

REPORT ON POWER SECTOR FOR THE YEAR 2002

INTRODUCTION

1. ELECTRICITY LAW

The Electricity Law of the Kingdom of Cambodia was promulgated by Royal Decree No. NS/RKM/0201/03 dated February 02, 2001. The aims of the Electricity Law include

- a. To establish the Electricity Authority of Cambodia for regulating the electric power services in the Kingdom of Cambodia.
- b. To establish favorable conditions for investment in and commercial operation of the electric power industry.
- c. To protect the rights of consumers to receive reliable and adequate provision of electric power services at reasonable costs.

2. ELECTRICITY AUTHORITY OF CAMBODIA (EAC)

The Electricity Law provides that the Electricity Authority of Cambodia (EAC) is a legal public entity, being granted the right by the Royal Government to be an autonomous agency to regulate the electricity services. The Electricity Authority of Cambodia has the following duties:

- (a) To issue, revise, suspend, revoke or deny the licenses for the provision of electric power services as provided in article 29 of this Law;
- (b) To approve tariff rates and charges and terms and conditions of electric power services of licensees, except where the Authority consider those rates or charges and terms and conditions are established pursuant to a competitive, market-based process;
- (c) To enforce regulations, procedures and standards for investment programs by licensees;
- (d) To review the financial activities and corporate organization structure of licensees to the extent that these activities and organization directly affect the operation of the power sector and the efficiency of electricity supply;
- (e) To approve and enforce the performance standards for licensees;
- (f) To evaluate and resolve consumer complaints and contract disputes involving licensees, to the extent that the complaints and disputes relate to the violation of the conditions of license;
- (g) To approve and enforce a uniform system of accounts for all licensees;
- (h) To prepare and publish reports of power sector and relevant information received from licensees for the benefit of the Government and the public;
- (i) To prescribe fees applicable to licensees;
- (j) To determine the procedures for informing the public about its activities within its duties, in order to ensure that the Electricity Authority of Cambodia complies with the principle of transparency as set forth in Article 3 of this law;
- (k) To issue rules and regulations and to make appropriate orders, and to issue temporary and permanent injunction for electric power services;
- (l) To impose monetary penalty, disconnect power supply, suspend or revoke the license for the violations of this Law, standards and regulations of the Electricity Authority of Cambodia;
- (m) To require the electric power service providers and the consumers to obey the rules relating to the national energy security, economic, environmental and other Government policies;

- (n) To perform any other function incidental or consequential to any of the duties as describes above; and
- (o) To establish the terms and conditions of employment of the officers or employees including experts/advisors of Electricity Authority of Cambodia.

3. THE NEED FOR THE REPORT ON THE POWER SECTOR

Electricite du Cambodge (EDC), a public sector company wholly owned by Government of Cambodia, is the biggest supplier in the country, supplying power to Phnom Penh and a number of provincial towns and other communes. Apart from EDC, there are a large number of suppliers in the country supplying electricity to isolated small areas. Some data on the operation of EDC is available, but the data relating to other suppliers is not available as the same is not collected and compiled. The data on the power sector is very important and required for planning of the power sector and for study of a number of other sectors.

As per Article 7 (h) of the Electricity Law, one of the duties of EAC is to prepare and publish reports of power sector and relevant information received from licensees for the benefit of the Government and the public. It will be useful and appropriate if this report contains data for a year. The present report is the first such report being published by EAC and contains data relating to the activities of EAC and operations of Licensees for the year 2002.

THE REPORT 2002

4. ACTIVITIES OF ELECTRICITY AUTHORITY OF CAMBODIA

The EAC consists of the following three members appointed by the Royal KRET:

- i. H.E. Dr. Ty Norin, Chairman
- ii. H.E. Yao Bunmeng
- iii. H.E. Dr. Ouch Thong Seng

The EAC started operating from September 03, 2001

During the few months EAC was in operation during 2001, it issued the following documents which are essential to its functioning.

- i. The duties and structure of EAC
- ii. Internal Rules of EAC
- iii. Procedures for issuing, revising, suspending, revoking or denying licenses.

During the year 2002, EAC started issuing licenses to the electric power service providers and has issued 21 licenses up to the end of the year.

Based on the initial experience in issuing licenses, EAC revised the procedures and issued a revised document on "Procedures for issuing, revising, suspending, revoking or denying licenses".

During 2002, EAC has determined the license fees to be paid by licensees vide Notification No. 006-02-EAC-SR dated February 27, 2002. The license fees determined are as follows:

- a- Generation or power purchased from any other country: 1.60 Riels per kWh of power generated or purchased.
- b- Transmission: 0.60 Riels per kWh of power transmitted.
- c- Distribution and Sale: 1.10 Riels per kWh of power sold.
- d- Retail: 0.50 Riels per kWh of power sold.
- e- Other services: license fee shall be 0.1% of the service fee.

EAC posts information relating to its activities, notices etc on its website for general information. The address of the website is <http://www.eac.gov.kh>

5. LICENSES ISSUED

2002 is the first year in which EAC issued licenses. EAC has issued 21 licenses of different types during the year 2002 as given in the table below.

Table 1 Licenses issued

Sl. No.	Type of License issued	Number of Licenses issued
1	Consolidated License consisting of Generation, Distribution and National Transmission License	1
2	Generation License	6
3	Distribution License	4
4	Consolidated License consisting of Generation and Distribution License	10
	Total	21

Electricite Du Cambodge, a Government owned company has been granted the Consolidated License consisting of Generation, Distribution and National Transmission License. The license gives it the right to provide transmission service for the entire Kingdom of Cambodia and to provide distribution service in its licensed area and to operate generation facilities at different locations. During 2002, EDC supplied electricity in its licensed areas of Phnom Penh, Sihanoukville, Siem Reap, Battambang, Takeo, Kampong Cham, Ponhea Krek, Memot and Bavit but has not started /taken over operations in Banteay Meanchey, Kampot, Kep, Prey Veng, Ratanakiri, Steung Treng, Svay Rieng and Kampong Speu.

Out of the six generation licensees, two are operating at more than one location. During 2002, the licenses issued to Jupiter Power (Cambodia) Co. Ltd and Mr. Chea Sopha were revised to increase their generation capacity. Jupiter Power (Cambodia) Co. Ltd was allowed to add 4 generators each of capacity 1600 KW at C1 power Plant at Phnom Penh. Mr. Chea Sopha was allowed to install 4 generators each of capacity 1000 KVA at Battambang.

Out of four distribution licensees, two are providing electric power service in more than one contiguous territory.

The authorized area of supply in which the licensees granted license during 2002 are supplying power are spread across 14 provinces/ municipalities as given in the table below.

Table 2 Province -wise licensed areas of supply

Province/ Municipality	Sl. No.	Licensed area of supply	Licensee
Banteay Meanchey	1	Ochraov District	Anco Brothers co., Ltd.
Battambang	1	Battambang	Electricite Du Cambodge
	2	Kamrieng	Franasie Import Export Co.Ltd
	3	Sampeou Loun	Franasie Import Export Co.Ltd
Kampong Cham	1	Kampong Cham	Electricite Du Cambodge
	2	Ponhea Krek	Electricite Du Cambodge
	3	Memot district	Electricite Du Cambodge

Kampong Thom	1	Kampong Thmar town	Mr. Huor Peng
	2	Capitol of Kampong Thom Province	Chilbo Industrial (Cambodia) Co., Ltd.
	3	Khum Treal Town	Mr. Te Kok Eng
Kandal	1	Loeung Town (West of Mekong River)	Mr. Nov Sokha
	2	Area surrounding Phnom Penh	Electricite Du Cambodge
Koh Kong	1	Koh Kong provincial town	Duty Free shop Co. LTD
Phnom Penh	1	Phnom Penh	Electricite Du Cambodge
Prey Veng	1	Neak Loeung Town east of Mekong River	Mrs. Bun Liv
	2	Phsar Snaypul Town	Mr. KY Sophear
Siem Reap	1	Siem Reap	Electricite Du Cambodge
Krong Preah Sihanouk	1	Sihanoukville	Electricite Du Cambodge
Svay Rieng	1	Bavit District	Electricite Du Cambodge
Takeo	1	Takeo	Electricite Du Cambodge
	2	Phsar Tonlap town	Mr. Mak Thorn
	3	Phum Smaokchey	Mr. Srey Sokhom
	4	Phsar Kompongchrey Town	Mr. Ke Kuyhuoy
	5	Phsar Preylvear Town	Mr. Chhou Lay
Otdar Mean Chey		Osmarch town	Duty Free shop Co. LTD
Krong Pailin		Phum Phsar Prum	M.S.P.Development Co. Ltd

Tables 3, 4 and 5 give details on Generation, Distribution and Consolidated licenses issued up to 31st December 2002 respectively. The locations of the licensees are marked in the attached Map.

Table 3 Generation Licenses issued up to 31 st December 2002							
License No. and Date	Name of Licensee	Validity period	Location of Generation facility	Fuel	Licensed Capacity	Number and capacity of generators	PPA with & date of PPA
002 LD 1-2-02	Cambodia Utilities Pte Ltd	Term of PPA	C2 power plant, Chak Ang Re, Phnom Penh	HFO / LDO	37100 KW	7x5300 KW	EDC Dt.15-9-94
003 LD 29-3-02 20.12.02	Jupiter Power (Cambodia) Co. Ltd	Term of respective PPAs	C1 power plant, Toul Sange, Phnom Penh	LDO	22400 KW	10x1600 KW + 4x1600 KW	EDC Dt.21-3-00 & 7-5-02
			Pursat's power plant, Phum Pea Nheak 2	LDO	1000 KW	4x250 KW	ED Pursat Dt 8-5-96
			Kampong Chhnang's power plant, Phum 1, Sangkat Ksan	LDO	750 KW	3x250 KW	ED Kampong Chhnang Dt.30-10-98
			Battambang's power plant, Phum Kamkor, Sangkat Svay Por	LDO	3500 KW	4x850 KW	ED Battambang Dt.30-10-98
004 LD 29-3-02	Global Technological Support SDN BHD	Term of interim PPA	Kampong Cham Power Plant at village 7	LDO	4100 KVA	2x1000 KVA 1x1300 KVA 1x800 KVA	EDC Dt.6-5-98
005 LD 1-4-02	Mr. Chea Sopha	Term of Gen. lease Agreement	Siem Reap's power plant, Phum Krouns, Khum Dang Kourm	LDO	5920 KVA	4x1000 KVA 1x1270 KVA 1x650 KVA	EDC Dt.17-10-01 & 25-12-01
30-12-02			Battambang	LDO	4000 KVA	4x1000 KVA	EDC Dt.27-09-02
007 LD 5-4-02	Cetic International Hydropower Development Co. Ltd	Term of PPA	Kirirom, Kampong Speu	Hydro	12000 KW	2x6000 KW	EDC Dt.28-7-00
010 LD 27-5-02	Cambodia Wan Long International Industrial Co. Ltd	up to 30-06-03	Kampot's power plant, Phum Tvy Khang Choeng	LDO	1300 KVA	2x650 KVA	Wan Heur and Electricity of Kampot Dt 1-2-96

License No. and Date	Name of Licensee	Validity period	Power Purchased From	Authorised Area of Distribution	Remarks
008LD 10-4-02	Franasie Import Export Co.Ltd	10 yrs	Provincial Electricity Authority, Thailand	District centre of Kamrieng, Battambang Province	
				Sampeou Loun in Battambang Province	
				Phnom Proeuk in Battambang Province	Not operational in 2002
009 LD 27-5-02	M.S.P.Development Co. Ltd	5 yrs	Provincial Electricity Authority, Thailand	Phum Phsar Prum in Krong Pailin and to surrounding Distribution Network through 22 KV line	
011 LD 09-8-02	Anco Brothers co., Ltd.	5 yrs	Provincial Electricity Authority, Thailand	Ochraov District, Bantea Meachey Province and to surrounding Distribution networks through 22 KV line	
014 LD 22-11-02	Duty Free shop Co. LTD	5 yrs	Provincial Electricity Authority, Thailand	Koh Kong provincial town Osmarch town, Oddor Meanchey Province	

Table 5 Consolidated Licenses issued up to 31 st December 2002									
License No. and Date	Name of Licensee	Validity period	Location of Generation facility	Fuel	Number and capacity of generating m/c	Authorized Area of Distribution	Power Purchased From	Remarks	
001 LD 1-2-02	Electricite Du Cambodge	until terminated	C2 power plant, Chak Ang Re	HFO	3x6000 KW	Phnom Penh and surrounding area	Cambodia Utilities Pte Ltd, Jupiter Power (Cambodia) Co. Ltd. and Cetic International Hydropower Development Co. Ltd		
			C3 power plant, Tek Laok III	LDO	2X2100 KW + 4X2800 KW				
			C5 power plant, Toul Sangke	LDO	2X5000 KW				
			C6 power plant, Toul Sangke	HFO/ LDO	3X6200 KW				
			Sihanoukville	LDO	4X800 KW + 2X2701 KW + 1X1840 KW + 1X280 KW	Sihanoukville			
			Siem Reap	LDO	7X800 KW + 1X650 KW + 2X350 KW	Siem Reap	Mr. Chea Sopha		
			Battambang	LDO	2X800KW + 2X280 KW	Battambang	Jupiter Power (Cambodia) Co. Ltd.		
			Takeo	LDO	1X500 KW + 2X200 KW	Takeo	Rental Generator sets		
						Kampong Cham	Global Technological Support SDN BHD		
						Ponhea Krek district	Vietnam Power No. 2		
						Memot district	Vietnam Power No. 2		
						Bavit District	Vietnam Power No. 2		
						Banteay Meanchey			
						Kampot			
			Prey Veng						
			Ratanakiri						
			Steung Treng						
			Svay Rieng						
			Kampong Speu						
								Not operational in 2002	

Table 5 Consolidated Licenses issued up to 31st December 2002 Page 2

License No. and Date	Name of Licensee	Validity period	Location of Generation facility	Fuel	Licensed Generation Capacity	Number and capacity of generating m/c	Authorised Area of Distribution
006 LD 1-4-02	Mr. Huor Peng	5 yrs	Phoum Tros, Kampong Thom Province	Diesel	525 KVA	1x250 KVA + 1x200 KVA + 1x75 KVA	Kampong Thmar town of Kampong Thom Province
012 LD 09-8-02	Chilbo Industrial (Cambodia) Co., Ltd.	5 yrs	Power Plant of DIME, Phum Kampong Rotes, Khum Damrey Chom Klar. Stung Sen district.	Diesel	1600 KW	1x1000 KVA + 1x500 KVA + 1x400 KVA	Capitol of Kampong Thom Province
013 LD 06-9-02	Mr. Mak Thorn	3 yrs	Phum Kampong, Khum Preah Batchanchum, Kirivong District, Takeo Province	Diesel	635 KVA	1x250 KVA + 2x125 KVA + 1x90 KVA + 1x45 KVA	Phsar Tonlap town, Khum Preah Batchanchum, Kirivong District, Takeo Province
015 LD 22-11-02	Mr. Srey Sokhom	2 yrs	Phum Smaokchey	Diesel	100 KVA	1x100 KVA	Phum Smaokchey of Takeo Province
016 LD 22-11-02	Mr. Ke Kuyhuoy	2 yrs	Phum Kompongchrey Town, Takeo Province	Diesel	60KVA	1x40 KVA + 1x20 KVA	Phsar Kompongchrey Town of Takeo Province
017 LD 29-11-02	Mrs. Bun Liv	5 yrs	Neak Loeung Town (East of Mekong River), Pearang District, Prey Veng Province	Diesel	2590 KVA	4x450 KVA + 2x250 KVA + 1x165 KVA + 1x125 KVA	Neak Loeung Town east of Mekong River in Prey Veng Province
018 LD 29-11-02	Mr. KY Sophear	2 yrs	Phum Snaypul, Khum Roka, Pearang District, Prey Veng Province.	Diesel	345KVA	1x200 KVA + 1x75 KVA + 2x35 KVA	Phsar Snaypul Town, Khum Roka, Pearang District, Prey Veng Province.
019 LD 12-12-02	Mr. Te Kok Eng	2 yrs	Phum Romchek, Khum Treal, Baray District, Kampong Thom Province	Diesel	175 KVA	1x70 KVA + 1x50 KVA + 1x30 KVA + 1x25 KVA	Khum Treal Town, Baray District, Kampong Thom Province.
020 LD 30-12-02	Mr. Chhou Lay	2 yrs	Phum Preyvearkhangket, Khum Preyvear, Preykabas District, Takeo Province	Diesel	70KVA	1x70 KVA	Phsar Preyvear Town, Khum Preyvear, Preykabas District, Takeo Province.
021 LD 30-12-02	Mr. Nov Sokha	2 yrs	Phum Kompongchamlong, Khum Prektunlob, Leukdek District, Kandal province	Diesel	560KVA	1x250 KVA + 1x185 KVA + 1x125 KVA	Loeung Town (West of Mekong River), Leukdek District, Kandal Province.

6. GENERATION CAPACITY

The installed generation capacity of the six generation licensee and eleven consolidated licensees at the end of year 2002 was 221,508 KVA as given in the table below.

Table 6 Installed Generation Capacity

Sl. No.	Type of Licensee	Generation capacity in KVA
1	Generation Licensees	111,133
2	Consolidated Licensees	110,375
	Total	221,508

The data on installed capacity available in KW has been converted to KVA by assuming a power factor of 0.8. The power plant of capacity 12000 KW (15000 KVA) of Cetic International Hydropower Development Co. Ltd is a hydro power plant. Three power plants of capacity 73700 KW (92125 KVA) of Cambodia Utilities Pte Ltd and Electricite Du Cambodge are capable of running on heavy fuel oil (HFO) and the rest power plants operate on diesel. Further details about the installed capacity of generators during 2002 are given in Tables 3 and 5.

7. ENERGY GENERATED AND ENERGY PURCHASED FROM OTHER COUNTRIES

The Generation Licensees and Consolidated Licensees generate electricity from generation facilities owned by them. Some licensees, especially in rural areas, do not have meters to record the energy generated by them or do not keep the data on energy generated. In such cases the energy generated during 2002 has been estimated and given in this report. Where data for the full year is not available with EAC, the figures for the period data is available have been included in this report. The data on energy generated by Generation Licensees and Consolidated Licensees is given in Table 7.

Table 7 Energy Generated

Name of Licensee	Location	Period	Generation in KWH
Generation Licensees			
Cambodia Utilities Pte Ltd	C2, Phnom Penh	January – December 2002	248,335,275
Jupiter Power (Camb) Co Ltd	C1, Phnom Penh	January – December 2002	79,416,864
	Pursat	February–December 2002	2,407,970
	Kampong Chhnang	January – December 2002	2,375,190
	Battambang	January – December 2002	11,178,742
Global Tech. Support SDN BHD	Kampong Cham	January – December 2002	6,257,880
Mr. Chea Sopha	Siem Reap	January – December 2002	19,361,682
Cetic Int. Hydropower Dev. Co. Ltd	Kirirom	June – December 2002	29,144,685
Cambodia Wan Long Intl. Industrial Co. Ltd	Kampot	June – August 2002	642,200

Consolidated Licensees Electricite Du Cambodge	C2, Phnom Penh	January – December 2002	40,379,616
	C3, Phnom Penh	January – December 2002	21,942,812
	C5, Phnom Penh	January – December 2002	13,903,300
	C6, Phnom Penh	January – December 2002	52,501,670
	Sihanoukville	January – December 2002	20,456,758
	Siem Reap	January – December 2002	75,020
	Battambang	January – December 2002	246,504
	Takeo	January – December 2002	21,340
Mr. Huor Peng	Phoum Tros	2002 - Estimated	424,800
Chilbo Industrial (Cambodia) Co., Ltd.	Phum Kampong Rotes	August - December 2002	651,754
Mr. Mak Thom	Phum Kampong	2002 - Estimated	265,200
Mr. Srey Sokhom	Phum Smaokchey	2002 - Estimated	53,160
Mr. Ke Kuyhuoy	Phum Kompongchrey Town	2002 - Estimated	41,472
Mrs. Bun Liv	Neak Loeung Town	2002 - Estimated	1,283,040
Mr. KY Sophear	Phum Snaypul	2002 - Estimated	147,996
Mr. Te Kok Eng	Phum Romchek	2002 - Estimated	111,132
Mr. Chhou Lay	Phum Prey Ivearkhangket	2002 – Estimated	63,504
Mr. Nov Sokha	Phum Kompongchamlong	2002 - Estimated	500,352

The Distribution Licensees operating in the area close to the border with Thailand import electricity from Provincial Electricity Authority of Thailand. EDC imports electricity from Vietnam Power No.2 for supply to its area of supply near the border with Vietnam. At present this import is at a voltage of 22 KV. The quantity of electricity imported is given in Table 8 below.

Table 8 Energy Imported

Name of the Licensee	Area of Supply	Period	Energy Imported in KWH
Distribution Licensees			
Franasie Import Export Co.Ltd	Kamrieng	April – December 2002	1,878,332
	Sampeou Loun	April – December 2002	367,008
M.S.P.Development Co. Ltd	Phum Phsar Prum	June – December 2002	978,460
Anco Brothers co., Ltd.	Ochraov District	January – December 2002	43,574,861
Duty Free shop Co. LTD	Koh Kong	January – December 2002	9,726,460
	Osmarch town	November – December 2002	599,200
Consolidated Licensee			
Electricite Du Cambodge	Ponhea Krek	February – December 2002	377,234
	Memot		1,095,600
	Bavit		1,314,300

8. SUPPLY THROUGH METERS and HOURS OF SUPPLY

Out of 15 suppliers issued license during 2002, 13 suppliers supplied electricity to consumers through meter. In the case of 2 suppliers Mr. Ke Kuyhuoy and Mr. Te Kok

Eng, some consumers have provided meters where as the supply to other consumers are without a meter.

Due to inadequate demand some of the suppliers do not supply electricity round the clock, but provide service only during certain hours of the day. The suppliers providing reduced hours of supply and the hours during which supply is made available is given in the Table 9 below.

Table 9 Reduced Hours of Supply

Name of Licensee	Normal Hours of Supply
Mr. Mak Thorn	00.00 to 05.00 and 10.30 to 24.00
Mr. Srey Sokhom	Monday to Friday - 17.30 to 22.30 and Sat, Sunday - 11.00 to 22.30
Mr. Ke Kuyhuoy	18.00 to 22.30
Mr. KY Sophear	00.00 to 06.00 and 11.00 to 24.00
Mr. Te Kok Eng	04.00 to 23.00 hrs
Mr. Chhou Lay	07.00 to 23.00

9. NUMBER OF CONSUMERS, AND ESTIMATED ENERGY RECEIVED AND SOLD

The number of consumers by end of 2002 could not be obtained from the licensees except for EDC. Information on number of consumers obtained at different times has been given in the table below. Similarly the information on Energy sold to consumers during 2002 was available only from EDC. As stated earlier, the information on energy generated/ purchased is available for different periods in 2002 for different licensees. It is considered that the energy received and sold in a year by a licensee is important information. Hence the information on energy generated/ purchased and energy sold to consumers for the whole year 2002 is estimated and given in the table below. The information, though not fully accurate, has been included to indicate the level of operation.

Table 10 Number of consumers and Estimated Energy received and sold

Name of Licensee/ Area of Supply	Number of consumers in 2002	Energy generated and purchased in 2002 in KWH	Energy sold in 2002 in KWH
Consolidated Licensees			
Electricite Du Cambodge			
Phonm Penh	131,151	485,624,222	418,088,431
Sihanoukville	7,345	20,456,758	16,089,952
Siem Reap	8,660	19,436,702	15,372,103
Battambang	10,194	11,425,246	8,674,087
Takeo	2,405	2,014,280	1,498,516
Kampong Cham	4,427	6,257,880	4,832,696
Ponhea Krek district	774	377,234	337,446
Memot district	1,500	1,095,600	991,423
Bavit District	1,017	1,314,300	1,234,150
Mr. Huor Peng	1,063	424,800	254,880

Chilbo Industrial (Cambodia) Co., Ltd.	2,900	1,564,210	1,251,368
Mr. Mak Thorn	650	265,200	159,120
Mr. Srey Sokhom	251	53,160	31,800
Mr. Ke Kuyhuoy	139	41,472	26,952
Mrs. Bun Liv	1,962	1,283,040	898,128
Mr. KY Sophear	603	147,996	96,204
Mr. Te Kok Eng	279	111,132	72,240
Mr. Chhou Lay	152	63,504	41,280
Mr. Nov Sokha	729	500,352	325,224
Distribution Licensees			
Franasie Import Export Co.Ltd			
Kamrieng	247	2,504,443	2,253,998
Sampeou Loun	500	489,344	440,410
M.S.P.Development Co. Ltd	1	1,677,360	1,509,624
Anco Brothers co., Ltd.	4,150	43,574,861	39,217,375
Duty Free shop Co. LTD			
Koh Kong provincial town	1,320	9,726,460	8,753,814
Osmarch town	511	3,595,200	3,235,680

10. FACILITIES FOR TRANSMISSION AND DISTRIBUTION

The power sector in Cambodia is characterized by a large number of isolated systems, without any interconnection, supplying power to separate areas. A National Grid is planned and does not exist today. Only EDC has got an HV system for power supply to Phnom Penh. After the grant of licenses a number of licensees have undertaken improvements to their system. A reliable data could not be collected by EAC for 2002 and hence the information is not included in this report.

11. TARIFF

All the 15 suppliers granted license during 2002 were allowed to continue with their existing tariffs till EAC approved a new tariff or modified the existing tariff. During the year 2002, EAC did not modify any tariff. The details of the tariff in 2002 of each supplier are given in Tables 11 to 15.

Table 11 Tariff of EDC for Phnom Penh and Kandal Province

Category of Consumer	Description	Riels/ KWH
Domestic	consumption up to 50 KWH/ Month	350
	consumption between 51 and 100 KWH/ Month	550
	consumption more than 100 KWH/ Month	650
Government Institutions		700
	Embassy, NGO, Foreigner's Residence	800
Commercial and Service Sector	Small	650
	Medium	550
	Big	500
	Medium Voltage	480
Industrial	Small	600
	Medium	550
	Big	500
	Medium Voltage	480

The four types of Commercial and Industrial Customers are defined as follows.
Small - The Customer who is connected to the public LV network of 220V or 380V.
Medium - The Customer who is directly connected to MV/LV S substation by separate LV feeder and has installed their metering system on this feeder and guarantees a monthly minimum take of 20,000 KWH.
Big - The Customer who has separate substation or partly uses the capacity of public substation and has metering system indoors or adjacent to their substation and guarantees a monthly minimum take of 50,000 KWH.
Medium Voltage - The Customer who is directly connected to MV network with MV metering and guarantees a monthly minimum take of 80,000 KWH.

Table 12 Tariff of EDC for Sihanoukville

Category of Consumer	Description	Riels/ KWH	US Cents/ KWH
Domestic		500	
Industrial	Consumption up to 20,000 KWH/ Month		17.5
	Consumption 20,001 to 50,000 KWH/ Month	Day Hours	16
		Night Hours	17.5
	Consumption 50,001 to 110,000 KWH/ Month	Day Hours	14.7
		Night Hours	17.5
		Consumption more than 110,000 KWH/ Month	
	Day Hours	13.5	
	Night Hours	17.5	
Commercial	Consumption up to 20,000 KWH/ Month		19.5
	Consumption 20,001 to 50,000 KWH/ Month		18
	Consumption 50,001 to 110,000 KWH/ Month		16.4
	Consumption more than 110,000 KWH/ Month		15
Hotels, House rented by foreigners	Consumption up to 20,000 KWH/ Month		20
	Consumption 20,001 to 50,000 KWH/ Month		18.4
	Consumption 50,001 to 110,000 KWH/ Month		17
	Consumption more than 110,000 KWH/ Month		16
Embassy and Government Institutions		760	
Day Hours = 00 to 18 Hours	Night Hours = 18 to 24 Hours		

Table 13 Tariff of EDC for Siem Reap

Category of Consumer	Description	Riels/ KWH	US Cents/ KWH
All Categories	Consumption up to 20,000 KWH/ Month	880	
	Consumption 20,001 to 50,000 KWH/ Month		19.3
	Consumption 50,001 to 110,000 KWH/ Month		17.6
	Consumption more than 110,000 KWH/ Month		16.2

Table 14 Tariff of EDC for Other Areas

Location	Description	Riels/ KWH	US Cents/ KWH
Kampong Cham	All Categories	850	
Battambang	All Categories		24.5
Takeo	All Categories	900	
Memot, Pohnea Krek and Bavet	Low Voltage	650	16
	Medium Voltage		11.5

Table 15 Tariff

Name of Licensee	Description	Tariff in Riels/KWH	Tariff in Bahts/ KWH	Tariff in US Cents/ KWH
Consolidated Licensees				
Mr. Huor Peng	If consumption up to 50 KWH/ Month	1600		40
	If consumption more than 50 KWH/ Month	1400		35
Chilbo Industrial (Cambodia) Co., Ltd.	All consumption	950		
Mr. Mak Thorn	All consumption	1400		
Mr. Srey Sokhom	All consumption	2000		
Mr. Ke Kuyhuoy	If consumption up to 10 KWH/ Month	2500		
	If consumption more than 10 KWH/ Month	2000		
Mrs. Bun Liv	All consumption	1100		
Mr. KY Sophear	If consumption up to 10 KWH/ Month	1700		
	If consumption more than 10 KWH/ Month	1500		
Mr. Te Kok Eng	If consumption up to 30 KWH/ Month	2000		
	If consumption more than 30 KWH/ Month	1800		
Mr. Chhou Lay	All consumption	2000		
Mr. Nov Sokha	All consumption	1400		
Distribution Licensees				
Franasie Import Export Co.Ltd				
Kamrieng	All consumption		6	
Sampeou Loun	All consumption		6	
M.S.P.Development Co. Ltd	All consumption		6	
Anco Brothers co., Ltd.	All consumption		6	
Duty Free shop Co. LTD				
Koh Kong provincial town	All consumption		6	
Osmarch town	All consumption		6	

