233. UTIARAOII 74. KHGN KAEN I.2&3 KKI.2&3 154. PHETCHABUN PE 234. MANG NOI 75. KHONG KNG 155. PHETCHABURI PB 235. WAITHANA NAKHON 76. KIRIOHARN (HUAI SAPHAN HIN) KNG 156. PHICHII PC 236. WIENG NAENG 77. KLAEMG KLA KLA KLA 78. KRABI KA 158. PHON PO 238. YALA 79. KRABI KA 158. PHON PO 238. YALA 79. YALA THONG NAME PO 238. YALA 79. KRABI KA 158. PHON PO 238. YALA 79. XALA XALA XALA XALA XALA XALA XALA 79. XALA XALA XALA XALA XALA XALA XALA 79. XALA 79. XALA XAL	UMP								
72. KHAB LAEH KHL 152. PHAYAKKHAPHUI PHISAI PYK 232. U THONG 73. KHLONG MAI KLM 153. PHAYAO PY 233. UTTARABIT 74. KHCH KAEN I.263 KKI.283 IS4. PHETCHABUN PE 234. MAIG NOT 75. KHONG KNG IS5. PHETCHABURI PB 235. WAITHANA NAKHOH 76. KIRIDHARN (HUA) SAPHAN HINS KRD IS6. PHICHT PC 236. WIEHG HAEHG 77. KLAENG KLA IS7. PHITSANULOK IS2 PLIS2 237. XESET 78. KRABI KA IS8. PHOH PO 238. YALA 78. KRABI KA IS8. PHOH PO 238. YALA 79. KRABI KA IS8. PHOH PO 238. YALA 79. KRABI KA IS8. PHOH PO 238. YALA 79. XALA	บคร		231.						
74. KHCN KAEN 1.2&3 KK1.2&3 L54. PHETCHABUN PE 234. NAHG NGI 75. KHONG KNG L55. PHETCHABUR PB 235. WAITHAWA NAKHOH 76. KIRCIDHARN CHUAI SAPHAN HIN KRD L56. PHICHIT PC 236. WIENG HAENG 77. KLAENG KLA L57. PHITSANULDK L82 PLIS2 237. XESET 78. KRABI KA L58. PHOH PO 238. YALA	UIG	U THONG	232.	PYK	PHAYAKKHAPHUU PHISAI	152.	KHL	KHAG LAEM	72.
75. KHONG	וט								
78. KIRIDHARN HUAI SAPHAN HINI KRD 156. PHICHLI PC 236. WIENG HAERG 77. KLAENG KLA 157. PHITSANULOK 182 PLI\$2 237. XESET 78. KRABI KA 158. PHON PO 238. YALA	VNK VNK								
77. KLAENG KLA 157. PHITSANULOK 182 PLIS2 237. XESET 78. KRABI KA 158. PHON PO 238. YALA	WHG								
79. KRABI: KA 158. PHON PO 238. YALA	XSE								
Typ Type	YL	YALA	238.	90	PHON	158.	KA	KRAUL	79.
79. KUD	YT	YASOTHON	239	POT		159	KUD		79.

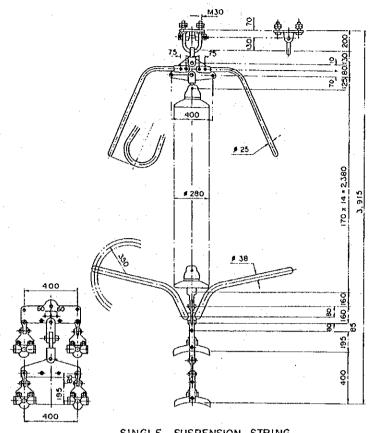
9

APPENDIX 2

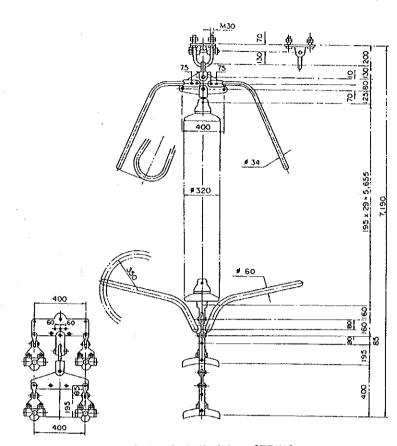




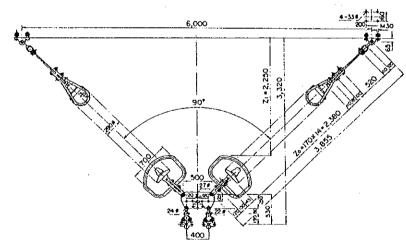
SINGLE SUSPENSION STRING TWIN CONDUCTORS



SINGLE SUSPENSION STRING 4 BUNDLE CONDUCTORS

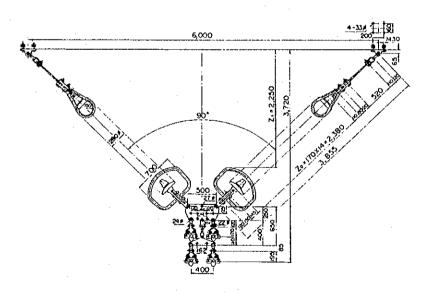


SINGLE SUSPENSION STRING 4 BUNDLE CONDUCTORS



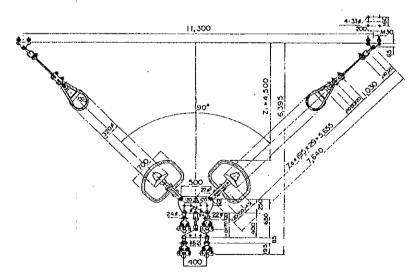
V TYPE SUSPENSION STRING TWIN CONDUCTORS

230 kV LINE



V TYPE SUSPENSION STRING 4 BUNDLE CONDUCTORS

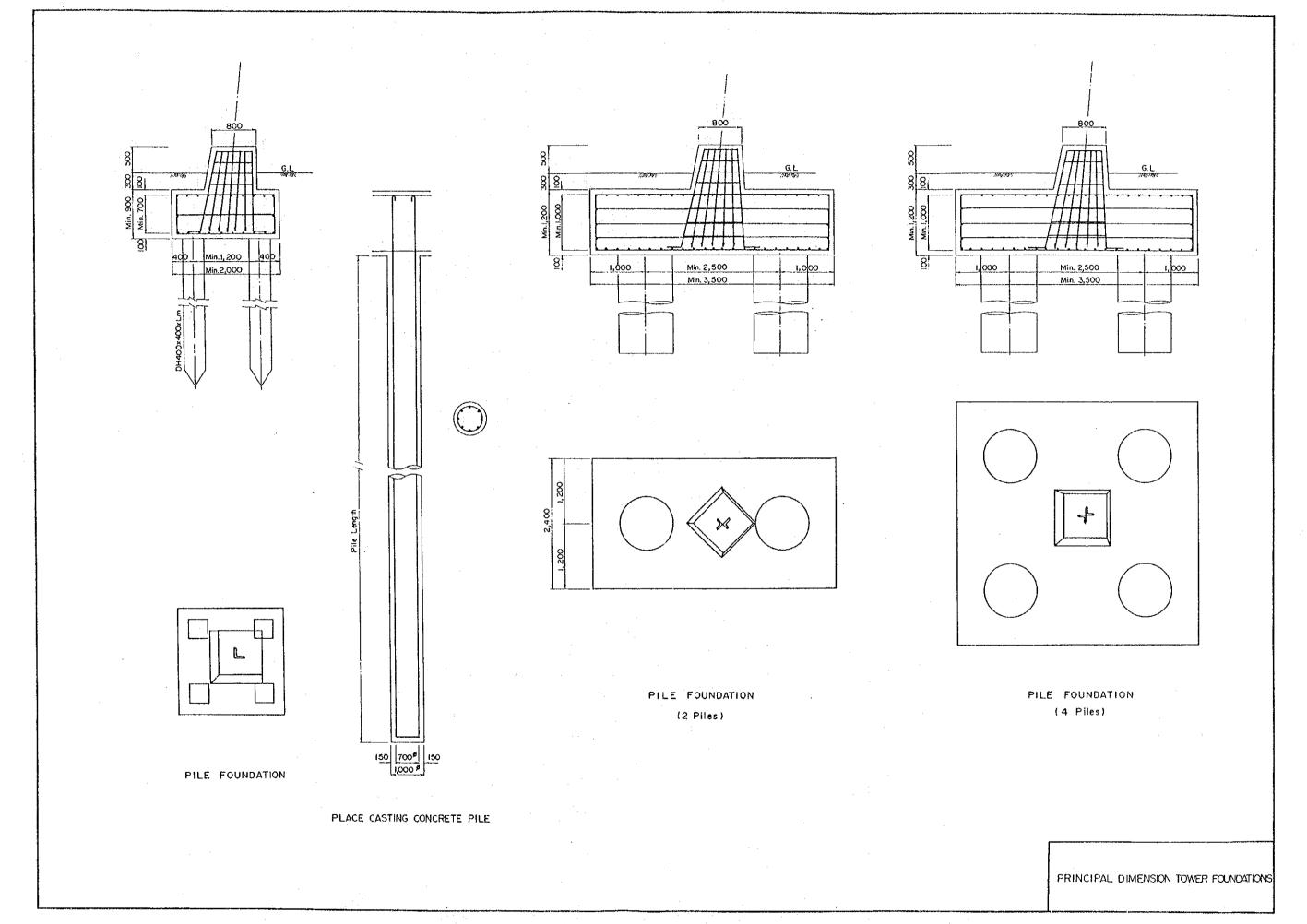
230 kV LINE

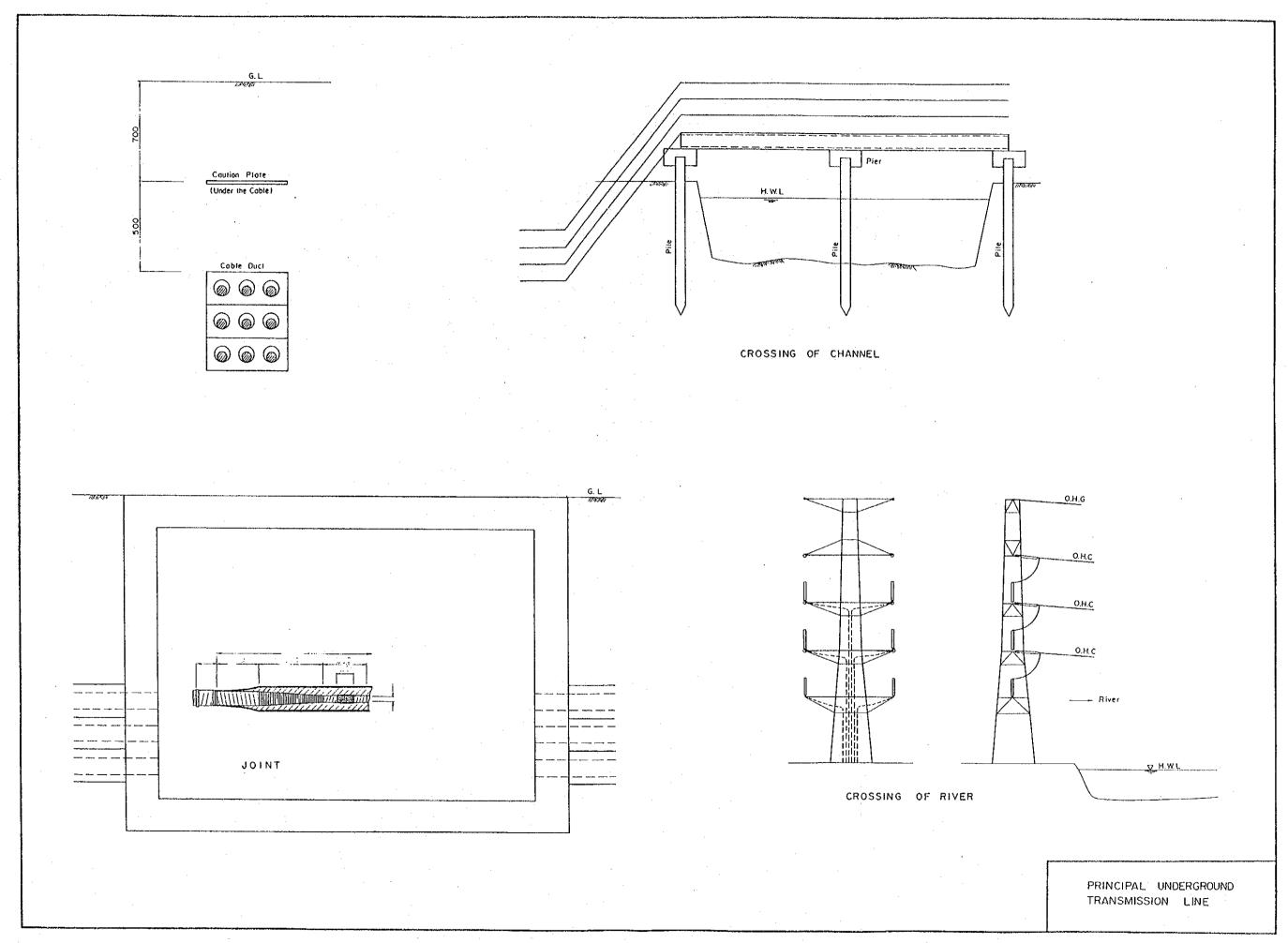


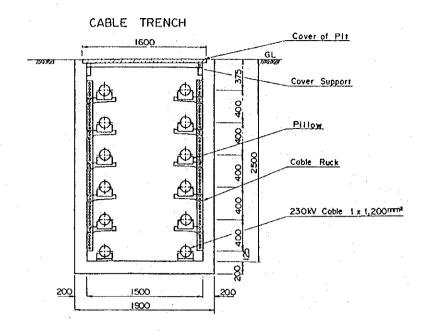
V TYPE SUSPENSION INSULATOR STRING 4 BUNDLE CONDUCTORS

500 kV LINE

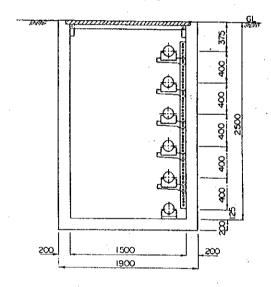
PRINCIPAL DIMENSION INSULATOR STRINGS



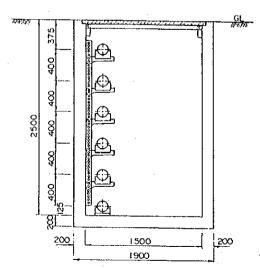




CABLE TRENCH



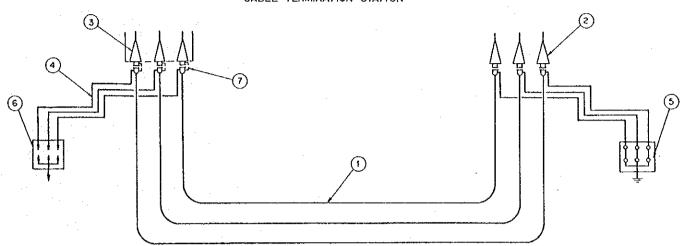
CABLE TRENCH



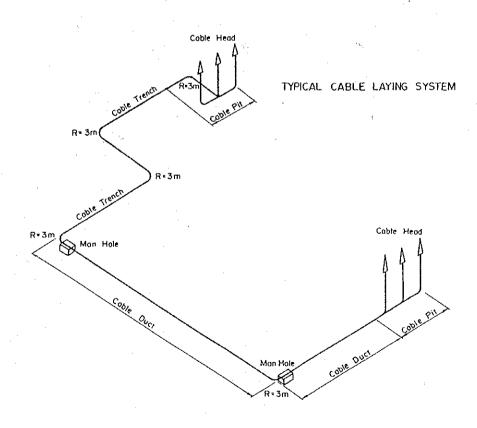
The Cover of Pit. (Width 1600mm , Length 1000mm, Thickness 14mm)

SCHEMATIC DIAGRAM OF BONDING SYSTEM

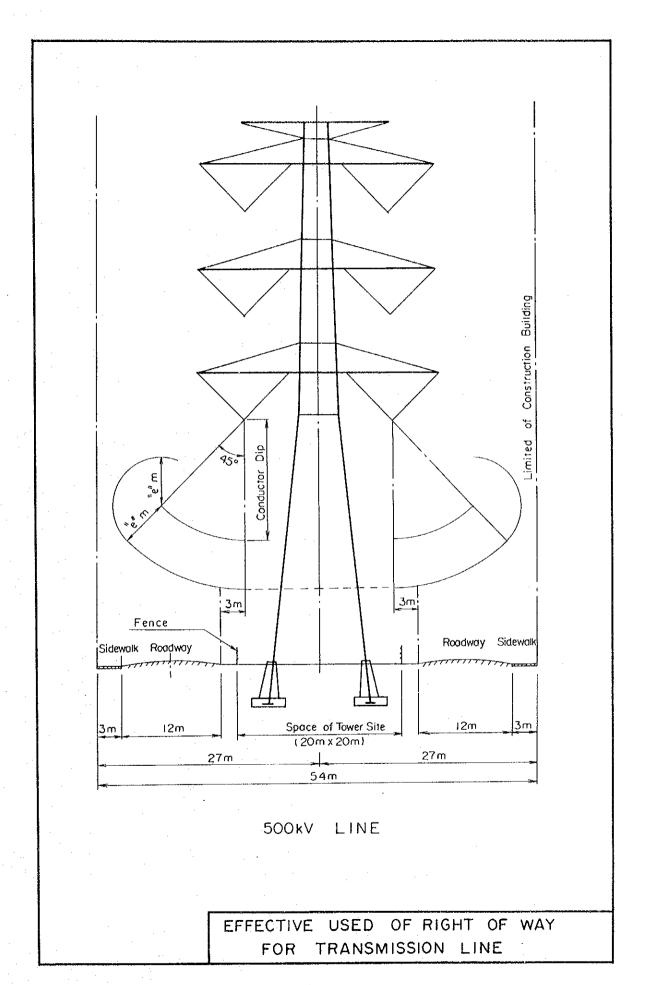
CABLE TERMINATION STATION

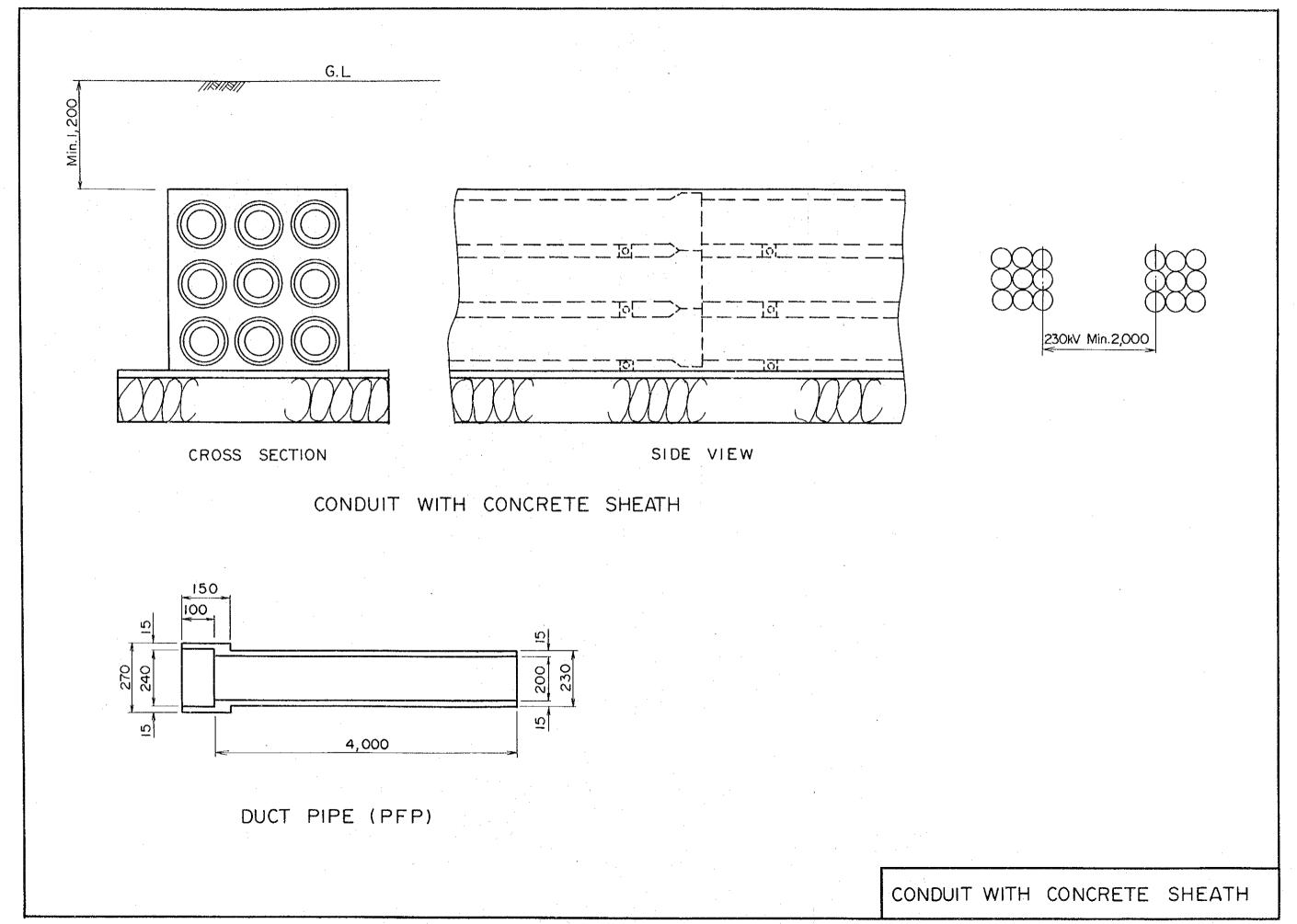


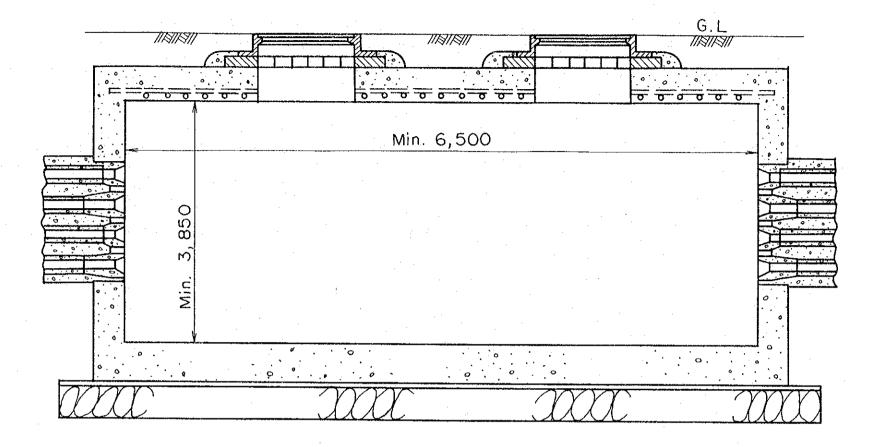
Nα	Description
1	Power Coble
2	Outdoor Termination
3_	SF6 Gas Immersed Termination
4	Single Bonding Wire
5	Solid Bond Link Box (3- Way)
6	Salid Bond Link Box with Arrester (3- Way)
7	Arrestor for Insulating Flange



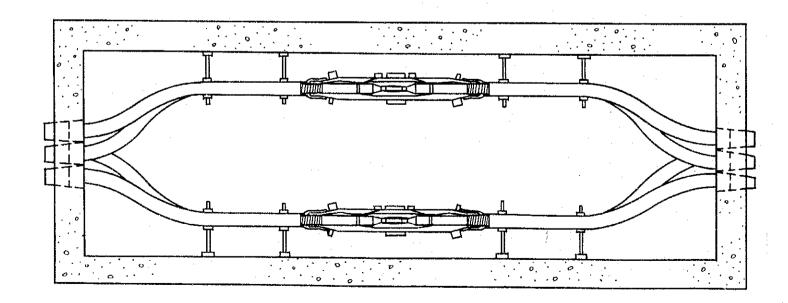
TYPICAL CABLE ARRANGMENT



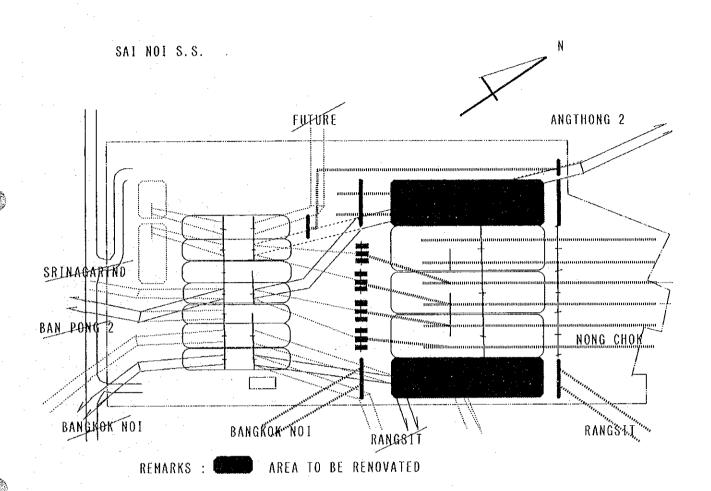




SIDE VIEW

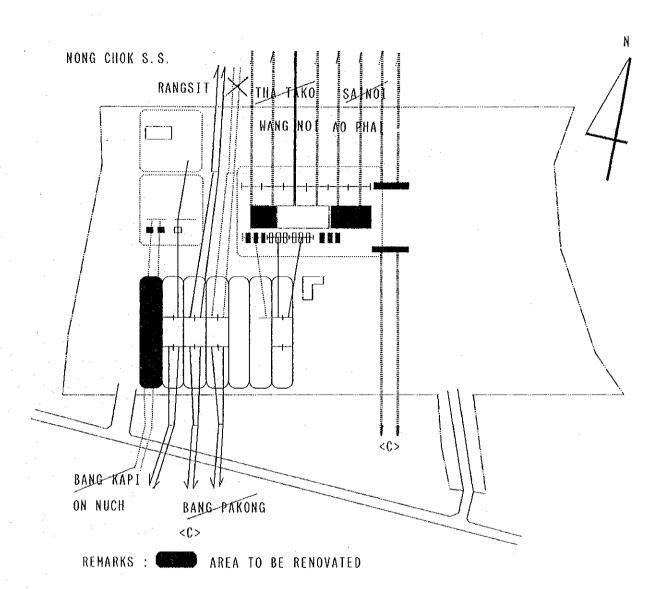


PLAN VIEW

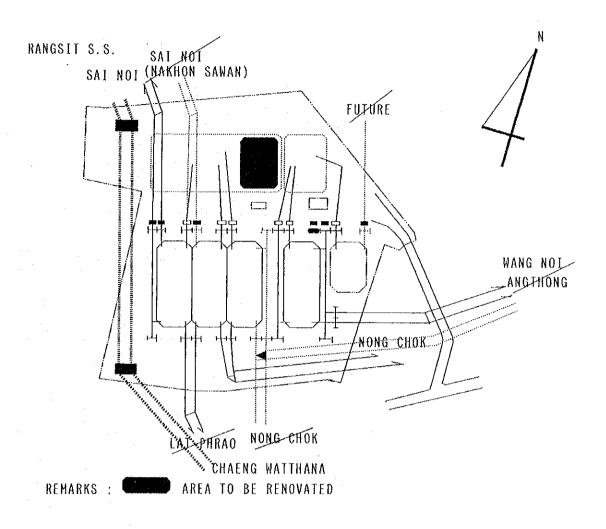


-4(BP2)	+4(BP2)
-2(BN)	+2(NC)
-2(RS)	+2(BN)
	+2(RS)

		230	kV	•	500 kV			
SAI NOI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре	Conver with A		-		Conventional with Al-pipe			
Bus system	One ar	nd a ha	alf		One and a half			
No.of line No.of bank	. 8 	4. 2	2/0 3/3	0 4	-	6 2	8/10 4/4	(14)
Switchgear area(W x L)	246 124	:			230 216			a de la companya de l



	230 kV			500 kV				
NONG CHOK	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре		ntional N1-pipe			G]	[S		
Bus system	One ar	nd a ha	a1f,		One and a half			
No.of line No.of bank	8 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			1 2	4 2	6/6 3/4	10 4
Switchgear area(W x L)	246 158	·			195 35			

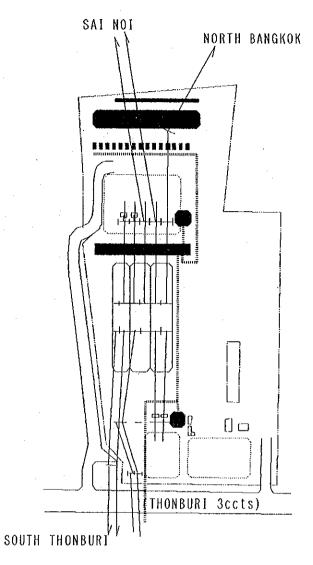


+2(WN) -2(AN)

+2(WN)
-2(SN)

		230	kV	<u> </u>	500 kV					
RANGSIT	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011		
Туре	Conver with A				-					
Bus system	One ar		alf		-					
No.of line	8	. 8	8/8	8	-	-	-	-		
No.of bank	6	9	10/12	12	-	_	-	-		
Switchgear area(W x L)	300 105									

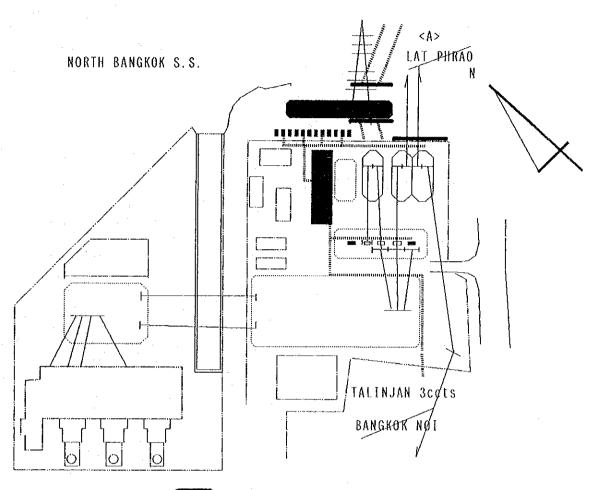
BANGKOK NOI S.S.



REMARKS : AREA TO BE RENOVATED

+1(TB)

	230 kV				500 kV				
BANGKOK NOI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011	
Туре	Conven	tional	1		-				
Bus system	One an	d a ha	alf		_				
No.of line No.of bank	6 4	6 7	3/5 8/8	6 8	-	-	4/4	4 5	
Switchgear area(W x L)	88.8 81.4				-				



REMARKS: AREA TO BE RENOVATED

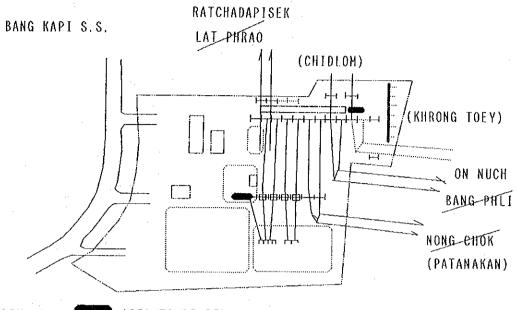
-1(BN) -2(LP)

-2(LP) +2(LP) +2(BN)

+2(RS)

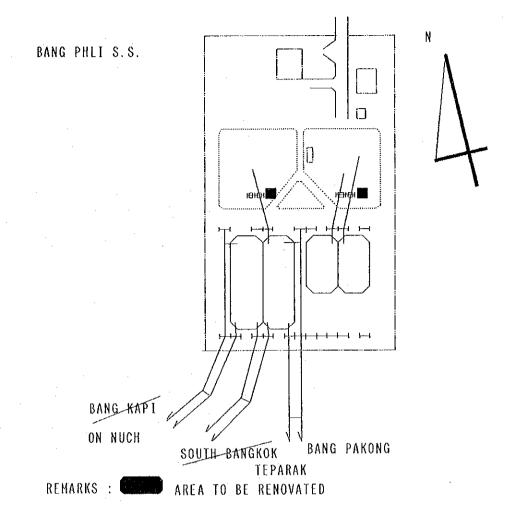
+3(TL)

NORTH		230	kV		500 kV			
BANGKOK	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре	Conven	tional	L		-		L	
Bus system	One an	id a ha	alf					
No.of line No.of bank	3 3	3	2/2 4/5	5 5	-	<u>-</u> -	4/4 -/4	4 4
Switchgear area(W x L)	103.6 54.2				-			

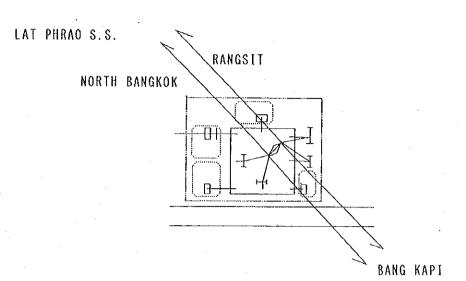


REMARKS: AREA TO BE RENOVATED

	230 kV				500 kV					
BANG KAPI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011		
Туре	GIS				_					
Bus system	One an	d a ha	alf		-			-		
No.of line No.of bank	6 4	9 5	11/11 6/ 6	14 6	-	-	-	-		
Switchgear area(W x L)	177.6 101.5				-		·			



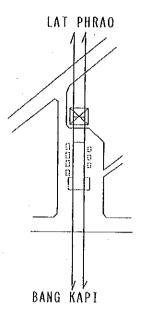
	230 kV				500 kV					
BANG PHLI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011		
Type	Conver with A		L		-					
Bus system	One ar		alf		-			<u>-</u>		
No.of line	6 4	6 6	6/6	6 6	- 1	-	-	-]		
No.of bank	4	6	6/6	б	-	-	-	- [
Switchgear area(W x L)	210 103				• •					



+2(<A>) -2(<A>)

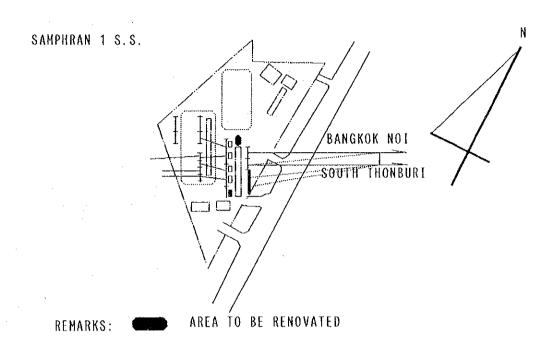
		230	kV		500 kV			
LAT PHRAO	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре	Conven with A		i.		-			
Bus system	Ring				-			
No.of line No.of bank	4(4)	4 4	4/4 4/4 (300M)	4 4 74)	-	-	- -	-
Switchgear area(W x L)	85.5 44.9		(50011					





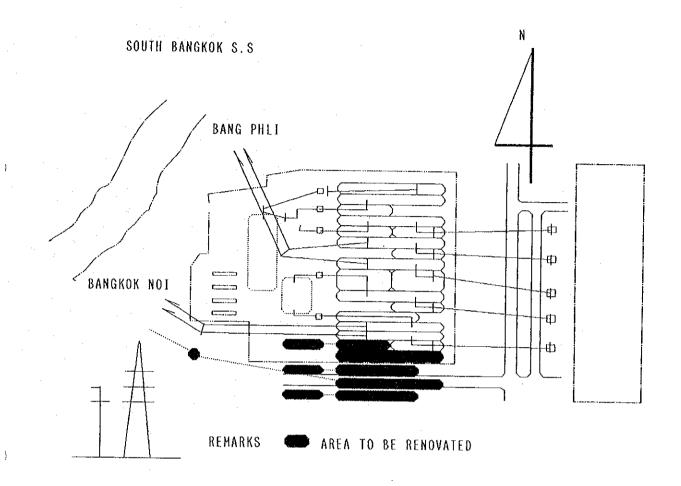


	230 kV				500 kV			
RATCHADA- PISEK	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре	GIS				•			
Bus system	One and a half				-			
No.of line No.of bank	<u>-</u> -	4 3	4/4 5/5	4 6		- -	-	-
Switchgear area(W x L)	65 10					:		



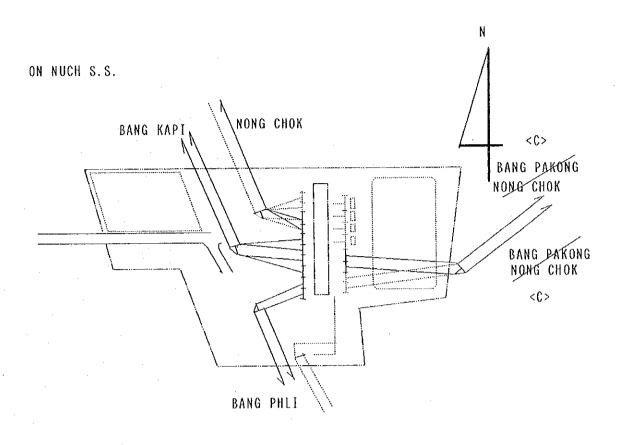
+1(BN) +1(STB)

		230 kV				500 kV		
SAMPHRAN 1	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре					-			
Bus system					-			
No.of line No.of bank	2 4	2 5	2/4 5/5	6 5	- -	- -	- - ·	-
Switchgear area(W x L)	51 43.5				-			



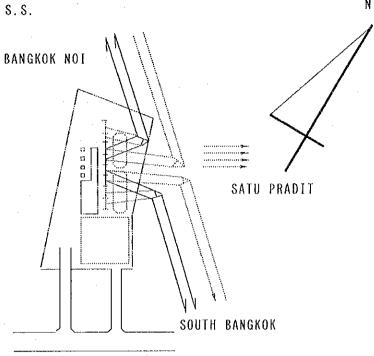
+1(STB)

SOUTH	230 kV				500 kV				
BANGKOK	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011	
Туре		onventional rith Al-pipe				-			
Bus system	One an	d a h	31f		-				
No.of line No.of bank	4 5	5 7	5/5 7/8	5 8	-		-	-	
Switchgear area(W x L)	280 103				-				



		230	kV		500 kV				
ON NUCH	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011	
Туре	GIS	GIS				-			
Bus system	One an	d a ha	alf		-				
No.of line No.of bank	10 -	10 3	$\begin{bmatrix} 12/12 \\ 3/4 \end{bmatrix}$	14 4	-	-	- -	-	
Switchgear area(W x L)	105 28								

SOUTH THONBURI S.S.

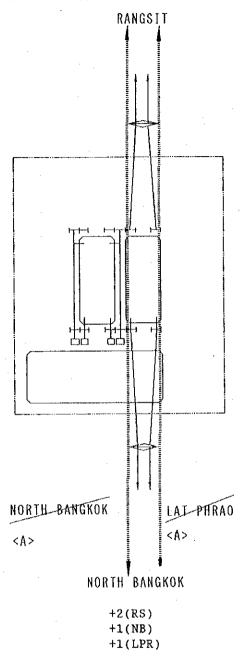


+3(STP) +1(SB)

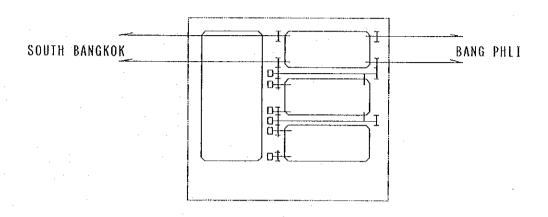
> +1(SP1) +1(STP)

SOUTH	230 kV				500 kV			
THONBURI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Type	GIS				-			
Bus system	One an	id a ha	alf					
No.of line No.of bank	4 2	- 8 4	8/9 4/4	10 4	- -	-	-	-
Switchgear area(W x L)	84 16				-		-	

CHAENG WATHANA S.S.



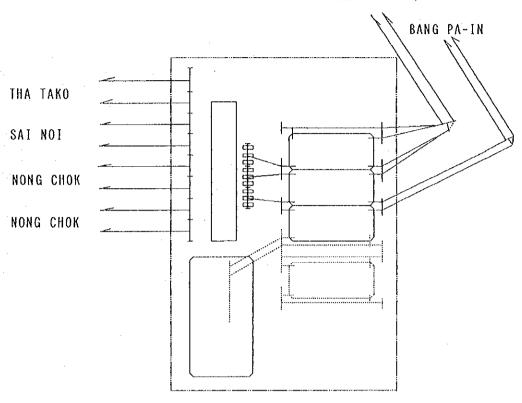
CHARNO	230 kV			500 kV				
CHAENG WATHANA	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Type					-			
Bus system					_			
No.of line No.of bank	-	4 2	3/3	4 4	-	- -	-	<u>-</u> -
Switchgear area(W x L)	-				-			



+2(SB) +2(BPL)

·		230	kV	·-		500	kV	
TEPARAK	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре	_	•			-			
Bus system	-				-			
No.of line No.of bank	-	4	4/4 4/5	4 6	-	-	-	 -
Switchgear area(W x L)					-			





+2(RS)	
+2(AT)	
	+2(T T)
+2(RS)	+2(SN)
	+2(NC) +2(EASTERN)

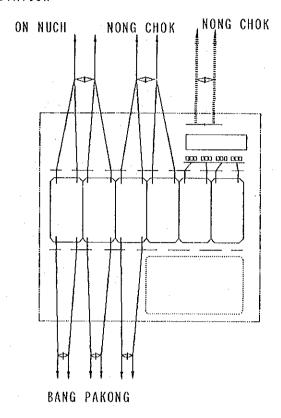
	·	230	kV			500	kV	
WANG NOI	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре					_			
Bus system					-			
No.of line No.of bank	- · -	4	4/6	6	-	- -	-/8 -/3	8 3
Switchgear area(W x L)	-		·		-			

		230 kV			500 kV			
<u>CHIDLOM</u>	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Type	·		· · · · · · · · · · · · · · · · · · ·		-			
Bus system					. -			
	2(2) 2(2)	2 2	2/2	2 2	-	-	-	-
Switchgear area(W x L)								i

SATU PRADIT S.S.

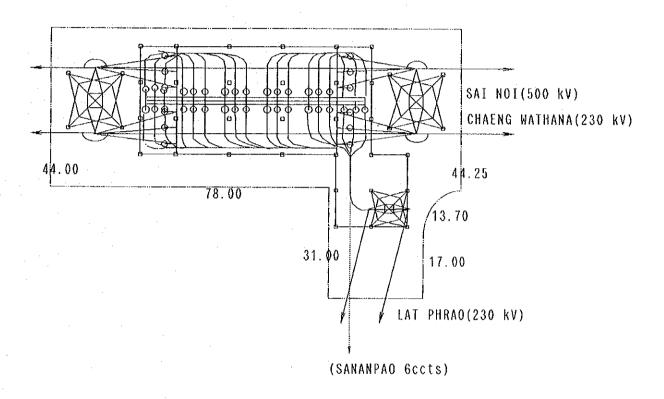
		230 kV				500 kV		
SATU PRADIT	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Type					-			
Bus system					_			
No.of line No.of bank	()	3	3/3 3/3	4 4	- -			-
Switchgear area(W x L)								

<C> SUBSTATION



+4(NC) +2(BP) +2(BP) +2(BP) +4(ON)

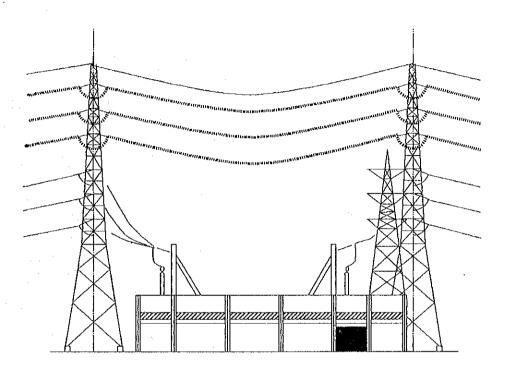
	230 kV			500 kV				
<c></c>	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре					-		<u> </u>	
Bus system					-			
No.of line No.of bank	-	-	-/-	14 ()	-	- -	-/ -/-	2 4
Switchgear area(W x L)	-				-			



+2(NB) +2(CW) +2(LP) +6(SA)

		230 kV			500 kV			
<u><a></u>	Equip	1997	2001 /2006	2011	Equip	1997	2001 /2006	2011
Туре					-			
Bus system					-			
No.of line No.of bank	-	-	12/12 -/-	12	 	~ <u>.</u>	-	- -
Switchgear area(W x L)					-			

<A> SUBSTATION-FRONT VIEW



APPENDIX 3

BREAK DOWN

OF

SUBSTATION COST

	HONG	CHOK		1997			Thousand	Baht
	-Nunt -Nunt -Konk -Type	er of	Bay: Line: Bank:	Al-pipe CONY,	Al-pipe INV.	GIS .	One and o 500 kV 4 3 0 Al-pipa CONV.	GIS
1	1. Laz 2. Laz 3. Pos	d Acquid Impi indution	isitio rovemen on Mork	n 0 t 0	200	200	0 3213 13040	315 3912
1	4.Con	trol I	Bulldin	9 0	0	0	0	4975
1 1 1	5 . Equ - G) - 8 t	iparent S col \$1	tructur	39363 • 500	39363 500	39363 500	12026	598304 482760 1804
1 1 1 1	. Y. 10- 10-	ace. : anefor reuit acons	mardwar Mar Mreake Mct.Swi	200 37000 r 0 t 0	200 37000 0 0	37000 -	483766 12026 65000 0 140520 67560 85320 112840	900
1	8.Hie	ce. Far	& SERV	0	0	0	0	0
	80t	total (1 (1	(C) (C)	40863 35934 4929	40863 35671 5192	40863 35671 5192	499519 420092 79427	607406 554279 53127
1 1 1	8.Rng 9.Coc 10.I=	inseri itinger port I	ing & 8 ncies buties ided Ta	7 2860 4086 2555 3039	2860 4086 2555 3039	2060 4086 2555 3039	420092 79427 24815 34966 49952 67352 39456	42518 60741 57121 46495
	Sut	-total		14583	14583	14583	216541	237230
	PC LC	,) Baht)				716060 463727 252333	
	TOTAL FO	; `	08'8)	2218 1587 631	2218 1576 642	2218 1576 642	28642 18549 10093	33785 24475 9361
								,

NONG CHOR	2006			Thousand	Baht
-Number of Line:	730 kV 0 0 1			0 0ma and 1 500 kV 0 0	
-Type :	Al-pips CONV.		G18	Al-pipa CONV.	GIB
1 1.Lead Acquisitio 1 2.Land Improvement 1 3.Foundation Work	t o	0	0		0
1 -Bos 1 -Transformer	200 1300	1300	1300	3900	3900
1 4.Control Buildin	•	- 1	. 0	ō	0 0 0
1 5.Equipment 1 -GI9 1 -Steel Structur	39363 • 500	39363 500	39363 0 500	-	0
1 -Misce, hardwar 1 -Transformer 1 -Circuit Breske	9 200 37000	200 37000	200	300	300
1 -Disconnect.Swi 1 -Instrument Tra 1 -Control & SERV	t o	0		0	<u>-</u>
1 -Control & SHRV 1 -Others 1 6.Misos, Facilitie		1663 0	1663	•	9204
Sub-totel (FC)	40863 35934				
(LC) 1 7.Misce.Expanse 1 8.Engineering & B	4929 2043 V 2860	5192 2043 2860		6263	6263
I 9.Contingencies 1 10.Import Duties 1 11.Value Added To	4086 2355	4086 2555	4086 2553	12525 8520	
Sub-total	14583				
TOTAL (1000 Baht) FC LC	55446 39677 15769	39388	39388	125017	
TOTAL (1000 US 8) FC LC	2218 1587 631				6828 5001 1627

NONG CHOK	2001			Thousand	Baht
	0			0	
-Bos System :	יים מוש שמנו	s Detr		One and a	
-Voltage :	230 80			300 20	
-Number of Line:	;			ž	
-Number of Bank:				ī	
-Тура	Al-pipe CONV.	Al-pipe	GIS	Al-pipe CONV.	GIS
1.Land Acquisition 2.Land Improvement	n 0	0	0	0	0
2.Land Improvement	t 295	380	28	0	0
3. Foundation Work					
-Bua	2506	2506	752	750	
-Transformer	0	Q		3900	3900
-Tranch	Ō	0	0	0	
4.Control Building	9 0	0			0
	-		0		122904
5.Equipment	37074		47318		
-C12		2921	39475	1800	1600
-Steel Structure -Nisce. hardware	a 2313 a 3192	6549	438 400	1800	
-Siece. Haldwar-	3174	KHC0 .	900	111000	
-Transformer -Circuit Bracks	11100	11140		111000	111000
-Disconnect Swi	4761	4751		ŏ	
-Disconnect.Swi	8613	8613		ŏ	
-Control & SERV	7005	7005		9204	9204
6.Hisca, Facilitie	e 0	0	0	; O	0
Sub-total				127554	
· (FC)	33340	35156	44599	114792	
(LC)	6535				
7.Misce.Expense 8.Engineering & S	1979	2177 3075	2404		6378
8 Engineering & S	V 2791	3075	3367	8929	
9.Contingencies 10.Import Duties	3988 4848	4393		12755	12755
31.Value Added Ta	x 3110		3668		2000 9359
Sub-total	16716	19111	18568	46621	46621
TOTAL (1000 Baht)		63036	56666	174173	
PC	36955	38972	49247	126736	
ic	19636	24064	17419	47439	47439
TOTAL (1000 US 8)	2264	2521	2667	5967	
FC LC	1478 785	1559		5069	
<i>.</i>	/85	963	697	1898	1898

	NONG CHOK		2011			Thousand	Baht
	************		0	0		0	0
÷			One and	e Leitz		One and	K DAIL
	-Voitage	٠	330 KA			500 kV	
	-Number of Bay -Number of Line		0			2	
	-Number of Bank		0			•	
					'n		
	-Туре		Al-pipa CONV.	Ai-pipa INV,	G13	Al-pipe CONV.	GIB
ı İ	1.Lend Acquisit			0	0		0
1	2.Land Improvem		. 0	0	0	1607	158
Ļ	3.Foundation Wo	ΣÌ	_		_		
1	-Bu≢		0	0			1956
ŀ	-Transformer		0	0			Ō
	-Treach		0	0			0
ı	4.Control Build	Įπο	. 0	0	Q.		0
ļ			~	-	0		0
1	5.Equipment		0	0	0		299902
1	-G18			٠.	0		241380
1	-Steel Struct			0	0		902
ı	-Misce, hardw			0			1200
•	-Transformer		0	0	0		0
1	-Circuit Brea			0	-	70260	-
l.	-Disconnect.8	M I C	. 0	v o	-	33780	-
i	-Instrument T -Control & SB	10-57 10-1011	. 0	ŏ		42660 56420	#5430
i	-Others	410.		٠	U	30420	56420
i	6.Misca. Pacilit	ies	. 0	O,	0	0	0
	Sub-totel		0	0	0		
	(FC)		0	0	0		277764
	(rc)		0	0	Q		24252
	7.Hisca.Expense		. 0	0	0		15093
	8.Engineering &			0	0		21141
٠	9.Contingencias		0	0	0		30202
	10. Import Dutie		0	0	0		28779
1	11.Value Added	Tex	. 0	0	0	19729	23145
	Sub-total		0	0	0	108272	118360
	TOTAL (1000 Bah	t)	0	0	٥	358032	420376
	PC	•	ó	O	ō		305752
	rc		Ó	0	Ó		114624
	TOTAL (1000 US	8)	0	0	0	14321	16815
	PC \		ō	ŏ	ō		12230
	i.c		ō	ŏ	ŏ	5047	4585

	BAI NOI	1997			Thoseand	Baht		BAI HOI
	-Bus System : -Voitage : -Number of Bay : -Number of Line; -Number of Bank: -Type :	0	0		. 0	0		
	-Bus System :	One and	a haif		One and	a háif		~Bus Syst
	-Volters :	230 kV			500 kV			-Voltage
	-Number of Bay :	0			5			-Number
	-Number of Lines	. 0			š			
	-Number of Bank:	2			ž			-Mumber
	-Type :	Al-uipa	Al-pips	GIB	Al-pipe	OYS		-Tune
		CONV.	INV,		CONV.			-Number o
1	1.Land Acquisition	0	0	0	0	0	1	1. Land Ac
i	2. Land Improvement	Ó	0	Ō	4016	394	ī	2.Land In
1	3. Foundation Work	•					í	3 Foundai
ī	-Sus	400	400	400	16300	4800	i	- Done
í	-Transformer	2600	7600	1600	7850	7800		-1100
î	-Trench	2000	A000	4000	7000	7000		-rrangi
٠	4 Control Building	. ,	×	ŭ	ž	ŭ	Ţ	-Tranci
:	*.Contion Bullding	· u			·	v		4.Control
1	2. Land Teprovament 3. Foundation Work -Bus -Trensformer -Trench 4. Control Building 5. Equipment -GIS -Steel Structure -Misce. hardware -Transformer -Circuit Breaker -Circuit Breaker -Disconnect. Swit -Instrusent Tren -Control & EERYOthers	*****	=000		44464	0	1	
ī	5.Equipment	76726	70725	78726	844491	989563	1	5.Equipes
ī	-618	7		0		603450	1	-G18
1	-Steel Structure	1000	1000	1000	15033	2355	1	-St ee l
ļ	-Miscs. hardware	400	400	400	01250	2400	1	-Misca
1	-Transformer	74000	74000	74000	222000	222000	1	-Transf
1	-Circuit Breaker	. 0	. 0	-	175650	-	1	-Circus
1	-Disconnect.Swit	. 0	0	_	84450	-	1	+Discor
1	~Instrument Tran	. 0	0	-	106650	_	ĩ	-Instri
1	-Control & EERY.	3326	3326	3326	159458	159458	ī	-Contro
1	-Others						i	-Others
ī	6.Hisos.Facilities	0			n	0	i	6.Bisce.
								Q.D18C4.
	&ub~tot a l	81726	81726	81726	872507	1002647		Sub-tol
	(FC)	71867	71342	71342	750149	918945		
	(LC)	9859	10384	10384	122458	83702		
1	7.Misca.Expense	4086	4086	4086	43430	50113	3	7.Hisco.i
i	S. Knginearing & SV	5721	5721	5721	61082	70185	î	8 Enginee
ī	9.Contingencies	8173	8173	R173	A7261	100265	•	9.Conting
î	10 Import Duties	5110	5110	5110	100751	ÉFFRA	;	10. Import
í	Sub-total (FC) (LC) 7.Misca.Expense 6.Engineering & SV 9.Contingencies 10.Import Duties 11.Value Added Tax	6078	6078	6078	67855	76342	3	11.Value
						385238		Sub-tol
	TOTAL (1000 Baht)	110894	110894	110894	1232986	1387885		TOTAL (10
	PC	79354	78777	78777	827976	1012148		PC
	TOTAL (1000 Baht) PC LC	31540	32117	32117	405010	375737		rc
	TOTAL (1000 US \$) FC LC	4436	4436	4436	49319	55515		TOTAL (10
	PC	3174	3151	3151	33119	40486		PC

		Baht		BAI HOI	2006	*		Thousand	. Beht
		0 a half		-Bue System : -Voltage : -Number of Rev	0	0	1	0	
				-Voltege :	230 FA			500 60	
	5			-Number of Bay :	230 20			0 0	
	š			"Number of Line:	ŏ			2	
	2			-Mumber of Bank:	õ			0	
	CONV.	O)s		-Voitige: -Number of Bay: -Number of Line: -Number of Hank: -Type:	Al-pips CONV.	Al-pipe	GIS	Al-pipe CONV.	G18
•		^		1.Land Acquisition 2.Land Improvement 3.Foundation Work					
Ò	4016	204	1	2.Land Improvement	. 0	Ō		0 0	q
			1	7.Land improvement -Bus -Transformer -Transh 4.Control Building 5.Equipment -GIS -Steel Structure -Misse hardware -Transformer -Circuit Breaker -Disconnect.Swit -Instrument Trans -Control & ERRVOthers - Wiese Weethilde					
600	16300	4890	1	~B∪ €	0	0		0 500	500
500	7800	7800	1	-Transformer	o,	0	1	0	Q
0	o o	0	1	-Tranch	o	0		0 0	0
ŏ	0	ō	1	4.Control Building	. 0	0	1	9 0	0
0	944404	0.000.00	1			~ _	,	D -	0
4.40	024231	4044503	1	5 Equipment	U	O		0 2800	1400
'nχ	15022	3288		-G18	~ ~	- ^		U +	* 200
400	81250	2400	†	-Steel Structure		,		0 1200	1200
000	232000	222000	1	-Miscel (Glows)	, ,	×		0 000	500
	175650		7	-Circuit Brasker	ň	ň	_	Š	
	84450	-	î	*Disconnect.Swit	ŏ	ŏ	_	ő	_
	106650	-	ī	-Instrument Tren	ŏ	ō	-	č	_
326	159458	159458	1	-Control & KERV.	Ó	ō	1	o õ	0
			1	-Others	-				
. •	-		-	V.1110C4, CHC/111C190		•			•
726	872607	1002647		Sub-total	0	0		2300	2300
342	750149	918945		(FC)	٥	0		1517	1517
304	122450	83702		(rc)	0	0		0 783	783
186	43430	50113	1	7.Hisce.Expense	0	0		0 115	115
721	51082	70185	1	8 Engineering & SV	, 0	0		0 161	161
173	87261	100265	1	9.Continguncies	Ō	Ó	1	0 330	230
110	100751	88333	1	10. Import Duties	ō	ō		0 480	480
//8	0/855	76342	1	Sub-total (FC) (LC) 7. Hisce Expense 8. Engineering 6 SV 9. Contingencies 10. Seport Duties 11. Value Added Tax		0		U 195	195
168	360379	385235		Sub-total	0	0		0 1181	1181
		1387885		TOTAL (1000 Baht) FC LC	0	0		0 3481	3481
777	827976	1012148		PC	o	Ω		0 1719	1719
		375737		rc	0	Ò		0 1762	1762
136	49319	55515 40486 15029		TOTAL (1000 US \$) FC	0	0		0 139	139
151	33119	40486		PC	0	0		0 69	69

LC	1762	1285	1265	16200	15029	ič
	•			•		
SAI NOI	2001			Thousand	Baht	SAI NOI
	.0	0		. 0		
-Bus System : (-Voltage :	ma sud i 230 kV	half		One end a		~Bus System ; O -Voltage :
-Number of Bay :	0			4		-Number of Bay :
-Number of Line:	0			3		-Number of Line:
-Number of Bank: -Type : J	i Nantoe	Al-pipe	CIS	Al-pips	GIS	-Mumber of Bank: -Type : A
	OHV.			CONV.		-1370
1.Land Acquisition		0			0	1 1.Land Acquisition
2.Land Improvement 3.Foundation Work	0	0	0	3213	315	1 2.Land Improvement 1 3.Youndation Work
-Bus	200	200	200	13040		1 -Rus
-Transformer	1300	1300				1 -Transformer
-Tranch 4.Control Building	0	0			0.	1 -Treach 1 4.Control Building
Alcourtor politrid	"	_ `	ŏ		ŏ	1 4.Concros purious
5.Equipment	39363	39363				1 5.Equipment
-GIB	500	500	0 500		482750 1804	I -GIB
-Steel Structure -Hisco. herdware	200	200		63000		1 -Steel Structure 1 -Hisce, hardware
-Transformer	37000	37000				1 -Transformer
-Circuit Breaker	0	0		140520	-	1 -Circuit Breaker
-Disconnect.Swit -Instrument Tren	0	0	- .	67560 85320	- -	1 ~Disconment.Swit 1 ~Instrument Tran
-Control & SERV.	1663					1 -Control & SERV.
-Others					_	1 -Others
6. Miace. Facilities					0	1 6.Wimca.Pacilities
Sub-total	40863					Bub-total
(PC) (LC)	35934 4929	35671 5192	35671 5192		779563 71476	(PC) (LC)
7. Miaca. Expense	2043	2043	2043		42536	1 7 Misos Expense
8.Enginearing & SV		2860			59573	1 B.Engineering & SV
9.Continguacite	4086	4086				1 9.Contingencies
10 Import Dutiés	2555	2555	2555			1 10.Import Duties
Il.Value Added Tex		3039				1 11. Velue Added Tex
Sub-total	14593					Sub-total
TOTAL (1000 Baht)	55446	55446	35416	1053969	1176735	TOTAL (1000 Baht)
PC	39677	39366	39388	712044	858722	FC .
LC	15769	16058			318013	LC
TOTAL (1000 US \$)	2218	2218	2218	42159	47069	TOTAL (1000 US \$)
PC	1587					FC
rc	631	542	642	13677	12721	LC .

	SAI NOI	7011			Thousand I	Sebt
	-Bus System ; -Voltage ; -Number of Bay ; -Number of Line; -Number of Rank;	0 One and (230 kV 0 0	, 0 a half		0 One and a 500 kV 0 0	
	-Туре :	COMA' VI-bibe	INA.	CIS	Al-pipe (118
1					0	
1	1.Land Acquisition 2.Land Improvement 3.Foundation Work	. 0	Ó	0	0	Ó
î	-Hus -Transformer -Transh	200	200 1300	200	O	Û
1	-Transformer	1300	1300	1300	0 0 0	0
1	-Trench	0	0	0	0	0
î	-Transformer -Tranch 4.Control Building 5.Equipment -GIB	- 0	ب _ پ	Ö		0
1	5.Equipment	39363	39363	39363	0	
1	-GIB		E^^	500	- ^	0
1	-atems atructure	200	200	200	. 0	0
i	-Transformer	37000	37000	37000	ō	õ
1	-Circuit Breaker	. 0	0		9	**
1	-Disconnect.Bwit	. 0	0	-	0	_
1	5.Equipment -GIS -Steel Structure -Miscs. hardware -Transformer -Circuit Breaker -Disconneot.Swit -Instrument Tran -Control & SERVOthers	. 1663	1663	1663	ő	0
1	6. Misca. Pacilities	0	. 0	Ø	0	0
	Sub-total	40863	40863	40863	0	0
	(PC)	35934	35671	35671	ŏ	ō
	(rc)	4929	5192	5192	Ō	0
į	7.Misos.Expense	2043	2043	2043	0	0
1	B.Engineering & SV	2060	2860	2860	0	Û
î	10.Import Duties	2555	2555	2555	ŏ	Õ
ī	Sub-total (FC) (FC) (T.Misos.Expense B.Engineering & SV 9.Contingencies 10.Import Duties 11.Valus Added Tex	3039	3039	3039	ŏ	ŏ
	Sub-total	14583	14583	14583	0	0
	TOTAL (1000 Baht) FC . LC	55446	55446	35446	0	0
	FC .	39677	39388	39388	Õ	0
	TOTAL (1000 US \$) FC LC	2218	2218	2218	0	¢
	FC	1587	1576	1576	ō	Ó
	LC	631	542	642	0	0

	NORTH BANGKOK	1997		,	Thousand Baht	
	-Bua Bystam : -Voltage : -Number of Bay : -Number of Line: -Number of Benk: -Type :	0	Al-pips	;	One and a haif 500 kV 0 0 0 AI-pipe GIS CONV.	Ó
	1 1.Land Acquisitio 1 2.Land Improvemen 1 3.Foundation Work 1 -Bus 1 -Transformer	t Ó	0 200			0
	I -Trench 1 4.Control Building	0	0	0	0	0
} .	1 1 5.Equipment 1 -GIS	39363	39363	39363 0	0	0
	1 -Steel Structure 1 -Minde, hardware 1 -Transformer 1 -Circuit Breake 1 -Disconnect.Swit 1 -Instrument Trai	* 200 37000 r 0 t 0	200 37000 0 0	500 200 37000	0	0
	1 -Control & BERV 1 -Others 1 6.Wisca.Facilities	1663	1663 0	1663 0		0
	Sub-total (PC) (LC)	40863 35934	35671	35671	0	0
	1 7.Misca.Expanse 1 5.Engineering & St 1 9.Contingencies 1 10.laport Duties	4929 2043 2860 4086	5192 2043 2860 4086	5192 2043 2860 4086	0	0
	1 11.Value Added Tax	. 3033	2555 3039	3039	0	0
	Sub-total	14583	14583	14583	Ç	0
	TOTAL (1000 Haht) FC LC	55446 39677 15769	55446 39388 16058	55446 39388 16058	0 0 0	0
	TOTAL (1000 US @) FC LC	2218 1587 631	2218 1576 642	2218 1576 642	0 0 0	0
	~			*****		

NORTH RANGKOK	2006			Thousend	Beht
	0	0		Ó	0
-Bum System 1 C		half		One and	
-Voltage : - -Number of Bey :	230 kV			500 kV	
-Mumber of Line:	Ď			, o	
-Number of Bank;	í			,	
		Al-pipe	CIR	Al-pipe	CTC
	ONV.	INV.	0.10	CONV.	dra.
1.Land Acquisition	0	0	0	0	0
2.Land Improvement	ŏ	0	0	0	0
3. Foundation Work					
-Bus	200	200			
-Yransformer	1300	1300	1300		
-Trench 4.Control Building	0	0	0		0
arcontton namajud	0	0	0		
5.Equipment	39363	39363			0 484416
-GIS	7:303	29303	0	103110	404410
-Steel Structure	500	500	- 500	2400	
-Misco, hardware	200	200			
-Transformer	37000	37000	37000		
-Circuit Bresker	Ó	0		0	
-Disconnect.Swit		0	~	Ō	
-Instrument Tran				Ö	
-Control & SERV.	1663	1663	1663	36816	36816
6.Niscs.Facilities	0	0	Ò	0	0
Sub-total	40963	40863	40863	501016	501016
(PC)	35934				
(LC)	4929	5192	5192		47914
7.Hisca.Rxpense	2043	2043	2043	25051	25051
8.Engineering & BV	2860	2860	2860	35071	35071
9.Contingenciae 10.Import Duties	2860 4086 2555	1096	4086		50102
11. Value Added Tax	3039	2555 3039	2555 3039		34080 37457
Sub-total	14583	14583	14583	181761	181761
TOTAL (1000 Baht)	55446	55446	53446	682777	682777
FC	39677	39388	39388	500073	500073
tc	15769	16058	16058	182704	182704
TOTAL (1000 US 4)	2218	2218	2218	27311	27311
PC	1587	1576			
LC	631	642	642	7308	7308

	NORTH BANGKOK	2001			Thousand	Beht
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank:	0 One and 2 230 kV 0 0	0 haif		0 One and 500 kV 4	
	-Type ;		Al-pipe INV.	CIS	Al-pips	arb
1	1.Lend Acquisition	0	0	0	0	0
1	2.Land Improvement 3.Foundation Work	. 0	0	0	3213	
1	~Bua	- 0		0	13040	3912
. 1	-Transformer	0	0	.0	0	0
1	-Tranch	0	Đ	0		0
•	4.Control Building	. 0	. 0	Q.		0
1	6 B			o,		4875
1	5.Equipment -GIS	0	0	o	483266	598604
í	-Steel Structure	- ^	~ ~	0		482760
i	-Misca. hardware	. 0	0	0		1804
î	-Transformer	'. ö	. 0	o	65000	
î	-Circuit Breaker		. 0	٥	0	0
î	-Disconnect.Swit		ŏ	-	140520 57560	-
î	-Instrument Tran		ŏ	-	85320	-
ĩ	-Control & SERV.	ň	ŏ	- o	112840	
ī	-Othera	·	v	v	117040	112840
1	6. Hisco, Facilities	0	.0	0	0	•
	+				·	
	Sub-total	0	. 0	0	459519	607706
	(FC)	ö	ō	. ŏ	420092	
	(LC)	Ö	ō	ŏ		53177
1	7.Misos.Expense	0	Ó	0	24015	30370
1	8.Engineering & SV	Ó	ō	·ŏ	34966	42539
1	9.Contingencies	Ö	Ö	ŏ		60771
	10. Import Duties	. 0	0	0	67352	57209
1	11. Value Added Tax	0	0	0	39456	46523
	Sub-total	0	0	0	216541	237412
	TOTAL (1000 Baht)	0	0	0	716060	645110
	PC (ADOC Date)	ŏ	ŏ	. 0	463727	845118 610892
	tč	ŏ	ŏ	ő	252333	234226
	~~~~~~~	***-~*				
	TOTAL (1000 US &)	0	D	0	28642	33805
	<b>₽</b> C	ō	Ď	ŏ		24436
	LC	Ō	ō	ō	10093	9369
		·				

	NORTH BANGKOK	2011			***********	7-14
	POTENTIAL PRINCIPLE				Thousand I	pant
		0	0		0	0
	-Sus System :	One and t	helf		One and a	helf
	-Voltage :	230 kV			500 KV	
	-Humber of Day :	2			0	
	-Number of Line:	3			0	
	-Number of Bank:	0			0	
	-Type :	Al-pipe CONV.	Al-pipe	G18	Al-pipa (	Çî ş
	1 1 4 1 1					
:	1.Lend Acquisition 2.Lend Improvement					ŏ
•	3. Foundation Work	. 591	139	56	0	0
ŧ	-Bus	5013	5013	1504	0	O
i	-Transformer	5013	3013	1304	ŏ	ů
ì	-Treach	ŏ		ŏ	ŏ	ŏ
ì	4.Control Building		ñ	ŏ	å	0
i	***************************************			ŏ	- "	ŏ
ı	5.Equipment	74149	92078		0	ŏ
ı	-G19	-	-	78950	_ ~	ŏ
ŧ	-Steel Structure	4626	5641	876	0	ŏ
ı	-Misce hardware	6384	13098	600	Ō	ō
L	~Transformer		0	0	0	0
ı	-Circuit Breaker	22380	22380 9522	_	0	-
L	-Disconnect.Swit				0	_
	-Instrument Tran		17226		0	-
	-Control & SERV.	14011	14011	14011	0	0
	-Others 5.Minos.Facilities	. 0	٥			
	O.MINOS.FRCITICION				0	0
	Sub-total	79753	87850	95997	O	0
	(FC)	66680	70331	89232	ó	ō
	(rc)	13073	17519	6765	Ó	Ō
	7.Misce.Expense	3958	4355	4797	0	0
l	B.Engineering & SV	5583		6720	0	0
	9.Contingencias		8785	9600	0	0
	10.Import Dutles		11996	8579	0	0
	11.Velue Added Tex	6220	6937	7316	0	Q
	Sub-total	33432	38223	37012	0	0
	TOTAL (1000 Raht)	113185	126073	133009	0	0
	FC .	113185 73908 39277	77941	98311	ŏ	ŏ
	LC .	39277	48132	34698	ō	ŏ
	TOTAL (1000 US \$)	4527	5043	5320	0	0
	rc .	2956	3118	3932	ŏ	ŏ
	LC	1571	1925	1388	ō	ŏ
			~~~~~		+	~~~~~

BANGKOK NOI	1997			Thousand Bahl
-Bue Bystem ; -Voltage ; -Kumber of Bay ; -Number of Line; -Kumber of Bank;		half		One and m hall 500 kV
-Type :	A1-Dipe CONV.	Al~pipa INV.		CONV.
1 1.Land Acquisition 1 2.Land Improvement 1 3.Foundation Work	. 0	0	0	0
i -Bua	600	600 3900	3900 600	0
Transformer Tranch A.Control Building S.Equipment G.E.	0	115000	0	- 0
1 -GIS 1 -Steel Structure	1500	1500	1500	. 0
i Steel Structure I -Misce herdware i -Transformer -Circuit Brasker i -Disconnect.Swit I -Instrument Tran	111000	111000	111000	0 Q 0
-Control & SERV.	0 0 4990	0 0 4990	4990	0
1 -Others 1 5.Nisce.Facilities	0	0	0	0
Sub-total (FC) (LC)	122590 107801 14789	122590 107013 15577	122590 107013 15577	0 0 0
1 7.Hisca.Expense 1 8.Engineering & SV	6130 8381	6130 8581	6130 8581	000
Sub-total (FC) (IC) 1 7.Miscs.Expense 1 B.Engineering & SV 1 9.Contingencies 1 10.Import Daties 1 11.Value Added Tax	7666 9119	7666 9119	7666 9119	ŏ
Sub-tate1	43755	43755	43755	
TOTAL (1000 Baht) PC LC	166345 119031 47314	166345 118164 48181	156345 118164 48181	0 0 0
TOTAL (1000 US 8) PC	6654 4761	6554 4727	6654 4727	0

}

and the state of the control of the

	BANGKOK HOI	2006			Thousand	Baht
	-Bus System : -Voltage : -Number of Bay ;	One and a 230 kV	half		0 000 moč 1 500 kV	half
	-Number of Line:	2			ğ	
		Al-pips CONV.	Al-pipe INV.		Al-pipe	GIB
1.	1.Land Acquisition 2.Land Improvement	0	0	0		
1	 Lend Improvement Foundation Work 	. 886	1139	84	D	0
î	-Bus	7519	7519	2256	1000	1000
1	-Transformer	0	ů.	0		
1	~Tranch	0	0			
1	4.Control Building	, 0	0	0		0
î	5. Equipment	111222	123117			
ī	-Gia			118425		0
1	-Steel Structure		8762			2400
1	-Misçm. hardware		19647			
1	-Transformer	0	0		,,,,,,,	
1	-Circuit Breaker -Disconnect.Swit		33570 14283		0	
í	-Instrument Tran		25839		0	
1	-Control & SERV.	21016	21016			
	5. Kiece. Facilities	0	0	0	0	. 0
	Sub-total	119627		143495	501016	501016
	(PC)	100020	105497			
	(LC)	19607	26278			
i	7. Hiscs. Expense 8. Engineering & 6V 9. Contingencies 10. Import Duties	5937	6532 9224	7171 10045		
i	9. Contingencias	11067	17178	14350		
î	10.1mport Duties	14543	17994	12722		
ì	TI'ASING WOOSE LOX	7330	13178 17994 10404	10930	37457	37457
	Sub-total		57332	55218	181761	181761
	TOTAL (1000 Baht)	169774	189107	198713	682777	
	PC	110863 58911	116913	147009	500073	
	LC	58911	72194	51704	182704	182704
	TOTAL (1000 US #)					
	PC .	4435	4677			
	LC	2356	2888	2068	7308	7308

BANGKOR NOI				Thomasod	Saht
	٥	n		a	
-Bos System -Voltage	: 230 kV			500 kV	
-Number of Hay	; 0			9	
-Number of Hay -Number of Line -Number of Hank	: 0			Đ	
-Number of Bank	1			4	
-Typs	CONV.	INV.			
1.Land Acquisit 2.Land Improvem 3 Foundation Mo	ion 0	0	0	0	
2.Land Improves	ment û	0	ė	4016	3
2.1.Odd/Decton Mo					
Bus	200	200 1300	200	16300	. 40
-Trepsformer -Trench	7300	1300	1300	12600	151
A.Control BullA	ilna A	0	9	ž	
-Trensformer -Trench 4.Control Build 5.Equipment -GIS -Steel Struct -Wisco. hardw -Transformer -Circuit Bres -Disconnect. S -Instrument T -Control & SE -Others	YILY V	_ `		_ •	41
5. Boulpment	39363	39363	39363	1084899	12287
-GIS	+	~	0		603
-Steel Struct	ure 500	500	500	15033	2:
-Misce, hardw	are 200	200	200	81250	13
-Transformer	37000	37000	37000	444000	4440
-Circuit Simp	Her U	×		1/3030	
-Diecommect.o	ran O	ŏ	-	106650	-
-Control & SE	KV. 1663	1663	1663	177866	1378
-Others					
6.Misca.Facilit	:1 08 0	0	0	. 0	
Sub-total	40863	40863	40563	1120815	12545
(FC)	35934	35671	35671	975183	11429
(LC)	4929	5192	5192	145632	1111
7. Misce. Expense	2013	2043	2043	55840	627
o.Engineering 6	2560	2860	2860	78457	878
10 Import Dutie	9000	308D	4000 2864	117083	1231
Sub-total (FC) (LC) 7.Misco.Expanse 9.Engineering 6 9.Contingencies 10.Import Dutie 11.Value Added	Tax 3040	3039	3030	86388	3092 951
Sub-total	14563	14502	14503	450074	47×4
TOTAL (1000 Bah	11 35446 20672	55446	55446	1076703	1730)
I.C	1104¢ 0atří	3730B	16049	494600	4703
TOTAL (1000 US PC LC	#) 2218	2218	2216	62836	697
r.c	1587	1576	1576	43052	503
30				10704	1124

	BANGKOK NOI	2011			Thousand	Beht
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank: -Type :	One end a 230 kV 0 1 0 Al-pipe CONV,		GIB	One and a 500 kV 0 0 1 1 A1-pips CONV.	
1	1.Land Acquisition 2.Land Improvement	t o	0	0	0	0 0
1	3. Foundation Work	200	200	200	250	
1	~Transformer	0	ø	0	3900	
1	-Treach	0	0	0	0	0
1	4. Control Building	g _ 0	. 0	0	. 0	0
1	5.Equipment -GIS	700	700	700	121104	121104
ī	-Steel Structure	500	500	500	600	600
î	-Miace, hardware		200	200	300	300
ĩ	-Trensformer	0	0	0	111000	111000
1	-Circuit Breaker	r. 0	ō	_	0	-
1	-Disconnect.Swi	t 0	0	-	Ō	~
ı	-Instrument Tran	n G	0	-	0	-
1	<pre>"Control & SERVOthers</pre>	. 0	0	. 0	9204	9204
î	6. Hisca. Pacilities	2 0	0	. 0	0	0
	Sub-total	900	900	900		
	(PC)	591	326	320		113275
	(LC) 7.Minca.Expense	309	572 45	572 45	11979 6263	11979 6263
	8. Engineering & B	45 7 63	63	63	876B	6768
i	9. Contingencies	90	90	90		
î	10.Import Duties		185	165	8520	8520
1		76	76	76	9365	9355
	Sub-total	459	459	459	45441	45441
	TOTAL (1000 Beht)	1359	1359	1359	170695	170695
	FC (1000 month)	670	381	381	125017	125017
	LC	669	978	978	45678	45678
	TOTAL (1000 08 8)	54	54	54	6828	6628
	PC (1000 00 0)	27	15	15	5001	5001
	rc	26	39	39	1827	1627

	RANGSIT	1997	~-		Thougand Baht	
		0	0		0	
	-Bus System : -Voltage :	230 11	Datt		One and a hall	Ι
	-Number of Bay :	230 80			0 VV	
	-Number of Line:	ň	•		0	
	-Number of Bank;	0 3			ŏ	
	-Type !	Al-pipe	Al-mipa	are	Al-pipa GIS	
	-Type :	CONV.	INV.		COM	
1	1.Land Acquisition 2.Land Improvement	. 0	0	0	0	
. 1	2.Land Improvement 3.Foundation Work	. 0	0	600 3900 0	Ö	
	T)	600	100	***		
î	-pua	2000	2040	3900	0	
•	-ros -Transformer -Trench	3300	3900	2400	ů	
	-Trench 4.Control Building 5.Kquipment -GIS	. ,	600 3960 0	V	o	
î	4.commission building		_ "	ň		
i	5. Routement					
. 1	-GIS -Stepl Structure -Misco. hardware -Transformer -Circuit Breaker -Disconnect.Swit -Instrument Trac -Control & ERRV.		-	0	_ *	
i	-Steel Structure	1500	1500	1500	0	
1	-Misce, bardware	600	000	600	ŏ	
1	-Transformer	111000	111000	111000	Ö	
1	-Circuit Breaker	. 0	. 0	-	0	.
1	-Disconnect.Swit	. 0	. 0	_	0	-
1	-Instrument Trac	1 0	. 0	•	. 0	-
1	-Control & BERV.	4990	4990	4990	0	
	6.Hisca.Facilities					
	Sub-total	122590	122590	122590	0	
	(FC)	107801	107013	. 107013	Ö	
	(LC)	14709	15577	15577	0	
1	7.Hiscs.Expense	6130	6130	5130	0	
1	8.Engineering & EV	7 83A1	8581	8581	0	
1	9.Contingancias	12259	12259	12259	0	
	10.Import Duties	7666	7668	7656	o o	
	Sub-total (FC) (LC) 7.Hiscs Expense 8.Engineering & By -Contingencies 10.Import Duties 11.Value Added Tax					
-	Sub-total	43755	43755	43755	0	
	TOTAL (1000 Beht)	166345	166345	166345	· o	
	rc	119031	118164	118164	Ó	
	LC	47314	48181	48181	0	
	TOTAL (1000 US \$)			6654 4727 1927		
	I.C	4761	4727	4727	0	
	1.6	1893	1927	1927	0	
			•			

	Rangsiy	2006			Thousand Baht	
		One and a 230 kV O O O O O O O O O O O O O O O O O O	Al-pipa		One and a helf 500 kV O O O Al-pipe GIS CONV.	0

	1.Land Acquisition 2.Land Improvement 3.Youndation Work	. 0	0		0	0
ĩ	-Bue	400	400	400	0	0
1	-Transformer	2600	2600		Ō	ō
1	-Tranch	0	0	0	o o	0
i	4.Control Building	. 0	0	0	0	0
	5.Equipment	78726	78726	78726	- 0	ő
ī	-GIS	~ ~ ~	70.20	0	-	ŏ
1	-Steel Structure		1000	1000	Ó	Ó
1	-Misca, hardware		400	400	0	b
1	-transformer	74000	74000	74000	0	Q.
ì	-Circuit Breaker -Disconnect.Swit		0	-	0 -	
î	Instrument Sten	ń	ŏ		0 -	
1	-Control & SERV.	3326	3326	3328	ō	ø
1	-Others	_	_			
1	5. Misce. Fecilities	0	0	0		0
	8ub-tot≱i	81725	81726	81726	0	0
	(FC)	71867	71342	71342	o	0
	(LC)	9859	10384	10384	o o	0
ï	7.Miscs.Expense 8.Engineering & SV	4086 5721	4086 5721	4086	0	ō
î	9.Contingencies	8173	8173	5721 8173	Ö	0
î	10.Import Duties	5110	5110	5110	ŏ	ŏ
1	11. Value Added Tax	6078	507B	6078	ŏ	ő
	Spb-total	29168	29168	29168	0	0
	TOTAL (1000 Baht)	110894	110894	110894	0	0
	FC	79354	78777	78777	ŏ	ŏ
	rc	31540	32117	32117	0	0
	TOTAL (1000 US 6)	4436	4436	4436	0	0
	rc .	3174	3151	3151	ŏ	ŏ
	LC	1262	1285	1285	Ŏ	ō

	RANGSIT	2001			Thousand Baht	
		0			0	0
	-Sus System : -Voltage :	Que end e	half		One and a half	
	-Voltage :	230 kV			500 kV	
	- MUNDER OF DEA.	U			0	
	-Number of Line:	0			Ò	
	-Number of Bank:	1			0	
	-Type :	CONV.	Al-pipa INV.	GIS	Al-pipe GIS CONV.	
	I.Lend Acquisition		0	0	0	0
	2.Land Improvement		· ŏ	0	· O	Ð
1	3. Poundation Work	1.0				
1	-Bus	200	300			0
1	-Trensformer	1300		1300	0	Ó
1	-Treach	0	0		0	0
1	4.Control Building	i . 0	0	ō	Ō	0
1		_	-	0		Ó
1	5.Equipment	39363	39363	39363	Ó	. 0
1	-G16	-	-	0	_	Ö
1	-Steel Structure	500	500	500	Û	٥
1	-Misce, hardware	200	200	200	Ó	0
1	-Transformer	37000	37000	37000	0	Ó
1	-Transformer -Circuit Braaker	. 0	0	-	0 -	
1	~Disconnect.Swit		0		Q	
i	-Instrument Tran	. 0			0	
1	-Control & SERV.			1653	0	٥
1	6. Hisca. Fecilities	0	0	0	0	0
	Sub-total		40863			Q
	(FC)	35934	35671			ø
	(ic)	4929.	5192	5192		0
1	/.nisco.sxpense	2043	2043 2860	2043		ŏ
+	o.miginaering & 8V	4000	1960	2860		0
1	10 Import Duti-	4000	4066 2555	4086	0	0
Ť	7.Misco.Expense 8.Engineering & Sv 9.Contingencies 10.Import Duties 11.Value Added Tax	2020	3930 7333	2555 2030	0	0
					· · · · · · · · · · · · · · · · · · ·	
	Sub-totel	14503	14563	14563	0	0
	TOTAL (1000 Baht)		55446	55446		0
	PC	39677		39388		0
	LC	15769	10030	16098	0	0
	TOTAL (1000 US \$)		2218		0	Ó
	PC .	1587				0
	LC	631	642	642	0	0

	RANGSIT	2011			Thousand	Baht
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank; -Type :	One and a 230 kV O O O Al-pipe CONV.	0 helf Al-pipe	G18	One and m 500 ky O O Al-pipe CONY.	
1	1.Land Acquisition 2.Land Exprovament 3.Poundation Work	n 0 E 0	0	0	0	0
ĩ	-Bua	0	0	0	o	0
1	-Transformer	0	0	0	0	Ó
1	-Treach	0	0	0	0	0
ŀ	4.Control Building	0	0	0	0	Q.
	5.Equipment	- 0	- 0	0	٠,	0
ì	-GIS		_ 0	0	0	0
i	-Steel Structure	. 0	_ 0	ő	~ o	ŏ
i	-Misce, hardware		ŏ	ŏ	ŏ	ŏ
L	~Transformer	Ō	Ō	ō	ō	ŏ
l	~Circuit Breakes		0	-	Û	-
ŧ	-Discommet.Swit		0	-	0	-
	-Instrument Tran		ō	~ _	0	-
	-Control & SBRV.	. 0	0	0	0	0
	6.Misco.Paoilities	0	0	0	o	o
	Sub-total	0	0	0	0	0
	(PC)	o	0	0	0	O
	(rc)	0	o	ō	Ō	O
	7.Miece.Expense	. 0	0	0	0	0
	B.Engineering & SV 9.Contingencies	0	ő	0	0	0
	10. Import Duties	ŏ	ñ	ď	0	0
	11. Value Added Tex		ő	. 0	ŏ	ŏ
	8ub-total	0	0	0	0	0
	TOTAL (1000 Baht)	0	0	0	0	0
	FC	0	0	0	0	Ó
	rc .	0	0	0	0	0
	TOTAL (1000 US 9)	0	0	0	0	0
	PC .	Ô	0	ġ.	Ŏ	ŏ
	rc	0	O	0	0	0
	~~~~~~~~~~~~			~~~~	*****	~~~~~~

	BOOTH BANCKOK	1997		•	Thousand Baht	
	-Bus System : -Voltage : -Number of Bay : -Number of Line; -Rumber of Hank; -Type :	One and to 230 kV 5 1 2 2 Al-pipe CONV.	Al-pips		One and a half 300 kV 0 0 0 Al-pipe GIS	0
			INV.		CONV.	
	1.Land Acquisition 2.Land Improvement 3.Youndation Work	1477	1898	141		0
î	Bus Bus	12532	12532	3759	0	0
1	-Transformer	2600	2600			ŏ
1	-Tranch	0	0	. 0	0	õ
1	4.Control Building	, 0	Q	0	0	0
1		-	-	. 0	-	0
1	5. Rquipment	262697	282521			0
1	-G18		14407	197375		Ò
í	-Steel Structure -Misce, hardwere	11564 15960	14603 32745		0	0
i	-Transformer		74000			ň
î			55950		ŭ -	·
1	-Circuit Breaker -Disconnect Swit	23805	23805		Ď -	
1	-Instrument Tran	49065	43065		. 0 -	
1	-Control & SERV.		38353		0	0
1	6:Misce.Facilities	. 0	0	. 0	0	0
	Sub-total	279306	299551	319018	0	0
	(YC)	237387	246515			õ
	(LC)	41010	52026	26001	ō	ò
1	7.Miscs.Expense 8.Engineering & SV 9.Contingencies	13891	14883	15944	0	٥
1	8. Engineering & SV	19551	20969		Ó	0
1	9.Contingencies 10.Import Duties	27931	29955		0	0
1	10. Import Duties 11. Value Added Tex	78978	34730		0	0
1	II.VAINA ADORG 183	21470	23267	24136	0	0
	Sub-total	111627	123804	120237	0	0
	TOTAL (1000 Baht)	391133	423355	439255	0	0
	PC	262787	272869		ò	ō
	ic	128346	150486		0	Ō
	TOTAL (1000 DS \$)	15645	16934	17570	0	0
	PC (1000 III \$)	10511	10915	12919		ŏ
	LC	5134	6013	4651	ŏ	ŏ

	BOUTH BANGKOK	2006	٠		Thousand B	aht
	-Bua System ; -Voitage : -Number of Bay : -Number of Line: -Number of Bank; -Type :	230 kV 0 0 1 Al~pipa	Al~pipe	G18	One and a 500 kV 0 0 0 0 Al-pipe C	
	~~~~~~	CONV.	INV.	· · · · · · · · · · · · · · · · · · ·	CONV.	
3	1.Land Acquisition 2.Land Improvement 3.Foundation Work	0	- 0 0		0	0
1	-Bus	200	200		o	0
ļ	-Trunsformer	1300	1300		0	0
1	-Trach 4.Coutrol Building	. 0	0	0	0	0
i	4.Coattor salians		_ 0	ň	0	0
ì	5.Equipment -GIS	-	39363		_ 0	0
1	-Btesl Structure				. 0	0
1	-Misca. hardware	200			o o	0
1	-Yransformer	37000			0	0
î	-Circuit Breeker -Disconnect.Swit		0		0	-
î	-Instrument Tran		. 0		ŏ	-
ī	-Control & SERV.				ő	0
ı	6.Miscs.Pacilities		Ď	0	0	0
	Sub-total	40863	40863	10863	0	0
	(fC)	35934		35671	ŏ	ŏ
	(LC)	4929	5192	5192	Ŏ	ō
	7.Misce.Expense		2043	2043	0	0
ı	8.Engineering & 8V	2860	2860			0
1	9.Contingenoles 10.Import Duties	4086	4086		o o	Ō
1	10.Import Duties	2555	2555	2555	0	0
ĭ	11. Velue Added Tex	3039		3039	0	0
	Sub-total	14583		14583	Q	0
	TOTAL (1000 Baht)	55446	55446		0	Ů.
	FC	39677	39388	39388 16058	Q	0
	rc	15769	16058	1605B	0	0
	TOTAL (1000 US \$)	271#	2218	2216	0	0
	FC TOUCUS WY	2218 1587	1576		ŏ	ñ
	ič	631	642	542	ŏ	ŏ
	~~~~~~~~~~					

1.Land Acquisition	CONV.	Al-pipa			
		INV.		Al-pipe GIS CONV.	
2.Land Improvement 3.Foundation Work				0	0
-Bus -Transformer	0 0	0	. 0	0	0
-Treach	0	Ö O	0	0	ŏ
5.Equipment	- 0	~ o	Ō	0	0
-Steel Structure			ō	0	0 0 0
-Transformer -Circuit Breaker	0	0	- 0	0	- 0
-Instrument Tran	0	ō	-	ò	- 0
-Others		0	0	0	0
Sub-total	0	0	0	0	0
(LC)	õ	Ŏ	ŏ	Ŏ	0
8.Engineering & BV	0	0	0	Ö	. 0
10.Import Duties	0	0	Ó	0 0	0
		0	0	0	0
TOTAL (1000 Baht) FC LC	0	0	0	0	0
TOTAL (1000 US \$)	0	à 0	0 D	0	0
	-Trench 4.Control Building 5.Equipment GIB -Steel Structure -Misca, herdware -Transformer -Circuit Breaker -Disconnect.Swit -Instrument Tran -Control 6 SERVOthers 6.Misca.Facilities Sub-total (FC) (LC) 7.Misca.Rapense 8.Engineering 5 SV 9.Contingencies 10.Import Duties 11.Valum Added Tex Sub-total TOTAL (1000 Beht) FC LC TOTAL (1000 US \$)	-Tranch 4.Control Building 0 4.Control Building 0 3.Bguipment -GIS -Steal Structure -Miace, herdware 0 -Transformer 0 -Disconnect.Swit 0 -Instrumant Yran 0 -Control & SERV 0 -Others (FC) 0 (LC) 0 7.Misce.Facilities 0 8.Bagineering & SV 0 9.Contingancies 10.Tmport buties 11.Value Added Tex 0 TOTAL (1000 Beht) FC 0 TOTAL (1000 US \$) FC 0	-Tranch 0 0 0 4.Control Building 0 0 0 5.Equipment 0 0 0 -GIB 0 0 0 -GIB 0 0 0 0 -GIB 0 0 0 0 -Transformer 0 0 0 -Transformer 0 0 0 -Disconnect.Swit 0 0 0 -Instrument Tran 0 0 0 -Control 6 SERV 0 0 -Others 0 0 0 -Sub-total 0 0 0 -Instrument 0 0 0 0 0 0 -Instrument 0 0 0 0 0 0 0 -Instrument 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-Tranch 0 0 0 0 0 4.Control Building 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-Trench 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

	SOUTH BANGKOK					Thousand E	Beht
	-Bus Eyetes -Voltage -Number of Bay -Number of Line -Number of Bank -Type		One and a 230 kV 0 0 0 Al-pipe CONV.	0 half Ai-pipe INV.		0 Dna and a 500 kV 0 0	
	1.Land Acquimits	lon		0		0	0
ĭ	2.Land Improvement 3.Poundation Work	ID C	U	ū	0	0	0
i	-Bus	•	0	0	0	0	0
ī	-Transformer		ŏ	ŏ	ò	ŏ	ő
1	~Treach		Ó	0	0	Ō	0
	4.Control Builds	ng	. 0	Q	0	0	0
ı					0	-	o
	5.Equipment -CIB		0	0	o o	0	0
1	-618 -8teel Structu		- 0	· 0	0	~ o	0
ì	-Misca. hardwa			ő	ő	ŏ	0
i	-Transformer			ŏ	ŏ	ŏ	ŏ
ī	-Circuit Breek			ō		ŏ	
1	-Dieconnect.Sw			ō	~	ŏ	_
1	-Instrument Tr			0	+	0	-
1	-Control & BEF	W.	0	0	0	0	0
1				0	0	0	0
	Sub-total		0	0	0	0	0
	(PC)		Ö	0	ŏ	ŏ	Ö
	(ičí		ŏ	ŏ	ŏ	ŏ	ŏ
ì	7.Nisca.Expense		0	Ó	ō	Ó	ø
ī	8.Engineering &	8V		0	0	0	0
	9.Contingencies		0	0	0	o	0
1	10. Import Duties		0	0	0	0	0
1	11.Value Added T			0	0	0	0
	Bub-total	-	0	0	0	0	0
	TOTAL (1000 Baht		0	0	0	0	0
	PC	•	ō	Q	ō	Ō	õ
	LC		0	0	. 0	0	0
	TOTAL (1000 US 6	τ-					
	PC COURT OF S	,	0	0	0	0	0
	ic		0	0	0	ő	0
			~~~~~~				

	•					
	amphiran 1	1997			Thousand Baht	4
	tum Bysten : /oltage : /umber of Bay :	0	0		0	
-7	lum Byuten	One and I	half		One and a hall	£
~)	VOLUMEN OF BAY : .	430 KY			0 VA 00C	
_	lumber of Line:	ŏ			ŏ	
-1	Tumber of Bay : Tumber of Line: Tumber of Bank:	1			0	
-5	Ype	Al-pipe CONV.	Al-pips INV.	G18	Al-pipe GIS	
	Land Acquisition		0	0		
	Land Improvement Foundation Work	. 0	v	U	v	
٠.	-Bus	200	200	200		
	** *	1300	1366	1300		
	-Transformer -Transh	Ŏ	0			
4.	Control Building			•		
5.	. Equipment	39363	39363			
	-GIB	. -	•	. 0		
	-Steel Structure	200		500 200	0	
	-Misca. hardware -Transformer -Circuit Breaker	37000	37000			
	-Circuit Breaker	r 0	. 0	_	0	-
	-Disconnect.Swil	t O	ŏ	-	o o	•
	-Instrument Trai -Control & SERV	1	1663	1663	0	-
	-Control # BERY.	. 1003	1863	1003	v	
6	.Misce.Facilitie			0	. 0	
	Sub-total	40863		40863	0	••
	(VC)	35934	35671	35671	. 0	
	(rc)	4929 2043	5192	7134	Ò	
7	(VC) (LC) Misca Expense Buginsering & S' Contingencies	2043	2043	2043	0	
9	.Engineering & S	4085	2660 4086	1086	ŏ	
11	O. Import Dutles	2555	2555 3039	2555	Ō	
1	Boginsering & St. Contingmodism O.Import Butles 1.Value Added Te:	: 3039	3039	3039	0	
_	Sub-total		14583		0	
T	OTAL (1000 Bant)	55446	55446	55446	0	
	PC	39677	55446 39388 16058	39388		
	LC	15769	1605B	16058	. 0	
1	OTAL (1000 US 8)		2218	2218	0	
	rc	1587	1576	1576 642	Ō	
	LC	631	642	642	0	

	SAMPHRAN 1	2006			Thousand 98	ht
	-Number of Bay : -Number of Line: -Number of Bank:	230 kV 3 2 0			One and a h 500 kV 0 0	
		Al-pipa CONV		GIS	Al-pipe GI CONV.	b
1	1.Land Acquisition	0	0	0	0	0
1	2.Land Improvement 3.Foundation Work		1139	84	0	0
ī	-Bus	7519	7519	2256	0	0
ı	~Transformer	. 0	0	0	0	0
1	-Trench	0	0	Q	Ō	Ó
1	4.Control Building	0	0	0	0	Q
1		****	123117	0	- 0	0
1	5.Equipment -GIS	111222	143117	141155 118425		0
i	-Steel Structure	6938	8762	1314	_ o	ŏ
î	-Misca, hardware		19647		ŏ	ŏ
1	"Transformer	0	0		Ó	0
1	-Circuit Breaker	33570	33570	-	0	~
1	-Disconnect.Swit	14283	14283		0	-
1	-Instrument Tran		25839		0	
1	-Control & BERV.	21016	21016	21016	0	0
1	6.Mison. Facilities	0	0	0	0	0
	Sub-total	119527	131775	143495	0	0
	(PC)	100020			0	0
	(LC)	19607	26278			0
1	7.Misca.Repassa 8.Engineering & SV 9.Contingencies 10.Import Duties	5937	6532			0
ì	8.Engineering L SV	11067	9224 13178			ů
ţ	10 Import Duties	14543	17994		ŏ	ŏ
i	11.Value Added Tex	9330.	10404	10930	ŏ	ŏ
	Sub-total	50147	57332	55218	0	0
	TOTAL (1000 Baht)	169774	189107	198713	0	0
	FC	110863	116913			D
	tc	58911	72194	51704	0	6
	TOTAL (1000 US 8)	6791	7564	7949	0	0
	FC	4435	4677	5680		. 0
	r.c	2356	2888	2068	0	0

٠.	BAMPERAN 1	2001			Thousand Beht	
-	-Bus System : -Voltage : -Number of Bey : -Number of Line: -Number of Bank; -Type :	One and a 230 ky 0 0 0 al-pips conv.			O One and a hal 500 kV O O O O O O O O O O O O O O O O O O	đ
1	1.Land Acquisition		0		ó	<u>0</u>
1	2.Land Improvement 3.Foundation Work	: 0	O	٥	Û	0
ī	~Bus	. 0	Q	0	0	0
ı	-Transformer	0	0	0	0	0
1	-Tranch	G	0		0	0
1	4. Control Building	, 0	0		. 0	0
1		-	-	0	-	Q
1	5.Equipment	0	0		Ġ.	0
1	-GIS	~ .	~ _	0	- ^	0
1	-Steel Structure		0		0	0
1	-Misco, hardware		0		ö	0
į	-Transformer -Circuit Breaks:	r 0	0		ŏ	
1	-Circuit Breaks:		0		ŏ	_
ì	~Instrument Tra		Ŏ		b	_
î	-Control: & SERV		ŏ		ŏ.	0
î	-Others		٠	•	•	•
î	6.Misca.Facilities	. 0	0	. 0	0	0
	Sub-totel	0	0		0	٥
	(FC)	0	0		Ō	0
	(tc)	. 0	0		Ō	0
	7. Misco. Expense	. 0	0		Q.	0
	8.Engineering & S'	v 0	0		0	ŏ
	9.Contingencies	. 0	0		Ď	ŏ
1	10.Import Duties	. 0	0			ŏ
4	11. Value Added Ta	E U		· · · · · · · · · · · · · · · · · · ·		
	Sub-total	0	0	0	Ŷ	0
	TOTAL (1000 Beht)	0		0	٥	Ð
	FC TOTAL (1000 BESIC)	ŏ	č		Ö	ō
	ič	ŏ	ō	0	0	Ó
	TOTAL (1000 UB \$)	0	.0			0
	PC	0	0			0
	LC .	O.	0	. 0	U	0

	**************			****		
	Samphran 1	2011			Thousand	
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank: -Type :	Al~pipa	a half (STEP UP Al-pipa	-115 kV) GIS	0 One and a 500 kV 0 0 0 0 Al-pipe	0 half
		CONV.	INV.		CONV.	
1	I Land Acquisition 2.Land Improvement	: 0	0			0
1	3. Foundation Work	400	400	400	0	0
î	-Transformer					ŏ
î	-Trench	0	ō		Ō	Ó
1	4. Control Building		0	0	0	0
1		-	-	0	~	0
Ł	5. Ngui pment	1400		1400	0	0
1	-G18	-		v	_	0
1	-Steel Structure	1000				0
1	-Misce, hardware	400	400			0
1	-Yransformer -Circuit Brasker		0		ŏ	
î	-Disconnect.Swift	ň	ŏ		ŏ	_
î		. 0	Ö		ō	-
ĩ			ŏ	0	Ó	0
1						
1	6.Misco.Facilities		0	. 0	0	0
	Sub-total	1800 1180	1800	1800	o	0
	(PC)	1180	655			Ö
	irci			1145		Ó
1	7.Misca.Rxpenso 8.Engineering & SV 9.Contingencies	90	90 126 180	90		0
1	8.Engineering & SV	126	126	126		Q
1	9.Contingencies 10.Import Duties 11.Volue Added Tex	180	180	180		0
1	10. Import Duties	371	371	371	0	0
1	11.AUING YOURG IS	123	152	152	· · ·	0
	Sub-tot#1	919	919		0	0
	TOTAL (1000 Baht)	2719	2719	2719	0	0
	FC	2719 1338 1381	760 1959	760		Ō
	rc.	1361		1959	Q	D
	TOTAL (1000 US \$)	109	109	109	0	0
	rc rc	54 55	30 78	30 78	ű	0
						~

	SOUTH THOMBURI	1997	1997			Thousand Baht		
	************	0	0		0	.~		
	-Bus Gystem : -Voltage :	One and	n half		One and a	half.		
	-Voltage :	230 kV			500 XV			
	-Number of Bay : -Number of Line:	0			O			
	-Number of Line:	4			0			
	-Number of Bank:	2			0			
	-Type ;	Al-pipa	Al-pipa INV.	GIS	Al-pipa CONV.	GI6		
,	1.Land Acquisition	·	0	0	0			
•	2.Land improvement	0 0	ŏ	ŏ				
•	3 Toughtation Work							
÷		1200	1100	1200	. 0			
:		2600	3600	2400	ű			
•	-Bus -Transformer -Transh	1000	2000	400 0	. 0			
:	4.Control Building	0	ň					
÷.	4. Control Building	U	0	Ŏ				
ţ		*****	81526	0				
ŀ	5.Equipment	81526	81270	81526				
ī	-GIS			0				
	-arear actactate	3000	3000	3000	ō			
	-Mince hardware	1200	1200	1200	0			
ï	-Steel Structure -Misce, hardware -Transformer -Circuit Breakor -Disconnect, Swit	74000	74000	74000	0			
1	-Circuit Breaker	· Ų	0	-	0	-		
1	-Disconnect.Buit	. 0	0	-	ō	-		
1	-Instrument Tran	. 0	. 0			-		
L	-Circuit Breaker -Disconnect.Swit -Instrument Tran -Control & SERV.	3326	3326	3326	Ð			
1	6.Nisca.Facilities				0			
	Sub-tots1 (FC) (LC)	85326	85326	85326	0			
	(PC)	74229	72653	72653	0			
	(LC)	11097	12673	12673	0			
ì	7. Hista, Expense	4266	4266	4266	0			
l	8.Engineering & 8V	5973	5973	5973	G			
1	9.Contingencies	8533	8533	8533	Ó			
ı	10.Import Doties	. 5852	5852	5852	0			
1	7. Hista, Exponse 8. Engineering & 8V 9. Contingencies 10. Import Duties 11. Value Added Tax	6382	5382	6382	0			
	Sub-total		31006	31006	0			
	TOTAL (1000 Baht)	116332	116332	116332	0			
	FC	82032	80299	60299				
	rc	34300	80299 36033	36033				
	TOTAL (1000 US 8)		4653	4653 3212	0			
	FC	3281	3212	3212	0			
	rc		3441		Ó			

	INDEMORT NTOOS	2006			Thousand	Baht
	-Bus System : -Voitags : -Wanbor of Bay : -Humbor of Line: -Number of Hank: -Type :	One and 230 kV 0 0 0 0 0 A1-pipe CONV.			One and a 500 kV O O O O Al-pipe CONV.	
	1 1	on O	0			
i	1.Land Acquisition 2.Land Improvement	n u	0	0	0	0
;	3. Youndation Work		v	Ų	v	U
:	-Bra		o	o	0	0
:	-transformer	ŏ	ŏ	ŏ	ŏ	ŏ
:	-Trench	ŏ	0	0	ŏ	ő.
:	4.Control Buildin		0	ŏ	ŏ	ŏ
;	4.Control Bulleti	ւց	V	ő		ŏ
;	5.Boulement	_ 0	٠ -	ő	- 0	ŏ
i	-GIR		v	ŏ	U	ŏ
:	-Steel Structur	•	- 0	ŏ	_ 0	ŏ
1	-Misce, hardwar		. 0	ŏ	0	ŏ
i	-Transformer		ŏ	0	ŏ	ŏ
i	-Circuit Bracks		ă		ŏ	•
î	-Disconnect.Swi		ŏ	-	ŏ	
i	-Instrument Tra		ŏ		ŏ	
i	-Control & BERV		ă	٠,	0	_ 0
i	-Others	. •	•	V	U	v
i		u O	0	0	0	0
	O.MIBCO.FECTIFICA	×				
	Sub-total	0	0	Q	Ď	0
	(PC)	ő	ő	ŏ	ŏ	ŏ
	(ič)	ŏ	ŏ	ŏ	ŏ	ŏ
1	7.Misce.Expense	ŏ	ŏ	ŏ	ŏ	ŏ
	8. Engineering & 8		ŏ	ŏ	ŏ	ō
	9.Contingencies	ŏ	ŏ	ŏ	ŏ	ŏ
	10.Import Duties	ŏ	õ	ő	ō	ō
	11. Value Added To		ō	Ò	ō	Ö
-						
	Sub-total	0	0	0	0	0
	TOTAL (1000 Bent)	0	0	0	0	٥
	PC .	0	0	0	0	0
	E.C.	0	0	Ð	0	. 0
		~~~~~~				
	TOTAL (1000 US 8)		0	0	0	0
	FC	0	0	0	Ō	0
	LC	0	0	b	0	0
			-~			

BOUTH THOMBURI	2001			Thousand	Baht
	0			0	
-Bun System : -Voltage ;	Ozsa and . 230 kV	a half		One and	
-Number of Day :	0			300 AV	
-Number of Line;	õ			ŏ	
~Musber of Bank:	0			0	
	COMY.	Al-pipe INV.		Al-pipe CONV.	
1.Land Acquisition	0	0	0		
2.Land Improvement	ŏ	Ö	Ð	0	
3. Foundation Work	0	6	0	0	
-Bus -Transformer	ő	0	ů	0	
-Tranch	ŏ	ŏ	ŏ	ő	
4.Control Building	ō	0	0	ō	
* •		•	0	~	
5.Rquipment	0	0	0	0	
-GIS -Steel Structure	- 0	٠,	ő	- 0	
-Misca, hardware				ŏ	
-Transformer	0			ō	
-Circuit Breaker		0		0	
-Disconnect.Ewit -Instrument Tran		0	-	0	
-Control & SERV.	ŏ	ď	_ 0	ő	
-Others		_	_	-	
6.Misca.Pacilities		0	. 0	0	
Hub-tot±1	0			0	
(FC)	0			0	
(LC) 7.Misce.Expense	0	Q O		0	
8.Baginearing & 8V				ŏ	
9.Contingencies	ō			õ	
10.Import Duties	0			0	
11.Value Added Tax	Q 	0	D	0	
Sub-total	0	0	0	0	
TOTAL (1000 Baht)	0			0	
PC LC	0	0	0	0	
			. ~ ~		
TOTAL (1000 DS 6)	0 0	0		0	
FC	. 0	0	0	ŏ	
rc	. 0	0	0	0	

		SOUTH THONBURI	2011			Thousand	Beht
0		-Bus System ;	O. Doe and	0		One and a	0 half
			230 xV			500 kV	
		-Number of Bay :	0			0	
		-Rumber of Line:	0			0	
		-Number of Bank:	0			0	
		-Type ;	Ai-pipa CONV.		GIS	A1-pipe CONV.	GI8
	_						
Ü		i.Land Acquisition		0		0	0
U		2.Land laprovement	. 0	0	0	0	0
_		3. Poundation Work	_	_	_	_	_
Q		-Bus	0	0	o	0	Q
0	1	-Transformer	o	0	0	. 0	0
O	1	-Tranch	0	0	0	0	0
0	1	4.Control Building	1 0	0	0	0	0
0	1		-	•	o	••	0
0		5.Equipment	. 0	0	0	0	0
O	1	-G18	***	-	O	-	0
0	1	-Bteel Structure		0	Ó	0	0
0	1	-Hisco, hardware		0	0	0	0
0	 Ł	-Transformer	٥	0	0	0	Q
	l	-Circuit Branker		Q	-	0	-
	1	-Disconnect.Swit		0	-	0	-
	1	-Instrument Trac		0		ø	_
0	1			0	0	0	0
0	ŀ	6. Misce. Pacilities	3 0	0	0	0	0
0		Sub-total	0	0	0	٥	0
Q.		(FC)	ō	Ö	ō	Ö	ò
0		(LC)	0	0	Ō	Ó	0
0	1	7.Misce, Expanse	0	0	0	0	0
Ű		8. Engineering & SV	r a	ė.	Ó	0	Ó
0		9.Contingencies	0	Ó	Ö	Ō	Ô
0		10.Import Duties	Û	0	Ó	Ó	Ò
0		11.Value Added Tex		Ō	ō	Ö	ō
0		Sub-total	0	0	0	0	0
0		TOTAL (1000 Baht)	0	U	0	0	0
ŏ		FC (100)	ŏ	ŏ	ŏ	ŏ	ŏ
0		ič	ō	ŏ	Q	ō	ŏ
0		TOTAL (1000 US 9)	0	0	o	0	ō
0		PC	0	0	0	0	0
0		rc	0	0	0	0	. 0

	RATCHADAP188K	1997				Thousand	Baht	
		0				0		0
	-Bon System : -Voltage :	One and 230 kV	a half			One and a 500 kV		
	-Number of Bay	230 89				300 A¥		
	-Number of Line:	ŏ				ŏ		
	-Number of Bank:	ŏ				ŏ		
	-Тура	CONV.	Al-pipe THV.	ots		Al-pipa CONV.	<b>31</b> 0	
ı			0	~~~~	0	0		•
1	2. Land Improvement				ō	. 0		
	3. Foundation Work							
1	-Buz	0	0		0	0		-
1	-Transformer	0	. 0		0	0		- {
1	-Trench	0	0		0	0		+
1		. O	_ 0		0	0.		
i		0	٥		ŏ	0		
ī		- *	_ *		ŏ			
i		Ò	0		ŏ	0		
ī					ō	0		
í		Ò			ō	Ö		
i		r Ö				Ō	_	
i				-		. 0,	**	
L			0	_		. 0	_	
į		. 0	0	•	0	0		
	6. Misca. Facilities		. 0		Q	0		
	Sub-totel	0	0		ō	0	~~~~	-
	· (FC)	0			0	0		
	(LC)	0			0	0		
	7.Nisca.Expense				0	o		
	8.Engineering & St				0	o,		
	9.Contingencies	0			O	o.		
	10.Import Duties 11.Value Added Tax	. 0			0	0		
	Sub-total	0	0		0	0		٠.
	TOTAL (1000 Bant)	0	0		0	0		
	PC	ŏ			Ŏ			
	LC	ŏ			ō	Ō		
	TOTAL (1000 US 8)	0			ō	0		_
	FC	. 0			0			
	LC .	0	0		٥	O		

	RATCHADAPISEK	2006			Thousand	Baht
	-Rus System : -Voltage : -Number of Hey : -Kumber of Line; -Number of Bank; -Type: :	230 kV 0 0 0			One and a 500 kV O O O O O O O O O O O O O O O O O O	
		CORV.	rt~prpa IXV,	015	CONV.	G1 #
1	1.Land Acquisition		0	0	0	0
1	2.Land Improvement 3.Youndstion Work	. 0	0	0	0	0
ī	-Bug	0	0	0	0	0
1	-Transformer	Û	0	0	. 0	0
1	~Trench	0	0	0	0	0
i	4.Control Building	0	0	0	0	0
1			-	0		0
1	5.Equipment	0	o	0	. 0	9
1	-G18			0		Ó
1	-Steal Structure		0	0	0	0
l	-Hisce, hardware		0	0	0	0
1	-Transformer	. 0	0	Q	0	0
i	-Circuit Breaker -Disconnect.Swit		0	-	Ď	-
i	-Instrument Tren		ŏ		ő	-
î	-Control & SERV.		ŏ	- 0	ŏ	o
î	-Others	•	•	v	v	v
i	6.Hisca: Facilities	. 0	٥	0	0	0
	Bub-total	0	0	0	0	0
	(FC)	0	O.	0	0	0
	(LC)	0	0	0	. 0	Ō
	7.Kisce.Expense	. 0	0	0	٥	ō
1	8. Engineering & SV		0	0	0	0
	9.Contingencies	0	0	0	0	0
1	10. Import Duties 11. Value Added Tax	. 0	0	0	0	0
•	11.Value Auuso 188				· · · · · · · · · · · · · · · · · · ·	V
	Sub-total	0	0	0	0	0
	TOTAL (1000 Beht)	0	0	0	0	0
	PC .	ő	ō	ō	ŏ	ò
	rc	ō	ō	ō	ŏ	ō
	TOTAL (1000 UB 6)	0	0	. 0	0	0
	YC (1000 to t)	ŏ	ŏ	ŏ	ŏ	ŏ
	i.c	ŏ	ŏ	ō	ŏ	ŏ

rc rc	0				
			*		*****
RATCHADAPIBEX	2001			Thousand	
************	0			0	
-Bus System :				One and	
-Bus System : -Voltage :	230 kV			500 kV	
-Number of Bay :	0			0	
-Number of Line:	0			a	
-Voltage : -Number of Bay : -Number of Line: -Number of Bank:	2			0	
-тура	CONV.	XX-pipe		CONV.	
1.Land Acquisition	n 0	0	0	0	
1.Land Acquisition 2.Land Emprovement	t Ŏ	ŏ	ŏ		
3. Foundation Work					
-Bua	400	400	400 2600	0	
~Transformer	2600	2600	2600	0	
-Transformer -Trench	0	0	0	0	
4.Control Building	i 0	0	0		
	70774	20476	40444	- 0	
5.Equipment -GIS	78726	19170	78726 0	0	
-Steel Structure			u		
-Nisce, hardware	1000	400			
"Transformer	74000	74000			
"Circuit Breaker		0	-	ŏ	
-Disconnect Sui	ň	ő	~	ŏ	
-Misce, hardware -Transformer -Circuit Breake -Disconnact.Swit -Instrument Tran	Š	0	~	ō	
-Control & BERY	3326	3376	3326	0	
-Others 5.Histo.Facilities	. 0	. 0	0	0	
Sub-total	81778	91776	61726	0	
(PC)	81728 71867 9859	71347	71342		
(PC) (LC) 7.Hisca.Repense	9859	10384	10384		
7. Hinca Broanse	4086	4086	4086		
8. Engineering & B'	7 5721	5721	5721		
9.Contingencies	8173	8173	0173		
10. Import Duties	5110	5110	5110		
7. Histon Expense 8. Engineering & 6' 9. Contingencies 10. Import Duties 11. Value Added Ta:	x 5078	6078	6078	0	
	29168			0	
TOTAL (1000 Baht)	110894	110894	110894	0	
FC FC	79354	78777 32117	78777		
FC	31540	32117	32117	0	
TOTAL (1000 US 8)	4436	4436	4436	0	
FC .	3174	3151 1285	3151		
LC	1262	1285	1285		

RATCHADAFISEK	2011			Thousand	Baht
	0	0		0	0
-Bus System :	One end a	half		One end a	helf
-Voltage :	230 kV			500 hV	
-Number of Bay :	0			0	
-Number of Line:	Ö			Ō	
-Number of Benk:	1			Ó	
-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank: -Type :	Al-pipe	Al-pipa INV.	GIB	Al-pipa CONV.	GIS
1.Land Acquisition 2.Land Improvement	0	0	0	o	0
and improvement	0	0	ō	Ō	O
3. Poundation Nork				_	_
-Dug	200	200			ō
-Transformer	1300	1300	1300	0	0
-Trench	0	Ų	v	U	0
4.Control Building	0	0	Q	0	0
	20002	70760	0 39363	~ ~	0
5.Bqulpobant -GIS	39363	39363	39353	0	9
	-		0		0
-Steel Structure	500 200	500	500		
-Misca. hardware	200	200	200	0	
-Misca. hardware -Transformer	37000	37000	37000	0	0
-Circuit Bresker -Disconnect.Swit -Instrument Tran	Q	0	**	0	-
-Disconnect.Swit	. 0	0	-	0	-
-Instrument Tran	0	0		0	+
-Control & BERV, -Others			1663	0	0
6.Hisca.Facilities	0	0	. 0	0	Q
Sub-total	40863	40863 35671 5192	40863	0	0
( PC )	35934	35671	35671	0	0
(LC)	1929	5192	35671 5192	0	0
(LC) 7.Hisco.Expanse	2043	2043	2043	0	ō
8.Engineering & SV	2860	2860	2860 4086	0	ò
9.Contingancies	4086	4086	4086	0	0
iO.Import Duties	2555	2555	2555	0	0
7. Misce. Expense 6. Engineering & SV 9. Contingencies 10. Export Duties 11. Value Added Yax	3039	3039	3039	0	0
Sub-totel	14583	14583	14583	0	0
TOTAL (1000 Baht)	55446	55445	55446	0	0
PC	39677	39388	39388		Ö
rc	15769	16058	55446 39388 16058	0	Ō
TOTAL (1000 DS 6)	2218	2218	2118	0	0
PC .	1587 631	1576	1576	0	0

BANG KAPI	1997		•	Thousand Baht	
-Bus fiyetes : -Voltage : -Number of Bay :				One and a haif	0
-Number of Line: -Number of Benk:	. ŝ	(KHLONG	TORY)	0	
-Type :	Al-pips CONV.			Al-pipe GIS CONV.	
I 1.Land Acquisits				0	0
1 2.Land Improvement 1 3.Foundation Wor		759	56	0	0
i -Bus	5013	5013	1504	0	Ð
1 -Transformer	5013 1300	1300		ŏ	ō
1 -Treach		0		Ō	Ö
1 1 Control Builds	ng 0	0	. 0	0	0
1		<u>~</u>	0	-	0
1 5.Equipment	112812	120741		0	0
1 -GIS 1 -Steal Structu	re 4626	5841	78950		0
1 -Misce: hardwa		13098		0	ŏ
1 -Transformer	37000	37000			ŏ
1 -Transformer 1 -Circuit Break	er. 22380	22380		0 -	٠
1 -Disconnect.Sw	it 9522	9522		ŏ -	
1 -Instrument Tr		17226	~	ò ~	
1 -Control & BER 1 -Others		15674	15674	0	0
1 6.Miace.Faciliti	99 0	0	0	0	0
Sub-total	119716	127813	136160	0	0
(FC)	102023			0	Q.
-(LC)	17693			0	0
1 7 Mince Bxpense	5956	6353		ō	0
1 8.Engineering & 1 9.Contingencies	8A 8380	8947		0	0
1 10 Income button	119/2	12781 14366		0 0	Ď
1 10. Import Duties 1 11. Value Added T	'ax 9183	9900		ŏ	ő
Sub-total	. 47556	52347	51256	0	ō
TOTAL (1000 Baht	) 167272			O	0
PC.	112916	116940		o.	ņ
LC	54356	63212	49914		0
TOTAL (1000 US \$	6691	7206	7497	Ò	0
<b>#</b> C	4517	4576		Ŏ	ŏ
PC	2174	2528	1997	0	0
			,		~~~

	HANG KAPI	2006			Thousand	Boht
	-Bue Bystem : -Voltage : -Number of Bay : -Number of Line:	0 0ne end 230 kV 0	0 haif	J	One and a	0 half
	-Number of Hank:	Al-pipe CONV.	Al-pipa INV.	GIB	0 0 Al-pipa CONV.	GIB
1	1. Land Acquisition	1 0	0	0	0	0
1 1	2.Land Improvement 3.Foundation Work		0		Ó	ò
1	-Bus	0	o	0	0	0
į	-Transformer -Tranch	0	0	0	0	0
î	4. Control Building		ő	ŏ	ő	ŏ
1		· - ·	~ -	ŏ		ŏ
1	5.Rquipment	0	0	0	G	ø
1	~GIS	-	-	0	-	o
1	-Steel Structure		0	0	0	Õ
•	-Misco, hardware	. 0	0	0	0	0
ì	-Circuit Breaker		ŏ	~ 0	0	
ï	~Disconnect, Swit		ŏ	-	ŏ	_
1	-Instrument Tran	ı O	0	-	. 0	
1	-Control & SERV.	0	0	0	0	O
1	6.Misca.Pacilities	0	0	0	0	0
	Sub-totel	0	0	0	0	0
	(PC)	0	0	. 0	0	0
	(LC) 7.Hisca.Expense	0	0	0	0	0
i	8.Engineering & 8V		ő	ő	ŏ	Ö
	9.Contingencies	ō	ŏ	ŏ	ŏ	ŏ
Ŀ	10.Import Duties	0	0	0	0	Ó
1	11.Value Added Tax	. 0	0	0	. 0	0
	8ob~totel	0	0	0	0	0
	TOTAL (1000 Baht)	0	0	0	0	0
	FC	0	0	0	0	0
	LC	0	0	0	· 0	0
	TOTAL (1000 US 9)	0	0	0	0	0
	PC	0	0	0	0	0
	rc	0	0	0	0	0

	DANG KAPI	2001			Thousand Buht	
	~~~~~~~~~~	0	6		0	0
	-Bus System :	One and e	half		One and a half	
	-voicede :	230 XV			500 kV	
	-Number of Bay :	- 2			0	
	-Number of Bay : -Number of Line:	2 2			. 0	
	-Number of Bank:	1			á	
	-Type :		Al-pipe INV.		Al-pipe GIS CONV.	
1	1.Land Acquisition 2.Land Improvement	0	0		0	Ó
1	2.Land Improvement	t 591	759	56	0	0
1	3. Foundation Work					
1	~ Bue	5013	5013	1504	0	0
1	Transformer	1300	1300	1300	0	0
1	-Trench	0	Û			0
1	4. Control Building	a Ö	õ	Ŏ		Č
1				. 0		ō
ī	5.Equipment	112812	120741	133100	0	Û
1	~GI8	-		78950	-	ō
1	-Steel Structure	4626	5841		0	ò
1	-Steel Structure -Misco, hardware	6384	13098			Õ
i	~Transformer	37000	37000			ō
ĩ	-Transformer -Circuit Breaker	22380	22380	-	0 -	-
1	-Disconnect.Swit -Instrument Tra	9522	9522	-	ō -	
1	-Instrument Tran	17226	17226	-	Õ ~	
ī	-Control & SERV.	15674	15674	15674	Ď.	0
1	-Others					
ì	6.Hisca.Pacilities	a ()	0	0	0	0
	Sub-total	119716	127813	135960		0
	(PC)	102023	105674	124575		0
	(10)	17402	22120	11105	0	0
1	7.Misca.Expense	5956	6353	6795		0
1	8 Engineering & \$1	0868 \	8947	9517	O	0
1	7. Misca. Expense 8. Engineering & \$\ 9. Contingencies 10. Import Duties	11972	12781	13596		0
1	10.Import Daties	12065	14366	10948	0	Û
ĵ	11. Value Added Tax	9163	9900	10279	0	0
	Sub-total	47556	52347	51135	0	0
	TOTAL (1000 Babt)	167272	081081	187095	O	0
	TOTAL (1000 Bubt)		116948	137318	ŏ	ŏ
	LČ	54356	63217		ŏ	ŏ
	TOTAL (1000 US 8)	6691	7206		0	0
	PC	4517	1678		Ö	ō
	I.C	2174	2528	1991	Ö	ò
					~~~~~~~	

	BANG KAPI	2011			Thousand	Beht
	-Voltage: -Number of Bay: -Number of Line: -Number of Bank: -Type:	One and of 230 kV of 1 of	O half (KHLONG 'Al-pipe		One And a 500 kV 0 0 0 0 Al-pipe CONV.	GIB
1	1.Land Acquisition 2.Land Improvement 3.Foundation Work -Bue		0 0	0	0	0
111	-Transformer -Transh 4.Control Building	. 0	200 0 0	200 0 0 0	0 0 0	0 0 0
1111	5.Equipment -018 -Steel Structure	700 - 500	700 500	700 700 0 500	- 0	0 0 0
1 1 1 1	-Misce. herdware -Transformer -Circuit Breaker -Dieconnect.Swit	200 0 0	200 0 0	200	0	0
1111	-Instrument Tran -Control & SERVOthers 5.Miscs.Facilities	0	0	0	0	- - 0
-	Sub-total	900				
	(FC)	591 309	900 328 572	900 328 572	0 0 0	0
1 1 1	7.Misca.Expense 8.Enginearing & EV 9.Contingencies 10.Import Duties	90 185	45 63 90 185	45 63 90 185	0 0 0	0 0 0
1	11.Value Added Tax	76 459	76  459	76 459	0 0	
	TOTAL (1000 Haht) FC	1359 670 689	1359 361 978	1359 381 978	0	0 0 0
	TOTAL (1000 US \$) FC LC	54 27 28	54 15 39	54 15 39	0 0 0	0 0

	ON MICH	1997		•	Thousand Baht	
	-Bue System : -Voltage : -Number of Bay :	One and 230 kV			One and a haif 500 kV	0
	-Number of Line:	ŏ			ŏ	
	-Number of Benk;	. 3			. 0	
	-Type :	Al-pipa CONV.	Al~pipa INV.	G18	Al-pipe GIS CONV.	
1	1.Land Acquimition	3 0	0	0	0	0
	2.Land Improvement					ò
1	3. Foundation Work					
1	~Bus :	500	600	600	. 0	.0
1	-Transformer	3900	3900	3900	. 0	0
1	-Tresch	0		0	0	Q
	4.Control Building	2 0	. 0	0	0	0
1		-	~	0	<b></b> .	0
1	3.Rquipment	118090	118090	118090	0	0
1	-GIS	- '	-	0	_	0
1	Steel Structure				0	0
1	-Misce, hardware	600		600	0	0
1	-Transformer	111000	111000	111000	0	0
1	-Circuit Branks		. 0	-	0 ~	
1	-Disconnect, Swii	. 0	. 0		0 -	
1	-Instrument Tre				0 -	
1	-Control & BRRV	. 4990	4990	4990	0	0
1	-Others	_			_	
	6.Miece.Facilities	• 0	0	0	0	. 0
	Sub-total	122590	122590	122590	0	0
	(YC)	107801			Ŏ	ō
	(ic)	14789	15577			ŏ
1	7.Misce.Expense	6130	6130		ŏ	ō
1	8.Engineering & St	/ 8581	8581		ŏ	ō
í	9.Contingencies	12259	12259			Ó
ĭ	9.Contingencias 10.Emport Duties	7666	7666		ŏ	ō
1	11. Value Added Tar	9119	9119		Ò	ō
	Sub-total	43755	43755	43755	0	0
	TOTAL (1000 Baht)	166345	166345	166345	ù	0
	PC (1000 Date)	119031			ŏ	ŏ
	ic	47314	48181		ō	ŏ
			,			
	TOTAL (1000 U8 6)	6654			0	0
	¥C.	4761				0
	LC.	1893	1927	1927	0	0

ÿ

	ON NOCH	2006			Thousand Bahi	t
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank:	230 kV 0 0 1			One and a hall 500 kV	15
		Al-pips CONY,		UIB .	A1-pipe GIS	
1	1.Land Acquisition	0	0	0	0	0
1	2.Land Improvement 3.Foundation Work	. 0	0	0	. 0	0
1	-Bus .	200	200	200	0	0
į	-Transformer	1300	1300	1300	0	0
1	-Trench	0	0	0	D	٥
1	4.Control Building	0	0	0	0	ő
÷	5.Rquipment	39363	39363	39363	٠ ،	0
i	-GIS	37303	39303	3,303		ŏ
ī	-Steal Structure	500	500	500	0	ŏ
ì	-Misca, hardwara		200	200	ŏ	ō
1	-Transformer	37000	37000	37000	ō	ò
1	-Circuit Breaker		0	_	٥	-
ī	-Disconnect.Swit		o.	-	0	-
ļ	-Instrument Tran	0	0	<del>.</del>	, O	
1 1	-Control & SERV.	- •	1663	1663	0	0
I.	6.Hiscs.Facilities	0	0	0	0	0
	Sub-total	40863	40863	40853	0	0
	(FC)	35934	35671	35671	0	0
	(tc)	4929	5192	5192	o o	0
	7.Misce.Expense	2043	2043	2043	0	Ô
ŧ	B.Engineering & SV 9.Contingencies	2860 4086	2860 4086	2860 4086	0	0
î	10. Import Duties		2555	2555	ň	ŏ
1	11.Value Added Tax	3039		3039	ŏ	ŏ
	8nb-total	14583	14563	14583	0	0
	TOTAL (1000 Baht)	55446	55446	55446	0	0
	PC .	39677	39308	39388	ŏ	Ď
	LC	15769	16058	16058	0	0
	TOTAL (1000 US \$)		2218	2218	0	0
	7C	1587	1576	1576	o o	0
	rc	631	642	642	O	0
	~~~~~~~~~~					

	ON NUCE	2001			Thousand Buht	
	-Yoltage : -Number of Bay : -Number of Live: -Number of Bank:	0 One and a 230 kV 0 2 0 Al-pipe CONV		G18	O One and a helf 500 kV O O O O O O O O O O O O O O O O O O	0
1	1.Land Acquisition		0		0	
1	2.Land Improvement 3.Foundation Work		ő	ő	0	0
î	-Bus	400	400	400	0	0
1	-Transformer	0	0	0	0	Ó
1	-Treach	Ō	0	o	Õ	0
1	4.Costrol Building	1 0	. 0	0	0	0
1	5.Equipment	1400	1400	1400	- 0	ŏ
î	-GIS	-	~	1700	,, •	ŏ
1	-Steel Structure	1,000	1000	1000	. 0	Ó
1	-Misca, hardware		400		0	0
1	~Transformer	0	0	0	0	0
1	-Circuit Breaker -Disconnect.Swit		0	-	0 -	
î	-Instrument Trau		0	-	0 -	
î	-Control & BERV.		ŏ	0	ŏ	0
1	-Others					
1	6.Misca. Facilities	0	. 0	. 0	0	0
	Sub-total	1800	1800	1800	0	0
	(FC)	1180	655	655	Q	Ģ
_	(LC)	620	1145	1145	. 0	Q
٠	7.Misce.Expense 8.Engineering & 8\	90	90 126	90 126	· 0	0
i.	9.Contingencies	/ 126 180	180	180	ŏ	ŏ
	10. Import Duties		371	371	ŏ	ŏ
	11.Value Added Tex		152	152	Ö	ø
	Sub-total	919	919	919	O.	0
	TOTAL (1000 Rabt)	2719	2719	2719	0	0
	rc ·	1338	760	760	ŏ	õ
	LC	1381	1959	1959	0	0
	TOTAL (1000 UB \$)	109	109	109	0	0
	FC	54	30	30	ŏ	õ
	LC	. 55	78	78	0	0

	он носл	2011			Thousand	Beht
-	-Number of Bay : -Number of Line: -Number of Bank:	230 k¥ 0 0 0			0 One and a 500 kV 0 0	
		Al-pipa CONV.	Al-pipe INV.	GIS	Al-pipe	CIS
111	1.Land Acquisition 2.Land Improvement 3.Foundation Work	0	0	0	0	0
1	-Bus -Transformer	0	0	0 6	0	0
	-Tranch 4.Control Building	0	0	0	0 0	0
1	5.Equipment -G18	Ť 0	. 0	0 0 0	. 0	0 0 0
i	-Steel Structure -Nisca, hardware	0	0	0	0	0
1	-Transformer -Circuit Bresker	0	Ó	o -	0	ő
1	-Disconnect.Swit -Instrument Tran -Control & SERV.	0	0	- 0	0 0 0	- 0
1	-Others 6.Hisca.Facilities	0	0	0	0	0
	Sub-total (FC)	0	0	0	0	0
	(IC) 7.Miscs.Expense	0	0	ō o	0	Ö
ı	B.Engineering & SV 9.Contingencies	0	0	0	0	0
	10.Import Duties 11.Value Added Tax	0	0	0	0	0
	Sub-tote!	0	0	0	0	0
	TOTAL (1000 Baht) PC	0	0	0	0	0
	LC		0	0	0	0
	TOTAL (1000 US 6) PC LC	0	0 0 0	· 0	0 0	0 0

	LAT PEPAO	1997		•	Thousand Bahi	
	-Bos Systam : -Voltage : -Number of Bay : -Number of Line: -Number of Benk: -Type :	One and a 230 kV O O O O O O O O O O O O O O O O O O			One and a hall 500 kV 0 0 0 0 Al-pipe GIS CONV.	o
1	1.Land Acquisition 2.Land Improvement		0	0	0	0
î	3. Foundation Work		·	•	•	•
1	-Bos	0	σ	0	0	0
1	-Transformer	0	0	0	0	0
1	~Tranch	0	0	0	Ō	0
ļ	4. Control Building	9 0	. 0	Ó	0	0
1	:			Ó	·	0
1	5.Equipment -G16	0	. 0	0	0	0
1	-Steel Structure	. 0	- 0	0	- 0	ő
ì	-Hisca, bardwar		ŏ	ŏ	Ö	ő
î	-Transformer	ŏ	· ŏ	ŏ	ŏ	ŏ
î	-Circuit Breake:		ŏ		ŏ.	- ·
ī	-Disconnect, Swi		ó	_	Ò	-
1	-Instrument Tra		ō	~	. 0	•
1	-Control & SERV	. 0	. 0	0	0	Ð
1	-Others					
1	6.Misce.Facilities	a 0	0	0	0	0
	Sub-tots1	٥	0	0	0	0
	(PC)	0	0	0	0	0
	(LC)	. 0	0	Ó		0
1		. 0	0	9	0	0
1	B.Engineering & 2	v. 0	0	9		0
	9.Contingencies	ō	0	0		Ó
1		0	o	o		0
1	11.Velue Added Ta		0	0	0	0
	Sub-total	0	0	Ō	0	0
	TOTAL (1000 Baht)	. 0	0	0	0	. 0
	rc .	0	. 0	0	0	0
	rc	. 0	0	0	0	0
	TOTAL (1000 US 8)	0	0	0	0	Õ
	PC	0	0			0
	FC.	0	0	0	0	0

	ht	LAT PBRAO	2006			Thousand Baht	
Number of Bank:	alf	-Voltage : -Number of Bay :	One and a 230 kV 0	half		500 kV	ō
0 1 1.Land Acquisition 0 0 0 0 0 0 1 2.Land Improvement 0 0 0 0 0 0 0 0 1 2.Land Improvement 0 0 0 0 0 0 0 0 0 1 3.Tondation Work 0 0 1 -Bus 600 800 800 0 0 0 0 0 1 -Transformer 5200 5200 5200 0 0 0 0 0 0 0 0 0 0 0 0	8	-Number of Bank: -Type :	Al∼pipa	Al-pipa	GIS	Al-pipe GIS CONV.	
1 3.Foundation Work	~						
0 1 -Bus 600 800 800 0 0 0 0 1 -Transformer 5200 3200 5200 0 0 0 0 0 1 -Transch 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1 1.Land Acquisition 1 2.Land Improvement	0	0	0		
0 1 -Transformer 5200 3200 5200 0 0 0 0 0 1 -Transch 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ð		200	900	900		^
0 1 -Tranch 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 4.Control Building 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			5200	9700	\$200	ň	
0 1 4.Control Building 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 5.Equipment 157453 157453 157453 0 0 0 0 1 -018 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0						
0 1 5.Equipment 157453 157453 157453 0 0 0 1 -GIS 157453 157453 0 0 0 1 -GIS 157453 157453 157453 0 0 0 1 -GIS 157453 157453 157453 0 0 0 0 1 -GIS 157453 157453 157453 0 0 0 0 1 -GIS 157453 157453 157453 0 0 0 0 1 -GIS 157453 16800 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0		ŏ				-
0 1 -GIS 1 -GIS 2000 2000 2000 0 0 1 -Steal Structure 2000 2000 2000 0 0 0 1 -Steal Structure 800 800 800 800 0 0 0 0		1			ō	•	ō
0 1 - Steel Structure 2000 2000 2000 0 0 0 1 - Hisca, hardware 800 800 800 0 0 0 0 0 1 - Hisca, hardware 800 800 800 0 0 0 0 0 1 - Hisca, hardware 148000 148000 0 0 0 0 0 1 - Transformer 148000 148000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1 5.Equipment	157453	157453	157453	0	0
0 1 -Miscs, hardwarm 800 800 800 0 0 0 0 1 -Transformer 148000 148000 0 0 0 0 1 -Transformer 148000 148000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	-			
0 1 -Transformer 148000 148000 0 0 0 0 0 0 1 -Circuit Breaker 0 0 0 - 0 - 0 - 0 - 1 1 -Disconnect.Swit 0 0 0 - 0 - 0 - 0 - 1 -Instrument Tran 0 0 - 0 - 0 - 0 - 0 - 0 1 -Chhara 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
- 1 -Circuit Breaker 0 0 - 0 - 0 - 1 - 1 -Disconnect Swit 0 0 0 - 0 - 0 - 0 - 1 -Instrument Trom 0 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -		1 -Misce, hardware	800	800	800	Ō	
1 -Instrument Tree 0 0 - 0 - 0 - 0 - 0 1 - Control & SERV. 6653 6653 0 0 0 1 - Ochtars 0 6653 6653 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_ 0	l Transformer	148000	148000			0
1 -Instrument Tree 0 0 - 0 - 0 - 0 - 0 1 - Control & SERV. 6653 6653 0 0 0 1 - Ochtars 0 6653 6653 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-	1 -Circuit Breaker	0	0			
0 1 -Control & BRRV. 6653 6653 6653 0 0 1 -Cohers 6 6653 6653 0 0 0 1 -Cohers 6 6653 6653 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_	1 -Disconnect.Swit	ō				
0 1 6.Misce.Fecilities 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	. 1 -Control & BERV.	6653	6653	6653		0
0 Bub-total 163453 163453 163453 0 0 0 (FC) 143736 142665 142665 0 0 0 (LC) 19717 20768 20768 0 0 0 1 7.Hisce. Expense 8173 8173 8173 0 0 0 1 6.Enginoscring & SV 11442 11442 0 0 0 1 9.Contingencies 18345 16345 16345 0 0 0 1 10.Import Duties 10221 10221 10221 0 0 0 1 11.Volue Added Tex 12158 12158 0 0 0 0 8ub-total 58339 58339 58339 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	1 6.Misca. Fecilities	0	0	0	0	0
0 (FC) 143736 142685 142685 0 0 0 (LC) 19717 20768 20768 0 0 0 (LC) 19717 20768 20768 0 0 0 0 1 7.Hiace Expanse 8173 8173 8173 0 0 1 8.Engineering & SY 11442 11442 0 0 0 1 9.Contingencies 16345 16345 16345 0 0 0 1 10.Import Duties 10221 10221 0 0 0 1 11.Value Added Tax 12158 12158 0 0 0 1 11.Value Added Tax 12158 12158 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0			142457	1/3/53		~~~
0 (LC) 19717 20768 20768 0 0 0 1 7.Hisce.Rxpense 8173 8173 8173 0 0 0 1 8.Raginsering & SV 11442 11442 0 0 0 1 9.Contingencies 15345 16345 0 0 0 1 9.Contingencies 16345 16345 16345 0 0 0 1 10.Import Duties 10221 10221 0 0 0 1 11.Volue Added Tax 12158 12158 12158 0 0 0 1 11.Volue Added Tax 12158 12158 12158 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
0 1 7.Hiscs.Rxpense 8173 8173 8173 0 0 0 1 6.Bnginosring & SV 11442 11442 0 0 0 1 9.Contingsacies 18345 16345 16345 0 0 0 1 9.Contingsacies 18345 16345 16345 0 0 0 1 10.Import Duties 10221 10221 0 0 0 1 11.Velue Added Tex 12158 12158 0 0 0 0 1 11.Velue Added Tex 12158 12158 12158 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
0 1 8.Engineering & Sy 11442 11442 11442 0 0 0 1 9.Contingencies 18345 16345 16345 0 0 0 1 10.Import Duties 10221 10221 0 0 0 1 10.Import Duties 10221 10221 10221 0 0 0 1 11.Velue Added Tax 12158 12158 12158 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1 7 Wines Property	13/1/	4173	20700		
0 8ub-total 58339 58339 58339 0 0 0 0 TOTAL (1000 Baht) 221792 221792 221792 0 0 0 PC 158709 157553 157553 0 0 LC 83083 64239 64239 0 0 0 TOTAL (1000 US \$) 8872 8872 8872 0 0 0 PC 6348 6302 6302 0 0		1 A Vandagerian C CV	11442	11443	11442		
0 8ub-total 58339 58339 58339 0 0 0 0 TOTAL (1000 Baht) 221792 221792 221792 0 0 0 PC 158709 157553 157553 0 0 LC 83083 64239 64239 0 0 0 TOTAL (1000 US \$) 8872 8872 8872 0 0 0 PC 6348 6302 6302 0 0		1 9. Continuencies	16345	16745	16345		
0 8ub-total 58339 58339 58339 0 0 0 0 TOTAL (1000 Baht) 221792 221792 221792 0 0 0 PC 158709 157553 157553 0 0 LC 83083 64239 64239 0 0 0 TOTAL (1000 US \$) 8872 8872 8872 0 0 0 PC 6348 6302 6302 0 0	0	1 19. Import Puties	10271	16221	10221		
0 TOTAL (1000 Baht) 221792 221792 0 0 0 PC 158709 157553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	1 11. Value Added Tax	12158	12158	12158		
0 PC 158709 157553 157553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ū	8ub-total	58339	58339	58339	0	0
0 PC 158709 157553 157553 0 0 0 157553 157553 0 0 0 157553 157553 0 0 0 157553 157553 0 0 0 157553 157553 0 0 0 157553 157553 0 0 0 0 0 157553 157553 0 0 0 0 157553 157553 0 0 0 0 157553 157553 0 0 0 0 0 157553 157553 0 0 0 0 0 157553 157553 0 0 0 0 0 157553 157553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. 0	TOTAL (1000 Babt)	221792	221792	221792	0	0
0 LC 83083 64239 64239 0 0 0 TOTAL (1000 U6 6) 8872 8872 8872 0 0 0 FC 6348 6302 6302 0 0	0		158709	157553	157553		
0 TOTAL (1000 US \$) 8872 8872 0 0 0 FC 5348 5302 6302 0 0	0	FC	63083	64239	64239		
		TOTAL (1000 US \$)					
V LC 2523 2570 2570 0 0							
	Ų	I.C	2523	2570	2570	0	Q

-	LAT PERAG	2001			Thousand B	aht
	-Bus System ; -Voitegs ; -Number of Bay ; -Number of Line; -Number of Bank; -Type ;	230 kV 0 0 0	Al-plps	G18	One and a 500 kV O O O O O O O CONV.	-
1	1.Land Acquisitio	n 0	0	0	0	0
1	2.Land Improvemen	t O	0	ō	Ō	Ó
ĩ	-Bua	0	0	G	0	0
ï	-Transformer	ó	ō	ō	Ó	Ó
ı.	-Treach	Ö	ò	Ó	Ō	0
1	4.Control Buildin	g Ö	C	0	0	9
1		· -	~	Q	-	0
1	5.Equipment	0	0	0	0	0
1	-GIS	~	•	0	-	0
1	-Steel Structur		0	0	0	0
1	-Misce, hardwar		Ō	Q	D.	0
1	-Transformer	ρ	0	0	0	٥
1	~Circuit Breaka		0	-	0	-
į	-Disconnect.Bwi		. 0	-	0	~
1	-Instrument Tra		0		0	~ 0
1	-Control & SERV	. 0	U	0	0	U
1	-Others 6.Misos.Facilitie	. 0	0	0	0	0
	Sub-total	0	0	0	0	0
	(PC)	ŏ	ō	o	. 0	Ó
	(ic)	ó	ò	Ó	Ó	Ó
1	7.Misce.Expense	Ó	ō	0	0	Đ
1	8.Enginearing & S	v ó	0	0	0	0
1	9.Contingencies	0	0	0	0	0
1	10.Import Duties	0	0	. 0	0	0
1	11, Value Added Te		0	0	. 0	0
	Sub-total	0	0	. 0	0	0
	TOTAL (1000 Baht)	0	0	o	0	0
	FC	. 0	. 0	ō	.0	Ø
	ı.c	0	0	0	0	0
	TOTAL (1000 US \$)	0	0	0	0	0
	FC	Ŏ	ó	Ó	0	0
	LC	ó	a	. 0	ri)	o o

	LAT PHRAO	2011			Thousend	Baht
		0	0		0	0
•	~Bus System :		half		One and a	t half
	-Voltage :	230 kV			500 kV	
	-Number of Bay :	0			0	
	-Number of Line:	0			0	
	-Number of Bank:	0			0	
	-Тура :	Al-pipe CONV.	Al-pipa IHV.	GIS	Al~pipe CONV.	GIS
1	1.Land Acquisition	. 0	0	ò	0	0
î			ŏ	ŏ	ŏ	ň
î	3. Foundation Work		•	•	•	•
î	-Bus	0	0	0	0	0
î	~Transformer	ŏ	ŏ	ň	ŏ	ŏ
î	-Treach	ŏ	ŏ	ŏ	ō	Ŏ
î	4.Control Building		ŭ	ŏ	ň	ŏ
î	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			ŏ		ō
ī	5.Equipment	0	0	ŏ	0	ŏ.
î	-619			ŏ		ŏ
î	-Steel Structure	. 0	0	ň	0	ō
ī	-Miscs, herdware		ŏ	ŏ	ň	ō
í	-Transformer	ñ	ō	ñ	ñ	ň
ī	-Circuit Breaker	. 0	ŏ		ŏ	_ `
ĭ	-Disconnect.Swif		ă	_	ō	_
í	-Instrument Tran		ŏ	_	ŏ	-
î	-Control & SERV.		ŏ	0	ŏ	0
ī.	-Othere		•	•	•	•
ī	6.Misca.Pacilities	. 0	0	0	0	0
-	v					
	8ub-tot#1	0	0	0	0	0
	(PC)	ò	Ó	ò	Ó	Ó
	(LC)	Ŏ	ò	Ó	Ŏ	Õ
1	7.Mince.Bxpense	0	0	0	0	0
	B.Engineering & St	, 0	0	0	0	0
	9.Contingencies	Ď.	Ó	Ó	Ö	0
	10.Import Duties	Ó	Ó	0	Ó	0
ł	11. Value Added Tex	. 0	0	Ó	0	0
	Sub-total	0	0	0	0	0
	TOTAL (1000 Baht)	0	0	0	O	0
	FC	· ŏ	ŏ	ő	ŏ	ŏ
	LC	ŏ	ŏ	Ď	ŏ	Ď
	TOTAL (1000 US 8)		0	0		0
	FC FC	ŏ	0	ŏ	Q	ă
	LC.	0	ő	ő	ŏ	ő
						·

	DANG PHLI	1997			DresuonT	Baht
			٥		0	(
	-Bus System :	One and a	half		One and	a hulf
	-Voltage :	230 KV			500 kV	
	-Number of Bay : -Number of Line:	0			0	
	-Number of Benk:	. 0			ñ	
	-Time	Alanina	Llugina	CIR	Al-pipe	RTR
	-Type I	CONV	TRV.	·	CONV.	4
1	1.Land Acquisition 2.Land Improvement	1 0	0	0	0	(
3	2.Land Improvement 3.Foundation Work	t 0	9	0	0	(
i		400	400	400	0	
	~Trensformer	7600	2600	7600	ŏ	Č
3	-Yranch	Ó	G G	1.0	0	(
3	4.Control Building	. 0	0	0 0 78726	Ó	Ċ
1		·		0	-	. (
1	5.Equipment	78726	78726	78726	Û	•
	-G18				-	•
1		1000	1000	1000		
	-Misce, hardware	400	400			
	-Transformer -Transformer -Circuit Bresker -Disconnact.Swit -Instrument Tran	74000	74000	74000	o	(
	-Circuit Breske -Disconnect.Swit -Instrument Trs: -Control & SERV		Ň	-	0	. ~
	-uxaconnact.bwi	. 0	v		0	•
. 1	-Control 6: 670V		2226	3226	ŏ	- (
	-Others	, 3310	3320	3320	ď	,
1	6.Misce.Facilities					(
	Sub-total	81726	81726	81726	0	
	(FC)	71867	71342	71342	. 0	
	(LC)	9859	10384	10384	0	
	7.Misca.Rapense	4086	4095	4086	0	(
	8.Engineering & 8	7 5721	5721	5721	0	9
	9.Contingenties	81/3.	8173	8173	0	9
	Sub-total (FC) (FC) 7. Misce Repense 8. Engineering & 50 10. Emport Dutles 11. Velve Added Tex	c 6078	607B	607B	ŏ	
	Sub-totel			29168		
	TOTAL (1000 Baht)	110894	110894	110894	0	(
	rc .	79354	78777	78777		
	LC	31540	78777 32117	32117	0	
	TOTAL (1000 US \$)	4436	4436			
	. rc	3174 1262	3151 1285		0	

BANG PHLI	2006			Thousand	Baht
-Bun System : -Voitage : -Number of Bay : -Number of Line:	0 0ne and a 230 kV 0 0	O half		One and a 500 kV 0	0 half
-Humber of Bank:	Ö			ž	
-Туре :		Al-pipa IVV.		Al-pipa CONV.	gis
1.Land Acquisition		0	0	0	0
2.Land Improvement 3.Poundation Work			0	_	0
Bua	ō	0	ō	0	0
~Transformer	0	0	0	0	0
-french	0	ō	0	0	0
4.Control Building	0	0	0	0	0
E Paratament	- 0	~ ^	0	- ^	0
5.Equipment -GIS		0	0	Q	0
-Steel Structure	- 0	- 0	ŏ	- 0	ŏ
-Misco. hardware		ŏ	ŏ	ŏ	Ŏ
-Transformer	ŏ	ŏ	ŏ	ŏ	ŏ
-Circuit Breaker		ŏ	- *	ŏ	- "
-Disconnect Bwit			-	õ	-
-Instrument Tran		Ō	-	ō	_
-Control & SERV.	0	٥	0	ō	0
5.Misca.Facilities		0	0	0	0
Sub-total	0	0	0	0	0
(PC)	0	0	0	0	o
(LC)	0	0	0	0	0
7.Miscs.Expansa	0	0	0	D	0
8.Rngiseering & \$V 9.Contingencies	ŏ	0	Û	0	0
10.Import Duties	0	0	. 0	ŏ	ě
li.Value Added Tax	ō	ŭ	Ö	o o	ŏ
Sub-tots1	0	0	0	0	0
TOTAL (1000 Baht)	0	o	o.	0	0
PC	0	0	0	0	o
ic	0	0	0	0	0
(\$ BU 0001) JATOT	0	0	0	0	0
PC	0	ō	0	0	Q
I.C	0	0	0	0	0

		BANG PHLI	2001			Thousand	Baht
		-Bus System : -Voitage : -Number of Bay : -Number of Line: -Number of Bank: -Type t	230 kV 0 0 0	Al-pipa	GIB.	One and a 500 ky O O O O O O O O O O O O O O O O O O	
	ı	1.Land Acquimition	n 0		0	0	0
-	1	2.Land Improvement 3.Foundation Work	t 0		. 0	_	O
	1	Bua	. 0	Ō	Ō	0	0
	1	-Transformer	. 0		0	0	0
		-Tranch 4.Control Building			ŏ	ŏ	0
	î	1100Hill Bullula	"	_ ~	ŏ	- ·	Ó
	1	5.Equipment	ē.	0	Ó	Ò	0
	1	-G18			0	~ _	0
	ŗ	-Steel Structure		0	0	0	0
	1	-Hiscs, hardware -Transformer	. 0		ő	ŏ	ŏ
	ī	-Circuit Breske		ŏ	~ "	ŏ	
	ī	-Disconnect.Swi		õ	-	ō	-
	1	-Instrument Tra		0	-	Đ	~
	1	-Control & SERV -Others		0	0	0	0
	1	6.Nisco.Facilities	• 0	0	0	. 0	0
		Sub-totel	0	0	0	0	0
		(FC)	. 0	ō	0	0	0
	•	(LC) 7.Hince.Expanse	0	0	0	0 0	0
	í	B.Enginearing & B		Ö	ő	0	ŏ
	Ñ	9.Contingancies	ŏ	ŏ	ŏ		0
	1	10. Import Duties	0	o.	o.	0	0
	1	11.Value Added Ta	× 0	0		0	0
		Sub-total	0	0	0	0	0
		TOTAL (1000 Baht)	0	. 0	0	0	0
		FC .	Ď			o o	Ò
		LC	0	0	0	0	0
		TOTAL (1000 US \$)	. 0	0	. 0	0	0
		rc	0				- 0
		I.C	0	0	0	0	. 0

BANG PRLI	2011			Thousand Bar	t
-Bus System : -Voitage : -Number of Bay :	One and 230 kV	0 a half		0 Oxe and a ha 500 kV 0	0
-Number of Line; -Number of Bank;	2 0			0	
-Type :	Al-pipe	Al-pipe	GIS	Al-pipe GIS	;
1.Land Acquisition 2.Land Improvement 3.Poundation Work	295	0 380	0 28	0	0
-Bus -Transformer	2506 0	2506 0	752 0	0	0
-Trench	ō	Ó	0	ō	Ò
4.Control Building	-	- 0	0	- 0	0
5.Equipment -GIS	37074	41039	47318 39475	~ 0	0
-Steal Structure -Kinca, hardward		2921 6549	438 400	0	0
-Transformer -Circuit Breaker	0	11190	0	o o	ŏ
-Disconnect.Swit	4761	4761 8613	-	ő	-
-Control & SERV.		7005	7005	ů ů	~ 0
-Others 5.Misce.Facilities	0	. 0	0	0	0
Sub-total (PC)	39875 33340	43925 35166	48098 44699	0	0
(rc)	6535	8759	3399	Ō	Ò
. 7.Misca.Expensa . 8.Engineering & SV		2177 3075	2404 3367	0	0
9.Contingencies 10.Import Duties	3988 4948	4393 5998	4810 4319	0	0
11. Value Added Tax	3110	3468	3568	ŏ	ŏ
Sub~total	16716	19111	18568	0	0
TOTAL (1000 Baht)	56591 36955	83036 38972	66666 49247	0	0
ič	19636	24064	17419	ŏ	ŏ
TOTAL (1000 US 5)	2264 1478	2521 1559	2667 1970	0	0
LC .	785	963	697	0	0

TSPARAK	1997			Thousand Baht	
	1	0		. 0	0
-Bus System :	One and	a nair		One and a half	
-Voltage :	23U EV			500 ky	
-Number of Bay : -Number of Line:	6			0	
-Number of Bank:					
-Type :	Al-pipe CONV			A1-pipe GIS	
1.Land Acquisitio	n 2443	3046			0
2.Land Improvement	ot 1772	2278	169	0	0
3.Poundation North					
~Bu\$		15038			. 0
-Transformer	5200	5100			0
-Trench	1306	1306			0
1. Control Building					0
	400100				0
5.Equipment		403988			0
-GIS -Steel Structum	a 13877		236850 2628		ŏ
-Miscs, hardwar	6 138//	39294			ŏ
-Transformer	148000	148000	148000		ŏ
"Circuit Branks	4: 67140	67140	190000	ŏ ^	. •
-Disconnect Sw	38566	28566	_	ŏ -	
-Instrument Tr	n 52833	52833	_	ŏ.	
-Transformer -Circuit Breake -Disconnect.8w -Instrument Tra -Control & SERV -Others	7. 50632	50632	50632	ō	0
6.Nisce.Facilitie	22720	22720		0	0
Bub-total	447878	472776	493352	0	0
(PC)	344114	355067	410553	. 0	0
(LC)	103764	355067 117709	82799	ø	0
				0	0
S.Engineering & i	SV 31351	33094	34535		0
9.Contingencies	44788	47278	49335		0
10.Import Duties	39196	45097	35734		0
6.Engineering & i 9.Contingencies 10.Import Duties 11.Value Added To	K# 33800	35949	36986		0
Sub-totel	171318		181222		0
TOTAL (1000 Bant)	619198	658567 397453	674574	. 0	0
rc	385293	397453	456972		O
LC	233903	261114		Ò	0
TOTAL (1000 US \$				0	0
rc	15412		18279		0
tc ·	9356	10445	8704	٥	0

	TEPARAK	2006			Thousand Baht	
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank;	0 One and a 230 kV 0 0	0 half		One and w helf 500 kV 0	0
	-Type :		Al-pips . TWV.	GIB	Al-pipe GIS CONV.	
i	1.Land Acquisition	0	0	0	0	0
	2.Land Improvement 3.Foundation Work	. 0	0	0	0	0
ī	-Bus	200	200	200	0	0
ì	-Transformer	1300	1300	1300	0	٥
1	-Tranch	0	0	0	0	0
1	4.Control Building	_ 0	. 0	0	. 0	0
ī	5.Equipment -GIS	39363	39363	39363	0	0
i	-Steel Structure	500	500	500	0	ŏ
î	-Misca, hardware				Ö	õ
ī	-Transformer	37000		37000	Ó	ō
i	-Circuit Breaker	0	0	•	0 -	
į	-Disconnect.Swit	. 0	Ó	-	0	
1	~Instrument Tren	0	. 0	-	0 -	
1	-Control & BRRV.	1663	1663	1663	0	٥
1	6.Misoa.Facilities	0	0	0	٥	0
	Sub-total	40863			0	0
	(FC)	35934		35671	0	0
	(LC)	4929	5192	5192	0	0
1	7.Misce.Expense	2043	2043	2043	0	0
1	8.Engineering & SV	2860 4086 2555	2860		0	o
3	9.Contingancias	4086	4086	4086	0	0
1	10.Import Duties 11.Value Added Tax	3039	2555 3039	2555 3039	ő	Ö
	Sub-total	14583	14583	14583	0	ō
	TOTAL (1000 Baht)	55446		55446	0	0
	PC.		39388	39388	0	o
	L¢	15769	16058	16058	0	0
	TOTAL (1000 US 8)		2218	2218	Ō	0
	FC	1587			0	0
	re	631	642	642	٥	Ð

	TEPARAK	2001			Thousand Baht	
	-Voltage :	Oceand and a 230 kV	0 helf		O One and a half 500 kV O	ō
	-Number of Line: -Number of Bank:	0 0			0	
		Al-pipe CONV.	Al-pipe INV.	GIS	Al-pipe GIS CONV.	
	1.Land Acquisition		0	0	0	0
	2.Land Improvement 3.Foundation Work	. 0	0	0	0	0
ī	~Bus	0	0	0	0	0
1	- ~Transformer	0	o.	ō	Ō	o
	-Tranch	0	0	0	0	Ö
1	4.Control Building	. 0	0	0	0	Ä
i	5.Equipment -GI6	0	- 0	Ó G	0	000000
1	-Steel Structure		0	0	0	0
1	-Kisce, hardware	. 0	0	0	0	0
. 1	-Transformer -Circuit Brasker		. 0	- "	0 -	
i	-Disconnect.Swit		ŏ	_	o -	
. 1	-Instrument Trac	ı Ö	0	-	0 -	
1	-Control & SERV.		0	0	0	0
. 1	6.Misca.Pacilities	. 0	0	0	0	0
	Bub-total (FC)	0	0	0	0	0
	(ic)	ŏ	ŏ	ŏ	ŏ	ŏ
. 1	7.Hisca.Expense	ŏ	ŏ	ŏ	ŏ	0
1	8.Engineering & St	łò	0	. 0	0	0
	9.Contingencies	0	Ď.	0	0	0
1	10.Import Duties	0	0	0	0	0
, 2	11.Value Added Tex	. 0	0	0	0	0
	Sub-total	. 0	. 0	Þ	• • • •	D
	TOTAL (1000 Baht)	0	0	0	0	0
	PC	. 0	ō	0	o o	0
	LC	0	0	0	0	0
	TOTAL (1000 US \$)	0		0		0
	PC	0		0	0	0
	. rc	U	0	U	V	

	TEPARAK	2011			Thousand Baht	
	•	0	0		٥	Û
	-Bus System :	One and	a half		One and a half	
	-Voltage :	230 kV			500 kV	
	-Number of Bay :	0			0	
	-Number of Line:	0			0	
	-Voltage : -Number of Bay : -Number of Line: -Number of Bank:	1			0	
	-Number of Bank: -Type :	CONV.	Al-pipe INV.	GIS	CONV.	
1	1.Land Acquisition	h ()	0	0		0
1	1.Land Acquisition 2:Land Improvement	t Ó	Ó	0	0	0
	3. Poundation Work					
1	-Bus	200	200	200	0	0
1		1300	1300	1300	0	0
1	-Trench	0	0			0
1	-Trench 4.Control Building	. 0	0	0 0	0	0
1			~	0	-	0
1	4.Control Building 5.Equipment -GIB	39363	39363	39363	0	0
1	~GI8			٥	- 0 0	0
1	-Steel Structure -Steel Structure -Steel Structure -Steel Structure -Transformer -Circuit Breake -Disconnect Swi -Instrument Transcortrol & SERV -Others	500	500	500	0	Ŏ.
1	-Niece, herdware	200	200	200	0	0
1	-Transformer	37000	37000	37000	0	0
1	-Circuit Breake		O O	-	0 0 0	
1	-Disconnect.swi	. 0	ý	~	, -	
i	"Instrument 1 February	1463	1662	1663	0 -	0
í	-Others	. 1003	1003	1003	v	v
i	6.Misca.Feallitie	a 0	0	0		0
	Out-tal -1	40063	40052	40867	0	0
	(PC)	35934	35671	35671	Ó	ō
	(tc)	4929	5192	5192	0	0
1	7. Hiscs Expense	2043	2043	20∉3	0	0
1	8. Engineering & B'	7 2860	2860	2860	0	0
1	9.Contingencies	4086	4086	1088	0	Û
ì	10.Import Duties	2555	2555	2555	o o	0
1	(PC) (LC) 7.Miscs Expense 8.Engineering & S' 9.Contingencies 10.Import Duties 11.Value Added Ta	x 3039	3039	3039	0	0
	Sub-total	14583	14583	14583	0	0
		55446	55446	55446 39388	ø	Q
	FC	39677	39388	39388 16058	0	0
	LC	15769	16058	16058	Q	0
	TOTAL (1000 US \$) PC				0	0
		1587	1576		v	ő
	rc.	631	642	642	0	0

	CHARNG WATTHANA	1997			Thousand Baht	
		0	0		. 0	0
	-Bua System :	One and	a haif		One and a haif	
	-Voltage :	230 kV			500 XV	
	-Number of Bay :	4			0	
	-Kumber of Line:	4			ň	
	-Number of Bank:	i			ň	
	-Type :	Al~pipe.	Al-pipe INV	CIS	Al-pipa GIB	
	1.Lead Acquisition	0			0	0
î						ō
î		1,01	1313	113	U	U
î	-Bus			444	_	_
î		10025	10025	3008		0
-	-Transformer	2600			0	ø
1	-Trench	. 0	. 0			0
1	4.Control Building	0	0	O.	, o	0
1			-	. 0		0
1	5. Boul poent	225623	241482			0
1	-CIS	-:	-	157900	•	ø
1	-Steel Structure	9251	11682	1752	0	ò
1	-Misca, hardware	12768	26196	1200	Ò	ō
1	-Transformer	74000	74000	74000	á	ń
1	-Circuit Breaker	44710	44788		Ŏ ~	•
ï	-Disconnect.Swit	19044	19044		Ď -	
ī	-Instrument Tran	74452	34452		ŏ -	
í	-Control & SERV.	31348			ŏ	0
ī	-Othera	31310	31340	31310	v	•
	S.Misco.Pacilities	0	. 0	0	0	0
	Sub-total	239429	255626	271921	0	
	(FC)	204047			ō	ō
	(LC)	35392				õ
1	7 Misca Renance	11912	12703		ŏ	ŏ
ī	7. Hisca. Expense 8. Engineering & SV 9. Contingencies 10. Import Duties	16760	17894		ŏ	ō.
Î	9.Contingencies	73043	25563		ŏ	ŏ
î	10 Impact Button	24120	26732	21697	ŏ	ŏ
î	11.Value Added Tax	19744	19798	20559	ő	ŏ
•	TI.VEIDE AGGEG TEX	10300	13/30	20339		
	Sub-total	95111	104692	102272	0	0
	TOTAL (1000 Baht)	334540	360318	374193	0	0
			233899			ŏ
	LC	108708			Ö	ŏ
	~		******			
	TOTAL (1000 US 9)	13382	14413		0	٥
	FC	9033	9356	10986	0	0
	LC	4348	5057	3982	Û	0

	CHARNG WATTRANA	2006			Thousand	Haht
	-Voitage -Number of Hay: -Number of Line: -Number of Bank; -Type	One and a 230 kV O O Al-pipe CONV,	half Al-pipe		One and a 500 kV 0 0 A1-pipa CONV.	
1	1.Lend Acquisition	. 0	0		0	0
i	2.Land Improvement 3.Foundation Work	ŏ	ŏ	ŏ	ő	ŏ
i	-Bus	Û	٥	0	0	0
ì	~Transformer	ŏ	ŏ	ŏ	ŏ	ŏ
1	-Trench	ò	ō	ŏ	ő	ŏ
1	4.Control Building	. 0	0	Ö	Ó	ō
1		-	-	0	~	Ó
;	5.Equipment	0	0	0	0	o,
1	-GIS -Steal Structure			0	~ .	0
î	-Misca. hardware		0	0	0	. 0
î	-Transformer	Ö	ŏ	Ö	0	0
ī	-Circuit Bresker		0		ŏ	V
î	-Disconnect.Swit		ŏ	_	ő	-
ī	-Instrument Tree		ŏ	_	Ď	Ξ.
1	-Control & SERV.		ō	0	ŏ	0
1	-Others			_		_
1	6.Misca.Facilities	0	0	0	0	٥
	Sub-total	0	0	0	0	0
	(YC)	0	o o	0	0	0
	(rc)	0	0	0	0	0
ł	7. Hisca. Expense	0	ō	0	Ō	0
+	8.Engineering & SV 9.Contingencies		ō	. 0	0	0
î	10. Import Duties	0	0	0	0	9
i			ő	0	0	0
•	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	******			· · · · · · · · · · · · · · · · · · ·	
	Sub-total	0	0	0	0	0
	TOTAL (1000 Baht)	ø	0	Û	0	0
	7C	0	0	0	ō	õ
	LC	0	0	0	Ó	Ů.
	MOMES (1000 NO A)		~~~~~~			
	TOTAL (1000 US 8)	9	0	0	0	0
	LC	0	0	0	0	0
		u			0	0

	CHARNG WATTHANA	2001			Thousand Daht	:
	**************************************	0	0		0	-
	-Bus System : -Voltage : -Number of Bay : -Number of Line: -Number of Bank:	OTRE AND I	DATE		One and a hall	x
	-Number of New :	230 AV			300 KV	
	-Number of Lines	ŏ			ň	
- 1	-Number of Bank:	i			ō	
	-Тура :	Y1-D1D4	Al-pipe INV.	GIS	Al-pipe GIS CONV.	
	1 I.Land Acquisition	. 0	0			
	1 2.Land Improvement 1 3.Foundation Work		0	0	Ò	
	l -Bus 1 -Transformer	200	200			
	1 -Transformer	1300	1300			
	1 -Trench 1 4.Control Building	0	0			
	1 4. Control Building	, 0		. 0		
	1 5.Rauinment	39363	39363			
	1 5.Equipment 1 -GIS			0		
	1 Rtaal Ctruckers	500	500	500	0	
1.0	1 -Miene, hardware 1 -Transformer 1 -Circuit Breaker 1 -Disconnect.Swil 1 -Instrument Tran 1 -Control & SERV.	200	200	200	0.	
	1 -Transformer	37000	37000	37000	U	
	i -Disconnect Swit	. 0	0		0	-
	1 -Instrument Tran	Š	ŏ		ŏ	_
	1 -Control & SERV.	1663	1663	1663		
	T -Orders .					
	1 6. Misca. Facilities				0	
	Sob-total	40863	40863	40863		- 1
	(FC)	35934	35671	35671	. 0	
	(&C)	4929	5192	5192 2043	0	
	1 R.Spoinaaries & St	/ 2860	2053	2860	0	
	1 9 Continuencies	1086	4086	2860 4086	ő	
	1 10. Import Duties	2555	2555	2555	ŏ	
	Sub-total (FC) (LC) 1 7.Miace.Expense 1 8.Regineering & 81 9.Contingencies 1 10.Import Duties 1 11.Value Added Tos	3039	3039	3039	0 -	
	Sub-total	14583	14583	14583		1
	TOTAL (1000 Bant) FC LC	55446	55446	55446	O	
	PC	39677	39388	39386	0	
	LG	15769	16058			
	TOTAL (1000 US #)	2218	2718	2218 1576	G	
	PC	1587	1576	1576	O	
	tc	631	542	642	0	

CHARNG WATTHAMA	2011			Thousand i	Bant
	~	0			
-Bus System :	One and	a half		Das and a	half 0
~voltage :	230 kV			500 KV	
-Number of Bay : -Number of Line:	. 0			0	
				Q.	
-Number of Bank:				0	
-Тура :	Al-pipa CONV.	Al-pipe INV.	GIS	CONV.	318
1 1, Land Acquisiti	oa 0	0	0		0
1 2.Land Improveme	ot ŏ	ŏ	ŏ	ő	ŏ
1 3. Foundation Wor	k	•	•	•	4
l -aus	200	200	200	0	0
l -Transformer	1300	1300	1300	Ö	Ō
l -Tranch	0	Q	0	0	Ó
4.Cootrol Buildi:	g Qa	0	0	0	Ō
1		-	0	-	0
l 5.Equipment 1 ~GI6	39363	39363	39363	0	Ō
-Steel Stroctu	FOA	***			0
-Nisca, hardwa				0	0
-Transformer				ő	0
-Circuit Break	37000	37000	37000	ŏ	U
-Circuit Break -Disconnect.Sw	it ő	ň	-	ŏ	_
-Instrument Tr			_	ŏ	_
-Control # WER	1663	1663	1663	ŏ	0
-Others					
6.Misce.Pacilitie	ps 0	0	0	0	0
Sub-total	40863			0	0
(PC)	35934		35671	0	0
(LC)	4929	5192	5192	0	0
7.Misca,Expense	2043	2013		O	0
s with parting with	SV 2860			0	0
9.Contingencies	4086			0	0
i 10. Emport Duties 11. Valus Added To	2555	2555 3039	2555 3039	0	n
77.70200 20000 10	74 3039	3033	3039	0	. 0
Sub-total	14563	14583	14583	0	0
TOTAL (1000 Baht)	55446	35446	55446	0	0
FC	39677	39388		ŏ	ŏ
tc	15769	16058		Ō	ŏ
TOTAL (1000 US 8)	2218	2218	2218	0	0
PC .	2218 1567	1576	1576	ŏ	ŏ
rc	631	642	642	ŏ	ŏ
***********			~		

and the second of the contract
7	FANG NOI	1997			Thousand Baht	
	Bua Syatem :	One and	o s half		One and a half	0
	-Voltage :				500 kV	
	Number of Bay :	6			0	
	Number of Line:	1	•		ů,	
	-Number of Bank:			GIB		
	·Type :	CONV.	Al-pipe INV.	GIR	Al-pipe GIS CONV.	
	L.Land Acquisition		3046		ø	0
	2.Land Improvement		2278	169	0	0
1 3	3. Foundation Work					
l	-Bu∎	15038			0	0
l l	-Transformer	1300				0
1	-Treach	1305				0
1 4	.Control Building		19200	19200	.0	0
1		- .	-	0		0
	.Equipment	264210	287999		0	Ò
1	-018	-	-	236850		0
2	~Steel Structure	13877				0
1	-Nisca, hardware		39294			0
1	-Transformer	37000		37000		0
1	-Circuit Breaker	r 67140	67140		0 -	
t	-Disconnect, Swill	28366	28566	-	0 ~	
1	-Instrument Trai	a 52833	52833		0 -	
1	-Control & BERV	. 45643	45643	45643	0	0
1	-Others					
1 (Misce.Facilities	22720	22720	22720	0	0
	Sub-total	327989				. 0
	(EC)	238083				0
	(LC)	89906				0
1 7	Misca Expansa	16189	17378	18608		0
1.8	Rngineering & 8	7 22959	24702			0
	Costingencies	32799	35209			٥
1 1	10. Import Duties	32086				0
1 1	11.Value Added Ta	24911	27058	28043	0	Q
	Sub-total	128944	143415	138467	0	0
•	rotAL (1000 Baht)					0
	PC	268269				0
	IC	188664	215873	171951	0	0
•	(4 80 0001) JATOT					ø
	FC	10731				0
	te	7547	8535	6878	0	0
. •						

	WANG NOI	2006			Thousand	Bant
	-Voltage : -Number of Bay : -Number of Line: -Number of Bank: -Type :		Ai-pipa	G18	0 One and 1 500 kV 6 8 3 Al-pipe	
		CONV.	INV.		CONV.	
1	1.Land Acquisition 2.Land Improvement 3.Foundation Work		0	0		473
ī	-Bua	400	100	400	19560	5868
L	-Transformer	o o	0	0	11700	11700
1	-Tranch	ō	0	0	ō	0
1	4.Control Building		_ 0	0	. 0	0 4875
i	5.Equipment -GIS	1400	1400	1400	1085512	
ı	-Steal Structure		1000	1000		2708
Ļ	-Mincy, hardware		400	400		
1	-Treusformer	0	0	0	333000	333000
	-Circuit Breaker -Disconnect.Swit		0	**	210780 101340	-
i	-Instrument Tran		ŏ	-	127980	
i	-Control & SERV.		ŏ	0	196872	195872
l	6. Hinca. Pacilities	. 0	0	0	.0	0
	Sub-totel	1800	1800	1800	1121592	1282934
	(7C)	1160	655	655	967689	
	(LC)	620	1145	1145	153903	112340
L	7. Hieco . Expense	90	90	90	55839	
	6. Anginearing & SV		126	126	78511	89405
	9.Contingencies 10.Tmport Duties	180 371	180 371	180 371	112159 125869	
i	11.Value Added Tax		152	152	86985	97549
	Suh-total	919	919	919	459363	490860
	TOTAL (1000 Baht)	2719	2719	2719	1580955	1773794
	FC PC	1338	760	760	1068066	
	ic	1381	1959	1959	512889	483849
	TOTAL (1000 US #)	109	109	109	63238	70932
	FC (1000 US 4)	54	30	30		51598
	ic	35	78	78	20516	19354
		******		******		

	WANG NOI	2001			Thousand	Baht
and the second	-Bun System ; -Voltage ; -Number of Bay ; -Number of Line; -Number of Bank;	0			0 One and a 500 kV 0 0	helf
	-Туре :	Al-pipe	Al-pipe IXV.	GIE	Al-pipa CONV.	G18
	i l.Land Acquisitio	n 0	0	0	0	0
	1 2.Land Improvement 1 3.Foundation Work	t 0	0	0	Ó	0
	1 -Bus	0	0	0	0	0
	1 -Transformer 1 -Tranch	. 0	0	0	0	0
	1 4.Control Buildin		0	ŏ	ŏ	ŏ
	1		- ·	ŏ	- *	ŏ
	1 5.Equipment	6	0	Ó	. 0	õ
	1 -616	- '	_	. 0	_	0
	1 -Steel Structur			0	0	9
	i -Misca, hardwar		0	0	0	0
	1: "Transformer 1 -Circuit Breake	r 0			0	
	1 -Disconnect.8wi		ŏ	-	ő	
	1 ~Instrument Tre			-	ŏ	_
	1 -Control & SERV 1 -Others	. 0	Ŏ	٥	ō	0
	1 6.Misco.Fecilitie	e 0	0	0	0	0
	Sub-totel	. 0	0	0	. 0	0
	(PC)	. 0		. 0		Q
	(LC)	. 0	0	0	0	0
	1 7.Hisce.Expense 1 8.Engineering & S	υ 0 υ 0		0	0	0
	1 9.Contingencies	¥ . U	ŏ	ŏ	Ö	ŏ
	1 10. Import Duties		ŏ	ŏ	ŏ	ō
	1 11. Value Added Ta		Ö	ó	Ó	Ò
Ď	Sub-total	. 0	. 0	0	. 0	0
·	TOTAL (1000 Bant) FC LC	0	0 0	0	0 0 0	0 0 0
	TOTAL (1000 US #) PC LC	0 0	ō	0 0	0	0
		~~~~~~				

	VANG NOI	2011			Thousand	Baht
	-Bus System : -Voltage -Mumber of Bay : -Number of Line: -Number of Bank: -Type :	230 kV 0 0 0	Al-pips	ate	One and a 500 kV O O O Al-pipe CONV.	
	I.Land Acquisiti 2.Land Improvement	nt 0	0	0	0	0
L L	3.Foundation Wor ~Bum ~Transformer	k O	0	0	0	0
i	-Tranch 4.Control Buildi	Ŏ	o o	9	o o	0
l L	5.Equipment	- 0	_ 0	0	_ 0	0 0
	~Steel Structu -Misce, herdwa	ra 0	0	0	0	0
L L	-Transformer -Circuit Break -Disconnect.Sw	it 0	0 0 0	~ 0	0 0 0	- 0
l L	-Instrument Tr -Control & SER -Others		0	- 0	0 0	- 0
i	6.Misca.Paciliti	es 0	0	0	0	. 0
	Sub-total (FC)	0	0	0	0	0
i	(LC) 7.Misca.Expense 8.Engineering &	0 0 sv 0	0 0 0	0 0 0	0 0 0	0 0 0
	9.Contingencies 10.Import Dutlem	0	Ď Ď	0	0	0
	11.Valus Added T Sub-total	Ax 0	 0	 0		0
	TOTAL (1000 Baht	. 0	0	0	0	0
	· LC	0		0	0	0
	TOTAL (1000 US \$ PC LC	) 0 0 0	0 0 0	0 0	0 0	0 0
			4			

	CRIDION			~~~~~	Thousand	Baht
	-Bus System : -Voltage : -Number of Bay : -Rumber of Line: -Number of Bank; -Type :	One and 230 kV 0 0 0 0 Al-pips CONV.	n half  Al-pipe INV.	gr <b>s</b>	One and of 500 kV 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	G19
1	1.Land Acquisition			0	0	
1	1.Land Acquisition 2.Land Improvement 3.Youndation Work	ŏ	ŏ	ŏ		ő
1	-Bus	0	0	. 0	0	0
1	-Transformer -Tranch	, ŏ	0	e	0	Ō
1		v	υ	0		0
ŗ	4.Control Suilding	0	0	0		0
1	5.Equipment	. 0		0		0
î	-GIS		. 0	0		0
ì	-Steel Structure	a	. 0	ő	- 0	0
1	-Misca, hardware			ŏ		ŏ
1	-Transformer	0	0		ŏ	ŏ
ı	-Circuit Breaker			-	Ō	••
1	-Dinconnect.Bwit				0	**
1	-Instrument Tran		0		0	-
i	-Control & SERV.	O	0	0	0	Q
	6.Misca.Facilities			0	0	0
	Sob-total	0	0	0	o	0
	(FC)	ŏ	ŏ	0	0	0
•	(LC)	. 0	0	0	0	0
Ť	R. Knaineering C. St	. 0	0	0	0	0
î	9.Contingencies	0	0	0	0	0
í	7.Hists.Brpense 8.Engineering & SV 9.Contingencies 10.Import Duties 11.Vatus Edded Tes	ŏ	Ö	ŏ	ŏ	ŏ
1	11. Value Added Tex	Ō	0 0 0 0 0	ŏ	Ō	0
	Sub-total	0	0	0	0	0
	TOTAL (1000 Baht)	ø	o	0	0	0
	rc .	0	0	0	0	0
	I.C	0	0	0	0	0
	TOTAL (1000 US 8)	0	0	Ó	0	0
	FC	ō	0	0	0	0
	1.C	0	0	0	0	0

**)** 

					•		
1.	SATE PRADIT	~~~~~			Thousand	Baht	
	⊣Nus System ;	One end o			Que and	. No1f	0
	-Voltage : -Humber of Bay : -Humber of Line: -Humber of Bank:	230 kV			500 kV	,_,	
	-Number of Bay ;	0			0		
	-Number of Bank:	ŏ			ó		
	тура :	COMA"	A1-0100		CONV.		_
ļ	1.Lend Acquisition	. 0	ō	rs.	ħ.		0
1	2.Land Improvement 3.Foundation Work	. 0	0	ŏ	0		0
1	Bue	. 0	0				0
1	-Transformer -Tranch	0	0				0
î	4.Control Building						ŏ
1	5. Roui pment	- p	- 0	Ó			0000
i	5.Equipment -GIS -Steel Structure	_ '		0			ö
1	. Open conscious			ø	Q		0
1	-Misca, hardware -Transformer			0			Ó
1	-Circuit Branker	. 0	· ŏ	+ *	Ō	-	۰
1	-Disconnect.Swit	0	0		0		
î	-Instrument Tran -Control & BERV.	0	ŏ		0		0
1	-Others			_	•		-
1	6. Misca. Facilities		0		0		0
	Sub-total	0					0
	(PC) (LC)	0					0
1	7.Hiscs.Expense 8.Engineering & SV 9.Contingencies	ě	ō	ō	ō		0
1	8.Enginearing & SV 9.Contingencies	0	0				Q
	10.Import Duties	ň		0 0			0
1	11.Valus Added Yax	0	ō	õ			ŏ
	Sub-total	0	0	0	0		0
	TOTAL (1000 Baht)	Q.	Q	0			0
	FC LC	0	0	0	0		0
	TOTAL (1000 US 9) FC	0	0	0	0		Ŏ
	LC LC	0	Ö	Ů	0		0

,

<a> 8.8.</a>		1997		•	Thousand	Bent
4444-444		. 0	0		0	*******
-Bug System	. :	One and			One and	n half
-Voltage		230 kV			500 kV	
-Musber of Hay -Musber of Li	7 2	0	•		0	
-Number of Ba		ő			ñ	
-Type	UK ;		Al-pipa	ATO	Ai-pipa	CTO
	•	CONV.	INV.	01.0	CONV.	010
1 Land Acquie	Ltion	0	0	0	0	
2.Land Improve	imen t	. 0	0	0	õ	
3.Foundation (	ork					
-Bus		Ō	0	ō	Q	
-Transforme	r	ō	ō	Q.	ō	
-Trench		0	0	Ģ	o.	
4.Control Bui	ratud	, 0	0	ō	0	
		• .	* .	Ó		
5.Equipment		0	0	0	. 0	
-GIS			٠.	0		
-Steal Struc			0		0	
-Hisce, har		, ö	Ö	ŏ		
-Transforms: -Circuit Bro			ŏ		0	
-Disconnect			ŏ		ő	_
-Instrument			ŏ		ŏ	
-Control &			. ŏ		ŏ	_
-Others		. •		•		
6.Misca.Facil:	time	. 0	0	٥	0	
		*****				
Sub-total		0	. 0	o.	D	
(FC)	100	0	0	ō	0	
(LC)		0	. 0	ō	0	
7.Misce.Expans 8.Engineering			0	0	0	
9.Contingenoi		Ó	ů	. 0	ő	
10.Import Dut		ŏ	ŏ	ŏ	ŏ	
11.Value Added			ŏ	ŏ	ŏ	
Sub-total		0	0			.~~~
TOTAL (1000 B	mt)	Q	0	0	. 0	
FC .		0	0	0	0	
LC			0		0	
TOTAL (1000 U	8 8)	0	0	0	0	
FC		ō	0	ō	0	
rc		0	0	0	0	

	<a> B.S.</a>	2006			Thousand Be	ht
	-Bus System ; -Voltage ; -Number of Hay ; -Number of Line; -Number of Bank; -Type ;	One and a 230 kV O O O O O O O O O O O O O O O O O O			One and a h 500 kV O O Al-pips GI CONV.	
0	1.Land Acquisition 2.Land Improvement	0	0	0	0	0
1	3. Foundation Work -Bus -Transformer	0	0	0	0	0
1	-Treach 4.Control Building	. 0	0	0 0 0	0	0 0 0
1 1 1	5.Equipment -GIS -Steel Structure		. 0	0 0	- o	0 0
1 1 1	-Hisce. hardware -Transformer -Circuit Breakei	Ó	0 0 0	0	0 0	- 8
1	-Disconnect.Swit -Instrument Tran -Control & SERV.	0	0 0 0		0 0	- 0
1	-Others 6.Misce.Facilities	0	0	0	0	0
	Sub-total (FC) (LC)	0	0 0 0	0 0 0	0 0 0	0
1	7.Misce.Expense 8.Enginearing & SV 9.Contingencies	Ó	0	0	0	0
1	10.Import Duties 11.Value Added Tax	Ó	0	0 0	0	0 0
	Sub-totel	0	0	0	0	0
	TOTAL (1000 Baht) FC LC	0	0 0	0	0 0 0	0 0 0
	TOTAL (1000 US \$) FC LC	0 0	0	0	0	0

	<a> 8.5.</a>	2001			Thousand Baht	
	-Bus Bystem : -Voltage : -Number of Bay :	230 kV	half		Oge and a half 500 kV	0
	-Number of Line; -Number of Bank:	12 0			Ŏ	
	-Type :	A1-pipe	Al-pipe INV.	G18	Al-pipe GIS CONV.	
ø	1.Land Acquisition 2.Land Improvement	on 0	0	0	0	ō
1	2.Land Improvement 3.Foundation World	k		169	· · ·	0
1	-Bus	15038	15038	4511	0	Q
1	-Transformer	0		0	0	0
3	-Trench	1306			0	0
1	4.Control Buildin	ng 19200	19200	19200 4875	. 0	0
i	5.Equipment	225546		285857	. 0	ŏ
ī	-G18	-	- 1,555	236650		ő
1	-Steal Structu	re 13877	17523		0	ŏ
1	-Misce, hardwa	ra 19151	39294	2400	Ó	ŏ
1	-Transformer	0	. 0	0	Ö	ő
1	-Circuit Break	er 67140	67140		Ò -	
1	-Disconnect.Sw	it 28566	28966	-	0 -	
1	-Instrument Tra- -Control & SER	an 52833	52833		0 ~	
1	-Control & SER!	V. 43979	43979	43979	0	0
ī	6.Hisco. Pacilitie	es 22720	22720	22720	0	0
	Sub-total	285582	309877	338638	0	0
	(FC)	202740	213693	269846	0	Ó
	(rc)	82842	96184		O	0
1	7 Nisce Expense	14191	15380			0
	n gudinearInd P	8A 19991	21691		o o	ò
1	9.Contingencies	28558	30988		0	
1	10.Import Duties	29717	36618	26489	0	0
1	(LC) 7.Miscs.Expense 8.Engineering & 1 9.Contingencies 10.Import Duties 11.Velue Added To	8¥ 21948	24095	25546	0	0
	Sub-total	114405	128772	126527	0	ò
	TOTAL (1000 Baht				ů	0
	FC	229017			o o	Ò
	tc	170970	197532	153056	0	0
	TOTAL (1000 US \$				0	0
	PC	9161	9645		0	0
	I.C	. 6B39	7901	6522	Ď	٥

	<a> 8.5.</a>	2011			Thousand I	lebt
	-Voltage : -Number of Bay : -Number of Line; -Number of Bank;	One and a 230 kV 0 0 0 Al-pipe CONV.			Ope and s 500 kV 0 0 0 Al-pips (	
0	1.Land Acquisition 2.Land Improvement 3.Youndation Work		0	0	0	0
1	-Bus -Transformer -Trench 4.Control Building	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
1111	5.Equipment -GIS -Steel Structure	_ 0	- o	0 0	- 0 - 0	0 0 0
1 1 1	-Misca herdwhre -Transformer -Circuit Breaker -Disconnect Swit	0 0	0 0 0	0	0 0 0	0
1111	-Instrument Tran -Control & SBRV. -Others 6.Misca.Facilities	0	0	- 0 0	ŏ	0
•	8ub-total (PC)	0	0	0	0	0
1	(LC) 7.Kiscs.Expense 8.Engineering & SV 9.Contingencies	Q	0 0 0	0 0 0	0 0 0	0 0 0
1	10.Import Duties 11.Value Added Tex	0	0 0	0	0	0
	Sub-total	0	0	0	0	0
	TOTAL (1000 Baht) PC LC	0 0	0	0	0	0
	TOTAL (1000 US 9) FC LC	0 0 0	0 0 0	0 0 0	0 0 0	0 0

<c> 8.8.</c>	1997			Thousand Baht		<0
-Bus System : -Voltage -Hunder of Bay : -Number of Line: -Kumber of Bank: -Type :	230 kV 0	Al-pipe		One and a half 500 kV 0 0 0 0 Al-pipe GIS CONV.	0	- F - V - V - X - Y
1.Land Acquisition	n 0	0		0	0	1 1.
2.tand Improvement 3.Foundation Work	t 0	0	0	0	0	1 2. 1 3.
-Bus	0	0	0	0	0	í
"Transformer	Ó	. 0	Ó	o	0	i
-Treach	0	0			Q	ī
4. Control Suildin	g ő	0			0	14.
	-	-	Ç	-	0	1
5. Equipment	0	0			0	1 5.
-GI8	-	-	0		0	1
-Steel Structur					0	1
-Hisca, hardwar					0	1
-Transformer	0				0	1
-Circuit Breaks				0 . ~		1
-Disconnect.Swi				0 ~		1
-Instrument Tre					0	1
-Control & SERV		. 0		v	•	
-Others 6.Hisco.Pacilitia	s 0	0	. 0	0	0	1.6
0.01809.10011161#						
Bub-total	0	G	0	Ó	Ð	
(20)			· ŏ		Ō	
(i.c)	ō				Ò	
7. Himos, Expense	ŏ				Ō	1 7.
8.Engineering & S		Ċ	. 0	Ö	Ó	18.
9.Contingencies			. 0	Ó	0	19.
10.1mport Duties					0	1 10
. 11.Value Added Ta		C		Ď	O	1 11
Sub-totel	0	0	0	0	0	
TOTAL (1000 Baht)	O		. 0	0	0	***
PC	ŏ	č			ŏ	**
LC	ő				ŏ	
		+				
TOTAL (1000 08 \$)	0	0	. 0	0	O	TO
PC \	0	O	Ó	. 0	0	
£C	0		. 0	. 0	Q	
	~~~~~~					***
		_				

	<c> 8.8.</c>	2006			Thousand B	aht
	-Voltage -Number of Bay : -Number of Line: -Number of Hank: -Type	One and a 230 kV 0 0 Al-pipa CONV	0 haif Al-pipe INV.	GIS	Ons and s 500 kV 0 0 0 Al-pips G	
1	1.Land Acquisition 2.Land Improvement	0	0	0	0	0
1 1	3. Poundation Work -Dus -Transformer -Transch	0	0 0	0	0 0	0
1	4.Control Building		ŏ	0	- 0	0 0
111	-018 -8teel Structure -Misce, hardware	0	- 0	0 0	0	0 0
1 1 1	-Transformer -Circuit Bresker -Disconnect.Swit -Instrument Trans	. 0	0		· 0	- 0
1	-Control & SERV. -Others 5.Misce.Facilities	Ó	ŏ 0	0	o o	0
	Sub-total (FC)	0	0	0	0	0
1	(LC) 7.Misce.Expense 8.Kogineering & SV 9.Contingencies	0 0	0 0 0	0 0 0	0 0 0	0 0 0
	10.Import Duties 11.Value Added Tax	Ŏ	0	0	0	0
	Sub-total TOTAL (1000 Baht)	0	0	0	0	0
	rc Lc	0 0	0	0 0	0	0
	TOTAL (1000 US \$) PC LC	0	0	0	0 0 0	0

	One and a half 500 kV 0 0 Al-pipe GIS CONV.
-Number of Line: 0 -Number of Bank: 0 -Type : Al-pipe Al-pipe GIS	0 0 Al-pipa GIS
CONV. INV.	COMY.
	0 0 (
1 3. Foundation Work	0 0 0
1 -Bus 0 0 0 1 -Transformer 0 0	o o
1 -Trench 0 0	ò ò i
1 4.Control Building 0 0	0 0
1	0 - (
1 5.Equipment 0 0	0 - 0 (
1 -Steel Structure 0 0	0 0
	å å i
l -Transformer 0 0	0 0 1
1 -Circuit Breaker 0 0 -	<u> </u>
1 -Disconnect.Swit 0 0 -	0 -
1 -Instrument Tran 0 0 - 1 -Control & BERV, 0 0	0 0 -
1 -Control # BERT.	•
1 6. Miscs. Pacilities 0 0	0 0 (
Sub-total 0 0	0 0
(FC) 0 0 (LC)	0 0
1 7.Nison.Expanse 0 0	0 0
1 8. Engineering & SV 0 0	0 0
1 9.Contingencies 0 0	0 0 0
1 10.Import Duties 0 0	0 0
1 11. Value Added Tex 0 0	0 0 0
Sub-total 0 0	0 0
TOTAL (1000 Baht) 0 0	0 0
rc 0 0	0 0
LC 0 0	0 0 (
TOTAL (1000 US 8) 0 0	0 0
rc o o	0 0
rc o o	.0. 0

	<c> 9.8. 2011</c>			Thousand Haht					
	~~~~~~~~~~~~	~~~~~	****			THANKSONG BOLL			
		1	ø		0	1			
	-Hus System :	One and :	helf		One and	half			
		230 kV			500 kV				
	-Number of Bay :	7			3				
	-Number of Line:	14			2				
	-Number of Bank: -Type :	0 #qtq-1A	Al-pips	420	Àl-pips	414			
		CONA.	INV.	(r10	CONV.	GIB			
1	1.Land Acquisition	2795	3497	569	O	0			
1	2.Land Improvement	2067	2658	197	2410	236			
1	3. Foundation Work								
1	-Bus	17544	17544	5263	9780	2934			
1	-Transformer	. 0	0		13500	15600			
1	-Trench	1306	1306		0	0			
1	4.Control Building		19200		0	0.			
1				0	·	4875			
1	5.Equipment	262621	290375		843266				
1	-G16	7.100	70.444	276325	-	362070			
i	-Steal Structure -Hiscs. hardware		20444 45643	3067 2800	9020 48750	1353 1800			
i	-Transformer	32393	12013		444000	444000			
î	-Circuit Breaker		7B330		105390	**********			
î	-Dieconnect.Swit		33327		50670	_			
ī	-Instrument fran		61446	_	63990	-			
ï	-Control & SERV.		50985	50985	121446	121446			
3	-Others								
i	6.Hisca.Pecilities	27720	22720	27720	. 0	0			
	Sub-total	328253			871056				
	(FC) (LC)	236080 92173	248959	314546	765137	866715			
	7 Wiscon Synones	16170	108441 17557	67865 19083	105919 43432	87599 47704			
î	7. Miscs. Expense B. Engineering & SV 9. Contingencies	101/0	25011	26770	50974	66802			
ì	9 Contingencies	32875	35730		87106	95431			
i	10. Import Duties	34564	42616	30807	83634	76289			
ì		25057	27563	28873	66659	72126			
	Sub-total	131594	148477	143776	341805	358352			
						223002			
	TOTAL (1000 Baht)	459847			1212861	1317666			
	PC	265251	280437		844430	955751			
	t.c	193596	225340	175282	368431	356915			
	TOTAL (1000 US 6)	18394	20231	21048	48514	52507			
	PC PC	10650	11217	14037	33777	38230			
	ic	7744	9014	7011	14737	14277			
			,,,,,	,,,,,	~ * * * * * *				

## BREAK DOWN

OF

TRANSMISSION LINE COST

CONSTRUCT	ION COS	t-overerad	LINE	USA	- 25	Baht	
*****	****	******	****				
Year		1998					
Section			K - ON NU	CD .			
New line	?	nond one	On NO	Ç.			
Kwisting	ż	í	0		_	0	_
Soil	-fair	ò	v	0	. 0	0	Q.
8011						0	
	~poor	1				1	
Length (k	<b>m</b> )	16.9				. 0	
				#			
~(kV)		230	230	230	230	500/230	500
-(cct)		2	2	4	4	4	2
-Tower		DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/ST
-(MCM)		., .	-,		50, 51		-0,0.
~(Kumber)		2	4	2	4	4	4
Route Sur	vay	302.4	302.4	302.4	302.4	0	0
Right of '	Way	0	0	ō	0	ŏ	ő
Prolimina	ry Work	1680	1680	1680	1680	ŏ	Ö
Tower Foo			61104.96	174147 6	172801 6	ŏ	0
Equipment		-5540,7	V-107170		*13001.0	v	U
-Tower Ho	d.	25704	35985.6	80740 0	113037.1	0	0
-Insulato			16464	16464	32928		
-Conducto		8920.8	17841.6			0	0
		2436	2436	17841.6	35683.2	o o	0
-0GM				17724	17724	ō	0
	•	504	504	504	304	0	0
-Accessor		2553.6	5107.2	5107.2		0	0
-Ground W	) Le	462	462	462	462	0	0
-Others							
SUB-TOTAL		94441	141888	264970	385335	0	ō
Miscellan	AOUB	4706.93	7070 30	12222 20	19301.68	•	
Boginerin		6610.87	9932.16			0	0
Contingen		9444.1			27043.52	0	0
Import Da	L.		14188.8	26497	38633.6	0	0
		4265	8202	8040	15752	. 0	0
Velue Add	o Tak	688B.252	10485.13	19089.53	28124.99	, 0	0
JATOT-HU		31915	49887	85408	128856	0	Ó
TOTAL		126356	191775	350378	515192	0	0
Removel		20764.8	Đ	0	Ö	ŏ	ŏ
DIRECT CO	-	4.61	6.51		16.00		
INDIRACT				11.43	16.28	0	Ó
INDINACT (	703.1	1.28	2	3.42	5.15	0	0
POREIGN CO		0.49	0.94	0.92	1.8	0	0
FOCYT COM	₹.	5.4	7.57	13.93	19.63	Õ	ő
ILM) JATO	7 77961	5.89	8,51	14.85	21.43	o	0

	CONSTRUCTION COST-	OVERHEAD	LINE	USÇ	∍ 2Ś	Baht	
	***********	****	****				
	Year	2009					
		нона сно					
	New line ?	Q				0	
	Existing ?	1	0	0	Ò	0	0
	Soil -fair	Ó				Ö	
	-poor	1				ĭ	
	Length (km)	19				õ	
	songer (na)	.,		*		v	
	(kV)	230	230	230	230	500/230	500
	-(cct)	2.30		430	230	2001230	200
	-Tower			9	4 ) (500	4	
		DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/ST
	-(NCM)						
	-(Number)	2	4	2	4	4	4
	Route Survay	342	342	342	342	0	Ó
	Right of Way	0	0	. 0	0	0	0
	Preliminary Work	1900	1900	1900	1900	Ó	Ō
	Tower Footing Equipment	49362	69106.8	140400.5	196560.7	0	0
	-Yower Body	29070	40698	91314	127839.6	0	٥
	-Inculator Strings		18620	18620	37240	ŏ	ŏ
	-Conductor	10089	20178	20178	40356	ő	ő
	-conducede	2755					ň
	-OGW		2755	20045	20045	. 0	Ó
		570	570	570	570	Ó	Ó
	-Accessories	2898	5776	5776	11552	0	0
	-Ground Wire -Others	522.5	522.5	522.5	522.5	0	0
	SUN-TOTAL	106809	160468	299668	436928	0	ó
							_
	Miscallaneous	5323.35				0	0
	Enginering & SV.	7476.63	11232.76	20976.76	30584.96	0	ð
	Contingency	10680.9	16046.8	29966.8	43692.8	Ō	Ö
	Import Duty	4823	9276	9093	17814	Ó	Ó
	Value Added Tax	7790.3	11858.14		31808	Ō	ŏ
	SUB-TOTAL	36094	56420	96592	145729	0	0
,	TOTAL	142903	216888	396260	582657	0	0
	Removal	23484	ő	0	0	ŏ	ŏ
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	49101	v	٧	U	·	
	DIRECT COST	5,21	7.36	12.93	18,42	0	0
,	INDIRECT COST	1.44	2.26	3.86	5,83	ŏ	ŏ
r	PORRIGN CURR.	0.55	1.06	1.04	2.04	0	0
,	LOCAL CURR.	6.1	8.56	15.75	22.21	ŏ	ŏ
						·	<del>-</del>
	TOTAL (mill.US\$)	6.65	9.62	16.79	24.25	0	0

<u>}</u> ·

3

Constructi *********		OVERHEAD *******		US\$	= 25	'Báht	
Year		2010					
Section		NONG CHO	K - <c></c>				
New line	?	0				0	
Existing	?	1	0	0	0	Ó	4
Boil	-fair	Ō			•	ŏ	
	-poor	i				í	
Longth (ka		19				19	
							:
-(kV)		230	230	230	230	500/230	50
-(cct)		2			4	4	
-Tower		DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/S'
~(MCM)		-	•				., -
-(Number)		2	4	2	4	4	
Rout <b>e</b> Surv		342			342	342	
Right of W		. 0			0	0	
Preliminax		1900			1900	2945	
Fower Foot Equipment		49362	69106.8	140400.5	196560.7	265705.8	8458
Tower Bod		29070	40698	91314	127839.6	270010 2	89116
-Insulator					37240	37240	
Conductor		10089	20178	20178	10356	40356	20178
-		2755	2755		20045	20045	
-OGW		570	570			570	
-Accessori	••	2888	5776		570 11552	11552	
-Ground Wi		522.5					866
-Others	7.62	322.3	522.5	522.5	522.5	741	741
SUB-TOTAL		106809	160468	299668	436928	659407	238412
Miscallane	ous	5323.35	8006.3	14966.3	21829.3	32953.25	11903.
Enginering	& SV.	7476.63			30584.96		
Contingenc		10680.9	16046.8	29966.8	43692.8	65940.7	23841.2
Import Dut		4823	9276	9093	17814	18073	11849
Value Adde			11858.14			47399.66	
SUB-TOTAL		36094	56420	96592	145729	210525	8177
TOTAL		142903	216888	396260	582657	869932	320189
Removal		23484	0	0	0	0	Č
uthrion e			· .				
DIRECT COS		5,21	7.36			27.32	10.46
INDIRECT C	OST	1.44	2.26	3.86	5.83	8.42	3.27
ORBIGN CU	RR,	0.55	1.06	1.04	2.04	2.07	1.35
LOCAL CURR		6.1	8.56	15.75	22,21	33.67	12.4
TOTAL (mil	1.05\$)	6.65	9.62	16.79	24.25	35.74	13.75

		-					
	CONSTRUCTION COST-O	VERHEAD L	INR	US\$ =	25	Baht	
	*******	****	***				
	Year	1995	MANG N	~*			
		ONG CHOK	- WANG N	01		1	
	New line ?	0	•	•	0	ō	0
	Existing ?	ō	. 0	0	U	0	v
	Soil -fair	o				i	
	-poor	1				64	
	Length (km)	U				07	
							•
	~(kV)	230	230	230	230	500/230	500
•	-(cct)	2	ž	4	4	4	2
	-Toyer	DC/ST	DC/ST	4cct/81.	4cct/ST	4cct/ST	DC/ST
	-(HCH)	,	,		,		
	-(Number)	2	4	2	4	4	4
	Route Survey	0	. 0	. 0	0	1152	1152
•	Right of Way	Ō	0	Ö	0	344000	344000
	Preliminary Work	0	0	0	0	9920	9920
	Tower Pooting	0	0	0	0	895009.1	284928
	Equipment	•				942855.5	300160
	-Tower Body	0	0	0	0	125440	75264
	-Insulator Strings	ŏ	ŏ	ŏ	ŏ	135936	67968
	-Conductor	0	ŏ	0	ŏ	67520	30080
:	-ocv	ŏ	ŏ	ő	ó	1920	1920
•	-Accessories	ő	ő	ŏ	ŏ		29184
	-Ground Wire	ŏ	Õ	ŏ	ŏ	2496	2496
* *	-Others	•	٠	·	•	24,0	2430
	OLIMBIN						
	* SUB-TOTAL	0	0	0	0	2565161	1147072
	Miscellaneous	0	0	0		111000.4	40096
	Raginering & SV.	0	0	Ō	0		
	Contingency	0	0	0	0		
4	Import Duty	0	Ģ	0	0		39911
	Valua Added Tax	0	0	0	0	159662.0	58928.17
	nich mohat		<u>-</u>	0	0	767618	333937
*	• 9UD-TOTAL	0	0	U	v	101010	333931
to provide the second s	• TOTAL	0	0	0	0	3332779	1481009
	Ramoval	ŏ	ŏ		ŏ		Ö
	102.0102		·		•	•	-
	. DIRECT COST	0	0	0	0		45,88
	* INDIRECT COST	0	0	0	Û	30.7	13.36
	* FOREIGN CURR.	0	0	0	0		4.56
The second second	* LOCAL CURR.	0	0	0	0	126.35	54.68
	* LOCAL CURR.  * TOTAL (mill.US\$)	0	0	0	. 0		59.24

•									
•									
		CONSTRUCT				us\$ -	= 25	Beht	
		Year		2000					
		Section New line	7	O ION IAB	BANGKOK	NOI		o	
		Existing	?	1	0	0	0	ó	0
		Soil	-fair -poor	0 1				0	
		Length (k		29.6				29.6	
									#
		-(kV)		230	230	230	230	500/230	500
		~(cct) -Towar		DC/ST	DC/ST	4 4cct/6T	4cct/ST	4 4cct/ST	DC/ST
		-(MCM)		-		-		-	
*		-(Number)		2	. 4	2	4	4	4
		Route Sur		532.8	532.8	532.8	532.8	532.8	532.8
		Right of Prelimina	way ty Work	0 2960	0 2960	0 2960	0 2960	0 4588	0 4588
		Tower 700	ting	76900.8	107661.1	218729.2	306220.8	413941.7	131779.2
		Rquipment -Tower Bo					199160.6		138824
		-Insulato	r String	14504	2900B	29008	58016	58016	34809.6
		-Conducto	r	15717.6 4292	31435.2 4292	31435.2 31228	62870.4 31228	52870.4 31228	31435.2 13912
		-OCM		888	888	888	986	888	888
4		-Accessor		4499.2 814	8998.4 814	8998.4 814	17996.8 814	17996.8 1154.4	13497.6 1154.4
		-Others							
	*	SUB-TOTAL		166396	249993	466851	680688	1027287	371421
•		Miscellan	#0\\\#						
		Enginerin		11647.72	17499.51	32679.57	34007.76 47648.16	71910.09	25999.47
•		Contingen Import Du	cy	16639.6	24999.3	46685.1	68068.8	102728.7	37142.1
		Value Add	ed Tax	7514 12136.40	14450 18473.71	14166 33633.89	27753 49553.57	28156 73843.71	18459 27254.30
		SUB-TOTAL	:	56231	87896	150480	227031	327976	127399
	*	TOTAL Removal		222627 36585.6	337889	617331	907719 0	1355263 0	498820 0
				*0303.0	v	U	υ	U	U
	*	DIRECT CO	ST	8.12	11.46	20.13	28.69	42.55	16.32
	±			2.25	3.52	6.02	9.08	13.12	5.1
4		FORBIGN C	mpp.	0.86	1.65	1.62	3.17	3.22	2.11
		LOCAL CUR		9.51	13.33	24.53	34.6	52.45	19.31
2.44		TOTAL (mi	11.0881	10.37	14.98	26.15	37.77	55.67	21.42
	-					~~.13			41.75
•		•							
		CONSTRUCT	TON COCE	(Kilbourses	t rive	TICO	ne	Dake	
		*****		****		US\$ =	= 25	Baht	
		Year		2004	DANCOTO				
		Section New line		SAI KOI - O				υ	
			? -fair	1 0	. 0	0	0	0	0
		100	-poor	1				1	
•		Length (k	<b>m</b> )	24.5				24.5	
•									#
		-(kV) -(cct)	-	230	230 2	230	230	500/230	500 2
		-Tower		DC/ST			4cct/ST	4cct/8T	DC/ST
4 A		-(MCM)		_		_			

	CONSTRUCTION COST	-OVERHEAD	FINE	US\$	= 25	Baht	
	********	****	****				
	Year	2004					
4	Section		- RANGSIT				
	New line ?	0				ΰ	
•	Existing ?	1	0	0	0	0	0
	Soilfair	0				0	
	-poor	1				1	
	Length (km)	24.5				24.5	
							#
·							
	-(kV)	230	230	230	230	500/230	500
	-(cct)	2	2	4	- 4	4	2
	-Tower	DC/ST	DC/ST	4cct/ST	4cct/6T	4cct/8T	DC/ST
	-(HCM)	20,01	20,01	1000/01	4000/01	4000/01	DC/01
* *	-(humber)	2	4	2	4	4	4
	(manager)	• •	,	£	•	•	•
	Route Survey	441	441	441	441	441	441
	Right of Way	0	0	770	771	771	
							0
	Preliminary Work	2450	2450	2450	2450	3797.5	3797.5
	Towar Footing	63651	89111.4	181042.7	253459.8	342620.6	109074
	Equipment						
	-Tower Body	37485	52479		164845.8		114905
and the second s	-Insulator Strings		24010	24010	48020	48020	28912
	-Conductor	13009.5	26019	26019	52038	52038	25019
	-	3552.5	3552.5	25847.5	25847.5	25847.5	11515
•	-OGW	735	735	735	735	735	735
	-Accessories	3724	7448	7448	14896	14896	11172
	~Ground Wire	673.75	673.75	673.75	673.75	955.6	955.5
	-Others						
4.4		100					
•	SUB-TOTAL	137727	206920	386414	563407	850286	307426
				•-•	***		
	Miscallaneous	6864.3	10323.95	19298.65	28148.3	42492.35	15349.25
	Baginering & SV.	9640.89				59520.16	
	Contingency	13772,7	20692	38641.4	56340.7	85028.8	30742.6
	Import Duty	6220	11961	11725	22971	23305	15279
	Value Added Tax	10045.42				61120.64	
			2527010	11030.00	*1013.55	01148.01	2200110
	SUB-TOTAL	46543	72752	124553	187914	271467	105449
	000 101710	10010	12134	127333	10/914	271401	103473
	TOTAL	184270	279672	510967	751321	1121755	412875
· · · · · · · · · · · · · · · · · · ·	Removal	30282	2/34/1	310307	731321	0	412675
	really var	30202	v	v	Ÿ	•	v
and the second s							
	DIRECT COST	6.72	9.49	16.67	23.75	35.22	13.51
	INDIRECT COST	1.86	2.91	4.98	7,52	10.86	4.22
• •		1.00	6.91	9.90	7.52	10.60	4.2%
•	FOREIGN CURR.	0.71	1.37	1.34	2.63	3 66	1 75
	LOCAL CURR.					2.66	1.75
•	LACAB CORR.	7.87	11.03	20.31	28.64	43.42	15.98
	TOTAL (mill.USS)	8.58	10 4	21 15	21 07	46 00	17 70
•	(480.111m) anio	6.36	12.4	21.65	31.27	46.08	17.73

CONSTRUCTION COST-		DINE.	US\$ =	25	Daht	
vest	1995	***				
		******				
New line 7	- ION IAE	WANG NOI				
	0			_	3	
Existing ?	ō	Ò	0	0	0	(
Soil -fair	o o				0	
-poor	1				1	
Length (km)	0				56	•
-(kV)	230	230	230	230	500/230	500
-(cct)	2	2	4	4	4	1
-Tower	DC/ST	DC/ST	4cct/5T	4cct/ST	4cct/ST	DC/81
~(MCM) -	•			,	.00,70.	20,0.
~(Number)	2	4	2	4	4	4
Route Survey	0	0	0		1008	1000
Right of Way	0	Ó	ō	ŏ	301000	301000
Preliminary Work	0	ō	ō	ŏ	8680	8680
Tower Pooting	Ó	ō	ŏ	ŏ	783132.9	249312
Rguipment	-	•	•	v		24,311
-Yower Body	0	0	0	. 0	824998.5	262640
~Insulator Strings	ō	ō	ŏ	ŏ	109760	65856
-Conductor	ō	ŏ	ŏ	ŏ	118944	59472
	ŏ	ŏ	ŏ	ň	59080	26320
-OGN	ő	ŏ	ŏ	. ŏ	1680	1680
-Accessories	ŏ	ŏ	ŏ	. 6	34048	25536
-Ground Wire	ŏ	Ö	ŏ	ŏ	2184	23030
-Others	•	v	•	U	2169	2101
SUB-TOTAL	0	Ö	0	0	2244516	1003688
Miscellaneous	0	0	0	0	97125.4	2500
Enginering & SV.	ŏ	ŏ	ŏ			35084
Contingency	ő	ŏ	ŏ	0	157116.1	
Import Duty	ŏ	Ö		-	224451.6	
Value Added Tax	o.	. 0	0	0	53268	34922
			U	0	139704.3	51562.14
BUB-TOTAL	0	0	0	0	671665	292195
TOTAL	0	0	0	0	2916181	1295883
Removal	0	0	0	0	0	Ċ
DIRECT COST	0		0	0	89.78	40.15
INDIRECT COST	ŏ	ŏ	ŏ	ő	26.87	
		ď	· ·	v	20.01	11.69
POREIGN CURR.	0	0	0	0	6.09	3.99
LOCAL CURR.	Ö	Õ	ŏ	ŏ	110.56	47.85

CONSTRUCTION COST			U8\$ •	25	Bant	
4444444444444 Your	2000					
<b>Saction</b>		iwwx - c	Palinocha)	POINT	_	
New lists ?	0		_		ō	_
Reisting 7	1	0	0	0	0	0
Soil -fair	0				0	
-poor '	1				1	
Leagth (km)	9.2				9.2	
~(kV)	230	230	230	230	500/230	500
-(cct)	2	2	4	4	4	2
-Tomer	DC/ST	DC/8T	4cct/8T	4cct/ST	4cct/57	DC/87
~(NCM)	-0,41	-4,4.	1000,01	.400,01	1000/01	20/41
~(Number)	2	4	2	4		4
				<b></b>	•	
Moute Street	165.6				165.6	165.6
Right of Way	_ 0	. 0	0	. 0	. 0	0
Preliminary Work	920	920	920	920	1425	1426
Towar Footing : Equipment	23901.6	33462.24	67983.4	95176.76	128657.5	40959.4
-Tower Body	14075	19708.4	44215.2	61901.28	135535.4	43148
-Insulator String	a 4508	9016	9016	18032	18032	10819.2
-Conductor	4885.2	9770.4	9770.4	19540.8	19540.B	9770.4
	1334	1334	9706	9706	9706	4324
-03W	276	276	276	276	276	276
-Accessories	1398.4	2796.8	2796.8			
-Ground Wire	253	2790.0	2790.8	253	5593.6 358.8	4195.2 358.8
-Others						
eub-total	51719	77700	145102	211565	319292	115442
Miscellansous	2577.62			10569.97		
Raginering & EV.	3620.26			14809.55		8080.94
Contingency	5171.8	7770	14510.2	21156.5	31929.2	11544.2
Import Duty	2336	4691	4403	8626	8751	5737
Value Added Tax	3772.188	5741.778	10453.75	15401.77	22951.41	8470.938
SUB-TOTAL	17478	27318	46771	70564	101938	39597
TOTAL	69196	105018	191873	282129	421230	155039
Removal	11371.2	0	Ģ	O	0	0
DIRECT COST	2,52	3.56	6.25	8.91	13.22	3.07
INDIRECT COST	0.7	1.09	1.07	2.82	4.08	1.58
FOREIGN CURR.	0.27	0.51	0.5	0.99	1	0.66
LOCAL CURR.	2.95	4.14	7.62	10.74	16.3	5.99
veille		4.11		20114	10.3	7.73
(\$HU.IIIm) JATOT	3.22	4.65	8.12	11.73	17.3	6.65

CONSTRUCTION COST			vse :	25	Baht	
Year	2000					
Bantion	CTALINGCE	TRICE MA	- BANGKO	MC ROT		
New line ?	0				0	
Existing ?	i	0	G	0	ŏ	0
Soil -feir	õ		•	•	ō	•
100g-	ĭ				ĭ	
Length (km)	9.2				9.2	
					,,_	
~(NV)	230	230	230	230	300/230	500
-(cot)	2	2	4	4	4	2
-tower	DC/ST	DC/81	4cct/ST	4cct/8T	4cct/ST	DC/8f
~(NCH)						
-(Number)	2	4	2	4	4	4
Route Survey	165.6	165.6	165.6	165.6	165.6	165.6
Right of Way	103.0	105.0	103.0	163.0	103.6	163.6
Proliminary Work	920	920	920	920	1426	
Tower Footing		33462,24		95176.76		
Equipment	23901.0	33402.24	0/903.9	95170.76	148657.0	40958.4
-Tower Body	14076	19706.4	44215.2	61901.28	135535.4	43148
-Insulator String		9016	9015	18032	18032	10819.2
-Conductor	4885.2	9770.4	9770.4	19540.B	19540.8	
*	1334	1334	9706	9706	9706	4324
-OGN	276	276	276	276	276	276
-Accessories	1398.4	2796.8	2796.8	5593.6	5593.6	4195.2
-Ground Wire	253	253	253	253	358.8	
-Others	203	200	203	255	350.0	330.0
SUB-TOTAL					~	
WAR-TOTAC	51719	77700	145102	211565	319292	115442
Miscellanaque	2577.62	3876,72	7246.82	10569.97	15956.32	5763.82
Enginering & BV.	3620.26	5439	10157.14	14809.55	22350.44	8080.94
Contingency	5171.8	7770		21156.5	31929.2	11544.2
Import Duty	2336	4491	4403		8751	5737
Value Added Tax	3772.188	5741,778	10453.75	15401.77		
SUS-TOTAL	17478	27318	46771	70564	101938	39597
OUT TOTAL	11,470	4,310	40//1	70304	101336	27091
TOTAL	69196	105018	191873	282129	421230	155039
Removal	11371.2	O	0	0	Ō	0
and the part of the						
DIRECT COST	2.52	3.56	6,25	8,91	13,22	5.07
INDIRECT COST	0.7	1.09	1.87	2.62	4.08	1.58
FORBICN CURR.	0.27	0,51	0.5	0.99	1	0.66
LOCAL CURR.	2.95	4.14	7.62	10.74	16.3	5.99
WATER PARTY	2.70	7.17	7.02	10.74	10.3	9.77
TOTAL (#111.088)	3.22	4.65	8.12	11.73	17,3	6.65

CONSTRUCTION COST-			<b>US\$</b>	25	Baht	
*********		****				
Year	2002					
		NGKOK - <	<b>\&gt;</b>			
New line ?	0				0	
Existing 7	1	. 0	0	0	0	0
Soll -fair	0				0	
-poor	1				1	
Length (km)	4.4				4.4	
					ŧ	
-(RV) .	230	230	230	230	500/230	500
-(cct)	2	2	4	4	4	2
-Towar	DC/ST	DC/ST	4cct/ST	4cct/87	lcct/ST	DC/ST
-(MCM)	,	,	,	1000,00	1000,121	20,51
~(Number)	2	4	2	. 4	4	4
	-	_	<u> </u>		··· · · · · · · · · · · · · · · · · ·	
Route Survey	79.2		79.2	79.2	79.2	79.2
Right of Way	0	0	0	. 0	0	0
Preliminary Work	440	440	440	440	682	682
Tower Footing	11431.2	16003.68	32513.8	45519.32	61531.87	19588.8
Equipment						
-Tower Body	6732	9424.8		29604.96	64821.31	20636
-Insulator Strings		4312	4312	8624	8624	5174.4
-Conductor	2336.4	4672.8	4672.8	9345.6	9345.6	4672.8
	. 638	638	4642	4642	4642	2068
-OGW	132	132	132	132	132	132
-Accessories	668.8	1337.6	1337.6	2675.2	2675.2	2006.4
-Ground Wire -Others	121	121	121	121	171.6	171.6
SUB-TOTAL	24735	37161	69397	101183	152705	55211
***************************************	1000 00					
Miscellaneous	1232.79		3465.89			
Enginering & SV.	1731.45	2601.27	4857.79		10689.35	2864.77
Contingency	2473.5	3716.1	6939.7		15270.5	5521.1
Import Duty	1117	2148	2106	4125	4185	2744
Value Added Tax	1804.096	2746.086	4999.666	7366.016	10976.75	4051.306
SUB-TOTAL	8359	13066	22369	33747	48753	18938
TOTAL	33094	50227	91766	134930	20145B	74149
Removal	5438.4	. 0	0	0	0	0
DIRECT COST	1.21	1.71	3	4.27	6.33	2.43
INDIRECT COST	0.33	0.52	0.89	1.35	1.95	
THDINGOT COST	0.55	U, 3Z	0.89	1,35	1.95	0.76
FORRIGN CURR.	0.13	0.25	0.24	0.47	0.48	0.31
LOCAL CURR.	1.41	1.98	3.65	5,15	7.8	2.88
TOTAL (mill.US\$)	1.54	2.23	3.69	5.62	8.28	3_19

		-OVEREIRAD	***	us\$ :	. 23	Baht	
Year		2003					
Section		BANGROK N	OI - junc	tion pt.	to SAMPHI	L KA	
Kew line	7	0	•	•		0	
Existing	2	1	0	0	0	0	0
Soil	-fair	0				0	
	~poor	1				1	
Langth (k	a) -	0.3				0	
	•	• • •	#			•	
(kV)		230	230	230	230	500/230	500
-(cct)		2	2	4	4	4	7
-Tows:		DC/ST	DC/ST	4cct/8T	4cct/8T	4cct/ST	DC/ST
- (19C2f)				-			
-(Number)		2	4	2	4	4	4
Route Sur		5.4	5.4	5.4	5.4		0
Right of	Way	. 0	0	0	0	0	0
Prelimina	ry Work	30	30	30	30	Ó	Ó
COMET FOO	ting	779.4	1091.16	2216.85	3103.59	0	Ó
Bquipment ~Tower B¢	4	459	£10 £	****		_	
			642,6	1441.8	2018.52	0	9
-Insulato			294	294	588	0	9
-Conducto	r ·	159.3	318.6	318.6	637.2	Õ	9
~~		43.5	43.5	316.5	316.5	0	•
OCM		. 9	9	. 9	9	ō	0
Accessor		45.6	91.2	91.2	182.4	Ď	0
-Ground W -Others	ite	8.35	8.25	8.25	8.25	0	Ó
JATOT-EUE		1695	2534	4732	6899	<del></del>	
30B-101AG		1000	7334	4/34	0033	v	,
iscellan	eous	84.03	126.43	236.33	344.68	0	(
Raginerin	g & 8V.	118.02	177.38	331,24	482.93	0	Ċ
Contingen	D <b>y</b>	168.6	253.4	473.2	689.9	0	C
Import Du		76	146	144	281	· ŏ	Č
Value Add	od Tox	122.962	187.222	340.942	502.222	Ō	à
JATOT-HUE		570	890	1526	2301	0	(
TATO		2256	3424	6258	9200	0	<del>c</del>
Removal		370.8	0	0	0	D	C
DIRECT CO	ST.	0.08	0.11	0.2	0.29	0	
INDIRECT		0.02	0.04	0.06	0.09	ŏ	č
			V.V4	4.30	4143	•	`
FORBIGE C		0.01	0.02	0.02	0.03	0	•
OCAL CUR	R.	0.09	0.13	0.24	0.35	Ō	C
rotal (mi	11.US\$)	0.1	0.15	Q.26	0.38	0	0

6577.2 2970 ax 4797.198 22227 87999 14461.2 3.21 9.89 0.34 3.76	7302.148 34743 133558 0 4.53 1.39	0	89739	0 0	
2970 4797.198 22227 87999 14461.2 3.21 9.89	7302.148 34743 133558 0 4.53 1.39	5599 13294.42 59480 244012 0 7.96 2.38	10970 19587.07 89739 358795 0	0 0 0	(
2970 4797.198 22227 87999 14461.2	5712 7302.148 34743 133558 0	5599 13294.42 59480 244012 0 7.96	10970 19587.07 89739 358795 0	0 0	(
2970 8x 4797.198 22227 87999 14461,2	5712 7302.148 34743 133558 0	5599 13294.42 59480 244012 0	10970 19587.07 89739 358795 0	0 0	(
2970 az 4797.198 22227 87999	5712 7302.148 34743	5599 13294.42 59480 244012	10970 19587.07 89739 358795	0	(
2970 az 4797.198 22227 87999	5712 7302.148 34743	5599 13294.42 59480 244012	10970 19587.07 89739 358795	0	(
2970 az 4797.198 22227 87999	5712 7302.148 34743	5599 13294.42 59480	10970 19587.07 89739 358795	0	(
2970 az 4797.198	5712 7302.148	5599 13294.42	10970 19587.07	0	
2970 az 4797.198	5712 7302.148	5599 13294.42	10970 19587.07	0	
2970	5712	5599	10970	Ō	
CEAN A	0001 -				
8V. 4604.04	6917.05	12917.24		0	•
3278.07			13442,27	D	
65712	98615	184532	269056	0	
65772		104500	250051		· · · · · · · · · · · · · · · · · · ·
361.75	321,75	321.75	321.75	U	1
rings 5733		11466	22932	·0	
17901	25061.4	56230.2	78722,28	0	
,,,,,,,,,,				_	
30396.6			121040.0	ŏ	
210 6	310 6	310 €	210 6	,	
2	4	. 2	4	4	
DC/ST	DC/BT	4cct/ST	4cct/8T	icct/ST	DC/8
2		4	4	4	
230		230	230	500/230	50
			#		
11.7				0	
or i				i	
ir ô		•	•		
		NFHRAN 1			
*****	***		· ·		
	2003 junction 0 ix 0 1 11.7 230 22 DC/8T 210.6 00 01 317901	Junction pt SAI  1 0 0 1x 0 0 1x 0 0 11.7  230 230 2 2 2 DC/BT DC/BT  2 4  210.6 210.6 0 1170 1170 30396.6 42555.24  rings 5733 11466 6212.7 12425.4 1696.5 1696.5 351 356.8	2003  Junction pt SANFERAN 1  1 0 0  1 0 0  1 1 0 0  1 11.7  230 230 230 230  2 2 2 4  DC/ST DC/ST 4cct/ST  2 4 2  210.6 210.6 210.6 210.6  0 0 0 0  0 1170 1170 1170 1170  30396.6 42555.24 86457.15  17901 25061.4 36230.2  rings 5733 11466 11466 5212.7 12425.4 12425.4  1696.5 1698.5 13343.5  251 351 351 351  1778.4 3556.8 3556.8	2003  junction pt SANPHRAN 1  1 0 0 0  1 1 0 0 0  1 1 1  11.7  230 230 230 230 230  2 2 4 4 4  DC/BT DC/BT 4cct/ST 4cct/ST  2 4 2 4  210.6 210.6 210.6 210.6 210.6  prix 1170 1170 1170 1170  30396.6 42555.24 86457.15 121040.0  117901 25061.4 56230.2 78722.28  117901 25061.4 56230.2 78722.28  117901 25061.4 36230.2 78722.88  117901 25061.4 35230.2 78722.88  117901 25061.4 35230.2 78722.88  117901 25061.4 35230.2 78722.88  117901 25061.4 356230.2 78722.88  117901 25061.4 356230.2 78722.88  117901 25061.4 356230.2 78722.88  117901 25061.4 356230.2 78722.88  117901 25061.5 12343.5 13343.5 1378.4 3555.8 3511 351 351 351 351 351 351 351 351 35	2003 junction pt SANPHRAN 1  0

CONSTRUCTION COS		LINE	use	= 25	Deht	
vanananenenenen Yaar	2004					
Section		MO1 ~ 800	тя тнонву	M.T.	_	
New line ?	ō	_	_	_	Ō	_
Existing 7	1	0	0	0	0	0
Goil -fair	0				0	
-poor	1				1	
Length (km)	8.1				0	
			·			
-(kV)	230	230	230	230	500/230	500
-(cct)		2	. 4	4	4	. 2
-Tomer	DC/ST	DC/ST	4cct/ST	4cot/BT	4cct/ST	DC/8T
-(MCH)						
-(Number)	2	. 4	2	4	4	4
Route Survey	145.8	145.6	145.8	145.8	0	0
Right of Way	0	. 0	0	0	0	0
Proliminary Work	810	810	810	810	0	0
Tower Footing Equipment		29461.32	59854.95	83796.93	0	0
-Tower Body	12393	17350.2	38928.6	54500.04	0	0
-Insulator String		7938		15876	ŏ	ŏ
-Conductor	4301,1		8602.2	17204.4	ŏ	ŏ
	1174.5	1174.5		8545.5	ŏ	ő
-OGW						
	243	243	243	243	ō	0
-Accessories	1231.2	2462.4	2462.4	4924.8	0	0
-Ground Wire -Others	222.75	222.75	222.75	222.75	ō	0
SUB-TOTAL	45534	68410	127753	196269	Ô	ō
Miscellaneous	2269.41	3413.21	6380.36	9306.16	0	0
Enginering & SV.	3187.38	4788.7		13038.83	ŏ	
						0
Contingency	4553.4	6841	12775.3	18626.9	ō	0
Import Duty	2056	3934	3876	7594	Ō	0
Value Added Tex	3321.094	5055.274	9203.824	13560.20	0	0
OUB-TOTAL	15387	24052	41178	62126	ō	σ
COTAL	60921	92462	168931	248395	0	0
Removal	10011.6	0	0	O	Ó	0
DIRECT COST	2.22	3,14	5.51	7,65	<del></del>	0
INDIRECT COST	0.62	0.95	1.65	2.49	ŏ	ő
PORRIGH CURR.	0.24	0.45	0.44	0.87	0	0
LOCAL CURR.	2.6	3.65	6.72	9.47	ñ	0
		•		3.47	v	•
POTAL (mill.US\$)	2,84	4.1	7.16	10.34	0	0

25 Babt

Number of Circuit (cct)	2			<del> </del>
Cable Type	1200mm2,X1	PE	1200mm2,01	
Section Length (km)	11		•	
Conduit or Duct	CONDUIT/ SHEATH	DUCT	CONDUIT/ SHEATH	DUCT
Number of Joint Box (pcs) Number of Men Hole (pcs)	186 31	168 28	186 31	168 28
Line Route Survey	16	18	18	18
Preliminary Work	100	100	100	100
Cable	462	462	330	330
Joint Box Cable Head	260.4 2.4	235.2 2.4	93 2.4	84 2.4
Oil Feeding System	1.7	7.7	80	80
Conduit Pipe	79.2	46.2	79.2	46,2
Cable Pulling	158.4	118.8	158.4	118.8
Conduit with Concrete Sheath or Duck Treatment of Load Surface	: 560 264	374 264	650 264	374 264
Man Role	37.2	33.6	37.2	33.6
Cable Head	2.9	2.9	2.9	2.9
SUB-TOTAL	2044.5	1657.1	1825,1	1453,9
Miscellaneous Expense	101.3	82	90.4	71.8
Engineering & Supervision	143.1	116	127.8	101.8
Contingency Import Duty	204.5 281.4	165.7 261	182.5 204.6	145.4 189.9
Value Added Tex	161.6	133	140.8	113.8
SUB-TOTAL	891.9	757.7	745.1	622.7
TOTAL (mill.Baht)	2936.4	2414.8	2571.2	2076.6
DIRECT COST (mill. USS)	81.78	56.28	73	58.16
INDIRECT COST (#111.US\$)	35.58	30.31	29.84	24.91
FOREIGN CURR. (#111.US\$)	32.16	29.83		21.7
LOCAL CURR. (mill.U86)	85.3	66.76	79.46	61.37
TOTAL (#ill.US\$)	117.46	96.59	102.84	83.07

Year Section New or Expansion

Number of Circuit (cct) 1200mm2,XLPB Cable Type Section Length 1200sm2,0F (**x**a) CONDUIT/ BREATH 93 31 DUCT CONDUIT/ SHEATH 84 93 28 31 Conduit or Duct Number of Joint Box (pcm) Number of Man Hole (pcm) 84 28 Line Route Survey Preliminary Work 0 0 0 0 Cable Joint Box Cable Read Oil Feeding System Conduit Pipe 231 130.2 1.2 0 231 117.6 1.2 0 165 46.5 1.2 80 0 165 42 1,2 60 0 Cable Fulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Role Cable Read 59.4 0 0 0 1.5 79.2 0 0 0 1.5 79.2 0 0 0 1.5 59.4 0 0 0 1.5 . SUB-TOTAL 443.1 410.7 373.4 349.1 Miscelleneous Expense Engineering & Supervision Contingency Import Duty Value Added Tax 22.2 31 44.3 126.8 39.9 20.5 28.7 41.1 122.4 37.3 * SUB-TOTAL 264.2 250 217.8 209.2 * TOTAL 707.3 660.7 591.2 558.3 (mill.Beht) * DIRECT COST (#111.US\$)
* INDIRECT COST (#111.US\$) 17.72 10.57 * FORRIGN CURR. (#111.US\$) * LOCAL CURR. (#111.US\$) (mill.VS\$) 28.29 23.65 22.33

CONSTRUCTION COST-			use =	25	Beht	
*****		***				
Year	1997					
		CHYRAC M	atthana(o	UTGIDE-A	IR PORT AR	EA)
New line ? ,	0				Ó	
Existing ?	1	0	0	0	0	0
Boil -fair	0				0	
-poor	1				i	
Length (km)	5				5	
	•				ŭ	
-(kV)	230	230	230	230	500/230	500
-(cct)	. 2	2	4	4	4	2
-Tower	DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/ST
-(8CH)		- • • • • •		,	,	,
-(Number)	2	4	2	4	4	4
(massur)						
Route Survey	90	90	90	90	90	90
Right of Way	0	0	0	0	0	0
Preliminary Work	500	500	500	500	775	775
Tower Footing	12990	18186	36947.5	51726.5	69922.58	22260
Equipment			/-			
-Tower Body	7650	10710	24030	33642	73660.58	23450
-Insulator Strings	2450	4900	4900	9800	9800	5880
-Conductor	2655	5310	5310	10620	10620	5310
	725	725	5275	5275	5275	2350
-OGW	150	150	150	150	150	150
-Accessories	760.		1520	3040	3040	2280
-Ground Wire -Others	137.5	137.5	137.5	137.5	195	195
SUB-TOTAL	28108	42229	78660	114981	173528	62740
Miscellaneous	1400.9	2106.95	3938.5	5744.55	8671.9	3132.5
Enginering & SV.	1967.56	2956.03	5520.2		12146.96	4391.8
Contingency	2810.8	4222.9	7886	11498.1	17352.8	
						6274
Import Duty	1269	2441	2393	4688	4756	3118
Value Added Tax	2050.09	3120.6	5681.41	53/0.53	12473.58	4603.76
SUB-TOTAL	9498	14847	25419	38350	55401	21520
TOTAL	37606	57076	104279	153331	228929	84260
Removal	6180	Ö	0	0	0	Ó
	****	. •	·		ŭ	•
DIRECT COST	1.37	1.94	3.4	4.85	7.19	2.76
INDIRECT COST	0.38	0.59	1.02	1.53	2.22	0.86
FOREIGN CURR.	0.15	0.28	0.27	0.54	0.54	0.36
LOCAL CURR.	1.6	2.25	4.15	5.84	8.87	3.26
LOUIS CONN.	4.0	4.23	7.13	3.07	0.07	3.20
TOTAL (mill.US\$)	1.75	2.53	4.42	6.38	9.41	3.62

CONSTRUCT	ION COST-	OVERHEAD	LINE	VS\$ =	25	Baht	
******	*****	******	***				
Year		1997					
Section			CHARNG W	atthana(a	IR FORT		
New line	3	0	_	_	_	0	_
Existing	?	. 1	0	0	0	ō	0-
Boil	-fair	. 0				0	
	-boot	1				1	
Longth (k	m)	4				4	
							#
~(k¥)		230	230	230	230	500/230	500
~(cct)		2	2	4	4	4	2
-Tower		DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/8T	DC/ST
-(MCM)		,	,			,	,
- (Number)		2	4	2	4	4	4
, ,							· .
Route Sur		72	72	72	72	72	72
Right of		. 0	. 0	. 0	0	0	0
Prelimina		400	400	400	400	620	620
Tower Foo		10392	14548.8	29558	41381.2	55938.07	17808
Equipment							
-Tower Bo		6120	6568	19224		58928.47	18760
-Insulato			3920	3920	7840	7840	4704
-Conducto	ľ	2124	4248	4248	8496	8496	4248
		580	580	4220	4220	4220	: 1080
-OGM		120	120	120	120	120	120
-Accessor		608	1216	1216	2432	2432	1824
-Ground #	ire	110	110	110	110	156	156
-Others							
SUB-TOTAL		22486	33783	63088	91985	138823	50192
Biscellan	eous	1120.7	1685.55	3150.8	4595.65	6937.55	2506
Enginerin		1574.02	2364.81	4416.16	6438.95	9717.61	3513.44
Contingen		2248.5	3378.3	6308.8	9198.5	13882.3	5019.2
Import Du		1015	1953	1914	3750	3805	2494
Value Add	asT De	1640.03	2496.48	4545.1	6696.41	9978.92	36B2.98
SUB-TOTAL		7598	11876	20335	30680	44321	17216
TOTAL.	<del></del>	30084	45661	83423	122665	183144	67408
Removal		4944	0	0.44.0	112003	103170	0.400
			•		•	·	•
DIRECT CO	ŜT	1.1	1.55	2,72	3.88	5.75	2.21
INDIRECT		ô.3	0.48	0.81	1,23	1.77	0.69
FOREIGN C	agn	0.12	0.22	0.22	0.43	0.43	0.29
LOCAL CUR		1.28	1.01	3.31	4.68	7.09	2.61
DOGSE COR	n,	1.20	1.01	3.31	4.00	7.09	2.01
TOTAL (mi.	11.US\$)	1.4	2.03	3.53	5.11	7.52	2.9
					*****		

25 Baht

Number of Circuit (cct)	. 4	(Actually	double co	n.x2cct
Cable Type	1200mm2, X	I,PR	1200mm2, OF	,
Section Length (km)	. 4			
Conduit or Duct	CONDUIT/	DUCT	CONDUIT/	DUCT
	SHEATH		SHEATH	
Number of Joint Box (pcs)	132	120	132	120
Number of Man Role (pcs)	11	10	11	10
Line Route Survey	18	18	10	18
Preliminary Work	100	100	100	100
Cable	336	336	240	240
Joint Box	184.8	169	56	60
Cable Read	4.0	4.8	4.8	4.8
Oil Feeding System	0	0	80	80
Conduit Pipe	57.6	33.6	57.6	33.6
Cable Pulling	115.2	86.4	115.2	86.4
Conduit with Concrete Sheath or Duct	240	136	240	136
Treatment of Load Surface	96	96	96	96
Man Hole	13.2	12	13.2	12
Cable Head	5.9	5.9	5.9	5.9
SUB-TOTAL	1171.5	996.7	1036.7	872.7
Miscellaneous Expense	57.7	48.9	50.9	42.7
Engineering & Supervision	82	69.8	72.6	61.1
Contingency	117.2	99.7		87.3
Import Duty	204.1	189.8		146.4
Value Added Tox	95	81.8	82.3	70.1
SUB-TOTAL	556	490	466.4	407.6
TOTAL (mill.Baht)	1727.5	1486.7	1503.1	1280.3
			41.47	34.91
DIRECT COST (mill.US\$)	46.86	39.67		
INDIRECT COST (#111.US\$)	22.24	19.6	18.66	16.3
PORRIGN CURR. (mill.DS\$)	23.33	21.7		16.74
	45.77	37.77	42.19	34.47
LOCAL CURR. (Mill.USS)	43.11	3/.//	76.17	3110

	construction cost	L-Oarghead	LINE	us\$	= 25	Ðaht	
	**********	*****	****				
	Year	1995	******	_			
	Section		- WANG NO	[		_	
	New line ?	1	_			o.	
	Bristing 7	0	0	0	0	Ō	0
	Soil -fair	0				0	
	-poor	1				1	
	Length (km)	50				0	
				#			
		***********	220			-15.1545	
	-(kV)	230	230	230	230	500/230	500
	-(cet)	2 50 100	2	4	4	4	7
	-Tower	DC/BT	DC/ST	4cct/ST	4cct/st	4cct/ST	DC/ST
	~(HCH)	~					
	-(Number)	2	4	2	4	4	4
	Route Survey	900	900	900	900	0	0
	Right of Way		181406.2			0	0
	Preliminary Work	5000	5000		5000	0	0
	Towar Footing	12990,0	181860	369475	517265	0	0
	Equipment.						_
	-Tower Body	76500	107100	240300	336420	ō	0
	-Insulator String		49000	49000	98000	Ō	0
•	-Conductor	26550	53100	53100	106200	Ŏ.	0
	<u> </u>	7250	7250	52750	52750	o	0
	-0GH	1500	1500	1500	1500	0	0
	-Accessories	7600	15200	15200	30400	0	0
	-Ground Wire - Others	1375	1375	1375	1375	0	0
	* SUB-TOTAL	462481	603691	970006	1331216	0	0
	•••		21252 22	*****			
	Miscallaneous		21069.23			0	0
,	Enginering & SV.		42258.37			0	0
	Contingency	46248.1	60369.1		133121.6	0	0
	Import Duty Value Added Tex	12693	24410	23928	46880	Ŏ.	0
	Value Added Tax	20500.74	31205.63	56813.94	83705.28	0	0
	* SUB-TOTAL	125824	179312	285028	414337	0	Ö
	* TOTAL	588305	783003	1255034	1745553	0	0
	Removal	0	0	0	0	Ō	ŏ
•	benden seen			····			
	* DIRECT COST	10.5		38.8		0	0
	• INDIRECT COST	5.03	7.17	11.4	16.57	0	0
	· FORBIGN CURR.	1.45	2.79	2.73	5.36	0	0
	<ul> <li>LOCAL CURR.</li> </ul>	22.08	28.53	47.47	64.46	Ó	0

CONSTRUCTION C	MON. MARKING AN	T. TWD	uss :	. 21	Baht	
BARRAGE SALARA	AAAAAAAAAA	171715	000	2.3	Barte	
Year	2004					
Section		AF /GENDE	DEW 11 - 0	SOUTH THON	TOTO 1	
New line ?	Janaton 1	Pt. (Ganen	100H 1) - 0	JOUTH THUM	0	
Existing ?	1	0	0	0	ŏ	
Soil -fai		v	v	v	ŏ	•
					ĭ	
-poo	8.1				ň	
Length (km)	9.1				U	
-(hV)	230	230	230	230	500/230	500
-(cct)	2	2	4	4	4	2
-Tower	DC/ST	DC/ST	4cct/ST	4cct/8T	4cct/8T	DC/87
~ (MCM)	•	•			-	
-(Number)	2	4	2	4	4	4
Route Survey	145.0	145.8	145.8	145.8	·····	
Right of Way	0		143.0	243.0	ŏ	ò
Preliminary Wo		810	810	810	ŏ	č
Tower Footing		29461.32			ŏ	ď
Equipment	21013.0	23401.32	5.004.33	03/30.93	v	·
-Towar Body	12393	17350.2	38928.6	54500.04	0.	0
-Insulator Stx	ings 3969	7938	7938	15876	Ó	ō
-Conductor	4301.1	8602.2	8602.2	17204.4	ō	Ò
<b>.</b> .	1174.5	1174.5	8545.5	8545.5	Ō	č
-OCW	243		243	243	ō	Ō
-Accessories	1231.2			4924.B	ŏ	č
-Ground Wire	222.75		222.75	222.75	ŏ	č
-Others					•	`
SUB-TOTAL	45334	68410	127753	186269	0	C
Miscellaneous	2269.41	3413.21	6380.36	9306.16	0	
Enginering & 8				13038.83	ŏ	à
Contingency	4553.4	6841	12775.3	18626.9	ŏ	ò
Import Duty	2056	3954	3876	7594	ŏ	č
Value Added To					ŏ	
ARIUM MUGES 19	× 3321.034	5055.274	9203.624	13360.20	U	C
SUB-TOTAL	15387	24052	41178	62126	0	
TOTAL	60921	92462	168931	248395	<u>o</u>	
Removal	10011.6	0	0	0	0	C
DIRECT COST	2.22	3.14	5.51	7.85	0	
INDIRECT COST	0.62	0.95	1.65	2.49	0	Ó
PORRIGH CURR.	0.24	0.45	0.44	0.87	0	
LOCAL CURR.	2.6	3.65	6.72	9.47	ŏ	õ
TOTAL (mill.US	\$) 2.84	4.1	7.16		o	a

25 Baht

Year Section New or Expansion Number of Circuit (cct) 1200mm2, XLPB Cable Type Section Length 1200mm2,0P (km) CONDUIT/ SREATE 261 29 DUCT CONDUIT/ SHEATH 225 261 25 29 Conduit or Duct DUCT Number of Joint Box (pcs) Number of Man Hole (pcs) 225 25 Line Route Survey Preliminary Work 18 100 18 100 18 18 100 Cable Joint Box Cable Head Oil Feeding System Conduit Pipe 450 130.5 3.6 80 108 450 112.5 3.6 80 63 630 365.4 3.6 0 108 630 315 3.6 0 63 216 600 240 34.8 4.4 Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Role Cable Read 216 500 240 34.8 4.4 162 340 240 30 4.4 . SUB-TOTAL 2320.2 1906 1985.3 1603.5 Miscellaneous Expense Engineering & Supervision Contingency Import Duty Value Added Tex 115.1 162.4 232 387.4 188.3 94.4 133.4 190.6 354.1 156.9 98.4 139 198.5 270.2 156.6 79.3 112.2 160.4 248.2 128.4 728.5 1085.2 929.4 862.7 . SUB-TOTAL 2332 3405.4 2835.4 2848 (mill.Baht) * DIRECT COST (#111.US\$) * INDIRECT COST (#111.US\$) 92.81 43.41 79.41 34.51 76.24 37.18 * POREIGN CURR. (#111.US\$) * LOCAL CURR. (#111.US\$) 44.28 91.94 40.46 72.96 93.28 136.22 113.42 113.92 + TOTAL (#111.VS\$)

25 Baht EXCHANGE RACE: 1 VOV -2010 SOUTH THOMBURI - THANONTOK

New Of Pyheniston	٠			
Number of Circuit (cct)	1			
Cable Type Section Length (km)	1200mm2, XLI 10	PB	1200mm2,OF	
Conduit or Duct	CONDUIT/ SHEATH	DUCT	CONDUIT/ SHEATH	DUCT
Number of Joint Box (pcs) Number of Man Role (pcs)	87 29	75 25	87 29	75 25
Line Route Survey Preliminary Work	0	0	0	0
Cable Joint Box	210 121.8	210 105	150 43.5	150 37.5
Cable Resd Oil Feeding System Conduit Fire	. 1.2 0	1.2	1,2 80 0	1.2 80 0
Cable Pulling	72	54	72	54 0
Conduit with Concrete Sheath or Duct Treatment of Lond Surface Man Role	0	0	0	0
Cable Head	1.5	1,5	1.5 348.2	1.5
Miscellaneous Expense	20.3	18.6	17.4 24.4	16.2 22.7
Engineering & Supervision Contingency Isoort Duty	28.5 40.7 116.5	37.2 110.7	34.8 96.1	32.4 94
Velue Added Tax SUB-TOTAL	36.6 242.6	33.8 226.3	31,1	29.3
TOTAL (mill.Baht)	649.1	598	552	518.8
DIRECT COST (mill.US#)	16.26	14.87		12.97
INDIRECT COST (mill.US\$)  FOREIGN CURR. (mill.US\$)	9.7 13.32	9.05	8.15 10.99	7.7B
LOCAL CURR. (mill.US\$)	12.64	11.27	11.09	10
TOTAL (#111.099)	25.96	23.92	22.08	20.75

Year Section	F	1994 ATCHADAP:	ISEK - LA	T PRRAO			
Now line 7		0	•			0	
Existing :	<b>?</b>	- 0	0	0	0	0	0
Soil -	fair	0				0	
	poor	. 1				1	
Longth (km)	)	0.5				. 0	
-(kV)	············	230	230	230	230	500/230	500
-(cct)		Da (ch	2	4 (0.00	4 100	4	2
-Tower -(MCM)		DC/ST	DC/6T	4cct/ST	4cct/ST	4cct/ST	DC/8T
-(Number)		2	4	2	4	4	4
Route Surve		9	9	9	9	Ó	0
Right of Wa		-0	. 0		0	0	0
Preliminary		1200	1010 6	50 2604 75	50 5172 68	Q	0
Tower Foots Equipment	-	1299	1818.6	3694.75	5172.65	0	0
-fower Body		765	1071	2403	3364.2	0	0
-Insulator	actings	245 265.5	490 531	490	980	0	0
+Conductor		72.5	72.5	531 527.5	1062 527.5	0	9
-CGW		15	15	15	15	ŏ	0
~Accessorie	18	26	152	152	304	ŏ	ŏ
-Ground Wis		13.75	13.75	13.75	13.75	ŏ	ŏ
SUB-TOTAL		2811	4223	7886	11498	0	0
		****	2043	1,000		v	. •
Miscallane		140.1	210.7	393.85	574.45	0	0
Reginering		195.77	295.61	552.02	804.86	0	0
Contingency		281.1	422.3	788.6	1149.8	0	0
Import Duty		127	244	239	469	0	0
Value Added	1 19K	205.03	312.06	568,12	837.06	0	0
SUB-TOTAL		950	1485	2542	3835	0	0
TOTAL		3761	5708	1042B	15333	0	0
Removal	:	0	0	0	0	ō	0
DIRECT COST		0.11	0.17	0.32	0.46	0	0
INDIRECT CO		0.04	0.06	0.1	0.15	ŏ	· ŏ
POREIGN COR	R.	0.01	0.03	0.03	0.05	0	Ð
LOCAL CURR.		0.14	0.2	0.39	0.56	ŏ	ŏ
TOTAL (#1)		0.15	0.23	0.42	0.61	0	0

A STATE OF

A

CONSTRUCT	ION COST-	OVERHRAD	LINE	<b>US\$</b> ≈	25	Baht	
****	******	*****	***				
Year		1994					
Section		ratchadap	185K - BA	NG KAPI			
New line	?	0				0	
Szisting	?	0	0	0	0	0	0
6011	-fair	0				0	
	-poor	1				1	
Length (k	<b>m</b> )	0.5				0	
		#					
-(kV)		230	230	230	230	500/230	500
-(cct)		2	. 2	4	4	4	2
-Tower		DC/ST	DC/ST	4cct/ST	4cct/ST	icct/ST	DC/Sf
~(NCH)							
-(Number)		2	4	2	. 4	4	4
Route Sur		9	9	9	9	0	0
Right of		.0	.0	0	_0	0	ō
Prelimina		50	50	50	50	0	0
Tower Poo Equipment	ting	1299	1818.6	3694.75	5172.65	0	0
-Yower Box	¢γ	765	1071	2403	3364.2	0	C
-Insulato	r Strings	245	490	490	980	0	Ò
-Conducto	£	265.5	531	531	1062	Ó	0
_		72.5	72.5	527.5	527.5	ō	č
-OGW		15	15	15	15	ō	õ
-Accessor	ias	76	152	152	304	Ŏ	č
-Ground W	ira	12.75	13,75	13.75	13.75	. ŏ	ŏ
-Others						•	
JATOT-RUB		2811	4223	7886	11498	, 0	0
Miscellan	60us	140.1	210.7	393.85	574.45	0	0
Enginerin	g & SV.	196.77	295.61	552.02	804.86	Ó	0
Contingen	O.A.	281,1	422.3	798.6	1149.8	0	Ô
Import Du		127	244	239	469	ō	ō
Value Add		205.03	312.06	568.12	937.06	Ŏ	ā
JATOT - BUE		950	1485	2542	3835	0	Ō
TOTAL		3761	5708	10428	15333	ō	
Removel		0	0	0	0	0	0
DIRECT CO	ST	0.11	0.17	0.32	0.46		0
INDIRECT		0.01	0.06	0.1	0.15	ň	Ö
		5.04	3.00	۷۰	3,13	Ū	v
FORBIGN CI	URR.	0.01	0.03	0.03	0.05	0	0
LOCAL CURI		0.14	0.2	0.39	0.56	ŏ	ŏ
TOTAL (#1)	11.03\$)	0.15	0.23	0.42	0.61	0	0

25 Baht

25 Baht

New or Expansion		1		-	
Number of Circuit	(cct)	. 3			
Cable Type	· · · · · · · · · · · · · · · · · · ·	1200am2,X	LPE	1200ma2,0	7
Section Length	(km)	9			
Conduit or Duct		COMDUIT/	DUCT	COMDUIT/	DUCT
		SHEATH		SHEATH	
Mumber of Joint Box	(pcs)	207	180	207	180
Number of Man Hole	(pcs)	23	20	23	- 30
Line Route Survey		18	18	18	18
Preliminary Work		100	100	100	100
Cable		504	504	360	360
Joint Box		289.8	252	103.5	90
Cable Head		3.6	3.5	3.6	3.6
Oil Feeding System		0	0	80	80
Conduit Pipe	•	86.4	50.4	86.4	50.4
Cable Pulling		172.8	129.6	172.6	129.6
Conduit with Concre	te Sheath or Duck	480	272	480	272
Treatment of Load S	urface	192	192	192	192
Han Hole		27.6	24	27.6	24
Cable Head		4.4	4.4	4.4	4,4
SUB-TOTAL	······································	1878.6	1550	1628.3	1324
Miscellaneous Expen		93	76.6	80.5	65.3
Engineering & Super	vision	131.5	108.5	114	92.7
Contingency		187.9	155	162.8	132.4
Import Duty .		309.3	283.5	221.7	204.4
Value Added Tex		151.9	127.1	128.2	105.7
SUS-TOTAL		873.6	750.7	707.2	600.5
TOTAL (mill.	Baht)	2752.2	2300.7	2335.5	1924.5
DIRECT COST (mili	( agu.	75.14	62	65.13	52.96
INDIRECT COST (mili		34.94	30.03	28.29	24.02
FORBIGN CURR, (MILL)	.USA)	35.35	32.4	25.34	23.36
LOCAL CURR. (mill		74.73	59.63	68.08	53.62
TOTAL (mill	. HSQ1	110.08	92.03	93.42	76.98

CONSTRUCTION COST - UNDERGROUND CABLE satisfaces and accompanies and accompani

New or Expansion	0			
Number of Circuit (cct)	2		····	
Cable Type	1200mm2,XL	PB	1200mm2,08	<del>,</del>
Section Length (km)	8			
Conduit or Duct	CONDUIT/	DUCT	COMDUIT/	DUCT
	SHEATH		SHEATH	
Number of Joint Box (pcs)	138	120	138	120
Number of Han Hole (pcs)	23	20	23	20
Line Route Survey	Ö	0	0	0
Preliminary Work	0	0	Ó	Ö
Cable	336	336	240	240
Joint Box	193.2	168	69	60
Cable Read	2.4	2.4	2.4	2.4
Oil Feeding System	Ö	0	80	80
Conduit Pipe	Ō	ō	ő	ő
Cable Pulling	115.2	86.4	115.2	86.4
Conduit with Concrete Sheath or Duct	Ö	Ö	6	Ö
Treatment of Load Surface	ō	ō	ő	ŏ
Man Hole	ŏ	ŏ	ŏ	ŏ
Cable Reed	2,9	2.9	2.9	2.9
SUB-TOTAL	649.7	595.7	509.5	471.7
Mincellansous Expense	32.5	29.8	25.5	23.6
Engineering & Supervision	45.5	41.7	35.7	33
Contingency	65	59.6	51	47.2
Import Duty	186.1	177.2	137	133.8
Value Added Yex	58.5	54.1	45.3	42,4
SUB-TOTAL	387.6	362.4	294.5	280
TOTAL (mill.Baht)	1037.3	950.1	804	751.7
DIRECT COST (mill.US\$)	25.99	23.83	20.38	18.07
INDIRECT COST (#111.US\$)	15.5	14.5	11.78	11.2
FORRIGN CURR, (#111.US\$)	21,25	20.26	15.66	15.3
LOCAL CURR. (mill, US\$)	20.23	18.07	16.5	14.77

ğ

\$

Section	BANG	KAPI	•	KRLONG T	OXY
New or Expansion					

Section BANG KAPI - KRLONG	TORY			
New or Expansion	0			
Number of Circuit (cct)	1			
Cable Type	1200mm2.XL	PE	1200mm2.01	,
Saction Length (km)	8			
Conduit or Duct	COMDUIT/	DUCT	CONDUIT/	DUCT
	REATE		SHKATH	
Number of Joint Box (pce)	69	60	69	60
Number of Kan Hole (pcs)	23	20	23	20
Line Route Survey	0	0	0	0
Preliminary Work	0	0	0	0
Cable	160	168	120	120
Joint Box	96.6	84	34.5	30
Cable Head	1.2	1.2	1.2	1,2
Oll Feeding System	. 0	0	80	60
Conduit Pipe	0	0	0	0
Cable Pulling	57.6	43.2	57.6	43.2
Conduit with Concrete Sheath or Duct		0	0	0
Treatment of Load Burface	0	0	Ō	0
Han Hole	0	0	0	0
Ceble Head	1.5	1.5	1.5	1.5
SUB-TOTAL	324.9	297.9	294.8	275.9
Miscelleneous Expense	16.2	14.9	14.7	13.8
Enginearing & Supervision	22.7	20.9	20.6	19.3
Contingency	32.5	29.8	29.5	27.6
Import Duty	93	98.6	82.5	80.9
Value Added Tex	29.3	27.1	26.4	25
BUB-TOTAL	193.7	181.3	173.7	166.6
TOTAL (mill, Haht)	518.6	479.2	468.5	442.5
DIRECT COST (Mill.US\$)	13	11.92	11.79	11.04
INDIRECT COST (mill.US\$)	7.75	7.25	6.95	5.66
FORSIGN CURR, (mill, USS)	10.63	10.13	9.43	9,25
LOCAL CURR. (mill.USS)	10.12	9.04	9.31	8.45
TOTAL (#111.US\$)	20.75	19.17	18.74	.17.7

3 - 38

CONSTRUCTION COST-(			vs¢	4 25	Baht	
******		***				
Year	2005					
		- ON HUC	R			
New line ?	0				0	
Existing ?	1	0	0	0	. 0	0
Soil -fair	0				Ö	
-poor	1				1	
Length (km)	10				0	
~(kV)	230	230	230	230	500/230	500
-(cct)	2	. 2	4	4	- 4	2
-Tower	DC/8T	DC/ST	4cct/8T	4cot/ST	4cct/87	DC/8T
~(HCH)	-	•				• •
-(Number)	2	4	2	4	4	4
Route Survey	180	180	180	180	0	c
Right of Way	0	Ó	Ó	Ö	Ö	Ċ
Preliminary Work	1000	1000	1000	1000	Ŏ	Ċ
Tower Pooting	25980	36372	73895	103453	ŏ	ò
Equipment					•	•
-Tower Body	15300	21420	48060	67284	0	
-Insulator Strings	4900	9800	9800	19600	ò	Ċ
-Conductor	5310	10620	10520	21240	Ď	Ō
	1450	1450	10550	10550	ō	ò
OCN	300	300	300	300	ŏ	è
-Accessories	1520	3040	3040	6080	ŏ	è
-Ground Wire	275	275	275	275	Ď	č
-Others					•	·
SUB-TOTAL	56215	84457	157720	229962	0	0
					-	
Miscellansous	2801.75	4213.85	7877		0	
Enginering 6 SV.	3935.05	5911.99	11040.4	16097.34	0	0
Contingency	5621.5	8445.7	15772	22996.2	0	0
Import Duty	2539	4862	4786	9376	0	0
Value Added Tax	4100.18	6241.13	11362.82	16741.08	Ó	Č
SUB-YOTAL	18997	29695	50838	76700	0	C
TOTAL	75212	114152	208558	306662	0	c
Removal	12360	0	Ó	0	ŏ	ō
DIRECT COST	2.74	3.87	6.8	9.69	0	0
INDIRECT COST	0.75	1.19	2.03	3.07	ŏ	č
FORSIGN CURR	0.29	0.56	0.55	1.07	0	0
LOCAL CURR.	3.21	4.5	8.28	11.69	0	0
TOTAL (mill. US\$)	3.5	5.06	0.83	12.76	0	0

CONSTRUCTION COST	-OVERHEAD	LINE	US\$	≈ 25	Baht	
*********	******	****				
Year	2010					
Section		I – PATAN	AKAN		_	
New line ? Existing ?	1				0	
	0	0	0	0	0	C
Boil -fair	ı 1					
-poor Langth (km)	. 5				1	
restriction (was)	*				٧	
~(kV)	230	230	230	230	500/230	500
-(cat)	2	2	4	. 4	4	2
-Towar	DC/ST	DC/ST	4cct/8T	4cct/ST	4cct/ST	DC/91
~(HCM)						
(Number)	2	4	; 2	4	4	4
Route Survey	90	90	90	90	0	
Right of Way			18140.62		0	0
Preliminary Work	590	500	500	500	0	C
Fower Footing	12990	16186	36947.5	51726.5	0	0
Bquipment						
-Tower Body	7650	10710	24030	33642	Q.	C
-Insulator String		4900	4900	9800	0	0
-Conductor	2655	5310	5310	10620	0	0
<b>-</b>	725	725	5275	5275	0	0
-OGW	150	150	150	150	0	0
-Accessories	760	1520	1520	3040	. 0	0
-Ground Wire -Others	137.5	137.5	137.5	137.5	. 0	0
SUB-TOTAL	46248	60369	97001	133122	0	Ó
Miscelleneous	1400.868	2105.918	3938.518	5744.558	0	0
Enginering & SV,	3237.36	4225.83	6790.07	9318.54	ó	ō
Contingency	4624.8	6036.9	9700.1	13312.2	Ó	Õ
Import Duty	1269	2441	2393	468B	0	0
Value Added Tex	2050.046	3120.556	5681.436	8370.556	0.	0
SUB-TOTAL	12582	17931	20503	41434	0	0
TOTAL	58830	78300	125504	174556	0	0
Removel	0	D	0	0	0	0
DIRECT COST	1.85	2.41	3.68	5.32	0	
INDIRECT COST	0.5	0.72	1.14	1.66	ŏ	ŏ
FORBIGN CURR.	0.15	0.28	0.27	0.54	. 0	0
LOCAL CURR.	2.2	2.85	4.75	6.44	Ó	Ó
TOTAL (mill.US9)	2.35	3.13	5,02	6.98	. 0	0

Year	2005					
	ON NUCH -	BANG PH	r. t			
New line ?	0				0	
Existing ?	ĭ	0	0	0	ŏ	(
Soil -fair	Õ	•	v	•	ŏ	,
-poor	í				i	
Langth (km)	10.5				ô	
	#				v	
-(kY)	230	230	230	230	500/230	500
~(cot)	2	2	4		4	
-Tower	DC/ST	DC/ST	4cct/9T	4cct/ST	4cct/ST	DC/81
-(HCH)				,	,	20,0.
-(Number)	2	4	2	4	4	4
Route Survey	189	189	189	189		
Right of Way	. 0	. 0	0	0	· ō	à
Preliminary Work	1050	1050	1050	1050	õ	č
Tower Pooting	27279	38190.6	77589.75	108625.6	Ŏ	ò
Equipment					•	•
-Tower Body	16065		50463	70618.2	0	
-Insulator Strings	5145	10290	10290	20580	Ö	Č
-Conductor	5575.5	11151		22302	0	0
	1522.5	1522.5	11077.5	11077.5	0	Ó
-OGW	315	315	315	315	0	Q
-Accessories	1596	3192	3192	6394	Ó	Ċ
-Ground Wire -Others	288.75	288.75	288.75	288.75	0	O
BUB-TOTAL	59026	88680	165608	241460	0	
Miscellaneous	2941.85	4424.55	9110 GE	12063.55	0	c
Enginering & SV.	4131.82		11592.42	16902.2	ŏ	ď
Contingency	5902.6	8868	16560.6	24146	. 6	o o
mport Duty	2656	5126	5025	9845	ŏ	ŏ
Value Added Tax	4305.21		11930.94		ŏ	ä
BUB-TOTAL	19947	31179	53380	80535	0	<u>-</u>
POTAL	78973	119859	218986	321995	Ō	0
Removal	12978	0	0	0	ŏ	ŏ
DIRECT COST	2.88		<del></del>			
INDIRECT COST	0.8	4.07	7.14	10.18	0	0
		1.25	2,14	3.22	0	0
FOREIGN CURR.	0.3	0.59	0.57	1.13	0	0
OCAL CURR.	3.38	4.73	8.71	12.27	Ö	ŏ
	3.68	5.32	9.28	13.4	0	0

Saction Length (km)	1 4 200ma2, X 10 0NDUIT/ 8NRATH 348 29 18 100 847.2 4.8 0 144 288 600 240 34.8		1200mm2,01 CONDUIT/ SHRATH 348 29 18 100 600 174 4.8 80 144 288 600 240 34.8	300 2° 10 100 600 156 4
Cable Type Section Length (km)  Conduit or Duct (Conduit or Man Bole (pce))  Line Route Survey Preliminary Work  Cable Fulling (Cable Head Oil Peeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Head Cable Head	200mm2, X 10 0NDUIT/ SHRATH 348 29 18 100 487.2 4.8 0 0 144 288 600 240 34.8	DUCT 300 25 18 100 840 420 4.8 0 84 216 340 240	CONDUIT/ SHEATH 348 29 18 100 600 174 4.8 80 144 288 600 240	300 2° 10 100 600 156 4
Section Length (km)  Conduit or Duct (Conduit or Manager of Man Bole (pcs)  Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oil Feeding System Conduit Pipe Conduit Pipe Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Read	10 ONDUIT/ SHRATH 349 29 18 100 487.2 4.8 0 0 144 288 600 240 34.8	DUCT 300 25 18 100 840 420 4.8 0 84 216 340 240	CONDUIT/ SHEATH 348 29 18 100 600 174 4.8 80 144 288 600 240	300 2° 10 100 600 156 4
Section Length (km)  Conduit or Duct (Conduit or Manager of Man Bole (pcs)  Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oil Feeding System Conduit Pipe Conduit Pipe Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Read	10 ONDUIT/ SHRATH 349 29 18 100 487.2 4.8 0 0 144 288 600 240 34.8	DUCT 300 25 18 100 840 420 4.8 0 84 216 340 240	CONDUIT/ SHEATH 348 29 18 100 600 174 4.8 80 144 288 600 240	300 2° 10 100 600 156 4
Number of Joint Box (pcs) Number of Man Bole (pcs) Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oil Feeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Trestment of Load Surface Man Hole Cable Read	SHRATH 348 29 18 100 840 487.2 4.8 0 144 288 600 240 34.8	300 25 18 100 840 420 4.8 0 84 216 340 240	SHRATH 348 29 18 100 600 174 4.8 80 144 288 600 240	300 2: 100 600 150 4.8 80 210 340 240
Number of Man Bole (pce)  Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oll Feeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Read	348 29 18 100 840 487.2 4.8 0 144 288 600 240 34.8	25 18 100 840 420 4.8 0 84 216 340 240	348 29 18 100 600 174 4.8 80 144 288 600 240	2: 100 600 150 4.8 86 84 216 34 240
Number of Man Bole (pce)  Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oll Feeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Read	18 100 840 487.2 4.8 0 144 288 600 240 34.8	25 18 100 840 420 4.8 0 84 216 340 240	18 100 600 174 4.8 80 144 288 500	21 10 60 15 4.; 8, 8, 8, 21; 34; 24;
Line Route Survey Preliminary Work  Cable Joint Box Cable Head Oil Feeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Kan Hole Cable Head	18 100 849 487.2 4.8 0 144 288 600 240 34.8	18 100 840 420 4.8 0 84 215 340 240	18 100 600 174 4.8 80 144 288 600 240	10 60 15; 4.; 8; 8; 8; 21; 34; 24;
Preliminary Work  Cable Joint Box Cable Head Oll Feeding System Conduit Pipe  Cable Pulling Conduit with Concrete Sheath or Duct Trestment of Load Surface Man Hole Cable Read	100 840 487.2 4.8 0 144 288 600 240 34.8	100 840 420 4.8 0 84 216 340 240	100 600 174 4.8 80 144 288 600 240	100 600 150 4.1 86 8: 210 34: 240
Cable Joint Box Cable Head Oil Feeding System Conduit Pipe Cable Pulling Condoit with Concrete Sheath or Duct Treatment of Load Burface Man Hole Cable Read	240 487.2 4.8 0 144 288 600 240 34.8	840 420 4.8 0 84 216 340 240	600 174 4.8 80 144 288 600 240	600 155 4.1 86 87 87 87 87 87 87 87 87 87 87 87 87 87
Joint Box Cable Head Oll Feeding System Conduit Pipe Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Burface Man Hole Cable Read	487.2 4.8 0 144 288 600 240 34.8	420 4.8 0 84 215 340 240	174 4.8 80 144 288 600 240	15: 4.1 8: 8: 21: 34: 24:
Cable Head Oll Feeding System Conduit Pipe Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Men Hole Cable Read	4.8 0 144 288 600 240 34.8	4.8 0 84 216 340 240	4.6 80 144 288 600 240	4. 8 8 21: 34 24:
Oil Feeding System Conduit Fipe Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Surface Man Hole Cable Read	288 600 240 34.8	216 340 240	80 144 288 600 240	8 8 21: 34 24:
Conduit Pipe Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Burface Man Hole Cable Read	288 600 240 34.8	216 340 240	144 288 600 240	8 21: 34 24:
Cable Pulling Conduit with Concrete Sheath or Duct Treatment of Load Burface Man Hole Cable Read	288 600 240 34.8	216 340 240	288 600 240	21: 34 24
Condoit with Concrete Sheath or Duct Treatment of Load Burface Man Bolle Cable Read	600 240 34.8	340 240	600 240	34 24
Treatment of Load Burface Man Hole Cable Read	240 34.8	240	240	24
Man Hole Cable Read	34.8			
Cabls Read		~ ~	24 6	
		30	34.6	. 3
DITO - CORAL	5.9	5.9	5,9	5.
BOB-101Kb	2762.7	2298.7	2289.5	1068.
Miscellaneous Expense	137.2	114	113.6	92.
Engineering & Supervision	193.4	160.9	160.3	130.
Contingency	276.3	229.9	229	186.
Import Duty	516.6	472.1	. 351	321.
Value Added Tex	228.3	192.7	183.6	152.
SUB-TOTAL	1351.8	1169.6	1037.5	893.
TOTAL (mill.Baht)	4114.5	3468.3	3327	2752.
DIRECT COST (mill.US\$)	110.51	91.95	91.58	74.7
INDIRECT COST (mill.US\$)	54.07	46.78	41.5	35.3
FOREIGN CURR. (#111.US\$)	59.04	53.95	40.11	36.7
LOCAL CURR. (m111,058)	105.54	64.78	92,97	73.3
TOTAL (milt.USS)	164.58	138.73	133.08	110.1

CONSTRUCT	ION COST-	OVERHEAD	LINE	USB	¤ 25	Baht	
*****	******	*****	****	-			
Year		2007					
Section		ON NUCH -	<¢>				
New line	?	0				0	
Bristing	?	i	0	0	0	0	0
Soil	-fair	0	-	-	_	Ō.	•
	-poor	ī				i	
Length (k	я)	12				Ö	
• `	•					•	
-(kV)		230	230	230	230	500/230	500
-(cct)		2	. 2	4	4	4	2
-Tower		DC/ST	DC/8T	4cct/8T	4cct/ST	4cct/87	DC/ST
-(HCN)							
(Number)		2	4	2	4	4	4
Route Bur		216	216		216	0	0
Right of		0	0	0	0	0	0
Prelimina		1200	1200	1200	1200	Ō	0
Tower Poo Equipment	_	31176	43646.4	88674	124143.6	σ	0
-Yower Bo	dy	18360	25704	57672	80740.8	0	Q
-Insulato	r Stringe	5880	11760	11760	23520	ō	ō
-Conducto	r	6372	12744	12744	25488	Ò	Ö
<b>←</b>		1740	1740	12660	12650	Ō	ŏ
-bcw		360	360	360	360	Ď	ŏ
~Accessor	ias	1824	3648	3648	7296	ŏ	ŏ
-Ground W		330	330	330	330	ŏ	ŏ
-Others					555		•
SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·	67458	101348	189264	275954	0	0
Hiscellad	eoue .	3362.1	5056.6	9452.4	13786.9	0	0
Roginerio	o E SV.	4722.06		13248.48		ŏ	ŏ
Contingen		6745.8	10134.8	18926.4	27595.4	Ö	ŏ
Import Du		3046	5656	5743	11251	õ	ŏ
Value Add		4920.16		13635.37		Ŏ	ŏ
SUB-TOTAL		22796	35633	61006	92039	0	0
TOTAL	·	90254	136981	250270	367993	0	0
Removal		14932					
Kenicoati		14032	. 0	0	0	0	0
DIRECT CO	БŤ	3.29	4.64	8,16	11.63	0	ó
INDIRECT (	COST	0.91	1.43	2.44		ŏ	ŏ
		,				-	•
PORBIGN. CO	URR.	0.35	0.67	0.66	1.29	. 0	0
LOCAL CURI	R,	3.85	5.4	9.94	14.02	ŏ	ō
TOTAL (at	(1.US\$)	4.2	6.07	10.6	15.31	0	0

CONSTRUCTION COST	-OVERHEAD	LINE	us\$	· 25	Baht	
**************	****	****				
Section	2002 LAT PERA					
New line ?	0.				0	
Existing ?	ĭ	Ó	0	0	ŏ	0
Soil -fair	ō		•	U	ŏ	V
-poor	i				· i	
Length (km)	2.7				0	
		#				
-(kV)	230	230	230	230	500/230	500
~(cct)	2,30			4.30	300/230	2
-Tower	DC/ST	DC/8T	4cct/8T	4cct/ST	4cct/ST	DC/ST
~(MCH)		-	•	,	/0.	,
-(Number)	2	4	2	4	4	4
Route Survey	48.5	48.6	48.6	48.6	0	
Right of Way	10.0	0		70.0	ő	0.
Preliminary Work	270	270		270	ŏ	ŏ
Tower Footing	7014.6		19951.65	27932.31	ŏ	ŏ
Equipment						
-Tower Body	4131	5783.4		18166.68	Q	ō
-Insulator String	1323 1433.7			5292	0	Ŷ
-consuctor	391.5	2867.4 391.5		5734.8	0	Ò
-OGW	391.3	81	2010.3	2848.5 81	0 0	0
-Accessories	410.4	820.8		1641.6	ŏ	ŏ
-Ground Wire	74.25	74.25		74.25	ŏ	
-Others						Ţ
SUB-TOTAL	15178	22803	42584	62090	0	0
- • •				02030	۰	U
Miscellaneous	756.47	1137.72		3102.07	0	0
Enginering & SV.	1062.46	1596.21	2980.88	4346.3	0	0
Contingency	1517.8	2280.3	4258.4	6209	0	0
Import Duty Value Added Tax	1107.008	1318	1292 3067.918	2531	0	0
	1107.008	1005.000	3007.918	4520.058	0	0
SUB-TOTAL	5129	8017	13726	20708	0	Ö
TOTAL	20307	30820	56310	82798	<u>0</u>	
Removal	3337.2	0		0	ŏ	ŏ
DIRECT COST	0.74	1.04	1.63	2,61	0	0
INDIRECT COST	0.21	0.32	0.55	0.83	ŏ	ŭ
		·-			•	-
PORBIGN CURR.	0.08	0.15	0.15	0.29	0	0
LOCAL CURR.	0.87	1.21	2.23	3.15	0	0 -

CONSTRUCTION COS	r-qverhead	LINE	US6 :	<b>4</b> 25	Baht	
*********	******	****				
Year	2000					
Section	BANG PRI	E - BANG I	ROR			
New line ?	1		,,,,,,,		0	
Existing ?	ő	0	0	0	ŏ	
Soil -fair	ŏ		v	•	ŏ	
-poor	ĭ				i	
Length (km)	i				å	
conditi (way	į				•	
-(kV)	230	230	230	230	500/230	5
-(cct)	2	2	4	4	4	•
-Tower	DC/ST	DC/ST	4cct/87	4cct/ST	4cct/ST	DC/
-(MCH)	,	,		,	/	,
-(Number)	2	4	2	4	4	
	_					
Route Survey	18		18	18	0	
Right of Way		3628.125			Ō	
Preliminary Work	100		100	100	o o	
Tower Footing	2598	3637.2	7389.5	10345.3	0	
Equipment						
"Tower Body	1530		4806		0	
-Insulator String			980	1960	0	
-Conductor	531	1062	1062	2124	0	
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	145		1055	1055	Q	
-OGM	30		30	30	o	
-Accessories	152	304	304	608	0	
-Ground Wire	27.5	27.5	27.5	27.5	0	
-Others						
SUB-TOTAL	9250	12074	19400	26624	0	
Miscellaneous		421.3937			0	
Enginering & SV.	647.5		1358	1863.68	0	
Contingency	925		1940	2662.4	0	
Import Duty	. 254		479	938	0	
Value Added Tex	410.0512	624,1112	1136.301	1674.111	0	
SUB-TOTAL	2517	3585	5701	8287	0	
TOTAL	11767	15660	25101	34911	0	
Removal	0	0	0	0	O	
DIRECT COST	0.37	0.48	0.78	1.06	0	
INDIRECT COST	0.1	0.14	0.23	0.33	Ō	
FORBIGN CURR.	0.03		0.05	0.11	0	
LOCAL CURR.	0.44	0.56	0.96	1.28	0	
TOTAL (mill.UB\$)	0.47	0.62	1.01	1.39	0	

CONSTRUCTION COST	-OVERHEAD	LINE	U8\$	= 25	Baht	
Yeat	2000	****				
Section		ONG - BAN	G BOD			
New line ?	1	41.4	<b>J DU</b> (1		0	
Existing ?	ō	0	0	0	ŏ	0
Soil -fair	ŏ	•		•	ŏ	•
~poor	ĭ				ĭ	
Length (km)	i				ô	
Dength (Aut)	į				•	
-(kV)	230	230	230	230	500/230	500
-(cct)	2	.2	4	4	4	. 2
-Tower	DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/81
-(HCH)						
-(Number)	2	4	2	. 4	4	4
Roste Survey	18	16	18	18	0	C
Right of Way		3628.125		3628.125	0	q
Preliminary Work	100	100	100	100	0	0
fower Footing Equipment	2598	3637.2	7389.5	10345.3	0	C
-Tower Body	1530	2142	4806	6728.4	0	0
-Insulator String	s 490	980	980	1960	Ó	Ċ
-Conductor	531	1062	1062	2124	Ö	Ċ
_	145	145	1055	1055	Ō	Ó
-OGM	30	30	30	30	0	0
-Accessories	152	304	304	609	Ō	ò
-Ground Wire -Others	27.5	27.5	27.5	27.5	0	C
SUB-TOTÁL	9250	12074	19400	26624	0	Ö
Miscelinneous	280.1937	421,3937	787.6937	1148.893	0	c
Enginering & SV.	547.5	845.18	1358	1863.68	Ö	ō
Contingency	925	1207.4	1940	2662.4	ō	ŏ
Import Duty	254	488	479	938	ŏ	ō
Value Added Tax		624.1112	1136.301	1674,111	Ó	ā
BUB-TOTAL	2517	3586	5701	8287	0	0
TOTAL	11767	15660	25101	34911	0	
Removal	0	Ö	. 0	0	Ō	0
DIRECT COST	0.37	0.48	0.78	1.06	0	· ö
INDIRECT COST	0.1	0.14	0.23	0.33	ŏ	ŏ
FOREIGN CORR.	0.03	0.06	0.05	0.11	0	0
LOCAL CURR.	0.44	0.56	0.95	1.28	Ŏ	õ
TOTAL (mill.USS)						

FORBIGN CE LOCAL CURF FOTAL (#1)	₹.	0.21 2.28 2.49	0.4 3.19 3.59	0.39 5.88 6.27	0.76 8.3 9.06	0.77 12.59 13.36	0.5 4.63 5.13
NDIRECT CO	OST	1.95 0.54		4.83 1,44	6.88 2.18	10.21 3.15	3.9 1.2
Removal		8775.6	0	Ö	0	0	
TOTAL		53401	81047	148076	217730	325080	11965
SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·	13498	21083	36095	54457	78670	3055
/alue Add:		2911.104			11886.15		
Contingent Import Du		3991.3 1802	5996.4 3466	11198.1 3398	16327.3 6657	24641 6754	8909. 442
Enginering							
discalland		1989.26 2793.91	2991.81 4197.48	5592-66	8157.26 11429.11	12314.11	
SUB-TOTAL	***************************************	39913	59964	111981	163273	246410	8909
-Others	. Lei ,	195.25	199.25	190.25	195.25	270.9	275.
-Accessor: -Ground Wi		1079.2 195.25	2158.4 195.25	2158.4 195.25	4316.9	4316.8 276.9	3237. 276.
		213	213	213	213	213	21
-OGW		1029.5	1029.5	7490.5	7490.5	7490.5	333
-Conductor	•	3770.1	7540.2	7540.2	15080.4	15080.4	7540.
Insulator			6958	6958	13916	13916	8349.
Tower Boo		10863	15208.2		47771.64		3329
Squipment	_						
lower Foot		. 18445-8	25824.12	52465.45	73451.63	99290.07	31609.
Prelimina		710	710	710	710	1100.5	1100.
Right of V		0	. 0	0	0	0	
Route Sur	rey	127.8	127.6	127.8	127.8	127.8	127.
·(Number)		2	4	2	4	4	
-Tower -(MCM)		DC/ST	DC/ST	4cct/ST	4cct/ST	4cct/ST	DC/S
(cct)		2	2	4	4	4	/
-(kV)		230	230	230	230	500/230	50
_ •						#	
length (ke		7.1				7.1	
9011	-boot	ĭ				ĭ	
Saisting Soil	7 -fair	, o	U	U	U	0	
New line Szistíná	?	0	0	0	0	0	
Section			ATTHANA -	<a>&gt;</a>			
'ear		2002					
	****	*****	***				
			LINR	US\$ :	∍ 25	Baht	

25 Baht

Number of Circ	cuit (cct)	5			
Cable Type	<del></del>	1200an2, XI	DØ.	1200mm2.01	
Section Length	h (k≢)	7500005,71	ir L	12001012,01	5
onceshi mende	(K#)	,			
Conduit or Due	nt.	CONDUIT/	price	CONDUIT/	DUCT
	<del></del> .	SHRATH		SHEATH	
Number of Join	nt Box (oca)	390	345	390	345
Number of Man		26	23	26	23
	,				
Line Route Sur	rvav	18	18	18	18
Preliminary Wo		100	100	100	100
Cable		945	945	675	675
Joint Box	* .	546	483	195	172.5
Cable Head		6	6	6	6
Oil Feeding Sy	yste <b>n</b>	Ö	Ó	80	80
Condult Pipe	-	162	94.5	162	94.5
•					,
Cable Pulling		324	243	324	243
Conduit with (	Concrete Sheeth o	r Duct 540	306	540	305
Treatment of I	Load Surface	216	216	216	216
Man Hole		31.2	27.6	31.2	27.5
Cable Head		7.3	7.3	7.3	7.3
GUB-TOTAL	•	2895.5	2446.4	2354.5	1945.9
Miscellaneous	Šzpensa	143.9	121.4	116.8	96.4
Engineering &		202.7	171.2	164.8	136.2
Contingency		289.6	244.6		194.6
Import Duty		580.7	535	391,3	359.8
Value Added To	4x	242.1	207.4	190.9	160.1
		24212	207.4	,,,,,	100.1
SUB-TOTAL	·····	1459	1279.6	1099.3	947.1
TOTAL	(mill.Baht)	4354.5	3726	3453.8	2693
DIRECT COST	(mill.U6\$)	115.02	97.86	94.18	77.84
INDIRECT COST	(mill.VS\$)	58.36	51.18	43.97	37.88
FOREIGN CURR.	(mill.US8)	66.36	61.14	44.72	41.12
LOCAL CURR.	(mill.088)	107.82	87.9	93.43	74.6
DOCAG CORK.	(	101.01	01.3	70.93	77.0
TOTAL	(MIII.US8)	174.18	149.04	138.15	115.72

: Year Section New or Expansion

Number of Circuit (	cct)	1			
Cable Type	·····	1200mm2, XLE	8	1200mm2.OF	
	ka)	9			
Conduit or Duct	<del></del>	CONDUIT/ SHEATH	DUCT	CONDUIT/ SHEATH	DUCT
Number of Joint Box (	DC9)	78	59	78	69
	pcs)	26	23	26	23
Line Route Survey		0	0	0	0
Preliminary Work		0	0	o	0
Cable		189	189	135	135
Joint Box		109.2	96.6	39	34.5
Cable Head		1,2	1.2	1,2	1.2
Oil Feeding System		0	0	80	80
Conduit Pipe		. 0	0	0	Đ
Cable Polling		64.8	48.6	64.8	48.6
Conduit with Concrete			0	0	0
Treatment of Load Sur	face	0	0	0	Ó
Man Role		. 0	Ó	0	Ō
Cable Bead		1.5	1.5	1.5	1.5
SUB-TOTAL		365.7	336.9	321.5	300.8
Miscellaneous Expense		18.3	16.8	16.1	15
Engineering & Supervi	aion	25.6	23.6	22.5	21.1
Contingency		36.5	33.7	32.2	30.1
Import Duty		104.8	100.4	89.3	87.7
Volue Added Tax		32.9	30.6	28.6	27.2
SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·	218.2	205.1	188.9	181.1
TOTAL (MILL.Ba	ht)	583.9	542	510.4	481.9
DIRECT COST (Mill.U		14.63	13.48	12.86	12.03
INDIRECT COST (mill.U	9\$)	8.73	8.2	7.56	7.24
FORBIGN CURR. (mill.u		11.98	11.47	10.21	10.03
LOCAL CURR. (m(11.0	~~ \	11 10	10.21	10.21	9,24
LOCAL CURR. (MIII.U	963	11.38	10,21	10.21	7.44

CONSTRUCTION COST-		INB	<b>VS\$</b> ×	25	Baht	
***********		400				
Year	2009		•			
Section	<c> - BĂNÇ</c>	PAKONU	2			
New line ?	Ó	_	_	_	o o	
Existing 7	j	0	Q	0	0	(
Soil -fair	0				0	
-poor	1				1	
Length (km)	2				0	
	#					
- (kV)	230	230	230	230	500/230	500
~(cct)	2	2	. 4	4	4	
-Tower	DC/ST	DC/8T	4cct/8T	4cct/ST	4cct/8f	DC/81
~(HCH)	20,0.	20,01		,		,-
-(Number)	2	4	2	4	4	
Route Survey	36	36	36	36	0	
Right of Way	0	. 0	0	.0	ŏ	9
Preliminary Work	200	200	200	200	0	
Tower Footing	5196	7274.4	14779	20690.6	0	•
Equipment		4004	0.510	*****		
-Tower Body	3060	4284	9612	13456.6	0	•
-Insulator Strings		1960	1960	3920	0	
-Conductor	1062	2124	2124	4248	0	
	290	290	2110	2110	0	
-og₩	60	60	50	60	0	
~Accessories	304	608	608	1216	0	
-Ground Wire -Others	55	55	55	55	0	(
SUB-TOTAL	11243	16891	31544	45992	0	
1.5						
Miscellaneous	560.35	842.75	1575.4	2297.8	0	
Enginering & SV.	787.01	1182.37	2208.08	3219.44	0	+
Contingency	1124.3	1689.1	3154.4	4599.2	0	
Import Duty	. 508	976	957	1875	0	
Value Added Tax	820.05	1248,17	2272.55	3348,17	0	
SUS-TOTAL	3800	5938	10167	15340	0	
TOTAL	15043	22829	41711	61332	0	
Removal	2472	0	0	0	ō	
DIRECT COST	0.55	0.78	1.36	1.94	0	
INDIRECT COST.	0.15	0.24	0.41	0.61	0	•
FOREIGN CURR.	0.06	0.11	0.11	0.21	0	
LOCAL CURR.	0.64	0.91	1.66	2.34	0	
TOTAL (#111.USS)	0.7	1.02	1.77	2,55	0	

CONSTRUCTION COST-O	VERHEAD I	LINE	<b>US\$</b> ≈	25	Baht	
*****	*******	***				
Year	2009					
Section <	C> - BANK	G PAKONG	2			
New line ?	0				0	
Existing ?	1	0	0	0	0	0
Soil -fair	0				0	
-poor	. 1				1	
Length (km)	2				0	
	¥					
-(kV)	230	230	230	230	500/230	500
~(cct)	230	230	230	2.50	300/230	303
-Towat	DC/ST	DC/ST	4cct/ST	4cct/8T	4cct/ST	DC/ST
~(MCH)	DC/31	00/51	4000/01	1000/01	4000731	50,01
~(Number)	2	4	2	4	4	4
-{howder}						
Route Survey	36	36	36	36	0	0
Right of Way	. 0	. 0	0	_ 0	0	0
Preliminary Work	200	200	200	200	0	0
Tower Footing Equipment	5196	7274.4	14779	20690.6	0	0
-Tower Body	3060	4284	9612	13456.8	0	0
~Insulator Strings	980	1960	1960	3920	Ò	0
-Conductor	1062	2124	2124	4248	0	0
*	290	290	2110	2110	0	· ŏ
-ocw	60	60	60	60	Ó	Ō
-Accessories	304	608	608	1216	0	0
-Ground Wire	55	55	55	55	0	0
-Others						
SUB-TOTAL	11243	16891	31544	45992	. 0	Ő
					_	_
Miscallansous	560.35	842.75	1575.4	2297.8	0	0
Enginering & SV.	707.01	1182.37	2208.08	3219.44	o o	0
Contingency	1124.3	1689.1	3154.4	4599.2	0	0
Import Duty	508	976	957	1875	ō	0
Value Added Tax	820.05	1248.17	2272.55	3348.17	Q	0
SUB-TOTAL	3800	5938	10167	15340	0	0
TOTAL	15043	22829	41711	61332	0	0
Removal	2472	0	0	0	0	o
DIRECT COST	0.55	0.78	1,36	1.94	ó	Ó
INDIRECT COST	0.15	0.24	0.41	0.61	ŏ	ŏ
wonders numb	0.01				. 0	0
FORBIGN CURR.	0.06	0.11	0.11 1.66	0.21 2.34	ŏ	Ö
LOCAL CURR.	0.64	V.91	1.00	2.37	•	•

	CONSTRUCTION COST	~()V89HP11	LINE	USS	_ ~~	D-1-1	
	*********		****	បគង្	= 25	Baht	
	Year	2009	1				
	Section		LONG MAT				
	New line ?.	1				_	
	Existing ?	ć		, (		0	
	Soil -fair	č		,	•	Q	(
	-poor	ĭ				o.	
	Length (ke)	2				1	
	congen (xz)	î				0	
	4.5		٠				
	-(kV)	230	230	230			
	+(cct)	230			230	500/230	500
	-Tomer				4	4	2
•	- (MCM)	DC/ST	DC/53	4cct/ST	4cct/8T	4cot/ST	DC/81
	-(Number)						
		2	4	. 2	4	4	4
	Route Survey	36				0	
•	Right of Way	7256.25		7256.25		ŏ	ŏ
•	Preliminary Work	200	200	200	200	ŏ	ŏ
	Tower Footing	5196	7274.4	14779		ŏ	ŏ
	Equipment				********	v	U
	-Tower Body	3060		9612	13456.8	0	0
	-Insulator Strings		1960			ŏ	ŭ
	-Conductor	1062	2124	2124		ŏ	Ö
	<b>-</b>	290	290	2110		ŏ	Ö
	-OGW	60	60	60		ŏ	ŏ
	-Accessories	304	60B			Ð	
	-Ground Wire	55	55	55		ŏ	0
	-Othera		**		73	v	υ
•	SUB-TOTAL	18499	24148	20000			
		10177	24140	39800	53249	0	0
	Miscellaneous	560.3375	842,7875	1575.387	2297 837	oʻ	0
	Enginering & SV.	1294.93	1690.36	2716	3727.43	ŏ	ő
	Contingency	1849.9	2414.8	3880	5324.9	ŏ	0
	Import Duty	508	976	957	1975	ő	ő
	Value Added Tax	820.0325	1248.222	2272.532	3348 222	0	ő
					******	U	v
	SUB-TOTAL	5033	7172	11401	16573	0	Ö
	BORY V						-
	TOTAL	23532	31320	50201	69822	Ó	0
	Removal	٥	0	0	0	Ŏ	ŏ
•	DIRECT COST	0.74	0.97	1.55	2,13	0	0
•	INDIRECT COST	0.2	0.29	0.46	0.66	. 0	ŏ
	FOREIGN CURR.	0.05					
	LOCAL CURR.	0.05	0.11	0.11	0.21	0	0
•	DOCAD GUNK;	0.80	1.15	1.9	2.58	Ō	ō

