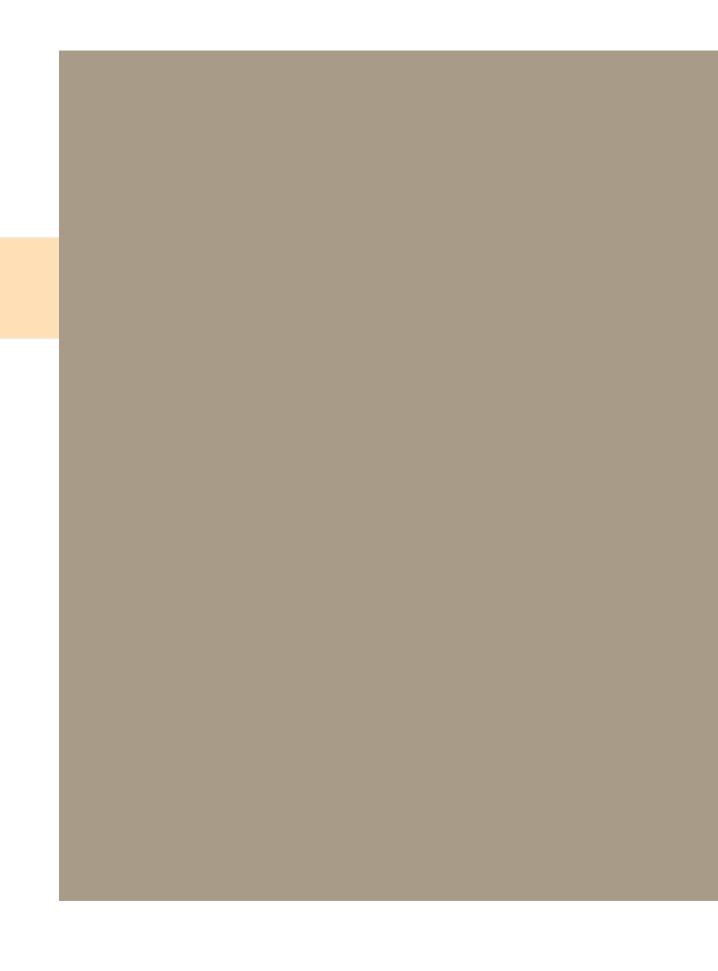


# Annual Report 2007







individual actions, individual talents, individual identities.

we all however, share the same desire to offer a life filled with light and an everyday reality filled with energy.



# The Electricity Authority of Cyprus

The Electricity Authority of Cyprus is an independent, semi-government corporation established under the Electricity Development Law Cap.171 of 1952 in order to exercise and perform functions relating to the generation and supply of electric energy in Cyprus.

The above definition is used in Cyprus for corporations which are independent and which were established in accordance with the relevant Law, in order to render services in the utility field. Such corporations are governed by Authorities, the members of which are appointed by the Council of Ministers.

In case of the Electricity Authority of Cyprus, the government, through the Minister of Commerce, Industry and Tourism, is empowered to give directives to the Authority on matters appertaining to the general interest of the Republic.

### Our Mission is...

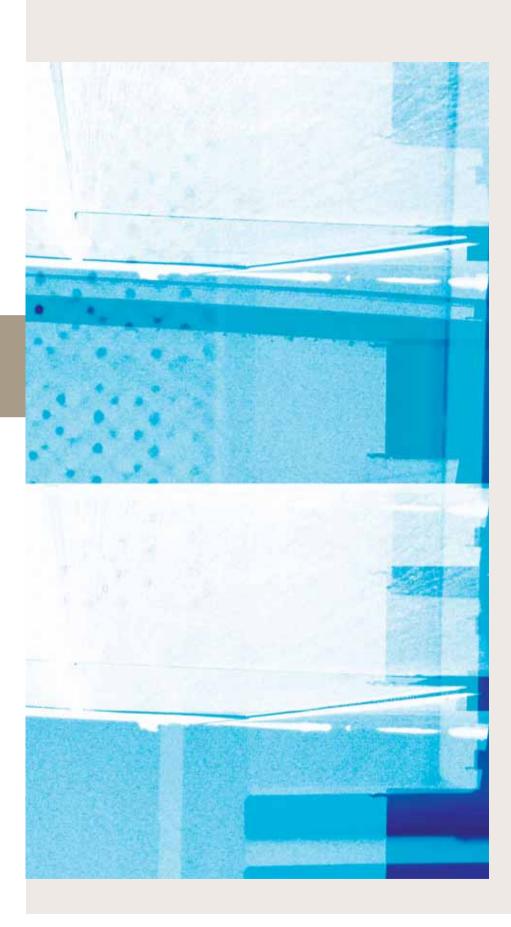
To provide our customers with the highest quality of safe and reliable services in the energy sector and in other activities at competitive prices, respecting society, the environment and our people and contributing to the development of our country.

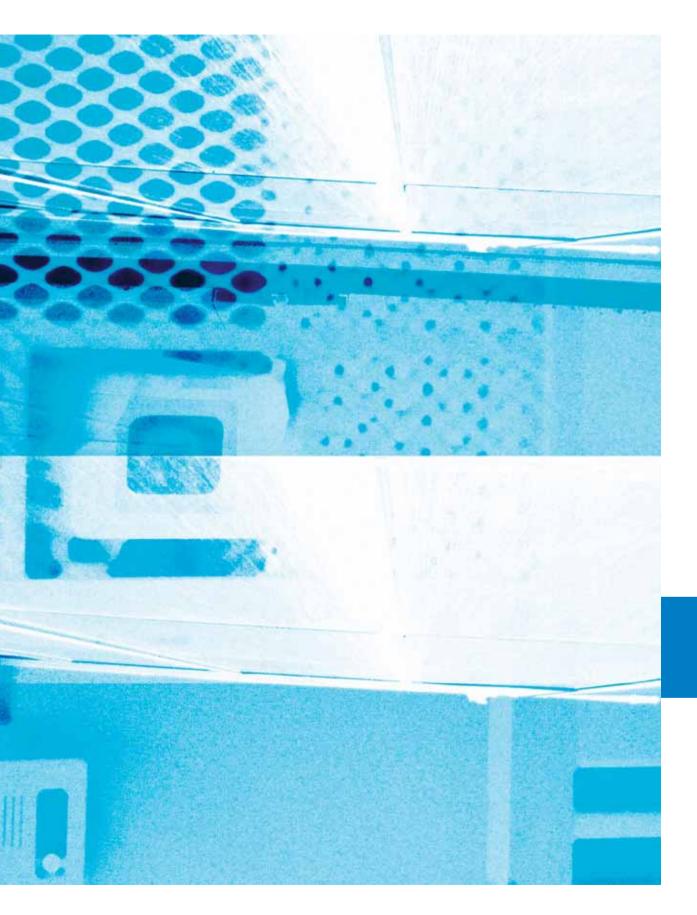




# Contents

Board of Directors & Management	14
Chairman's Message	18
Development Plan	22
General Manager's Message	24
Generation Business Unit	28
Networks Business Unit	38
Customer Service Business Unit	48
Common Services Business Unit	60
Human Resources Management	62
Corporate Development Management Unit	68
Finance Management Unit	74
Auditor's Report and Financial Statements	80
Appendices	112







# The Year in Brief

		2007	2006	% Increase (Decrease)
GENERATION				
Total units generated	million kWh	4 786,2	4 618,0	3,6
Maximum output capacity of power stations	MW	1 118	988	13,2
Maximum demand met	MW	1 047	904	15,8
Thermal efficiency of generation		33,8	33,8	-
SALES OF ELECTRICITY				
Total sales	million kWh	4 298,3	4 135,0	3,9
Consumption in the turkish				
occupied area	million kWh	7,9	7,3	8,2
Average charge per kWh sold	cents	7,444	7,262	2,5
Consumers at 31 December	thousand	476,5	455,0	4,7
FINANCE				
Total income	C£ thousand	336.839	315.820	6,7
Operating costs	C£ thousand	294.932	275 <b>.</b> 987	6,9
Operating profit	C£ thousand	41 <b>.</b> 907	39.833	5,2
Finace costs	C£ thousand	8.650	7.715	12,1
Tax	C£ thousand	9.834	9.511	3,4
Profit for the year	C£ thousand	23.423	22.607	3,6
Dividends	C£ thousand		15.000	(100,0)
Capital expenditure	C£ thousand	92.628	70.769	30,9
Average net assets employed	C£ thousand	807.358	776.605	4,0
Return on average net assets employed	%	5,2	5,1	2,0
EMPLOYEES				
Permanent employees in service at 31 December		2 261	2 095	7,9
Sales per employee	million kWh	1,90	1,97	(3,6)
Consumers per employee		211	217	(2,8)

# Board of Directors and Management

### THE AUTHORITY

### CHAIRMAN

Ch. Stavrakis	BA (Cantab), MBA (Harvard), ACIB
VICE CHAIRMAN	
Y. Valanides	Mechanical Engineering of National Metsovio University
MEMBERS	
I. Constantinides	BA in Philosophy, Politics and Economics Oxford University MBA in Business Administration
Filitsa loannou	Economist of National Kapodistriako University, Athens
M. Miltiades	BSc (Hons) Psychology & Sociology
G. Pistentis	H.T.I. Diploma in Computer Science
Ch. Rotsas	BA (Hons) Economics & Finance FCA
D. Psiloyenis	BSc Electronic Engineering
P. Hadjicharalambous	Mathematics, University of Leipzig, Germany



Ch. Stavrakis Chairman



Y. Valanides Vice Chairman



I. Constantinides Board Member



F. Ioannou Board Member



M. Miltiades Board Member



G. Pistentis Board Member



P. Hadjicharalambous Board Member



Ch. Rotsas Board Member



D. Psiloyenis Board Member



M. Stavrou General Manager

#### LEGAL ADVISERS

Ioannides Demetriou, Lefkosia

AUDITORS

Auditor General of the Republic PricewaterhouseCoopers, Lefkosia

### **EXECUTIVE**

#### **GENERAL MANAGER**

M. Stavrou FCCA, ACMA

#### **EXECUTIVE MANAGER FINANCE**

H. Hadjiyerou FCA, MBA

#### EXECUTIVE MANAGER CUSTOMER SERVICE

G. Petoussis Dip. Eng. CEng, MIEE

#### **EXECUTIVE MANAGER NETWORKS**

A. Avraamides BSc (Eng), CEng, MIEE

#### **EXECUTIVE MANAGER GENERATION**

A. Papadopoulos BSc (Eng), CEng, MIEE, MIMechE, CdipAF

#### EXECUTIVE MANAGER COMMON SERVICES

C. Eliopoullos Dipl Eng, Dipl Eng Mgt, CEng, MIEE, MIMechE

### EXECUTIVE MANAGER CORPORATE DEVELOPMENT

N. Papadopoulos BSc (Eng), CEng, MIEE, CdipAF

# Board of Directors and Management

#### **POWER STATIONS**

#### POWER STATION MANAGER Moni Power Station

S. Stavrinides BSc (Eng), DipMgt, MIEE, MIMechE, CEng (since 1/6/2007)

Vacant (1/2/2007 until 31/5/2007)

M. Voskou Dipl. Eng. (until 31/1/2007)

POWER STATION MANAGER Dhekelia Power Station

A. Polydorides MSc (Eng) (since 1/2/2007)

Vacant (until 31/1/2007)

POWER STATION MANAGER Vasilikos Power Station

A. Ioannou BA (Eng), MA. Eur Ing, CEng, MIEE

### AREAS

AREA MANAGER Lefkosia - Keryneia - Morfou area

P. Sardos BSc, MSc, DIC, ACCI, MIEE, MIEEE

AREA MANAGER Lemesos area

A. Malialis Dipl in Physics, MSc, CEng, MIEE

AREA MANAGER Ammochostos - Larnaka area

Y. Siekkersavvas BSc (Eng), MIEE



#### AREA MANAGER Pafos area

S. Petousis BSc (Eng), CdipAF, MIEE, CEng, MCMI (since 1/2/2007)

Vacant (until 31/1/2007)

### INTERNAL AUDIT MANAGER

I. Koumeras FCCA, CIA

#### SECRETARY / MANAGER OF LEGAL SERVICES

Vacant

#### GENERAL MANAGER'S OFFICE MANAGER

A. Christou BSc (Eng), HND, MIEE, CEng

#### HUMAN RESOURCES MANAGER

A. Patsalis BSc (Eng), MIOSH

## Chairman's Message



Any review of the EAC's achievements – and, by extension, its contribution to the consumer – such as the one carried out in the context of preparing our Organisation's Annual Report, cannot be restricted to the narrow timeframe of one calendar year. Projects that were completed during 2007 were planned much earlier while others to be completed in the future are already being planned today.

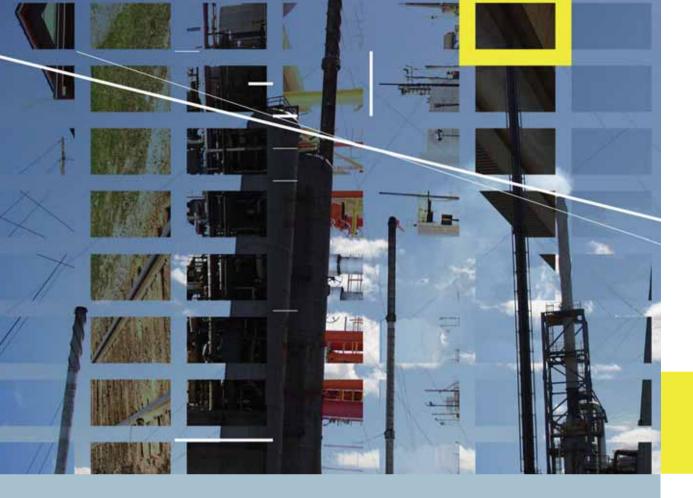
Although I was not Chairman of the EAC Board of Directors during the year under review, the superb, detailed briefing that I have received from the General Manager and the entire Management Team of our Organisation has, to a great extent, served to reinforce the opinion that I already held regarding both the quality of the EAC's personnel and the highly important work that everyone does. I believe that the knowledge and experience gained by the Organisation's people during its 55-year contribution to society will play a major part in the EAC's endeavours in the new liberalised environment. Moreover, I am convinced that with its responsible attitude, vision and proper planning, the EAC will not only survive in a competitive environment but will continue to supply electricity at a reasonable price.

#### **Natural Gas**

One issue that concerned not only the EAC but the broader political, financial and industrial circles of Cyprus during 2007 was, of course, that of bringing natural gas to the island. It would be my omission not to congratulate the EAC's unions for their unanimity on the matter since, in the final analysis, their stance contributed substantially to ensuring that the best decision under the circumstances was taken.

The EAC Board and Management has acted in full cooperation with the Ministry of Commerce, Industry and Tourism and, on the issue of natural gas in particular, I am sure that we shall all be working hard to have natural gas in Cyprus as an alternative, more economical and environmentally-friendly choice of fuel for the generation of electricity. It is clear that the arrival of natural gas and the gradual abandonment of oil will mark the beginning of a new era for electricity generation and more in Cyprus. Let me take this opportunity to state how important the issue of natural gas is for Cyprus and to stress that the EAC's fuel costs for 2007 amounted to £176,9 million, representing some 58,3% of the Organisation's total expenses for the year.

We are keeping a close watch on the Government's plan to create an energy centre at Vasilikos which will include a natural gas storage and deliquification facility. The EAC Board has submitted a number of proposals to the Government concerning the Authority's active involvement in this project. The change from oil to natural gas is a major challenge for the Organisation and the whole issue is of great importance for the viability of the EAC itself. For this reason we are cooperating closely with the Government to determine the fastest and best way of bringing natural gas to Cyprus.



#### **Electricity Generation**

In July 2007, the consulting engineer issued the final delivery certificates for the contracts for the steam turbine and transformers for Unit No 3 (130 MW) of Phase 2 of the Vasilikos Power Station. These contracts have now been completed.

The issuing of the boiler delivery certificate will depend on progress in resolving a number of pending issues, the main one being the problem of optimising fuel consumption and reducing nitrogen oxide emissions to permitted levels.

The projected date of issuance of the boiler delivery certificate has been put back to the end of 2008. It should be noted, however, that the unit is in operation and is contributing to the generation system.

#### Phase 3 of the Vasilikos Power Station

Phase 3 of the Vasilikos Power Station includes a combined cycle unit with a capacity of 220 MW (Unit No. 4) which is due to come into commercial operation on 30 December 2008. The contract also provides for the operation of two open gas cycle turbines in May 2008. During the first years of operation of the unit, diesel oil will be its fuel until the arrival of liquefied natural gas (LNG) in Cyprus. Thereafter it will use liquefied natural gas as its main fuel.

# Chairman's Message

#### Phase 4 of the Vasilikos Power Station

Phase 4 of the Vasilikos Power Station provides for two dual firing (liquefied natural gas and diesel oil) combined cycle units, each with a capacity of approximately 220 MW (Units 5 and 6). For this project, as in the case of Phase 3, the completed contract (turn key) method will be followed. So far three contractors have been preselected and the contract with the successful contractor for the Unit No. 5 project is due to be signed in April 2009. It will operate as an open cycle unit in summer 2011 and as a combined cycle unit at the begining of 2012. Unit No. 6 will operate as a combined cycle unit in 2013.

#### Internal Combustion Units of 50 MW Total Capacity

In the context of its efforts to deal with the expected load increase during summer 2008 and with subsequent load increases, the Electricity Authority awarded a tender to BWSC (Denmark) for the project announced by CERA in August 2007 for the temporary installation at the Dhekelia Power Station on 1 June 2008 of generation units with a total capacity of 50MW and the permanent installation of internal combustion units of the same capacity by 1 June 2009.

#### **Transmission Development Plan**

Despite ongoing problems caused by the time-consuming procedures for obtaining the necessary permits, the EAC carried out a significant amount of work in 2007. Many transmission and distribution substations throughout Cyprus were upgraded while the Omonia GIS transmission substation was commissioned in a rapidly developing area of Lemesos.

#### **Customer Service**

In order to provide the best possible service and information to the Organisation's customers, the EAC decided to install a new, modern customer service and billing system in place of the previous system. With the implementation of this new system, the standard of EAC customer service and information will improve considerably. Moreover, the new system will facilitate and speed up the day-to-day work of our Customer Service Officers. The system will be the main tool and source of information for the EAC Call Centre.

The EAC's decision to set up a Call Centre is of strategic importance since it has already entered a competitive environment following the liberalisation of the energy market. The Call Centre will enable the EAC to provide good quality service and information to customers quickly and efficiently, to promote the image of a progressive and dynamic Organisation and, in general, to respond to the expectations of consumers/customers. By the end of 2008, work on the Call Centre premises (2nd floor of the old Head Office building) is due to be completed, all the necessary equipment will be installed and the Call Centre will begin operations.



Within the framework of the EAC's continuous upgrading of the services it offers to customers, the Authority set up an Islandwide Faults Reporting Centre (IFRC). The aim of the IFRC is to provide a full, first-rate telephone service during major faults which lead to extensive power cuts so that EAC customers receive adequate information about the areas affected by power failures and the time required to restore service. The EAC Call Centre will eventually take over the work currently being carried out by the IFRC.

#### **Personnel Safety and Working Conditions**

Through upgrades to our installations we wish to provide our personnel with safe, first-class working conditions so that they are able to give their all for the benefit of the EAC. We consider it more than necessary that our personnel should enjoy such conditions. In 2007 we completed the relocation and operation of the Ammochostos-Larnaka Area Office while work continued on the Polis Chrysochous stores.

#### Thanks

I would like to express my thanks to all members of Personnel for their contribution to the EAC's progress and to promise that cooperation with the Management on Personnel matters will be high on the list of issues to be dealt with by the Organisation's Board of Directors.

I also wish to thank all the Members of the Board, the General Manager, Mr Moysis Stavrou, and all members of the Management Team. It would be an omission if I did not express my warm thanks to my predecessor as Chairman of the EAC Board, Mr Charilaos Stavrakis. I also thank the Unions for their joint efforts to ensure that the EAC has a vision and enjoys good industrial relations.

Special thanks go to the Minister of Commerce, Industry and Tourism, Mr Antonis Paschalides, as well as to his predecessor, Mr Antonis Michaelides and to all the ministry staff for their cooperation.

I thank the Government, the House of Representatives, the Auditor-General of the Republic, all those government departments and local government authorities with which the EAC has cooperated, our Organisation's Legal Advisers and representatives of the media for their promotion of the EAC's work.

Harris Thrassou Chairman

### Development Plan

In 2007 the EAC maintained its policy of aiming for high standards of safety and reliability in the provision of electricity, bearing in mind the predicted increase in load demand and thus continued with the rapid implementation of its Development Plan. Drawn up after various studies, the Development Plan has the following basic aims:

- The expansion and upgrading of customer services.
- · Greater efficiency in all areas of the EAC's activity.
- The upgrading of its IT systems, which will assist the EAC in achieving its business aims.
- The proper use of electricity, with the aim of energy conservation and load management and control, particularly at peak times.
- Protection of the natural environment.

The Development Plan covers both the medium and long-term requirements of the EAC. Some projects that have already been implemented, such as the introduction of new IT systems, significantly upgraded substations and new links to the transmission system, are of such importance that they will help the EAC to successfully carry out its mission for a substantial period of the 21st century.

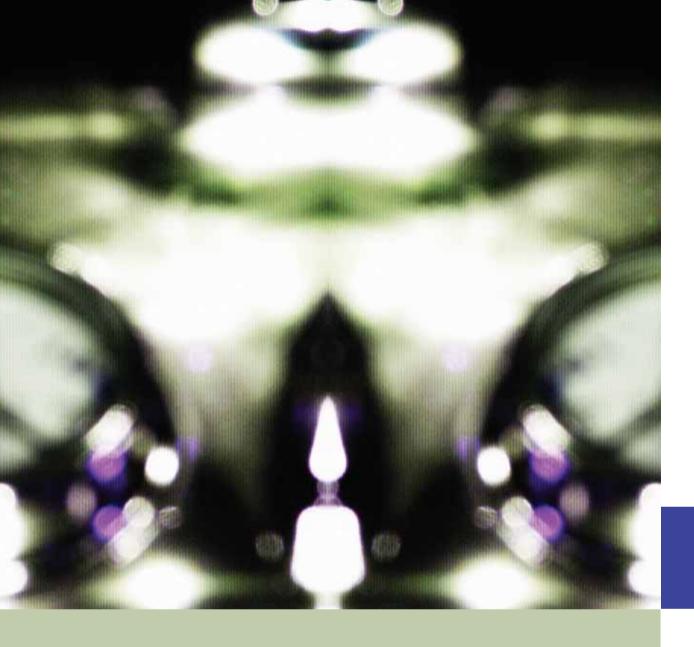
In the generation sector, the main and most important project was the completion of Phase 2 and Phase 3 of the Vasilikos Power Station, which will contribute to fulfilling the country's electricity needs for a considerable time. In July 2007, the consulting engineer issued the final delivery certificates for the contract for the steam turbine and transformers. These contracts have now been completed. The issuing of the boiler delivery certificate will depend on progress in resolving a number of pending issues, the main one being the problem of optimising fuel consumption and reducing nitrogen oxide emissions to permitted levels.

The projected date of issuance of the boiler delivery certificate has been put back to the end of 2008. It should be noted that the unit is in operation and is contributing to the generation system.

Phase 3 of the Vasilikos Power Station includes a combined cycle unit with a capacity of 220 MW (Unit No. 4) which is due to come into commercial operation on 30 December 2008. The contract also provides for the operation of two open gas cycle turbines in May 2008. During the first years of operation of the unit, diesel oil will be its fuel until the arrival of liquefied natural gas (LNG) in Cyprus. Thereafter it will use liquefied natural gas as its main fuel.

For this project, the completed contract (turn key) method is being followed. It includes the planning, supply, manufacture, construction, testing, delivery and maintenance of the unit for a specific time period. This is normal practice as implemented internationally for combined cycle units.

Phase 4 of the Vasilikos Power Station provides for two dual firing (liquefied natural gas and diesel oil) combined cycle units, each with a capacity of approximately 220 MWH (Units 5 and 6). For this project, as in the case of Phase 3, the completed contract (turn key) method will be followed.



Meanwhile, negotiations and contacts are continuing with the relevant Ministry and other interested parties concerning the arrival of Liquefied Natural Gas in Cyprus.

During the year under review, the new Omonia transmission substation was commissioned in the certain area of Lemesos, thus upgrading the EAC network even further in a very sensitive area that is undergoing rapid development.

During the year, various projects were carried out throughout Cyprus on the expansion and upgrading of the distribution network.

# General Manager's Message



Throughout 2007 the Electricity Authority of Cyprus continued with the difficult task of successfully ensuring an uninterrupted supply of electricity to the island while providing the best possible service to the public and completing various projects in the framework of its Development Plan - a Plan that will enable the EAC to play the leading role in the competitive environment that has been created.

During the year under review, the EAC continued to make steady progress and this is reflected in the advances achieved regarding a number of Development Plan projects.

In the light of the new situation that has arisen in the energy market and the interest that the EAC has demonstrated in expanding its activities to other sectors of the economy, our aim is now to consolidate the EAC's position of market leader in the energy and services sectors. At the forefront of this endeavour will be the excellent training and education of our personnel, hard work, increased productivity, respect for our customers and the provision of the best possible service.

Regarding electricity generation, in July 2007 the final certificates were delivered for Unit No 3 (130 MW) of the Vasilikos Power Station. This unit has been in operation and is contributing to the generation system since 2006 but the EAC will officially take delivery of it at the end of 2008. By then it is expected that a number of pending issues will have been resolved, the main one being the problem of optimising fuel consumption and reducing nitrogen oxide emissions to permitted levels. With the addition of this Unit, the installed capacity of the Vasilikos Power Station has increased from 298 MW to 428 MW (3 steam turbines, each of 130 MW capacity and a 38 MW gas turbine), thus enabling the EAC to respond fully to the continuously increasing demand for electricity that it faces every summer.

During 2007, the Omonia GIS transmission substation was commissioned in the certain area of Lemesos, thereby further upgrading the EAC network in the broader district.

In the course of the year, the construction of the Tseri transmission substation continued following the completion of building work. Despite our Organisation's efforts to provide an adequate supply of electricity and good service throughout Cyprus, I would like to mention here that in several instances we have been constrained by the fact that organised groups and/or communities have placed obstacles in the way of work aimed at supplying electricity to various areas. Everyone – the state and the public – needs to realise that the EAC's aim is to serve the country and that to this end it always acts in such a way as to cause the least inconvenience.

An extremely important issue that concerned the Board, Management and Staff Unions during 2007 was that of bringing natural gas to Cyprus. Our joint stance resulted in the issue being examined by all the political parties so that that the best decision under the circumstances could be taken for the good of all consumers.



During 2007, the EAC's Customer Charter came into force. The Customer Charter represents the EAC's commitment to top-quality customer service and is an official EAC information brochure which sets out performance indicators as well as the rights, obligations and benefits of customers. It also contains the special provisions, key performance settings or indicators that the EAC undertakes to meet when supplying electricity to consumers and customers, as determined by CERA.

In September 2007, the EAC began the free distribution of energy-saving lightbulbs which, by decision of the Council of Ministers, it made available to the special Fund for the use of Renewable Energy Sources (RES) and the promotion of Energy Saving methods. By the end of 2007, some 350 000 energy-saving lightbulbs had been distributed to the public. The campaign will continue until 2010, by which time it is hoped that every household, institution and school as well as all other eligible organisations will have received such lightbulbs.

Also during 2007, planning permission was obtained for the new Area Offices in Larnaka and Pafos while detailed work continued on the specifications and designs for the relevant calls for tender. Management lays great store on the Organisation's personnel and takes particular care to provide the best possible working conditions by ensuring that all members of staff have functional and ergonomically designed workplaces. The EAC's aim is to provide its personnel with a comfortable and safe working environment so that everyone in turn gives his/her best for the Organisation's progress and prosperity.

At this point I would like to express special thanks to the former Chairman of the Board, Mr Charilaos Stavrakis, who relinquished his duties following his appointment as Finance Minister and to all Members of the Board for the excellent cooperation that we had during the year. I can assure them that our cooperation will continue at the highest level with the sole aim of achieving progress for the Organisation and ensuring the welfare of our personnel.

To conclude this brief message I would like to express warm thanks to all my colleagues and associates, in particular to the Executive Managers of the Business and Management Units for their superb cooperation and to all members of staff for their constant efforts and their contribution to the Organisation's significant progress.

I believe that it goes without saying that, in the years to come, the EAC will continue to provide a first-rate service to its customers and that each one of us will continue to do everything in our power to ensure that the Electricity Authority of Cyprus maintains the excellent reputation that it has deservedly earned as a result of the great contribution that it has made to society during its 55 years of existence.

Moysis Stavrou General Manager



# business and management units

## Generation Business Unit

#### **GENERATION OF ELECTRIC POWER**

During the year 2007, the Electricity Authority of Cyprus continued the implementation of its operational and development program, which provides for the full utilisation, maintenance and extension of the existing Vasilikos, Dhekelia and Moni Power Stations.

#### VASILIKOS POWER STATION

Vasilikos Power Station, with an installed capacity of 428 MW (3 x 130 MW Steam Units and 38 MW Gas Turbine Unit) generated in 2007, 2 434 097 MWh, which corresponds to 50,86% of the total electricity generated from the Authority's Power Stations. During the same period the Station exported, 2 291 147 MWh, which corresponds to 50,67% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units for units generated reached 39,39% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 26,48%.

Moreover, the thermal coefficient of efficiency of the Steam Units, for units exported, reached 37,09% whereas the corresponding thermal coefficient of efficiency for the Gas Turbine reached 23,17%.

#### Maintenance

During the period January-December 2007, Units No.1 and 2 were taken out of service for a scheduled general maintenance of the Steam Turbines and of the Steam Boilers.

The yearly general maintenance of the two Units included all the electrical equipment, transformers and auxiliary equipment as well as repairs of various defects.

An external Contractor carried out the annual inspection and maintenance of the single mooring and the heavy fuel oil underwater unloading pipes.

#### DHEKELIA POWER STATION

Dhekelia Power Station, with an installed capacity of 360 MW (6 x 60 MW Steam Units), generated in 2007, 1 906 199 MWh which corresponds to 39,83% of the total electricity generated from the Authority's Power Stations. During the same period, Dhekelia Power Station exported, 1 811 943 MWh which corresponds to 40,07% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Power Station for units generated reached 30,98% whereas the respective coefficient of efficiency for units exported reached 29,44%.



#### Maintenance

During the period January-December 2007 the yearly maintenance of Units No. 1, 2, 3 and 4 was completed whereas the maintenance of Unit No.6 began and continued during 2008.

The yearly general maintenance of the two Units included all the electrical equipment, transformers, auxiliary equipment and repairs of various defects.

The Station moorings were inspected and maintained by an external Contractor and a new certificate was issued.

#### MONI POWER STATION

Moni Power Station, with an installed capacity of 330 MW (6 x 30 MW Steam Units and 4 x 37,5 MW Gas Turbine Units), generated in 2007, 445 875 MWh which corresponds to 9,31% of the total electricity generated from the EAC's Power Stations. During the same period the Station exported 418 383 MWh, which corresponds to 9,26% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units for units generated reached 24,44% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 25,26%.

Moreover, the thermal coefficient of efficiency of the Steam Units for units exported reached 22,82% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 24,81%.

## Generation Business Unit

#### Maintenance

During the period January-December 2007, the annual maintenance of Steam Boilers No. 2, 3 and 6 was completed. The yearly maintenance of the Boilers included visual checks and cleaning of all parts, various repairs inside the boilers, replacement of superheater tubes, which have reached their design limits, with other better quality material tubes and repairs in the air and flue gas ducts in order to avoid leakages. The steam air preheater of Boiler No. 6 was also replaced.

During the same period the annual overhaul of Steam Turbines No. 1 and 5 was completed.

The yearly general maintenance of the above Turbines included all the electrical equipment, transformers and auxiliary equipment.

The Station moorings were inspected and maintained by an external Contractor whereas a break away coupling was installed between the first and second flexible pipes and a quick release coupling at the end of the last pipe.

#### **ENVIRONMENTAL ISSUES**

For the protection of the environment and the continuous monitoring of the air quality, six mobile air quality units, two for each Power Station, are in continuous operation at selected sites in the vicinity of the Power Stations. These fully equipped units are capable of monitoring the ground level concentrations of dust, nitrogen oxides (NOx), sulphur dioxide (SO2), carbon dioxide (CO) and ozone (O3). The units are also capable of measuring other meteorological data such as the wind speed and direction, the air temperature and the relative humidity.



#### STUDIES

- Officers of the Generation Department were involved in the procedures required for the Accession of Cyprus in the European Union and the effects these will have on EAC operation and more specifically in matters involving the environment and the generation of electricity.
- The Operational Unit of Generation prepared a Report with calculations of the carbon dioxide CO<sub>2</sub> emissions for the period January-December 2006 as per new National Law for the greenhouse gas Emissions Trading Directive. This report was subsequently verified by an external consultant and submitted to the Ministry of Agriculture, Natural Resources and Environment.
- An external consultant was awarded a contract to carry out a study on how the efficiency of the three Power Stations could be improved. The study is expected to be completed at the beginning of 2008.

## Generation Business Unit

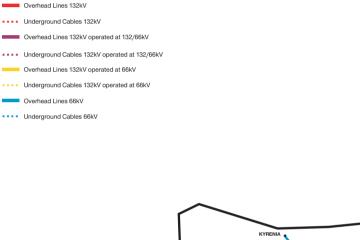
#### VASILIKOS POWER STATION DEVELOPMENT WORKS

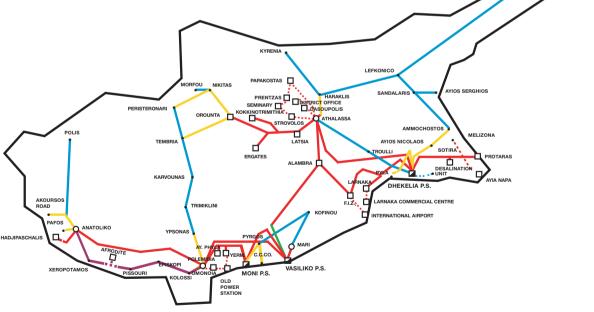
#### Phase 2 of Vasilikos Power Station

- According to the initial plan the date of commercial operation of the Unit of the second phase of Vasilikos Power Station (Unit No. 3, Steam Turbine 130 MW) was the 08.06.2005.
- In July 2007 the Consultant issued the final delivery certificates for the Steam Turbines and Transformers.
- The issue of the Boiler delivery certificate will depend on the progress of all outstanding issues, mainly the improvement of the combustion and the reduction of NOx emissions.
- The new commercial date of operation of the Unit is transferred to 2008. It should be noted that the Unit is currently operating and generating.

#### Phase 3 of Vasilikos Power Station

- Phase 3 consists of one combined cycle Unit with a capacity of 220 MW, (Unit No. 4), which is expected to be in commercial operation on 30/12/2008. In the Contract there is a provision for the operation of two open cycle gas turbines in July 2008. During the first years of operation of the unit, it will use as fuel diesel oil until the arrival of liquefied natural gas (LNG) in Cyprus. Thereafter it will use liquefied natural gas as the main fuel.
- For this Project, the method of a completed contract (Turn Key) is followed, which includes the planning, the supply, the manufacture, the construction, the tests, the delivery and the maintenance of the Unit for a specified time period. This is the usual practice that is applied internationally for Combined Cycle Units.
- The Contract for the construction of Phase 3 has been awarded to the joint venture Hitachi Power Europe/Itochu Corporation & J&P Avax.
- For the maintenance of the two gas turbines a Contract has been awarded to General Electric International Inc. The Contract provides for the maintenance of the gas turbines for a period of 9 years.





AYIOS

### Generation Stations

Overhead Lines 220kV operated at 132kV

- O Substations 132/66/11kV

- Substations 132/11kV
- Substations 66/11kV

33

## Generation Business Unit

#### Phase 4 of Vasilikos Power Station

- Phase 4 consists of two dual firing (liquefied natural gas and diesel) combined cycle Units with a capacity of 220 MW each (Units No. 5 and 6).
- For this Project, as in the case of Phase 3, the method of a completed contract (Turn Key) will be followed.
- The Consultants of the project, Lahmeyer International GmbH of Germany, have submitted to the Electricity Authority of Cyprus their final report which refers to the total review of the Generation Development Program and its formation so that it will be successfully implemented in the liberalised electricity market.

The report was submitted in November 2006 and thereafter, the Generation Business Unit, after considering the best applicable scenario as well as other parameters analysed in the report, prepared and submitted a specific proposal to the Board of Directors which was eventually approved on the 6th of December 2006. According to the approved proposal, Unit No. 5 will be regarded as a definite Unit and will be delivered for commercial operation in 2011 whereas Unit. No. 6 will be regarded as an optional Unit and in case this option is materialised then the Unit will be delivered for commercial operation either in 2011 (together with Unit No. 5), or in 2012 or in 2013.

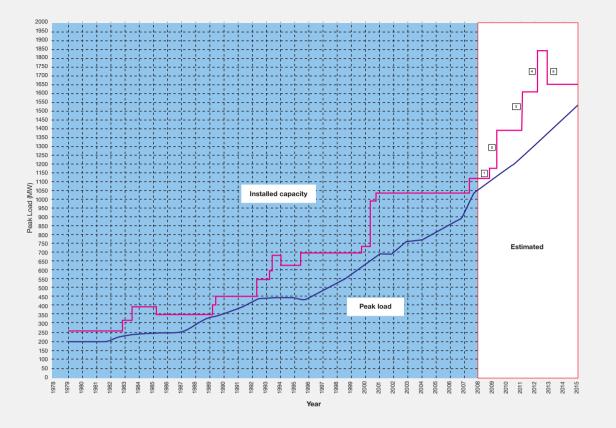
 Up to now the pre-selection of three Contractors has been completed and the successful Contractor is expected to sign the contract in April 2009. The Unit will operate in an open cycle in the summer of 2011 and in a combined cycle during the first monhts of 2012. The corresponding dates for Unit No. 6 are during 2013. The exact operating date of Unit No. 6 will depend on all future developments.

#### DHEKELIA POWER STATION DEVELOPMENT WORKS

#### Internal combustion engines with a total capacity of 50 MW

• The Electricity Authority of Cyprus in its effort to satisfy the expected energy demand for the summer 2008 as well as the increase of demand thereafter, awarded to BWSC of Denmark the project for the installation of temporary units with a total installed capacity of 50 MW at Dhekelia Power Station by June 1st 2008 and the permanent installation of internal combustion engines of the same capacity by June 1st 2009.





# DEVELOPMENT PLAN OF EAC

- (1) COMMISSIONING OF DIESEL POWER PLANT 50 MW (June 2008)
- (2) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT, VASILIKOS) 2009 (beginning)
- (3) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT, VASILIKOS) 2011 (beginning)
- (4) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT) 2012 (beginning)
- (5) DE-COMMISSIONING 6 x 30MW = 180MW (STEAM UNITS, MONI) 2012 (end)

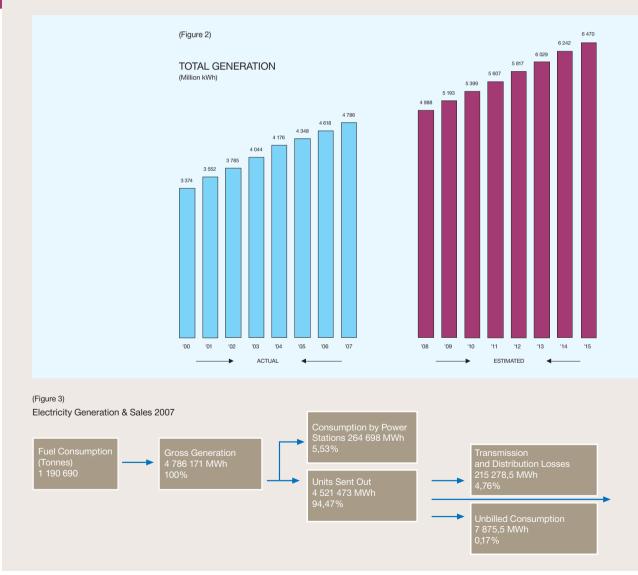
It is estimated that the steam units at Moni P/S will be taken out of service at the end of 2012. Thereafter, the land will be suitably prepared for the installation of new combined cycle units (2016).

# Generation Business Unit

#### SYSTEM OPERATION

#### **Electricity supplied**

In 2007 the total number of units generated by the EAC's three Power Stations was 4 786 171 000 kWh, compared with 4 618 079 000 kWh in 2006, representing an increase of some 3,6% over the previous year.



36

Figure 2 (page 36) shows the total number of units generated annually from 2000 to 2007. The predicted generation for the period 2008-2015 is also shown.

# **Generation, Transmission and Distribution Losses**

Electricity consumption at the power stations amounted to 5,5% of the total generation, compared with 5,5% the previous year.

Figure 3 (page 36) shows electricity generation and distribution of sales to the various consumer categories.

### **Fuel Consumption**

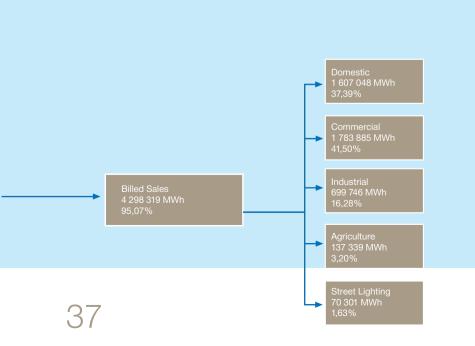
The amount of heavy fuel oil consumed by the power stations totalled 1 174 656 metric tonnes, compared to 1 137 274 metric tonnes the previous year, representing an increase of 3,3%.

The total quantity of diesel fuel consumed by the power stations was 16 034 metric tonnes, compared to 6 862 metric tonnes the previous year, representing an increase of 133,7%.

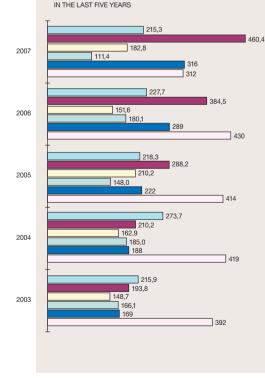
The average calorific value of the fuel oil used was 42 816 kJ/kg compared to 42 989 kJ/kg in 2006.

# Plant Efficiency

Average generating system efficiency in 2007, based on the total units generated by the EAC's three power stations, was 33,8% compared with 33,8% in 2006. The heat rate per kWh generated was 10 652 kJ/kWh compared to 10 651 kJ/kWh in 2006. The main aim was to utilise the higher efficiency units of the Vasilikos and Dhekelia Power Stations to cover the basic load to the maximum possible extent, taking maintenance and load demand into account.



# Networks Business Unit



NEW DISTRIBUTION PROJECTS EXECUTED

□ L.V. O/H LINES (km) □ L.V. U/G CABLES (km) □ MV U/G CABLES (km) □ MV O/H LINES (km) ■ G.M. TRANSFORMERS □ P.M. TRANSFORMERS

(Figure 4)

#### TRANSMISSION NETWORK

#### INTRODUCTION

The transmission network is the backbone of the Authority's system, interconnecting the power stations with the load centres.

Transmission system development works that were completed in 2007 increased reliability and raised the installed capacity of the transmission substations by 111MVA.

# CONSTRUCTION WORK

#### **New substations**

#### Commissioning of new substations

During the year under review, commissioning work was completed on the new Omonia 132/11kV substation in Lemesos which has a capacity of 80MVA (2x40MVA).

#### New substations under development

#### 132/22-11kV Ayios Athanasios substation

Work on the 132/22-11kV Ayios Athanasios substation in Lemesos has almost finished. Installation of the transmission cables will be completed by the end of January 2008 and the required commissioning tests will be carried out. The substation is due to come into operation in February 2008.

#### 220/132kV Tseri substation

Construction work on the substation was completed in August 2007. The electrical equipment includes only GIS switchgear, protection panels and a fully automatic monitoring system. The substation will operate as a branch without transformers and a medium voltage distribution panel. It is due to come into operation in April 2008.

#### 132/22-11kV Trimiklini substation

Construction work on the substation is due to start in June 2008 and to finish in September 2009. Immediately afterwards, installation of the electrical equipment will begin. This will include one 132kV-66kV interbus transformer and two 16MVA, 66/11,5kV transformer circuits. The substation is due to come into operation in summer 2010.

#### 132/22-11kV Amathus substation

In September 2007 construction work began on the substation with a predicted duration of 12 months. The electrical equipment will be delivered shortly and its installation is expected to start in autumn 2009.

### 132/22-11kV Lakatamia substation

The tendering process is under way for construction of the substation and for the supply of electrical equipment. Two 40MVA, 132/23-11,5kV transformer circuits, four line circuits and one 30-position circuit breaker panel will be installed.

# Upgrades to substations

# **Completed upgrades**

### 66/11kV Kophinou substation

Upgrading work on the 66/11kV Kophinou substation was completed in November 2007 following the commissioning of a 2nd 10,5/15MVA transformer circuit. The reinforcement included the construction of 132kV links, the replacement of 2x5 MVA transformers by 2x15MVA, the construction of a control room and the installation of automatic 132kV and 11kV circuit breakers.

### **Ongoing upgrades**

### 132/11kV Dhekelia substation

Due to the installation of additional alternators in the Dhekelia substation in order to meet generation requirements, the new GIS equipment will operate at 132kV instead of 66kV as originally scheduled and two new 40MVA, 132/23-11,5kV transformers will be installed. All the procedures for awarding tenders for construction work on the substation are currently under way.

### 132/11kV Alambra substation

Extensions to the substation's 132kV busbars have been completed. Work continues on the installation of the 3rd 16 MVA transformer circuit.

# Episkopi, Pissouri and Xeropotamos substations

The existing 66/11kV Episkopi, Pissouri and Xeropotamos substations are being totally renovated and upgraded to 132/22-11kV. The Xeropotamos substation will be relocated to new premises that have already been procured. Work on the first phase of the Epiksopi substation was completed in October 2007.

The upgrade includes the construction of 132kV busbars, the replacement of transformers, the construction of a control room and the installation of automatic 132kV and 11kV circuit breakers.

#### **Overhead power lines**

#### New construction

#### Vassilikos-Tseri 220/132kV overhead power line

Construction is at an advanced stage of the Vassilikos-Tseri double circuit 220kV overhead transmission line with two Rubus conductors per phase.

The 132kV will be connected to the overhead transmission network of the interconnecting Athalassa and Orounta Stations.

#### Ypsonas-Trimiklini 132kV overhead power line

Plans for the new 132kV double circuit overhead transmission line are complete. Planning permission, government approval and access permission have all been obtained. Specifications are now being drawn up for tenders to be invited in 2008 for construction of the project.

This project is considered to be extremely important as regards the uninterrupted supply of electricity to the broader Troodos region.

# Networks Business Unit

### Upgrades/Relocations of overhead power lines

Relocation of the Dhekelia-Ayios Nicolaos and Dhekelia-Protaras 132kV overhead power lines.

Work on relocating transmission lines outside residential areas in the Ormidhia district began in summer 2007 and are expected to be completed in March 2008.

### Kolossi-Anatoliko 132kV overhead power line

Work on relocating transmission lines outside residential areas in the Timi district is due to begin in January 2008 and to be completed by June 2008.

#### Stroumbi-Polis 132kV overhead power line

Plans have been drawn up for the upgrading of the 66kV overhead transmission line to a double circuit 132kV line. Planning permission and government approval have been obtained and we are now at the stage of gaining access permission. A call for tenders for the construction of the project will be published in 2008.

### Undergrounding of existing transmission lines

In 2008 work will begin on installing 132kV underground cables from the Athalassa substation to the Strovolos Industrial Estate and the roundabout near the Psychiatric Hospital which will replace the 132kV Athalassa-Strovolos and Athalassa-Dasoupolis overhead lines.

Also, during 2008 a call for tenders will be issued for the undergrounding of the 132kV Moni-Germasogeia-Agia Fyla-Polemidia overhead line which crosses the greater Lemesos area from the Moni Substation to Polemidia. The first phase of the project is expected to start at the end of 2008 or early in 2009.

#### Other transmission network projects at a preliminary stage

Work is at a preliminary stage on the following:

- Establishment of the Pafos substation
- Establishment of the Ikaria substation
- Establishment of a reactive power compensation system at the Tseri substation.

# TRANSMISSION SYSTEM DEVELOPMENT STUDIES

The following transmission development studies were undertaken during 2007 in collaboration with the Transmission System Operator (TSO):



#### Lefkosia Area:

The following studies were prepared and approved for Lefkosia and the surrounding area:

- Interconnection of the Dasoupolis and District Offce transmission substations.
- Replacement of transformers in the Tembria transmission substation.
- A new Dali Industrial Zone 2 x 40MVA GIS 132/22-11kV transmission substation in Lefkosia with an underground connection to the transmission network.

The following studies are planned:

• A new Archangelos 2 x 40MVA GIS 132/22-11kV transmission substation in Lefkosia.

### Lemesos Area:

The following studies were prepared and approved for Lemesos and the surrounding area:

• The temporary installation of a desalination plant in the grounds of Moni Power Station.

The following studies are planned:

- The Ypsonas Industrial Estate switching transmission substation.
- A Trimiklini-Karvounas-Tembria double circuit 132/66 kV overhead line.
- A new Vassilikos-Ypsonas Industrial Estate Rubus twin circuit overhead transmission line.
- Upgrading of the Vassilikos-Moni overhead transmission line.
- A new Zakaki 132kV transmission substation.

# Ammochostos-Larnaka Area:

The following studies were prepared and approved for Ammochostos-Larnaka and the surrounding area:

• A new Athienou 132/22-11kV transmission substation.

The following studies are planned:

- Interconnection of the Pyla and Commercial Centre transmission substations via a twin circuit underground transmission cable.
- Dismantling of a part of the Dhekelia-Larnaka 132/11kV line.
- Upgrading of the Free Industrial Zone transmission substation.

# Networks Business Unit

# Pafos Area:

The following studies were prepared and approved for Pafos and the surrounding area:

- Upgrading of the A. Hadjipaschalis transmission substation to a GIS type and the replacement of medium voltage equipment.
- The installation of a third 132/66kV 45MVA interbus transformer in the Anatoliko substation.
- The relocation/undergrounding of the Anatoliko-New Pafos interconnection.
- Upgrading of the Akoursos transmission substation.

### The following studies are planned:

• Undergrounding of a section of the Anatoliko-A. Hadjipaschalis line.

### Other studies:

The following studies have also been completed:

- Ten-Year Transmission System Development Programme 2007-2016 by the Transmission System Operator.
- Startup for desalination turbines.
- Reactive Power Compensation on the Transmission System.
- Upgrading of the Load Management System (Ripple Control).

The following studies are planned:

- Transmission System power factor improvement
- Continuous Modelisation of theTransmission System and Equipment
   and System Analysis
- Ten-Year Transmission System Development Programme 2008-2017 by the Transmission System Operator
- Introduction of a GIS (Geographical Information System) for the EAC (digitalisation of drawing board work)
- Review of a study for a transmission substation earthing system with the use of CDEGS software

All studies are carried out in collaboration with the Transmission System Operator (TSO) who is directly responsible for the operation and development of the transmission system.

# DISTRIBUTION NETWORK

# INTRODUCTION

The Distribution Network is the link between the EAC Transmission system and the Authority's customers.



# CONSTRUCTION PROJECTS

#### **Technical Specifications**

The Networks Business Unit is responsible for the drawing up of technical specifications for all distribution network equipment and materials.

The technical specifications are under constant revision due to changes to international standards, improvements in technology or alterations in the use of materials. There is a total of 245 approved technical specifications concerning 1 445 materials. In 2007, seven new technical specifications were drawn up while 29 were revised.

# **Code of Practice**

The correct and uniform application of distribution network construction work requires the existence of a detailed Code of Practice. Revision of the code for overhead power lines has already been completed and revisions take place at regular intervals to cover new applications. Preliminary work has also begun on the drawing up of a Code of Practice for the underground network.

#### Network construction standards

In order to carry out studies that include distribution networks, Distribution Network Specifications have been drawn up for all types of construction. The Distribution Network Standards are maintained and reviewed by the Networks Business Unit to ensure the proper use of materials and the correct costing of studies.

### New methods for the scaling and recovery of poles and pylons

In order to comply with the law on safe working at heights, a plan was drawn up during 2007 for the introduction of new methods for safe scaling and pole/pylon recovery by the EAC's linesmen.

In accordance with prepared specifications, a complete range of personal equipment was purchased for the EAC's 380 linesmen. The Networks Business Unit made a substantial contribution to the organisation and monitoring of an external training programme which included specialised techniques for scaling and maintaining poles and pylons, the training of safety equipment inspectors and provisions for regular refresher courses.

# Networks Business Unit

# DISTRIBUTION SYSTEM DEVELOPMENT STUDIES

In the context of our efforts to expand and develop the distribution system, 7 033 studies were completed in 2007 compared with 6 910 in 2006. Expenditure on construction work for the expansion and development of distribution system in 2007 amounted to 36,6 million compared with 28,7 million in 2006.

# Other studies:

The following studies have also been completed:

- Calculation of distribution substation electromagnetic fields
- Levels of consumer short-circuit faults in the context of the 16th edition
   of IET regulations
- Reinforcement of medium voltage distribution system connections in Pafos and the surrounding area

The following studies are planned:

 Studies on the interconnection of Renewable Energy Sources (RES) on the distribution system

# TELECOMMUNICATIONS AND ELECTRONIC SYSTEMS

The Electronic Systems and Telecommunications section deals mainly with the development and support of the EAC's electronic, telecommunications and security systems.

#### **Optical Telecommunications Network**

The EAC's Optical Telecommunications Network, which was established in 2000, links 21 substations, power stations and Area Offices. This network provides the communication facilities for the SCADA/EMS system, teleprotection, telephone, ripple control, IT and other services.

During 2007, two of the system's digital multiplexers were upgraded while a number of new telecommunication channels were created, mainly for the networking of telephone systems, the protection of transmission lines and the IT network.

# **Optical Fibre Network**

The Authority utilises an extensive overhead and underground optical fibre network. In 2007, work was carried out on the network for the interconnection of three new transmission substations and for six cases of repair/relocation work.

Also, additional optical fibre circuits were made available to the EAC's two strategic partners in telecommunications.



### **Telephone Network**

The integration of all the EAC's area and power station telephone systems into a single unified telephone network was completed in 2007. The major part of this network is used for the EAC's optical fibre telephone system.

The Pafos telephone system was expanded and upgraded while a new system was installed in the Paralimni Call Centre and the Polis Chrysochous stores. The system serving the IT section, the Energy Control Centre (ECC) and the Islandwide Faults Reporting Centre (IFRC) was also upgraded.

At the same time, the project to upgrade the telephone system in the Lefkosia-Kyrenia-Morfou Area offices is in its final stages and is due to be completed at the beginning of 2008. Furthermore, the Ammochostos-Larnaka Area was added to the Voicemail system.

With the expansion of the Islandwide Faults Reporting Centre (IFRC) to the Faults Reporting Centres (FRC) in all districts, new reliable telecommunications circuits connecting the IFRC with the FRCs were introduced in the form of hotlines.

Preparatory work began on an integrated telephone exchange that will serve all the needs of EAC customers.

#### **Emergency Telephone Network**

The Emergency Telephone Network was expanded so as to include the Backup Monitoring Centre and Vasilikos Power Station.

# Supervisory Control and Data Acquisition and Energy Management System (SCADA/EMS)

The on-line and real-time Supervisory Control and Data Acquisition and Energy Management System (SCADA/EMS) has been in service since 1997. It provides facilities for the monitoring and controlling of the generation, transmission and primary distribution systems through the Energy Control Centre (ECC) and the Area Distribution Control Centres.

Implementation of the SCADA/EMS system was expanded during 2007 to include the monitoring of three additional transmission substations, while the monitoring and control systems of six more substations were upgraded.

All the above projects were carried out in full cooperation with the TSO.

### Load Management System (Ripple Control)

This system is used for the load management of controllable loads on consumer premises (storage heaters, central airconditioning/heating systems, water pumps, street lighting etc.) using the transmission and distribution network as a communications medium.

During 2007 a study on the expansion/upgrading of the system was completed and its findings are due to be submitted for implementation during 2009-2010.

# Networks Business Unit

### Security Systems

The installation of a security system (CCTV and intrusion alarm) was completed in Area Offices Stores and Customer Service Centres.

A pilot lightning conductor system was installed in the Lefkosia stores. A similar system is planned for other Authority buildings.

#### **Civil Defence**

Work has progressed on the creation of an emergency Civil Defence operations centre at the EAC's Head Offices.

# CIVIL AND BUILDING WORKS SECTION

The Civil and Building Works Section is chiefly involved in all the EAC's construction projects.

#### **Power Stations**

In 2007 work continued at the Authority's Power Stations on the basis of a three-year civil engineering works maintenance contract.

Construction plans for civil engineering works regarding Phase 3 of the development of Vasilikos Power Station were completed and construction work began. Additionally, planning work on Phase 4 for the same station was completed with the provision of all the required specifications to the consultant engineers.

#### Transmission/Distribution systems projects

The section provided technical support for the planning and monitoring of transmission and distribution network construction work.

#### Stores and Technical Staff Offices

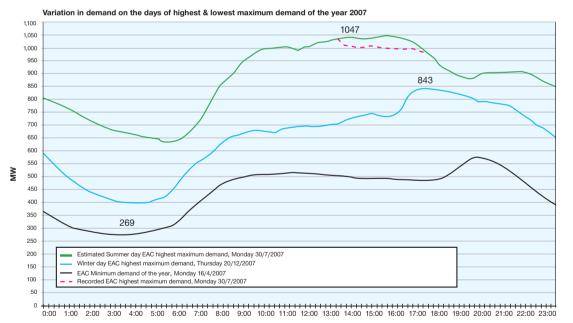
In addition to the development projects for the generation and transmission systems, the section dealt with the construction of new Area stores at Polis Chrysochous which were completed in 2007. It has also been involved in construction work on the new Area stores in Lemesos, which is due to begin in 2008 and to be completed in 2010.

# Area Offices

Architectural planning and other work on the Authority's new Area Offices in Pafos and Larnaka continued throughout 2007.



(Figure 5)



Note: As shown in T.S.O. 2007 Annual Report

# Customer Service Business Unit

# CONSUMERS

At the end of 2007, the total number of consumers in the governmentcontrolled areas of Cyprus stood at 476 500, a net increase of 21 458 or 4,7%.

Table 1 (page 53) shows the number of consumers by category as well as the percentage increase over the previous year.

# **BILLED SALES**

Billed sales in the government-controlled areas increased to 4 298,3 GWh, compared to 4 135,0 GWh the previous year, representing an increase of 3,9%.

- Table 2 (page 53) shows the allocation of billed sales to the various categories of consumers, as well as the percentage increase over the previous year.
- Electricity sales for the years 2005, 2006 and 2007 are shown in Fig. 6 (page 51). Electricity sales and revenue for 2007 are shown by consumer category and as a percentage of total sales and revenue in Fig. 7 (page 59).

# **OFF-PEAK SUPPLIES**

Off-peak electricity sales (tariff Code 55) totalled 110 587,9 MWh, down by 2 512 MWh or 2,2% compared to 2006. This reduction is attributed to the mild weather and to an increase in the price of electricity, since the average charge per kWh rose from 7,262 cents in 2006 to 7,444 cents in 2007. The number of consumers increased by 980.

- Consumers opting for the off-peak tariff totalled 19 129, of whom 18 733 (97,9%) were domestic consumers with an average annual consumption of 5 754 kWh compared to 6 193 kWh in 2006.
- Statistics for billed off-peak sales of electricity over the last five years are shown in Fig. 8 (page 59).

# TARIFFS

• The EAC's Tariffs Group continued to work with its external consultants on the introduction of new marginal cost tariffs in the context of Cyprus liberalised electricity market. The consultants developed and delivered to the EAC software which will be used to set tariffs. Software training was given to members of the Tariffs Group. The Tariffs Group, in collaboration with its consultants, prepared an initial proposal for the introduction of new tariffs which was submitted to the Cyprus Energy Regulatory Authority (CERA) for discussion.

CERA subsequently requested that new tariffs be submitted based on revised Load and Power flow forecasts, revised Transmission System Development Cost forecasts, and Distribution System Development Cost forecasts, in accordance with the EAC's Development Plan.

- In the context of the upgrading of the EAC's services and its efforts aimed at energy conservation, we again sent out an annual statistical report to all our monthly billed customers. This report includes information on monthly consumption and peak demand regarding their premises, as well as monthly voltage and load indicators, which are directly linked to correct energy use and conservation.
- In the framework of the special domestic tariff for large and needy families, by the end of December 2007 some 9 503 customers were benefitting from this. The EAC's reduced revenue for 2007 as a result of this special tariff amounted to £825.000 less than it would have been if these customers had remained on tariff codes 05, 06 and 07.
- The average selling price of electricity per kWh in all categories rose from 7,262 cents in 2006 to 7,444 cents in 2007, an increase of 2,5, as a result of increased fuel costs and the automatic fuel cost adjustment.

# LOAD RESEARCH AND CONTROL

In the context of its efforts to upgrade its load research, since 2000 the EAC has been using a software package by which data is retrieved via the telephone network. This program enables direct monitoring of customer loads, the automatic retrieval of data and the timely preparation of load research reports. During 2007 the EAC continued to implement this load research method for all its corporate customers who are supplied at medium and high voltage.

The data obtained for domestic customers and monthly peak demand commercial customers was analysed, processed and subsequently used in the drawing up of the relevant load research reports. Their conclusions are used for new tariff structuring and for load forecasting and management.

# CUSTOMER SERVICE AND BILLING SYSTEM

In order to provide the best possible service and information to the Organisation's customers, the EAC decided to adopt a new, modern customer service and billing system in place of the previous system which can no longer respond satisfactorily in the new environment created by liberalisation of the electricity market.

# Customer Service Business Unit

The project was won by SPL World Group Ltd and work began on 4 July 2005. The new system is due to come into operation in the second week of May 2008.

With the implementation of this new system, the standard of EAC customer service and information will improve considerably. Moreover, the new system will facilitate and speed up the day-to-day work of our Customer Service Officers.

The system will be the main tool and source of information for the EAC Call Centre.

# **ISLANDWIDE FAULTS REPORTING CENTRE (IFRC)**

Within the framework of the EAC's continuous upgrading of the services it offers to customers, the Authority set up an Islandwide Faults Reporting Centre (IFRC). The aim of the IFRC is to provide a full, first-rate telephone service during major faults which lead to extensive power cuts so that EAC customers receive adequate information about the areas affected by power failures and the time required to restore service. It also covers daily routine work, providing for a good quality response on the part of the EAC about isolated daily faults to customer premises and street lighting.

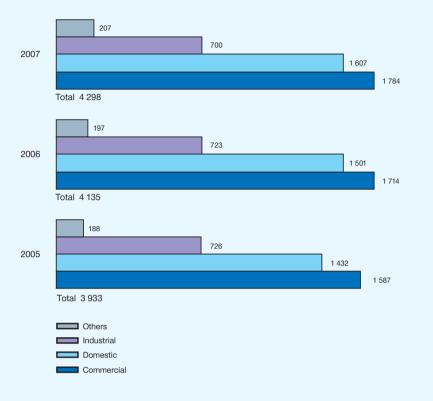
The IFRC, which is currently located on the second floor of the old Head Office building and is manned by ten Customer Service Officers, provides service to all the government-controlled areas of Cyprus. In the future, the IFRC will be one of the main features of the EAC Call Centre.

Customer calls are distributed via an islandwide four-digit telephone number to the IFRC, where the faults are registered electronically before being reported to the Area emergency/faults crews for corrective action. During 2007 the EAC's Customer Service Officers responded to 353 976 calls, or 94% of a total of 376 280 received calls to 1800.

The EAC is constantly striving to improve its service to customers, particularly in cases of repairing faults and the restoration of the power supply, through the use of suitable equipment. The IFRC receives calls on 22 572 299 (07.00-21.30) on a daily basis from customers regarding meter readings which could not be carried out by EAC inspectors due to the fact that the premises were closed.

### (Figure 6)

SALES OF ELECTRICITY (millions kWh)



# CALL CENTRE

The EAC's decision to set up a Call Centre is of strategic importance since it has already entered a competitive environment following the liberalisation of the energy market.

The Call Centre will enable the EAC to provide good quality service and information to consumers/customers quickly and efficiently, to promote the image of a progressive and dynamic Organisation and, in general, to respond to the expectations of consumers/customers.

The EAC Working Group that was set up to oversee the establishment of the Call Centre has been cooperating fully with the Irish firm ESB International, to whom the tender for consultancy services was awarded. The project is progressing on schedule.

On December 22, 2006, the EAC issued a call for tenders for the purchase of the necessary infrastructure (technical equipment, software, etc.) in collaboration with the consultants. The tenders were assessed and the project was awarded to GCC Computers Ltd on 19 December 2007. The project is due to be completed by the end of 2008.

# Customer Service Business Unit

# **RENEWABLE ENERGY SOURCES**

In accordance with the provisions of the relevant European Directive 2001/77/EC during Cyprus' accession process and its compliance with the directives, legislation and regulations of the European Union, the Government has taken legislative, regulatory and administrative measures for the promotion of the use of Renewable Energy Sources (RES) and, more generally, of energy conservation with the ultimate goal of increasing the contribution of RES to the country's energy balance. As the main producer and supplier of electricity in Cyprus, the EAC could not but contribute actively to this effort, so as to satisfy the demands of the European Union regarding RES, while acting within the strict framework of Cyprus' appropriately adapted and amended Laws and Regulations.

The EAC cooperates well with the Energy Service of the Ministry of Commerce, Industry & Tourism for joint action on the subject of RES. Interested applicants/producers are given all possible technical assistance, including priority in the examination of their applications to install units for generating electricity from RES.

In accordance with existing legislation and the relevant decisions of the Council of Ministers, the EAC is obliged to purchase electricity produced from Renewable Energy Sources and to distribute it on its grid at a price determined by the Cyprus Energy Regulatory Authority (CERA). To this end, a 15-year purchase agreement is signed between the producer and the EAC. In addition to the purchase price paid to the producer by the EAC, the producer receives a subsidy from the Special Fund for Grants/Subsidies and part of the Subsidy Scheme, once approved and having signed the Subsidy Agreement with the Special Fund Management Committee.

By the end of 2007, a total of 196 photovoltaic systems (compared to133 at the end of 2006, representing an increase of 47,4%) producing up to 20 kW, with a total voltage of 843,39 kW (compared to 577,50 kW at the end of 2006, representing an increase of 46%) and a total production of 1 321 119 kWh (compared to 388 160 kWh in 2006, i.e. an increase of 240,4%). It is worth noting that on 18/1/2007, the Council of Ministers approved a new scheme for grants/subsidies for promoting energy conservation and encouraging the use of Renewable Energy Sources. The scheme provides for an increase in the maximum acceptable installed voltage of photovoltaic systems for the purpose of grants/subsidies from 5 kW to 20 kW. Furthermore, on 9 December 2007 the first biomass/biogas (250 kW) electricity generation unit in the RES Grants/Subsidies scheme came into operation and three more applications are being processed with a view to their coming into service during the first part of 2008. There has been considerable interest, both in the connection of new photovoltaic systems, despite the relatively high initial outlay required for the installation of such systems, and in RES Generation Units using biomass/biogas. Unfortunately, the applications which have also been received for the installation of wind farms are still at the stage of obtaining the necessary approvals.

# Table 1

# NUMBER OF CONSUMERS

CONSUMER CATEGORY	AS AT 31.12.2007	AS AT 31.12.2006	INCREASE %
Domestic	366 799	348 394	5,3
Commercial	78 294	76 272	2,7
Industrial	11 299	11 198	0,9
Agricultural	12 117	11 597	4,5
Street Lighting	7 991	7 581	5,4
TOTAL	476 500	455 042	4,7

# Table 2

# BILLED SALES OF ELECTRICITY (MWh)

CONSUMER CATEGORY	2007	2006	INCREASE %
Domestic	1 607 048	1 500 511	7,1
Commercial	1 783 885	1 713 921	4,1
Industrial	699 746	723 038	(3,2)
Agricultural	137 339	128 701	6,7
Street Lighting	70 301	68 851	2,1
TOTAL	4 298 319	4 135 022	3,9

# TECHNICAL ISSUES

During 2007, the department of the Customer Service Business Unit responsible for Technical Issues dealt with issues pertaining to:

- The metering system
- Street lighting
- Energy conservation
- Wiring regulations for electrical installations
- Electricity generation via Renewable Energy Sources
- Protection of the EAC's revenue from electricity theft
- Monitoring of the quality of electricity supply

# Customer Service Business Unit

Specifically, during the year under review, the Meter and Relay Testing Centre (MRTC) received 83 200 new meters. A total of 56 705 new meters were checked and calibrated, 1 099 second-hand meters were repaired and recalibrated, 2 194 Ripple Control Receivers were programmed and tested and 1 029 street lamps were repaired and tested.

During 2007, the EAC Area office inspection department carried out 31 696 inspections of electrical installations throughout Cyprus.

In 2007 the Medium Voltage Automatic Meter Reading system was expanded and all personnel involved in its use were given the relevant training. Some 419 meters have been disconnected and measurements are now recorded automatically. Moreover, specifications were drawn up and tenders assessed for the equipment used in the Meter and Relay Testing Centre (MRTC) and Area Offices relevant to the metering system and street lighting.

Regarding the monitoring of the quality of supply to customer premises, the Section installs power disruption analysers and, wherever it is considered necessary, corrective measures are taken.

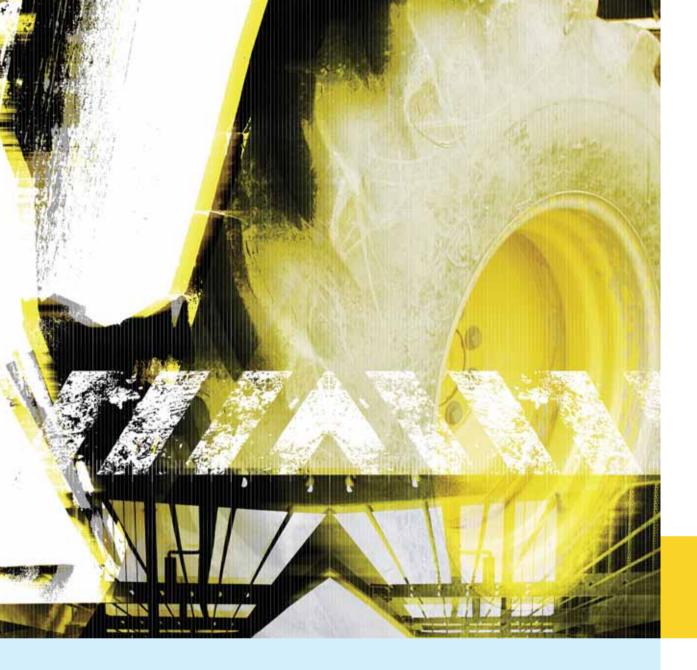
# EAC REVENUE PROTECTION

In 2007, personnel dealing with EAC revenue protection of electricity checked 3 225 meters on the premises of high-risk customers. Of these, 1 810 were found to be intact, while 1 249 had been tampered with, though they showed no sign of electricity theft. In 166 instances, meters were found to have been tampered with and there were signs of electricity theft. In relation to these, a total of £705.965 was recovered in respect of unrecorded consumption, damage to EAC equipment and the cost of investigating the cases.

Investigations that began in 2001 into 168 cases of electricity theft (the Masoura case) continued during 2007. The total value of unrecorded consumption has been estimated at  $\pounds 2,9$  million and payment of  $\pounds 1,1$  million has been arranged. The EAC has taken legal action against those involved in order to recover the remainder.

# QUALITY CERTIFICATION OF THE METER AND RELAY TESTING CENTRE

In the context of the EAC's stated policy of upgrading the quality of its operations and its customer services, the Organisation took the strategic decision for Quality Certification/ Accreditation of its workshop in the Meter and Relay Testing Centre (MRTC). Certification work is now at an advanced stage and it is planned that procedures for obtaining the required Quality Certification/Accreditation will be completed during 2008. In December 2007, work was completed on replacing existing test benches with new ones, one for single-phase and one for three-phase meters.



Accreditation of the workshop will be in accordance with ISO/IEC17025.

The relevant Accreditation certification will essentially give the Centre a written guarantee that monitoring and testing procedures at the MRTC comply with required specifications. The Accreditation Certificate will recognise the technical capability of the MRTC to carry out the relevant testing and calibration work on meters and the results of these tests will be accepted anywhere.

# Customer Service Business Unit

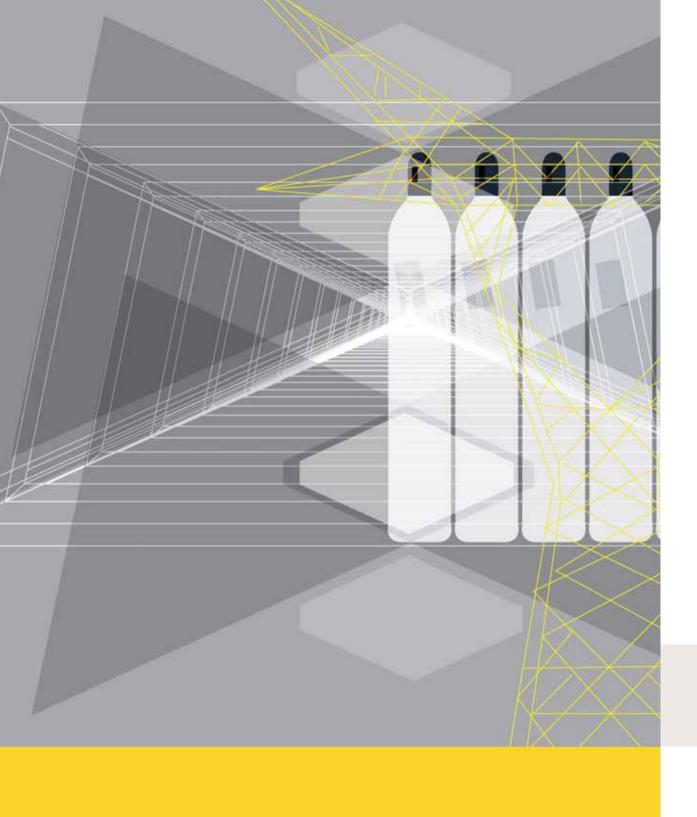
# PUBLIC RELATIONS

 The continuously growing demands of its customers and rapid developments in technology oblige the EAC to plan public relations campaigns aimed at letting customers know about all issues pertaining to energy and the Authority's work.

The Public Relations Department is responsible for planning integrated PR campaigns aimed at upgrading the Organisation's image, establishing its corporate identity, improving the EAC's relations with the general public, involving it in society and ensuring that the public is fully aware of the EAC's activities and services.

In this context, the EAC continued in 2007 to provide advisory services to all its customers on matters of interest to them. The general terms governing the provision of electricity, EAC policy on electrification, tariffs and general information are among the topics that are always of interest. As happens every year, during 2007 lectures were given to organised groups and to groups of EAC customers on issues concerning the conservation and safe use of electricity, new tariffs and electromagnetic fields.

- In the framework of improving internal communications among EAC personnel, the Authority publishes EAC News. This magazine is distributed not only to EAC personnel but also to various other groups, individuals and services outside the Organisation.
- In 2007, in collaboration with the Ministry of Commerce, Industry & Tourism, we began the free distribution of 2 000 000 energy-saving lightbulbs over a four-year period. This campaign, which will end in 2010, is the result of a decision by the Council of Ministers to make available from the special RES Fund of the Ministry of Commerce, Industry & Tourism for the purchase and free distribution to consumers for the specific purpose of saving energy. The Public Relations Department undertook all the work required for the implementation of the entire public information campaign.
- During 2007, the EAC's Customer Charter came into force. The Customer Charter, which represents the EAC's commitment to top-quality customer service, is an official EAC information brochure which sets out performance indicators as well as the rights, obligations and benefits of customers. It also contains the special provisions, key performance settings or indicators that the EAC undertakes to meet when supplying electricity to consumers and customers, as determined by CERA.

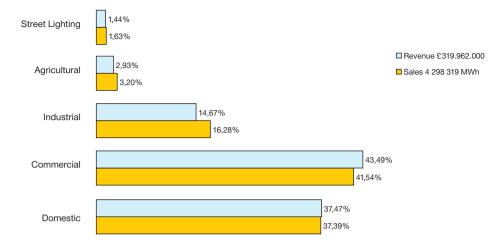


# Customer Service Business Unit

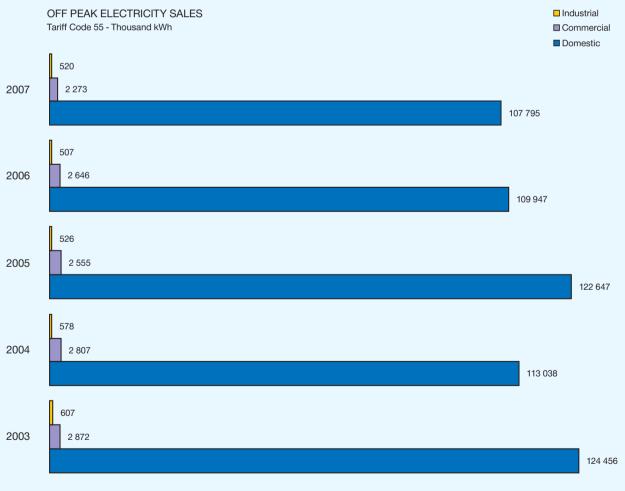
- Broadening its social contribution and knowing the charitable feelings of the staff, the EAC management again accepted a request from UNICEF to organise fundraising events at the various EAC offices. Coordination of these events, which were extremely successful, was undertaken by the Public Relations Department. The Electricity Authority was once again involved in sport as one of the major sponsors of the country's national men's basketball team and a supporter of various other sporting events. In the context of its social contribution, the EAC also sponsors the Cyprus Anti-Cancer Society and its "Give Light to a Life" campaign as well as the annual TELETHON fundraiser.
- The EAC participated in various conferences, seminars and specialist exhibitions and fairs, enabling the public to obtain first-hand information on all aspects of the Authority's activities and its development projects. It is worth noting the EAC's participation in the 32nd Cyprus International Fair and the 3rd Savenergy Exhibition, where people had an opportunity to learn about EAC services and to ask questions. At the same time, the EAC had a chance to assess and evaluate complaints and problems facing its customers and to take remedial action to resolve them.
- Every year the Public Relations Department undertakes the presentation
  of the EAC's Annual Report. On 19th November 2007, representatives of
  the commerce and industry sector as well as government Ministers,
  Members of Parliament, officials of other semi-government organisations,
  government departments and professional associations were invited to
  the presentation of the 2006 Annual Report at which a full audiovisual
  account of the Organisation's financial results and a description of its
  Development Plan were given.
- Various other events were held which gave the Board and Management of the Organisation the opportunity to brief political party spokespersons, former Chairmen of the Authority, etc., about the EAC's work.

# (Figure 7)

# ELECTRICITY SALES & REVENUE BY CONSUMER CLASS



(Figure 8)



# 59

# Common Services Business Unit

#### ADMINISTRATION

#### **Administrative Department**

During the period January-December 2007 the Administrative Department which is divided into three sub-departments, the Administration Services Department, the Registry Department, and the Stationery/Printing Department dealt with the following activities:

#### ADMINISTRATION SERVICES DEPARTMENT

#### Various Agreements

42 agreements concerning the lease of offices for covering the needs of housing the EAC personnel staff have either been concluded or renewed, the lease of canteens, window cleaning, repair and maintenance of the A/C systems, photocopier machines, telefaxes, telephone systems etc.

#### Announcements/Publications

711 announcements concerning tenders, interruptions of supply, vacancies etc have been promoted to the Press and the Information Office, the Local Press and the Government Printing Office.

The announcements concerning the interruptions of supply have also been handed over to CBC for radio broadcasting.

#### Maintenance of Office Buildings

204 cases concerning the maintenance of office buildings and office equipment were dealt.

#### **Telephone Procedures**

136 applications have been submitted to CYTA.

All the cases concerning the auditing and payment of the telephone bills were dealt.

### Invoices

208 Purchase Orders have been created in the SAP system concerning invoices - apart from the other invoices - announcements in the local press/Official Gazette, purchasing of materials, petty cash etc.

# Loans for Hire - Purchase

30 Agreements have been concluded and the total amount mounted up to  $\pounds 434.231.$ 



# IT DEPARTMENT

During the period January-December 2007:

- The SAP Euro conversion has been completed successfully in order to be compatible with the introduction of Euro and be consistent with the relevant laws.
- The Euro conversion for the existing (legacy) Billing system has been completed successfully in order to be compatible with the introduction of Euro and be consistent with the relevant laws.
- The parameterisation of the SAP-HR Payroll has been completed successfully and the go live date was set for January 2008.
- The parameterisation of the Customer Care & Billing system (of the SPL Oracle Corp.) and the parallel run for Customer Service Centre of Paralimni have been completed successfully and the go live date was set for May 2008.
- The evaluation and the selection of the successful tenderer for the Customer Contact Centre solution has been completed.

# PURCHASING SECTION

During the period of January – December 2007, 19 Contracts, the value of which is above the threshold levels stipulated in Law 11(I)/2006, were awarded for the total amount of C£56.837.902.

Furthermore, 277 Contracts, the value of which is below the threshold levels stipulated in Law 11(I)/2006 were awarded for the execution of works, services and the procurement of materials and equipment for the total amount of C£44.305.832.

During the same period, 4 Contracts for the supply of Heavy Fuel Oil covering the Authority's needs for 2008, were awarded, for the total amount of C£416.670.110.

# Human Resources Management

# HUMAN RESOURCES MANAGEMENT

#### The Authority's staff

The number of employees in post and their distribution by category is shown in the table below.

	2007	2006
Professional	279	279
Clerical	381	376
Technical	1 601	1 440
TOTAL	2 261	2 095

Four employees who have been missing since the Turkish Invasion of 1974 are included in the above figures. The employees in active service at the end of the year were, therefore 2 257.

# The Authority's pensioners

The total number of pensioners at the end of the year who received pension was 999 (including six missing persons since the Turkish invasion of 1974) compared to 996 at the end of the previous year. In addition 214 pensions were paid to widows and orphans of deceased pensioners/employees compared to 215 at the end of the previous year.

# Increase of the Retirement Age Limit from the 60<sup>th</sup> to the 63<sup>rd</sup> year of age

As from 25<sup>th</sup> of July 2007 the usual for retirement age limit for EAC employees has been extended from the age of 60 to the age of 63 as follows:

- a) For those employees that will become 60 years old on or before the 30<sup>th</sup> of June 2008, the usual for retirement age is the age of 62.
- b) For those employees that will become 60 years old on or after the 1.7.2008, the usual for retirement age is the age of 63.

#### Manpower indicators and Productivity

Variations in productivity are shown in Figure 9 (page 64) which indicates the relationship between the Authority's manpower, the total units billed and the number of consumers during the ten year period 1997-2006.

Absenteeism due to sickness and/or industrial accidents was 3,6% or 12,9 days per EAC employee compared to 3,3% or 11,8 days per employee at the end of the previous year.



#### **Industrial Relations**

The process for implementing the provisions of the Reorganisation of the Clerical and Technical Staff agreement was further promoted by the end of 2007.

In particular, the schemes of Service Clerical & Technical Staff's Committee met several times and prepared the schemes of services of the reorganised posts. These schemes were then forwarded and approved by EAC's Board of Directors.

With the new schemes of service, it will be easier for EAC to achieve the goals set by the reorganisation agreement.

Some of the goals such as the abolishment of the practice of employing casual workers, were immediately achieved by the signing of the agreement and EAC's casual workers received permanent status of employment.

Furthermore, a number of them received, after submitting an application, technical posts in EAC's network works as well as in EAC's Power Stations.

During the year a number of meetings were held with Union representatives in order to define and agree the parameters of a revised pension plan for extending the retirement age to the 63<sup>rd</sup> year of age.

An agreement was reached and after EAC's and the subsequent House of Parliament's approval, the new Pension Plan provisions came into effect on the 25<sup>th</sup> of July 2007.

EAC's Human Resources Management played a key role before the 24 hour Union's strike held by all employees on the 13<sup>th</sup> of June 2007, by reaching an agreement with the Unions for maintaining skeletal staff during the strike, thus avoiding power cuts.

# Human Resources Management

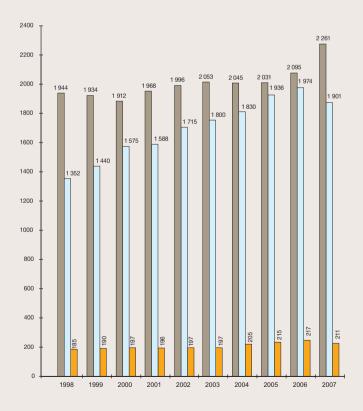
Further meetings between the Human Resources Management and the Unions were held within the year for revising a number of schemes of service and drawing up new schemes of service for the TSO's posts, after receiving TSO Manager's comments.

Also the two sides met for examining and settling industrial disputes, for examine matters concerning contract employees, the Organisational structure, shift employees, e.t.c.

#### (Figure 9)

#### MANPOWER INDICATORS

- EMPLOYEES IN SERVICE
- SALES (thousand kWh) PER EMPLOYEE
- CONSUMERS PER EMPLOYEE



Finally, during the year the procedures relating to the renewal of the collective agreement which expired of the 31.12.2006 came into effect and the union submitted their relevant claims to EAC and likewise EAC submitted to the Unions suggestions for changes on certain EAC Rules and Regulations.

# HUMAN RECOURSES DEVELOPMENT

# **Education and Training**

During 2007, 1 527 members of the staff attended 96 in-house courses and seminars, organised by the Authority's Training School, which covered a wide range of topics. We had 290 more participations from employees in various open educational programmes and training courses, organised by local educational institutions and organisations, whilst 74 members of the professional staff attended training courses or participated in conferences and seminars abroad. In total 1 891 employees attended training courses at an overall cost £112,01 per participation. The in-house training courses were subsidised by the HRDA with the amount of £54.232.

Within its corporate social responsibility initiative EAC offered six-month industrial training to 10 University and Higher Technical Educational Institutions students, 18 final-year students of the Higher Technical Institute (HTI) and summer vacation training to 29 University and HTI students. Moreover EAC participated in the programme of the International Association for the Exchange of Students for Technical Experience (IAESTE) offering technical experience to 4 international students.

# Promotions

During 2007 the procedure for promoting 74 employees was completed.

# **Recruitment/Retirements/Termination of Employment**

During the year, staff vacancies for several posts were announced and 51 new employees were recruited to fill various vacant posts. It should be noted that during the year, 16 employees retired due to age, 21 employees took advantage of the early retirement scheme, 5 employees chose early retirement, 10 employees terminated their services, 2 employees passed away and 1 employee retired for health reasons.

### Scholarships

During the year, EAC offered 46 scholarships to children of employees attending University courses abroad and 17 scholarships to children of employees attending courses in Cyprus.

# SAFETY, HEALTH AND WELFARE

## Medical Care

During the year EAC contributed £3.085.698 (£2.435.142 in 2006) to EAC Employees Medical Fund, as well as £130.000 (£60.000 in 2006) to the Special Medical Fund set up to cover expenses incurred in the treatment of serious cases, in Cyprus and abroad. The beneficiaries of the Fund, as at 31 December 2007 were 8 798 (2 202 employee-members, 1 008 pensioners, 215 widows and 5 373 dependants).

# **Benevolent Funds**

EAC's Employee Benevolent Funds continued to function satisfactorily during the year. The financial relief offered to needy members, pensioners or members of their families, exceeded £255.000. This sum includes the monthly financial assistance offered by the EAC to ex-employees who retired prior to 1978 with Provident Fund benefits, as well as to their widows. It also includes the financial assistance to other ex-employees due to the recognition of their previous service with the ex-private Electric Companies after being undertaken by the EAC. The members of the Funds, as at 31 December 2007, were 2 042.

# Human Resources Management

#### Welfare Funds

EAC Employees' Welfare Funds continued to function satisfactorily during the year offering several facilities to the members and their families.

#### Long Service Certificates and Awards

The following Awards were presented:

- The EAC's Long Service Certificates were awarded to 35 employees, who retired during 2007 and had completed more than 20 years of service.
- The EAC's Gold Plated Plaques were awarded to 12 employees, who had completed during 2007, 40 years of service.

# **Occupational Health and Safety**

#### **Health and Safety Management**

The development of an EAC project called «Health and Safety management system» has been assigned to Management Force Company, after a successful tender application. This project will also include a written risk assessment of industrial hazards.

The implementation of the project will satisfy the relevant law requirements and will lay the foundations for the continuous development and improvement on industrial safety matters within the Organisation.

#### Health and Safety in the working environment

During the year, EAC's safety officers performed on site safety checks and gave consultation to the personnel.

The Human Resources Management upgraded the Health and Safety work standards by purchasing automatic external defibrillators for the Head Office, the District Areas and Power Stations. Safety standard will be further enhanced by the purchase of new convenient safety shoes and helmets.

The Safety Committees held regular meetings during the year, as the law requires and gave to the Management advice for solving various problems concerning health and safety issues.



# Accidents

During the past year a total number of 31 occupational accidents happened from which the two were road accidents. All the accidents were investigated and were evaluated by the Central Safety Committee. From the total number of accidents two of them were serious and had direct relation with electrocution.

The Human Resources Management in cooperation with the Networks Management have investigated both accidents and they found out that the main cause of the accidents was the violation of the safety rules. EAC's Management has issued a circular stressing the need for the development and maintenance of high standards on safety awareness.

#### Safety Week and Fire drill exercises

The 3<sup>rd</sup> week of January 2008 was EAC's Safety week, during which various events took place, including lectures on safety, fire drills and evacuation exercises in cooperation with the Fire Department.

#### Safety Awards

The year 2006 safety award in memory of Archbishop Makarios III, was given to the Lefkosia-Kyrenia-Morfou district area. The safety award in memory of Georgios Kontopoulos was given to the Dhekelia power station.

# **Education and Training**

Linesmen received training required by the law on the newly purchased equipment suitable for working on heights.

In cooperation with the Ministry of Labour and Social Insurance various seminars concerning safety and health at work were carried out.

# Corporate Development Management Unit

# NEW BUSINESS DEVELOPMENT

The New Business Development Management focused on the development of other activities and the use of new technology in order to earn additional income to act as a counterbalance for the predicted reduction in the EAC's share of the liberalised energy market.

#### Telecommunications

In 2007, the Organisation continued to provide infrastructure to its Strategic Partners for the commercial exploitation of its optical fibre network and other EAC infrastructure for telecommunications purposes.

During the year, various technical and financial issues were resolved with the Authority's two Strategic Partners, Primetel plc and Cablenet Communications Systems.

Consultants completed their study of the telecommunications environment in Cyprus and submitted proposals on the strategy that the EAC should adopt, in view of the intention of one of its two strategic partners to be listed on an approved Stock Exchange. The EAC's decision, based on the commercial data that was presented, was that it will not exercise its right to participate in the Strategic Partner's capital. Moreover, a decision was taken to expand the leasing of its infrastructure to include telecommunications service providers so as to operate as a Carriers' Carrier. To this end, a study will be undertaken regarding the best way for the EAC to broaden its activities as a Carriers' Carrier.

For this purpose, the EAC appointed Consultants to prepare a business plan for the expansion of its optical fibre network and the identification of the EAC's role in the context of a National Broadband Strategy. The study has been completed and will be submitted for approval at the beginning of 2008.

#### **Consultancy Services**

In the context of developing its Consultancy Services, contacts were made with the Public Power Corporation of Greece and ESBI (Ireland) with a view to possible cooperation.

With this in mind, proposals were submitted by the EAC to ESBI regarding the provision of services by members of the Authority's personnel.

### Desalination

The EAC's involvement in the provision of desalinated water has come about in the context of its policy of identifying new activities.

In the summer of 2007, at the request of the Ministry of Agriculture, Natural Resources and the Environment, approval was given to the provision of an area in the grounds of Moni Power Station for the installation and operation of prefabricated desalination units for a period of three years.



The Ministry has already approved the contract for this project and the production of desalinated water from prefabricated desalination units located on the eastern side of Moni Power Station will begin later in 2008.

In November 2007, the Ministry's Water Development Department published a call for tenders for the Planning, Construction, Operation and Maintenance of the Lemesos (Episkopi) Desalination Project. The unit will operate in approximately three years time and will produce 40 000 m<sup>3</sup> of water daily over a period of 20 years. The EAC is looking into the possibility of participating in the tendering process as a member of a consortium. Contacts and negotiations have already taken place with companies that have shown an interest in collaborating with the EAC.

Furthermore, we are looking into the possibility of designating an area in the grounds of Vasilikos Power Station for the construction of a desalination plant in conjunction with the installation of new generation units in 2011.

# **Fuel Storage Area**

In the context of our policy of expansion into new areas of activity, we are also looking into the possibility of exploiting the area around Vasilikos Power Station by constructing more fuel storage tanks which will be offered on a long-term lease to interested parties for the fulfillment of their strategic and operational obligations.

# Corporate Development Management Unit

### Manufacture of Photovoltaic Elements

SUNDIAL Electric Enterprises submitted a proposal to the EAC concerning its participation in a photovoltaic production facility in Cyprus. The EAC appointed Consultants to carry out an assessment of the SUNDIAL Electric Enterprises business plan. This has now been completed and a report will be submitted to the EAC Board of Directors.

# RESEARCH AND TECHNOLOGICAL DEVELOPMENT

During 2007 the EAC continued its active participation in seven research projects: EU-DEEP, CACHET, HYDRONOX, HYDROGEN-FUEL CELL DISTRIBUTED GENERATION TECHNOLOGY, CORONA, DISTRES (starting in January 2007) and GROW-DERS (starting in September 2007). EU-DEEP and CACHET are two of the most important European research projects and are funded under the Sixth Framework Programme of Research and Development of the European Union, as are DISTRES and GROW-DERS, while the other three projects are funded by the Research Promotion Foundation of Cyprus.

Below is a brief description of the seven research projects:

• EU-DEEP: The aim of the project is the study of technical and financial parameters for the introduction of Distributed Energy Resources (DER) to the EU. A market survey will be carried out to determine factors preventing the competitiveness of distributed generation at present. The project also aims at creating partnerships among electricity companies for the future promotion of DER in the EU member states. The EAC has undertaken to gather information on the development of mathematical and financial models for the study of various DER technologies such as typical annual voltage curves for various types of consumer and to carry out cost-benefit studies of DER technologies.

• CACHET: The aim of the project is the development of technology for capturing carbon dioxide (CO<sub>2</sub>) in power station units and the parallel production of clean hydrogen for storage or for use in fuel cells. The EAC has undertaken to carry out cost-benefit studies for the modification of the EAC's future Combined Cycle units to use hydrogen and to examine the possibility of using technology that will be developed in Cyprus.

• HYDRONOx,: The aim of the project is the development of an industrial H2 Lean de-NOx catalyst, the design and installation of a pilot unit and the transfer of knowledge of new abatement technologies in Cyprus industry. The EAC is the end user of the research work.

• HYDROGEN-FUEL CELL DISTRIBUTED GENERATION TECHNOLOGY (H2/KY $\Psi$ EAE $\Sigma$ ): The aim of the project is the development of a hydrogen fuel cell distributed generation technology. A pilot plant will be installed and the behaviour of the technology when grid-connected will be investigated. The EAC has undertaken the general coordination of the project.



• CORONA: The aim of the project is the development of an innovative methodology for the detection of possible faults and flaws in high and medium voltage cables in constant operation. The methodology will be based on constant monitoring of the cables and the identification of electrical discharges.

• DISTRES: The overall goal of the project is to exchange and disseminate good practice developed in the field of renewable energy sources distributed generation (RES-DG) technologies by isolated research activities and perform studies and/or analyses of Mediterranean needs. The EAC has undertaken the general coordination of the project.

• GROW-DERS: The project aims at the trial use of various flexible and transferable electricity storage systems. The results of this pioneering project will show how efficient they are and whether it will be feasible to employ such systems on future European distribution networks.

In 2007 another research proposal in which the EAC will participate was approved for funding by the Seventh Framework Programme of Research and Development of the European Union. The aim of the WEC research proposal, which is currently under discussion, is the construction, development, installation and pilot operation of a large-scale wind farm utilizing wind generators and innovative electronic systems (for network stability and wind forecast). The WEC project will last for four years.

The EAC's Research and Technological Development (RTD) sector organised three important workshops in 2007 with the aim of disseminating its RTD results and those of the new European strategy in the energy sector within the EAC and more widely to the scientific community in Cyprus. The workshops were the following:

- "Renewable energy sources and distributed generation technologies." EU policy on future generation systems, in collaboration with the European Commission's Institute for Energy, Lefkosia, 13 February 2007.
- "Tools and Methodologies for planning the expansion of electricity generation infrastructure", in collaboration with the European Commission's Institute for Energy, Lefkosia, 22-23 November 2007.
- "Cyprus Electricity Research and Development." Workshop presenting the RTD activities to date of the EAC and the University of Cyprus, Lefkosia, 17 December 2007.

Furthermore, during 2007 in the context of its collaboration with the academic community in Cyprus, the EAC funded research projects related to its activities. Finally, the EAC's RTD sector carried out studies into the technological and financial aspects of new carbon monoxide capture technologies. A considerable number of articles were published in respected journals and conference presentations were made on RTD activities. Information on the EAC's activities in the RTD sector can be found on our website (www.eac.com.cy).

### Corporate Development Management Unit

#### STRATEGIC PLANNING MANAGEMENT

With the aim of ensuring the Organisation's efficient operation in an environment that has seen business equilibrium going through a transitional yet decisive period due to the partial liberalisation of the Energy Market, and taking the matter of forthcoming competition into account, the Electricity Authority of Cyprus proceeded to implement a systematic development process for Strategic, Policy and Annual Business Planning, using the Balanced Scorecard method. The process focuses on the alignment of efforts and the optimum use of resources by all the Organisation's Units, for the achievement of the EAC's Strategic Aims and the realisation of its Vision.

During 2007 work began on more than 25 Crucial Business Projects which had been identified and codified using the above-mentioned process.

#### **QUALITY ASSURANCE & BUSINESS EXCELLENCE**

During 2007, the Department dealt mainly with the following:

#### **Certifications - Upgrades of Quality Systems**

Efforts aimed at obtaining ISO 9001:2000 quality certification for the MRTC concluded with a successful internal inspection by the Cyprus Certification Company. During the Management Review, it was decided to freeze Certification so that the relevant Unit could examine a number of alternative solutions.

#### Drawing up of notifications of Vasilikos Power Station operations (SEVESO II)

Following the Authority's decision to construct two additional diesel storage tanks with a total capacity of 60 000 tonnes for supplying Vasilikos Power Station, this Station is now classed as a "high power unit" in accordance with the provisions of the SEVESO II directive (507/2001). As a result, and in order for Vasilikos Power Station to comply with this directive, the required Safety Report for the Station was drawn up in collaboration with External Consultants. The report focuses on the new diesel storage tanks and areas where dangerous substances are present, in accordance with SEVESO II. The report was submitted to the Ministry of Labour in January 2008 for the issuing of the required licence.

#### **Internal Audits**

During the course of the year, internal audits were scheduled and carried out on various aspects of the Quality System. Additionally, audits of the processes by which the Authority is obliged to provide services in accordance with the Citizens' Charter (CERA Indicators) were carried out. The results have been handed over to the responsible authority so that the necessary corrective measures may be taken.

#### **External Quality Systems Inspection**

In October 2007, an external Quality Systems inspection was carried out by the Cyprus Certification Company (CCC). The results of the inspection were presented to Senior Management with the aim of correcting areas of non-compliance noted by the CCC.

#### Identification of critical indicators and Action Plans

The Management Council completed its identification of the EAC's critical indicators, based on the Balanced Scorecard method, in all certified areas. Work also began in all the certified areas on drawing up an action plan for each of the critical indicators in order to achieve the set targets. Results will be presented in the form of a comparative performance table for all areas.

#### Monthly review of key performance indicators and special Indicators

A system has been designed to monitor monthly area performance indicators and forward them systematically to local management. Information received includes continuous improvement management indicators, personnel suggestions, customer complaints, etc.

#### **Consumer Protection Specifications - CERA**

Work has now been completed on the planning, drawing up of specifications and the installation of software for a system for measuring all key performance indicators as determined by CERA and the recording of the relevant processes for regular monitoring. It forms part of a total monitoring system of all customer contact points with the aim of upgrading customer services.

The results of the system are published regularly and annually and are forwarded to the management of both the EAC and CERA.

#### Systems Automation

The automated system for monitoring personnel suggestions and innovative ideas was upgraded while monitoring continued of the complaints, faults and information systems as well as those dealing with quality circle management and response times by the EAC's external partners.

Improvements were also made to the existing indicators and quality circle monitoring system.

#### **International Conferences - Presentations**

In September the international ECO-Q Quality conference, in whose organisation the EAC was directly involved, took place in Cyprus. The Conference was attended by various members of the EAC staff and Senior Management.

#### Introduction of an integrated management system

Following the relevant decision by the EAC, preparatory work was completed on a tender for the implementation of an integrated management system in the EAC which includes ISO 9001:2000 and ISO 14001:2004 quality assurance standards in the first phase and their integration with the OHSAS 18001:2007 standard and tenders were invited. The winning tender is expected to be announced during the first quarter of 2008.

#### Support for Certified Areas

During the year under review there was continuous support regarding the Area Quality system, performance indicators and the automation of the complaints, faults reporting and information system.

Extensive support was requested and given to various projects including the Call Centre and the new Customer Care and Billing system.

### Finance Management Unit

#### FINANCIAL STATEMENTS

The financial statements of the EAC for the year 2007 together with the supporting statements are set out in pages 86 to 111. The principal financial statistics for the ten-year period 1998-2007 are summarised on page 78.

#### Table 3

#### Consolidated income statement for the year ended 31 December 2007 and changes from previous year

	C£000		
		Increase/	
	2007	(Decrease)	
INCOME			
Sales of electricity	319.991	19.684	
Consumers' capital contributions	8.335	677	
Other operating income	6.982	1.936	
Finance income	1.531	(1.278)	
	336.839	21.019	
OPERATING COSTS	(294.932)	(18.945)	
Operating profit	41.907	2.074	
Finance costs	(8.650)	(935)	
Profit before tax	33.257	1.139	
Tax	(9.834)	(323)	
Profit for the year	23.423	816	
Units sold (million kWh)	4 298,3	163,3	

#### (Figure 10)

1998

1999

2000

#### Income, operating costs & profit from operations (C£ Thousand)

37 817

35,925

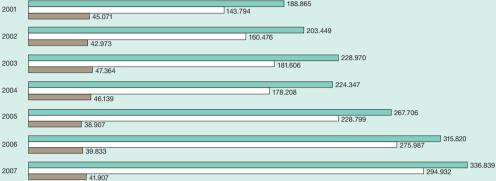
45 103

82 107

98.385



Income



#### FINANCIAL RESULTS

The financial results for the year and the changes from the previous year are shown in Table No. 3 (page 74). The income from sales of electricity for the year, totalled to C£319.991.000 (an amount of £29.000 relates to charges arising from unrecorded consumption) showing an increase of C£19.684.000 or 6,6%. The total operating costs were C£294.932.000 showing an increase of C£18.945.000 or 6,9%. After accounting for finance costs amounting to C£8.650.000 there was a profit before tax of C£33.257.000 compared to a profit of C£32.118.000 in the previous year. After the deduction of tax amounting to C£9.834.000 the net profit was C£23.423.000 (2006:C£22.607.000).

#### ANALYSIS OF OPERATING COSTS

Table 4 (page 76) gives an analysis of the operating costs according to each category. The principal factors underlying the changes are reviewed below.

The average cost of fuel oil used by the EAC power stations increased by 4,2% to C£148,57 per metric tonne. The consumption increased by 4,1 % to 1 190,7 thousand metric tonnes. As a result of the above the fuel oil bill increased by C£13.748.000 to C£176.897.000.

The total salaries and related costs amounted to C£69.432.000 out of which C£9.021.000 was capitalised in fixed assets and work in progress. The amounts capitalised relate to expenditure for development projects executed by the Authority's employees during the year. An amount of C£60.411.000 or 87,0% was charged to the income statement. The increase of C£4.380.000 or 6,7% to the total salaries and related costs charge is due mainly to the increase in the number of employees and increase in the cost of living allowance.

The deficiency contribution to pension schemes was C£9.895.000 (2006: C£10.499.000). This contribution was the result of the latest actuarial valuation carried out as of 31 December 2002.

Materials services and other expenditure were C $\pounds$ 23.562.000 (increase of C $\pounds$ 938.000 or 4,1%). The depreciation charge was C $\pounds$ 34.062.000 (increase of C $\pounds$ 2.020.000 or 6,3%).

### Finance Management Unit

#### Table 4

#### Analysis of Operating costs

		2007		crease (Dec er 2006	rease)
	C£000	%	Cents per kWh sold	C£000	%
Fuel oil	176.897	60,0	4,116	13.748	8,4
Salaries and related costs	50.516	17,1	1,175	2.843	6,0
Deficiency contribution to pension schemes	9.895	3,4	0,230	(604)	(5,8)
Materials, services and other expenditure	23.562	8,0	0,548	938	4,1
Depreciation	34.062	11,5	0,792	2.020	6,3
TOTAL	294.932	100,0	6,861	18.945	6,9

#### CAPITAL REQUIREMENTS AND SOURCES OF FINANCE

Capital expenditure during the year amounted to C $\pounds$ 92.628.000 compared with C $\pounds$ 70.769.000 in 2006 (increase of C $\pounds$ 21.859.000).

The amount paid for taxation during the year amounted to C£6.787.000 (2006:C£6.063.000).

Loan repayments amounted to C£20.600.000 (2006: C£20.436.000).

Out of the total financing requirements of C $\pounds$ 120.015.000 internal sources and consumers contributions provided C $\pounds$ 90.751.000 and the balance of C $\pounds$ 29.264.000 was covered by loans. Table 5 below shows the financing requirements during the year and the sources of finance.

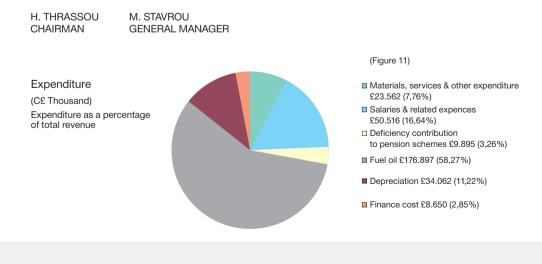
#### Table 5

#### **Financing Requirements and Sources of Finance**

	20	007	2006		
FINANCING REQUIREMENTS	C£000	%	C£000	%	
Тах	6.787	5,6	6.063	6,2	
Capital expenditure	92.628	77,2	70.769	72,8	
Loan repayments	20.600	17,2	20.436	21,0	
	120.015	100,0	97.268	100,0	
SOURCES OF FINANCE					
Profit before tax	33.257	27,7	32.118	33,0	
Depreciation less consumers' contributions	25.727	21,4	24.384	25,1	
Proceeds from disposal of fixed assets	96	0,1	4.275	4,4	
Unrealised foreign exchange loss	1.370	1,1	1.400	1,4	
Consumers' contributions	22.921	19,1	23.127	23,8	
Working Capital changes	7.380	6,2	11.964	12,3	
	90.751	75,6	97.268	100,0	
Loans	29.264	24,4	-	-	
	120.015	100,0	97.268	100,0	

#### FINANCIAL POSITION AT END OF YEAR

The historical cost of the assets employed at 31 December 2007 was C $\pounds$ 1.103.984.000 and total provision for depreciation was C $\pounds$ 351.834.000. As a result the written down value of the assets employed was 68,1% of the original cost. The total net assets at 31 December 2007 were C $\pounds$ 834.844.000. Finance derived from loans (C $\pounds$ 155.315.000 or 18,6%) other long term liabilities (C $\pounds$ 270.989.000 or 32,5%) and the balance (C $\pounds$ 408.540.000 or 48,9%) from own sources.



### Finance Management Unit

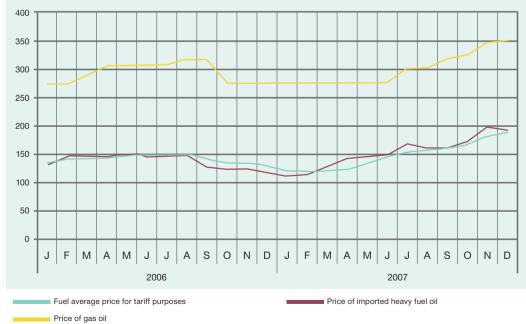
#### Table 6 PRINCIPAL FINANCIAL STATISTICS 1998-2007

During the Financial Year to 31 December	er 1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Units sold (million kWh)	2 629	2 785	3 011	3 125	3 423	3 696	3 742	3 933	4 135	4 298
occupied area (million kWh)	6	5	6	6	6	7	8	7	7	8
Total units (million kWh)	2 635	2 790	3 017	3 131	3 429	3 703	3 750	3 940	4 142	4 306
Installed capacity (MW)		728	988	988	988	988	988	988	988	
INCOME (C£ THOUSAND)										
		128.358	182.701	179.865	193.617	218.579	211.308	252.942	300.307	319.991
	3.820	4.134	4.592	5.099	5.591	6.020	6.519	7.061	7.658	8.335
Other operating income		702	786	749	638	507	1.417	3.620	5.046	6.982
		1.116	1.864	3.152	3.603	3.864	5.103	4.083	2.809	
Total Income	119.924	134.310	189.943	188.865	203.449	228.970	224.347	267.706	315.820	336.839
COSTS (C£ THOUSAND)										
Operating costs		84.016	126.634	121.904	137.121	154.840	151.207	197.421	243.945	260.870
Depreciation	12.880	14.369	18.206	21.890	23.355	26.766	27.001	31.378	32.042	34.062
Total operating costs	82.107	98.385	144.840	143.794	160.476	181.606	178.208	228.799	275.987	294.932
Operating profit	37.817	35.925	45.103	45.071	42.973	47.364	46.139	38.907	39.833	41.907
Finance costs	(3.543)	(6.333)	(6.699)	(6.849)	(5.523)	(8.536)	(7.236)	(5.005)	(7.715)	(8.650)
Profit before tax and exceptional item	34.274	29.592	38.404	38.222	37.450	38.828	38.903	33.902	32.118	33.257
Exceptional item	-	-	-	-	(20.000)	(25.000)	(15.000)	(693)	-	-
Profit before tax	34.274	29.592	38.404	38.222	17.450	13.828	23.903	33.209	32.118	33.257
Tax	(10.075)	(8.142)	(7.937)	(10.576)	(4.960)	(4.655)	(9.502)	(9.757)	(9.511)	(9.834)
Profit for the year	24.199	21.450	30.467	27.646	12.490	9.173	14.401	23.452	22.607	23.423
RATIOS TO TOTAL INCOME										
Profit from operations (%)	31,5	26,7	23,7	23,9	21,1	20,7	20,6	14,5	12,6	12,4
Profit before tax (%)	28,6	22,0	20,2	20,2	8,6	6,0	10,7	12,4	10,2	9,9

CONSOLIDATED BALANCE SHEET AT 31 DECEMBER	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ASSETS (C£THOUSAND)										
Non Current assets										
		468.082		504.811			633.294		693.594	
Trade and other receivables	1.515	5.159	4.279	4.230	3.468	2.974	2.742	2.231	1.674	1.111
	399.050	473.241	487.364	509.041	528.804	574.820	636.036	660.387	695.268	753.261
Current assets	98.057	69.140	125.416	135.338	210.014	220.754	168.763	176.809	171.927	164.252
Total assets	497.107	542.381	612.780	644.379	738.818	795.574	804.799	837.196	867.195	917.513
RESERVES AND LIABILITIES (CETHOUSAND)										
		250.777		308.890			344.954		376.013	
Government grant	9.104	9.104	9.104	9.104	9.104	9.104	9.104	9.104	9.104	9.104
	238.432	259.881	290.349	317.994	330.484	339.657	354.058	377.510	385.117	408.540
Non - current liabilities										
		77.426					170.241		142.453	
Deferred tax liabilities	25.910	29.826	33.261	36.905	40.847	43.308	42.769	46.372	49.184	53.285
Deferred Income	107.295	118.555	130.946	142.481	151.465	162.350	174.261	187.649	203.118	217.704
	204.245	225.807	260.889	275.579	325.892	378.870	387.271	395.827	394.755	426.304
Current Liabilities	54.430	56.693	61.542	50.806	82.442	77.047	63.470	63.859	87.323	82.669
Total Liabilities	258.675	282.500	322.431	326.385	408.334	455.917	450.741	459.686	482.078	508.973
Total reserves and liabilities	497.107	542.381	612.780	644.379	738.818	795.574	804.799	837.196	867.195	917.513

#### (Figure 12)

Prices paid for fuel oil & average prices used for tariff purposes (fuel adjustment clause)



Prices per tone in C£

# Auditor's Report and Financial Statements

### Report and consolidated financial statements 31 December 2007

Contents	page
Report of the Board of Directors	82
Reports of the independent auditors and Auditor General of the Republic	84
Consolidated income statement	86
Consolidated balance sheet	87
Consolidated statement of changes in equity	88
Consolidated cash flow statement	89
Notes to the consolidated financial statements	90

# Electricity Authority of Cyprus

#### Report of the Board of Directors

 The Board of Directors presents its report together with the audited consolidated financial statements of the Authority and its subsidiary Elektriki Ltd (together the "Group") for the year ended 31 December 2007.

#### **Principal activities**

2. The principal activities of the Authority, which have not changed since last year, is the generation, transmission, distribution and supply of electricity in Cyprus. Following an amendment in the Law on 24 November 2000 the Authority has been empowered to engage in activities that are relevant with the exploitation and development of its assets, technical capabilities, installations, services and knowhow.

### Review of business developments, current situation and the results of the activities of the Authority

3. The financial position of the Group as presented in the consolidated financial statements is considered satisfactory. The Board of Directors is not anticipating any significant changes in the activities of the Authority in the foreseeable future.

#### Results

4. The results of the Group for the year are presented on page 86. The net profit for the year is transferred to reserves.

#### **Board of Directors**

- 5. The members of the Board of Directors at 31 December 2007 and at the date of this report are presented on page 14. All of them were members of the Board of Directors for the whole year. Mr. Charilaos Stavrakis who was Chairman as at 31 December 2007 resigned on 29 February 2008. Mr. Harris Thrassou was appointed as Chairman on 11 March 2008.
- 6. There were no significant changes in the assignment of responsibilities and remuneration of the Board of Directors.



#### Events after the balance sheet date

7. Except from the matter discussed in Note 25 of the consolidated financial statements, there were no other material events which occurred after the end of the financial year.

#### Auditors

8. The auditors, PricewaterhouseCoopers Limited, have expressed their willingness to continue in office.

#### By order of the Board of Directors

Harris Thrassou Chairman

Lefkosia 13 May 2008

### Independent Auditors' Report To the Members of Electricity Authority of Cyprus

#### **Report on the consolidated Financial Statements**

We have audited the consolidated financial statements of Electricity Authority of Cyprus (the "Authority") and its 100% subsidiary Elektriki Limited (together "the Group"), on pages 5 to 27, which comprise the consolidated balance sheet as at 31 December 2007, the consolidated income statement, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory notes.

#### Board of Directors' Responsibility for the Financial Statements

The Authority's Board of Directors is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (EU) and the requirements of the Electricity Development Law Cap. 171, the Public Corporate Bodies (Audit of Accounts) Laws of 1983-2007, the Laws Regulating the Electricity Market of 2003-2006 and the provisions of Section 156 of the Cyprus Companies Law, Cap. 113. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and

appropriate to provide a reasonable basis for our opinion.

#### Opinion

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as of 31 December 2007 and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU and the requirements of the Electricity Development Law Cap. 171, the requirements of the Public Corporate Bodies (Audit of Accounts) Laws of 1983-2007, the requirements of the Cyprus Companies Law, Cap. 113.

#### **Report on Other Legal Requirements**

Pursuant to the requirements of the Companies Law, Cap. 113, we report the following:

- We have obtained all the information and explanations we considered necessary for the purposes of our audit.
- In our opinion, proper books of account have been kept by the Authority.
- The Authority's financial statements are in agreement with the books
   of account.
- In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Companies Law, Cap. 113, in the manner so required.
- In our opinion, the information given in the report of the Board of Directors on page 82 is consistent with the financial statements.

#### **Other Matter**

This report, including the opinion, has been prepared for and only for the Electricity Authority of Cyprus, the Minister of Commerce, Industry & Tourism, the House of Representatives and the Auditor General of the Republic in accordance with the Electricity Development Law Cap. 171, the Public Corporate Bodies (Audit of Accounts) Laws of 1983-2007, the Laws Regulating the Electricity Market of 2003-2006 and the provisions of Section 156 of the Cyprus Companies Law Cap. 113. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whose knowledge this report may come to.

PricewaterhouseCoopers Limited Chartered Accountants

Lefkosia, 13 May 2008

### Report of the Auditor General of the Republic to the Electricity Authority of Cyprus

I have examined the foregoing report on the consolidated financial statements on pages 86 to 111 of the Electricity Authority of Cyprus for the year ended 31 December 2007, submitted by the appointed auditors in accordance with section 3 (1) of the Public Corporate Bodies (Audit of Accounts) Laws and I am satisfied that it is appropriate.

Chrystalla Georghadji

Auditor General of the Republic

Lefkosia, May 28th 2008

Consolidated income statement for the year ended 31 December 2007

	Notes	2007 £000	2006 £000
Sales	6	319.991	300.307
Other operating income - net	7	16.848	15.513
Operating costs	8	(294.932)	(275.987)
Operating profit		41.907	39.833
Finance costs	10	(8.650)	(7.715)
Profit before tax		33.257	32.118
Тах	11	(9.834)	(9.511)
Profit for the year		23.423	22.607

### Consolidated balance sheet at 31 December 2007

	Notes	2007 £000	2006 £000
		2000	2000
Assets			
Non-current assets			
Property, plant and equipment	12	752.150	693.594
Trade and other receivables	13	1.111	1.674
Current assets		753.261	695.268
		07.077	57.044
	14	67.277	57.044
Trade and other receivables	13	63.421	52.667
Tax refundable		4.688	3.634
Short-term deposits	15	2.277	24.748
Cash and cash equivalents	16	26.589	33.834
		164.252	171.927
Total assets		917.513	867.195
Reserves and liabilities			
Reserves		408.540	385.117
Non-current liabilities			
Borrowings	17	155.315	142.453
Deferred tax liabilities	18	53.285	49.184
Deferred income	19	217.704	203.118
		426.304	394.755
Current liabilities			
Trade and other payables	20	64.894	66.720
Borrowings	17	17.775	20.603
		82.669	87.323
Total liabilities		508.973	482.078
Total reserves and liabilities		917.513	867.195

On 13 May 2008 the Board of Directors of the Electricity Authority of Cyprus authorised these financial statements for issue.

H. THRASSOU	M. STAVROU	H. HADJIYEROU
Chairman	General Manager	Executive Manager Finance

Consolidated statement of changes in equity for the year ended 31 December 2007

Notes	Capital Reserve (1) £000	Revenue Reserve £000	Total £000
Balance at 1 January 2006	9.104	368.406	377.510
Net profit for the year	-	22.607	22.607
Dividend 21	-	(15.000)	(15.000)
Balance at 31 December 2006	9.104	376.013	385.117
Balance at 1 January 2007	9.104	376.013	385.117
Net profit for the year	-	23.423	23.423
Balance at 31 December 2007	9.104	399.436	408.540

(1) The Capital Reserve represents a government grant.

### Consolidated cash flow statement for the year ended 31 December 2007

Notes	2007 £000	2006 £000
Cash flows from operating activities		
Profit before tax	33.257	32.118
Adjustments for:		
Depreciation of property, plant and equipment 12	34.062	32.042
Amortisation of deferred income 19	(8.335)	(7.658)
Profit on sale of property, plant and equipment	(86)	(986)
Interest expense 10	7.356	6.612
Unrealised exchange loss	1.370	1.400
Interest income	(1.539)	(2.809)
	66.085	60.719
Changes in working capital:		
	(10.233)	(4.302)
Trade and other receivables	(10.191)	442
Trade and other payables	(1.847)	15.793
Cash generated from operations	43.814	72.652
Tax paid	(6.787)	(6.063)
Net cash from operating activities	37.027	66.589
Cash flows from investing activities Short-term deposits	22.471	1.443
Purchase of property, plant and equipment 12	(92.628)	(70.769)
Proceeds from sale of property, plant and equipment	96	4.275
	22.921	23.127
Interest received	1.539	2.809
Net cash used in investing activities	(45.601)	(39.115)
Cash flows from financing activities Proceeds from borrowings	29.264	
Repayments of borrowings	(20.600)	(20.436)
Dividend paid	-	(7.500)
Interest paid	(7.335)	(6.758)
Net cash from/(used) in financing activities	1.329	(34.694)
Net decrease in cash and cash equivalents	(7.245)	(7.220)
Cash and cash equivalents at beginning of year	33.834	41.054
Cash and cash equivalents at end of year 16	26.589	33.834

#### Notes to the consolidated financial statements

#### 1. General Information

The Electricity Authority of Cyprus is a Public Corporate Body which was established in Cyprus under the Electricity Development Law Cap.171 of 1952. It is managed by a Board of Directors, consisting of a Chairman, Vice-Chairman and seven members, who are appointed by the Council of Ministers.

The address of the Authority's Head Office is at 11 Amfipoleos Street, Strovolos, P.O.Box 24506, CY-1399 Nicosia, Cyprus.

The Electricity Authority of Cyprus pursuant to the above Law is engaged in the generation, transmission, distribution and supply of electricity in Cyprus. Following an amendment in the Law on 24 November 2000 the Authority has been empowered to engage in activities that are relevant with the exploitation and development of its assets, technical capabilities, installations, services and knowhow.

With the accession of Cyprus to the European Union and the opening up of the electricity market to competition, the Electricity Authority of Cyprus in preparing for its harmonisation with the European Union has taken all the necessary steps in order to conform with Directive 2003/54/EC of the European Parliament and of the Council of 19th December 1996 concerning common rules for the internal market in electricity.

#### 2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented in these financial statements unless otherwise stated.

#### **Basis of preparation**

The consolidated financial statements of the Electricity Authority of Cyprus have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU). All International Financial Reporting Standards issued by the International Accounting Standard Board (IASB) and effective as at 1 January 2006 have been adopted by the EU through the endorsement procedure established by the European Commission with the exception of certain provision of IAS 39 "Financial Instruments: Recognition and Measurement" relating to portfolio hedge accounting. In addition the financial statements have been prepared in accordance with the requirements of the Electricity Development Law, Cap. 171 of Cyprus and the Laws regulating the Electricity Market of 2003-2006. The financial statements have been prepared under the historical cost convention.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates and requires management to exercise its judgment in the process of applying the Authority's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the Financial Statements are disclosed in Note 4.

#### Adoption of new and revised IFRS

In the current year the Authority adopted all new and revised IFRS that are relevant to its operations and are effective for accounting periods beginning on 1 January 2007.

This adoption did not result in substantial changes to the Authority's accounting policies.

#### Consolidation

#### Subsidiary undertaking

Subsidiary undertaking, is that entity in which the Group has an interest of more than 50% of the voting rights or otherwise has the power to exercise control over its operations. The subsidiary undertaking is consolidated from the date on which control is transferred to the Group and is no longer consolidated from the date that control ceases. All intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated as is also the case with unrealised losses unless cost cannot be recovered.

#### **Revenue recognition**

Revenues earned by the Authority are recognized on the following bases:

#### (a) Sales of electricity

Sales of electricity represent amounts receivable, based on consumption recorded by meters, net of V.A.T. Sales also include an estimate of the value of units supplied to consumers between the date of the last meter reading and the year end, and this estimate is included in receivables in the balance sheet.

#### (b) Interest income

Interest income is recognised on a time proportion basis, taking into account the principal outstanding and the effective rate over the period to maturity when it is determined that such income will accrue to the Authority.

#### (c) Consumers' capital contributions

Consumers' contributions towards capital expenditure are treated as deferred income and released to the income statement over the average estimated economic lives of the related assets (33 1/3 years). This period is regarded as a reasonable approximation of the estimated period of the customer relationship. Subsidies granted by the Authority against such capital contributions are deducted from the amounts receivable and charged to the revenue account in the year in which they are granted.

#### Foreign currency translation

#### (a) Functional and presentation currency

Items included in the Authority's financial statements are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The financial statements are presented in Cyprus pounds (C£), which is the Authority's functional and presentation currency.

#### (b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated income statement.

#### **Employee benefits**

The Authority operates two defined benefit plans and various other defined contribution plans the assets of which are held in separate trustee-administered funds. These plans are mainly funded by the Authority.

Retirement benefit costs relating to the defined benefit plan are assessed using the projected unit credit method. Under this method, the cost of providing defined pensions is charged to the income statement so as to spread the regular cost over the service lives of employees in accordance with the advice of professionally qualified actuaries who value the plan at least once every three years.

The portion of actuarial gains and losses to be recognised is the excess, over and above the greatest of the 10% corridor of the present obligation of the defined benefit plan and the 10% of the present value of the assets at the previous reporting period, divided by the expected average remaining working lives of the employees.

The Authority's contributions to the defined contribution plans are charged to the income statement in the year to which they relate.

#### Тах

Current tax liabilities and assets for the current and prior periods are measured at the amount expected to be paid to or recovered from the taxation authorities using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax is determined using tax rates and laws that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

#### Property, plant and equipment

All property, plant and equipment are stated at historical cost less depreciation. For projects carried out by outside contractors, cost is based on the value of work executed and certified by engineering consultants. For projects carried out by the Authority's own staff, cost comprises materials, labour and related overheads.

Major spare parts and stand-by equipment are accounted for as property, plant and equipment when the Authority expects to use them during more than one period.

Depreciation is calculated using the straight-line method to allocate the cost of property, plant and equipment to their residual values, over their estimated useful lives. The principal asset life periods used for this purpose are as follows:

Freehold land Power station buildings Other buildings Power station plant and machinery Other plant and machinery Lines and cables Meters Motor vehicles	Years Indefinite 30 35 25 25 - 30 35 - 40 15 5
Furniture, fittings and office equipment	10
Tools and instruments	10
Hardware	5
Software	3

Expenditure for repairs and maintenance of property, plant and equipment is charged to the income statement of the year in which they were incurred. The cost of major renovations and other subsequent expenditure are included in the carrying amount of the asset or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Authority and the cost of the item can be measured reliably.

Gains and losses on disposal of property, plant and equipment are determined by comparing proceeds with carrying amount and these are included in the income statement.

#### **Emission Rights**

Based on the Cyprus Law for the Scheme of Greenhouse Gas Emission Allowance Trading, N.132(I)/2004, greenhouse gas emission allowances are allocated to the various operators (companies) with the objective of reducing the level of pollution in the atmosphere.

Each operator, whose annual emissions exceed the number of emission allowances for the specific year, is obliged to buy as many emission allowances as required to cover the shortage and in addition to pay a penalty fee for each tonne of excess emission as well as to sell any surplus.

Granted CO2 emission allowances are initially recognised at nominal value (nil value) when the Group is able to exercise control. Purchased CO2 emission allowances are initially recognised at cost (purchased price) within intangible assets. A liability is recognised when the level of emissions exceeds the level of allowances granted. The liability is measured at the cost of purchased allowances and then at the market price of allowances ruling at the balance sheet date, with movements in the liability recognised in the income statement.

The intangible asset is surrendered at the end of the compliance period reflecting the consumption of economic benefit. Surplus emission allowances can be carried forward and off-set future shortages (up to the end of the compliance period) or to be sold. Proceeds from the sale of surplus emission allowances are recognised upon the sale of these rights.

#### Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease.

#### Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average cost method. In general, cost includes purchase cost, transport and handling costs, but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business less applicable variable selling expenses. Provision is made for damaged, deteriorated, obsolete and unusable items where appropriate.

#### Trade receivables

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Authority will not be able to collect all amounts due according to the original terms of receivables. The amount of the provision is the difference between the carrying amount and the recoverable amount, being the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is recognised in the income statement.

#### Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is more likely that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

#### Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and bank overdrafts. In the balance sheet, bank overdrafts are shown within borrowings in current liabilities.

#### Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Authority has an unconditional right to defer settlement of the liability for at least twelve months after the balance sheet date.

#### Segmental reporting

The financial statements are also presented in separate statements per business and geographical segment.

A business segment is a group of assets and operations engaged in providing products or services that are subject to risks and returns that are different from those of other business segments. A geographical segment is engaged in providing products or services within a particular economic environment that are subject to risks and returns that are different from those of segments operating in other economic environments.

The analysis per business segment is prepared for the activities of generation, transmission, distribution and supply which also complies with the requirements of the Laws regulating the Electricity Market of 2003-2006.

#### **Comparative information**

Where necessary comparative figures have been adjusted to conform with changes in presentation in the current year.

#### 3. Financial risk management

#### **Financial risk factors**

The Group's activities expose it to interest rate risk, currency risk and credit risk arising from the financial instruments it holds. The risk management policies employed by the Group to manage these risks are discussed below:

#### a) Interest rate risk

Interest rate risk is the risk that the value of financial instruments will fluctuate due to changes in market interest rates. The Authority's income and operating cash flows are dependent on changes in market interest rates. The Authority is exposed to interest rate risk in relation to its long-term borrowings. Borrowings entered into at variable rates expose the Authority to fair value interest rate risk. The Authority's management monitors the interest rate fluctuations on a continuous basis and acts accordingly.

#### b) Currency risk

Currency risk is the risk that the value of financial instruments will fluctuate due to changes in foreign exchange rates. Currency risk arises when future commercial transactions and recognised assets and liabilities are denominated in a currency that is not the Authority's functional currency. The Authority is exposed to foreign exchange risk arising from various currency exposures primarily with respect to the US Dollar, Euro, Swiss Franks and Pound Sterlings. The Authority's management monitors the exchange rate fluctuations on a continuous basis and acts accordingly.

The net foreign exchange difference debited to the income statement amounts to C£1.294.000 (2006: C£1.103.000) which relates to financing activities (Note 10).

#### c) Credit risk

Credit risk arises when a failure by counterparties to discharge their obligations could reduce the amount of future cash inflows from financial assets on hand at the balance sheet date. The Authority has no significant concentrations of credit risk. The Authority monitors on a continuous basis the ageing profile of its receivables. Cash balances are held with high credit quality financial institutions and the Authority has policies to limit the amount of credit exposure to any financial institution.

#### Fair value estimation

The fair values of the Group's financial assets and liabilities approximate their carrying amounts at the balance sheet date.

#### 4. Critical accounting estimates and judgments

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

#### Critical accounting estimates and assumptions

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

#### (i) Deferred income

Deferred income is recognised through the Authority's income statement over a period of 33 1/3 years, which represents the estimated useful economic life of the Authority's distribution network which is regarded as a reasonable approximation of the estimated duration of the customer relationship between the Authority and its customers.

#### (ii) Tax

Signifinant judgement is required in determining the provision for income taxes. For certain transactions and calculations the ultimate tax determination is uncertain. The Authority recognises liabilities for anticipated tax based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

#### 5. Segmental reporting

The Authority prepared separate accounts for expenditure and assets and liabilities for the activities of generation, transmission, distribution, supply and others.

The total revenue expenditure of the Authority per activity is shown below:

	2007 £000	2006 £000
Generation	222.916	209.783
Transmission	14.655	12.773
Distribution	52.622	48.228
Supply	4.535	5.489
Other Activities	204	(286)
	294.932	275.987

No separate income accounts for each activity have been prepared due to the fact that up to date there are no approved tariffs for the separate activities by the Regulatory Authority of Cyprus.

The total assets/liabilities of each activity of the Authority for the year 2007 and 2006 are analysed below:

Generation 2007 £000	Transmission 2007 £000	Distrib. 2007 £000	Supply 2007 £000	Other Activities 2007 £000	Unallocated amounts 2007 £000	Total 2007 £000
268.572	146.993	335.845	1.621	230	-	753.261
50.601	3.983	19.231	50.520	389	39.528	164.252
319.173	150.976	355.076	52.141	619	39.528	917.513
21.929	2.790	14.166	21.855	23	21.906	82.669
-	10.203	207.501	-	-	208.600	426.304
-	-		-	-	408.540	408.540
297.244	137.983	133.409	30.286	596	(599.518)	-
319.173	150.976	355.076	52.141	619	39.528	917.513
	2007 2000 268.572 50.601 319.173 21.929 - - 297.244	2007 £000         2007 £000           268.572         146.993           50.601         3.983           319.173         150.976           21.929         2.790           -         10.203           -         -           297.244         137.983	2007 £000         2007 £000         2007 £000           268.572         146.993         335.845           50.601         3.983         19.231           319.173         150.976         355.076           21.929         2.790         14.166           -         10.203         207.501           297.244         137.983         133.409	2007         2003         2003 <th< td=""><td>Generation         Transmission         Distrib.         Supply         Activities           2007         2007         2007         2007         2007         2007           2000         2007         2007         2007         2007         2007           2001         2000         2007         2007         2007         2007         2007           2002         2007<td>Generation         Transmission         Distrib.         Supply         Activities         amounts           2007         200         30.528         319.528         319.528         319.528         21.906         20.800         20.800         20.800         20.800         20.800         20.800</td></td></th<>	Generation         Transmission         Distrib.         Supply         Activities           2007         2007         2007         2007         2007         2007           2000         2007         2007         2007         2007         2007           2001         2000         2007         2007         2007         2007         2007           2002         2007 <td>Generation         Transmission         Distrib.         Supply         Activities         amounts           2007         200         30.528         319.528         319.528         319.528         21.906         20.800         20.800         20.800         20.800         20.800         20.800</td>	Generation         Transmission         Distrib.         Supply         Activities         amounts           2007         200         30.528         319.528         319.528         319.528         21.906         20.800         20.800         20.800         20.800         20.800         20.800

	Generation 2006 £000	Transmission 2006 £000	Distribution 2006 £000	Supply 2006 £000	Other Activities 2006 £000	Unallocated amounts 2006 £000	Total 2006 £000
Non current assets	242.541	138.920	312.182	1.414	211	-	695.268
Current assets	38.026	4.444	17.272	43.385	706	68.094	171.927
Total Assets	280.567	143.364	329.454	44.799	917	68.094	867.195
Current Liabilities	18.879	5.400	9.619	19.374		34.051	87.323
Non-current liabilities		10.156	192.962			191.637	394.755
Reserves						385.117	385.117
Allocated Capital	261.688	127.808	126.873	25.425	917	(542.711)	0
	280.567	143.364	329.454	44.799	917	68.094	867.195

No analysis per geographical segment has been prepared due to the fact that all group activities are carried out in Cyprus.

#### 6. Sales of electricity

Sales of electricity include an amount of C£29.000 (2006: C£37.000) arising from non-recorded electricity consumption at a number of premises at which illegal tampering at the Group's meters was observed. The amount of recognised charges arising from non-recorded electricity consumption has been restricted to the total of the amounts agreed with the consumers as payable.

Sales of electricity do not include all of the consumption in the Turkish occupied area where the Group has no access due to the prevailing conditions. The unbilled electrical energy, calculated at a special rate, amounts to C£507.000 (2006: C£473.000).

#### 7. Other operating income - net

	2007 £000	2006 £000
Income from damages to property of the Authority	104	118
Net income from maintenance of public lighting and sale of materials	147	136
Income from fees for telecommunication usage of optical fibres	446	701
Consumers' capital contributions	8.335	7.658
Storage and other fees relating to the Cyprus Organisation		
for Storage and Management of Oil stocks (COSMOS)	4.132	3.184
Sundry income	2.153	907
Interest income:		
Bank balances	1.334	2.636
Other	197	173
	16.848	15.513

#### 8. Analysis of operating costs by nature

	2007 £000	2006 £000
Fuel Oil	176.897	163.149
Salaries and related costs (Note 9)	60.411	58.172
Depreciation (Note 12)	34.062	32.042
Repairs and maintenance	5.103	4.633
Other expenses	18.459	17.991
	294.932	275.987

#### 9. Staff costs

	2007 £000	2006 £000
Wages and salaries	42.403	39.651
Social insurance and other costs	4.302	3.947
Social cohesion fund	824	792
Pension costs - defined benefit retirement plan		
- Current contribution	10.170	8.258
- Deficiency contribution to pension schemes	9.895	10.499
Other defined contribution plans	1.838	1.905
	69.432	65.052

#### The staff costs were allocated as follows:

	2007 £000	2006 £000
Income statement (Note 8) Capitalized in fixed assets	60.411	58.172
and work in progress	9.021	6.880
	69.432	65.052

#### **Defined Benefit Plan**

The latest actuarial valuation was carried out as at 31 December 2007. The assets used for the purposes of the actuarial valuation were as extracted from the draft accounts of the Pension Fund for the year 2007 and therefore the actuarial valuation is presented as draft.

The amounts recognised in the consolidated balance sheet of the Group and which are in accordance with the draft actuarial valuation as at 31 December 2007, for the defined benefit plan are as follows:

2007 £000	2006 £000
Defined benefit obligation 324.078	311.573
Fair value of plan assets (295.949)	(268.991)
Net obligation 28.129	42.582
Unrecognised actuarial losses (26.850)	(33.289)
Unrecognised transitional liability -	(9.293)
Net liability in balance sheet (Note 20) <b>1.279</b>	-

The amounts recognised in the consolidated income statement of the Group and which are in accordance with the draft actuarial valuation as at 31 December 2007 for the defined benefit plan are as follows:

2007 £000	2006 £000
Current service cost 8.891	7.735
Interest on obligation 15.401	14.199
Expected return on plan assets (13.620)	(12.437)
Net actuarial losses recognised in year 100	-
Recognised transitional liability 9.293	9.291
Total, included in 'staff costs' 20.065	18.788

#### Movements in balance sheet (asset) provision

Net liability at start of year -	(75)
Net expense recognised in the income statement 20.065	18.788
Actual contributions (18.786)	(18.713)
Net liability at end of year 1.279	-

Change in benefit obligation during the year	2007 £000	2006 £000
Benefit Obligation at start of year	311.573	288.786
Current service cost	8.891	7.735
Members contributions	303	232
Interest cost	15.401	14.199
Benefits paid	(12.252)	(12.211)
Actuarial loss of obligation	162	12.832
Benefit obligation at end of year	324.078	311.573

Change in plan assets during the year	2007 £000	2006 £000
Fair value of plan assets at start of year	268.991	244.099
Expected return on plan assets	13.620	12.437
Employer contributions	18.786	18.713
Employee contributions	303	232
Benefits paid	(12.252)	(12.211)
Actuarial gain on plan assets	6.501	5.721
Fair value of plan assets at end of year	295.949	268.991

#### The principal actuarial assumptions used for the actuarial valuation were:

	2007 %	2006 %
Discount rate	5,25	5,00
Average expected return on plan assets	5,00	5,00
Average rate of salary increases	3,5% plus scale	5,75
Pension increases	3,50	3,00
Price inflation	2,50	2,50
Mortality	85% of PA (90)	-

#### 10. Finance costs

	2007 £000	2006 £000
Interest expense:		
Bank borrowings	(7.243)	(6.562)
Overdue taxation	(37)	(13)
Other	(76)	(37)
	(7.356)	(6.612)
Net foreign exchange transaction losses	(1.294)	(1.103)
	(8.650)	(7.715)

#### 11. Tax

	2007 £000	2006 £000
Current tax:		
Corporation tax	5.041	5.777
Defence contribution	692	872
Deferred tax (Note 18)	4.101	2.812
Tax prior years:		
Corporation tax	-	40
Defence Contribution	-	10
	9.834	9.511

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the applicable tax rates as follows:

	2007 £000	2006 £000
Profit before tax	33.257	32.118
Tax at the applicable corporation and defence tax rates	9.398	9.160
Tax effect of expenses not deductible for tax purposes	610	600
Tax effect of allowances and income not assessable to tax	(174)	(299)
Tax for prior years	-	50
Tax charge	9.834	9.511

The Authority is subject to corporation tax on taxable profits at the rate of 25%. Electriki Limited is subject to corporation tax on taxable profits at the rate of 10%.

The Authority is also subject to special contribution for defence at the rate of 3% on taxable profits.

Under certain conditions interest may be subject to defence contribution at the rate of 10%. In such cases 50% of the same interest will be exempt from corporation tax thus having an effective tax rate burden of approximately 22,5%.

#### 12. Property Plant and Equipment

	Freehold Land	Build.	Plant & machinerv	Lines, cables	Motor Vehicles	Furniture, fittings and	Tools & instrum.	Hardware and	Work in	Total
				& meters		office equip.		software	progress	
	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000
At 1 January 2006										
Cost	11.485	102.237	444.892	326.950	7.854	2.916	3.235	8.414	37.747	945.730
Accumulated depreciation		(24.536)	(149.537)	(98.011)	(6.119)	(1.601)	(1.923)	(5.847)		(287.574)
Net book value	11.485	77.701	295.355	228.939	1.735	1.315	1.312	2.567	37.747	658.156
Year ended 31 December 2006										
Opening										
net book value	11.485	77.701	295.355	228.939	1.735	1.315	1.312	2.567	37.747	658.156
Additions	110	2.285	255	875	1.064	307	124	443	65.306	70.769
Disposals	(2)	(4)	(3.283)	-	-	-	-	-	-	(3.289)
Depreciation charge	-	(3.880)	(16.420)	(9.101)	(748)	(238)	(245)	(1.410)	-	(32.042)
Transfers	-	9.981	4.285	20.807	-	-	-	51	(35.124)	-
Closing net book value	11.593	86.083	280.192	241.520	2.051	1.384	1.191	1.651	67.929	693.594
	11.000	00.000	200.102	211.020	2.001	1.001		1.001	01.020	000.001
At 31 December 2006										
Cost	11.593	114.499	445.164	348.534	8.918	3.211	3.359	8.903	67.929	1.012.110
Accumulated depreciation	-	(28.416)	(164.972)	(107.014)	(6.867)	(1.827)	(2.168)	(7.252)		(318.516)
Net book value	11.593	86.083	280.192	241.520	2.051	1.384	1.191	1.651	67.929	693.594
Year ended 31 December 2007										
Opening net book value	11.593	86.083	280.192	241.520	2.051	1.384	1.191	1.651	67.929	693.594
Additions	472	3.391	181	1.545	826	1.364	302	506	85.290	92.628
Disposals	(4)		-	(2)	(1)	-	- 100	(3)		(10)
Depreciation charge	()	(4.220)	(16.938)	(10.070)	(964)	(242)	(268)	(1.360)		(34.062)
Transfers		6.717	15.311	36.332	(34)		-	1.137	(59.463)	
Closing										
net book value	12.061	91.971	278.746	269.325	1.878	1.257	1.225	1.931	93.756	752.150
At 31 December 2007										
Cost	12.061	124.603	460.661	385.777	9.691	3.323	3.661	10.451	93.756	1.103.984
Accumulated depreciation	-	(32.632)	(181.915)	(116.452)	(7.813)	(2.066)	(2.436)	(8.520)	-	(351.834)
Net book value	12.061	91.971	278.746	269.325	1.878	1.257	1.225	1.931	93.756	752.150

#### Land and equipment located in Turkish occupied area

The total fixed assets shown in the balance sheet include land and equipment located in the area occupied by the Turkish invasion force, whose cost approximates C£7.596.000. The depreciation provision for the year in respect of these assets was NIL (2006: NIL) bringing the accumulated provision at 31 December 2007 to C£7.281.000 (2006: C£7.281.000) and leaving a written down value of C£315.000 (2006: C£315.000) which represents the cost of land. The consequences of the Turkish occupation on the value of this land and equipment is unknown.

#### 13. Trade and other receivables

	2007 £000	2006 £000
Trade receivables	51.426	44.284
Less: provision for impairment of receivables	(888)	(909)
Trade receivables - net	50.538	43.375
Capital contributions receivable by installments	982	1.762
Advance payments to contractors	7.171	4.752
Government of Cyprus		325
Other receivables net of provision for impairment	5.352	3.911
Prepayments	489	216
	64.532	54.341
Less: non-current portion of receivables and prepayments	(1.111)	(1.674)
	63.421	52.667
The maturity of non-current receivables and prepayments is as follows:		
Between 1 and 2 years	353	971
Between 2 and 5 years	617	703
Over 5 years	141	-
	1.111	1.674

The fair values of trade and other receivables approximate their values at the balance sheet date. Concentrations of credit risk with respect to trade receivables are limited due to the Group's large number of customers who have a variety of end markets in which they sell. The Group's historical experience in collection of trade receivables falls within the recorded allowances. Due to these factors, management believes that no additional credit risk beyond amounts provided for collection losses is inherent in the Group's trade receivables.

The carrying amounts of the group's trade and other receivables are denominated in the following currencies:	2007 C£000	2006 C£000
Currency		
Cyprus Pounds	49.747	51.891
Euro	13.583	2.231
Japanese Yen	1.048	-
Pound Sterling	46	46
Swiss Franc	108	108
United States Dollar	-	65
	64.532	54.341

14. Inventories	2007 £000	2006 £000
Fuel	28.724	22.272
Spares and consumables	38.553	34.772
	67.277	57.044

The cost of inventories recognized as expense and included in "operating costs" amounted to £179.681.000 (2006: £166.276.000).

15. Short-term deposits 2007	2006
£000	£000
Short-term deposits 2.277	24.748

The effective interest rate on these short term bank deposits was 3,00% - 5,00% (2006: 3,95% - 5,00%) and these deposits had a maturity of 12 months (2006: 12 months).

#### 16. Cash and cash equivalents

Cash and cash equivalents included in the consolidated cash flow statement represent the balance sheet amounts of cash at bank and in hand and are analysed as follows:

	2007 £000	2006 £000
Cash at bank and in hand	10.352	7.209
Short-term deposits	16.237	26.625
	26.589	33.834

The effective interest rate on short term bank deposits was 2,75% - 4,50% (2006: 2,50% - 4,50%) and these deposits had an average maturity of 85 days (2006: 83 days).

7. Borrowings	2007 £000	2006 £000
Current		
Bank loans	15.168	18.025
Suppliers' credits	2.607	2.578
	17.775	20.603
Non-current		
Bank loans	148.780	133.411
Suppliers' credits	6.535	9.042
	155.315	142.453
otal borrowings	173.090	163.056

The maturity of non-current borrowings is as follows:	2007 £000	2006 £000
Between 1 and 2 years	17.954	17.615
Between 2 and 5 years	66.354	62.022
Over 5 years	71.007	62.816
	155.315	142.453

The loans are payable in various currencies and with various interest rates stipulated in the loan agreements. Loans are guaranteed as to the repayment of principal and interest by the Government of Cyprus.

The weighted average effective interest rates at the balance sheet date were as follows:

	2007 %	<b>2006</b> %
Bank loans	4,9	4,2

The carrying amounts of short-term borrowings approximate their fair value. The carrying amounts of the Group's borrowings are denominated in the following currencies:

	2007 £000	2006 £000
Euro	168.413	157.430
Swiss Franc	3.269	3.867
Pound Sterling	1.408	1.759
	173.090	163.056

#### 18. Deferred tax liabilities

Deferred taxation is calculated in full on all temporary differences under the liability method using the applicable tax rates (Note 11).

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to the same fiscal authority. The gross movement of the deferred taxation account as follows:

	2007 £000	2006 £000
At 1 January	49.184	46.372
Charged to income statement (Note 11)		
- Current year	4.101	2.812
At 31 December	53.285	49.184

The movement in deferred income tax assets and liabilities during the year is as follows:

	Accelerated Tax Depreciation C£000
Deferred tax liabilities	
At 1 January 2006	80.442
Charged to the income statement	5.284
At 31 December 2006	85.726
Charged to the income statement	6.288
At 31 December 2007	92.014

	Deferred Income £000	Other £000	Total £000
Deferred tax assets			
At 1 January 2006	(31.022)	(3.048)	(34.070)
Credited to the Income Statement	(2.501)	29	(2.472)
At 31 December 2006	(33.523)	(3.019)	(36.542)
Credited to the income statement	(2.593)	406	(2.187)
At 31 December 2007	(36.116)	(2.613)	(38.729)

#### 19. Deferred income

	2007 £000	2006 £000
- Consumers' capital contributions:		
Balance at 1 January	203.118	187.649
Additions	22.921	23.127
Transferred to income statement	(8.335)	(7.658)
Balance at 31 December	217.704	203.118

#### 20. Trade and other payables

	2007 £000	2006 £000
Fuel oil suppliers	17.965	9.463
Other Suppliers	16.344	18.019
Value Added Tax payable	3.445	7.333
Pay As You Earn payable	464	537
Retention on capital contracts	5.061	5.153
Consumers' deposits	5.039	4.719
Payments received in advance	85	86
Government of Cyprus		7.500
Interest payable	895	874
Accrued charges	7.861	7.732
Creditors for purchase of land and substations	5.544	4.193
Pension fund contributions	1.279	-
Other creditors	912	1.111
	64.894	66.720

The fair values of trade and other payables approximate their values at the balance sheet date.

#### 21. Dividend

The House of Representatives on 28.7.2006 enacted an amendment to the Electricity Development Law which provides for the payment by the Authority to the Republic of Cyprus part of its surplus of the previous financial year and additional amount (up to 10%) from its accumulated surpluses. Based on the above Law and the Letter of the Minister of Finance dated 23.11.2006 the Authority deposited to the Government Consolidated Fund the amount of £7,5 million for the financial year 2005 and £7,5 million for the year 2006.

#### 22. Subsidiary undertaking

	% Holding	Country of incorporation	Principal activities
Electriki Limited	100	Cyprus	Dormant

The accounts of Electriki Limited were consolidated in the Group accounts of Electricity Authority of Cyprus. The company remained dormant during 2007.

#### 23. Contingent liabilities

(a) The Tax Authorities have issued final assessments for the tax years 1995 - 2002. All the liabilities have been agreed and accounted for in these financial statements except for the ones relating to consumers' capital contributions. The Tax Authorities have questioned the accounting treatment applied by the Authority in relation to consumers' capital contributions. The Tax Authorities are of the opinion that the amounts received by the Authority as capital contributions should be taxed in the year of receipt. In such a case there will be additional current tax, interest and other charges of £46.163.000, for which there is a provision in the account of deferred tax for the amount of £24.973.000. The Authority, based on independent professional advice, believes that the current accounting treatment of capital contributions is correct. As a result no provision has been made in these financial statements.

(b) At 31 December 2007 the Group had contingent liabilities in respect of pending litigation amounting to C£1.495.522 (2006: £942.177).

The Group believes that adequate defence exists against all claims and does not expect to suffer significant loss. Accordingly no provision has been made in these financial statements in respect of this matter.

#### 24. Commitments

#### - Capital commitments

	2007 £000	2006 £000
Commitments in respect of contracts	91.844	138.769
Approved but not contracted	200.051	154.915
Approved expenditure outstanding	291.895	293.684

These will be financed mainly by long-term borrowings. Contractual commitments are mainly in foreign currencies which have been translated into Cyprus pounds at year-end exchange rates.

#### - Operating lease commitments

The future minimum lease payments under non-cancelable operating leases are as follows:

	2007 £000	2006 £000
Not later than one year	384	193
Later than one year and not later than 5 years	554	494
Over 5 years	1	-
	939	687

#### 25. Events after the balance sheet date

With the introduction of the euro as the official currency of the Republic of Cyprus as from 1 January 2008, the functional currency of the Authority has changed from Cyprus pounds to Euro. As a result, the financial position of the Authority at 1 January 2008 has been converted into Euro based on the definite fixing of the exchange rate  $\in 1 = \pounds 0,585274$ .

There were no other material post balance sheet events, which have a bearing on the understanding of the financial statements.

Independent Auditor's report pages 3 and 4.

# Appendices

#### APPENDIX 1 CONSUMERS, SALES AND AVERAGE PRICES

AS AT 31 DECEMBER	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
NUMBER OF CONSUMERS	1550	1555	2000	2001	2002	2000	2004	2003	2000	2007
Domestic	272 591	278 521	284 486	291 476	298 277	307 206	318 640	332 338	348 394	366 799
Commercial	66 897	68 269	69 512	70 250	70 867	71 589	72 941	74 916	76 272	78 294
Industrial	9 566	9 578	9 662	9 712	9 829	10 107	10 595	10 956	11 198	11 299
Agricultural	6 100	6 702	7 414	8 294	9 084	9 779	10 400	10 931	11 597	12 117
Public lighting	4 711	5 095	5 421	5 720	6 099	6 428	6 771	7 138	7 581	7 991
TOTALS	359 865	368 165	376 495	385 452	394 156	405 109	419 347	436 279	455 042	476 500
SALES TO CONSUMERS (thous	and kWh)									
Domestic	904 348	951 682	1 054 942	1 041 826	1 170 386	1 321 677	1 324 774	1 431 792	1 500 511	1 607 048
Commercial	1 050 001	1 129 167	1 214 937	1 290 171	1 387 729	1 478 441	1 518 582	1 587 196	1 713 921	1 783 885
Industrial	544 161	567 039	593 824	647 632	708 232	722 806	722 850	726 059	723 038	699 746
Agricultural	85 075	88 708	94 888	92 567	101 515	113 761	117 478	120 062	128 701	137 339
Public lighting	45 439	48 818	52 640	52 557	54 670	59 386	58 146	67 793	68 851	70 301
TOTALS	2 629 024	2 785 414	3 011 231	3 124 753	3 422 532	3 696 071	3 741 830	3 932 902	4 135 022	4 298 319
AVERAGE SALES PER CONSUMER (kWh)										
Domestic	3 318	3 417	3 708	3 574	3 924	4 302	4 158	4 308	4 307	4 381
Commercial	15 696	16 540	17 478	18 365	19 582	20 652	20 819	21 186	22 471	22 784
Industrial	56 885	59 202	61 460	66 684	72 055	71 515	68 226	66 270	64 568	61 930
Agricultural	13 947 9 645	13 236 9 582	12 798 9 710	11 161 9 188	11 175 8 964	11 633 9 239	11 296 8 589	10 984 9 497	11 098 9 082	11 334 8 798
Public lighting	9 040	9 362	9710	9 100	0 904	9239	0 009	9 497	9 002	0790
AVERAGE PRICE PER UNIT BILLED (cents)										
Domestic	4,054	4,090	5,718	5,634	5,429	5,758	5,673	6,443	7,311	7,460
Commercial	4,854	5,130	6,719	6,328	6,225	6,440	6,080	6,876	7,614	7,801
Industrial	3,744	4,002	5,391	5,097	4,979	5,224	4,839	5,615	6,503	6,706
Agricultural	3,539	3,895	5,407	5,168	5,135	5,263	5,055	5,915	6,692	6,833
Public lighting AVERAGE PRICE	3,710 4,287	3,802 4,482	5,278 6.040	5,139 5,787	4,975 5,643	5,124 5,901	4,938 5,646	5,442 6,431	6,427 7,262	6,575 7,444
	4,287	4,482	6,040	5,787	0,643	5,901	3,646	6,431	7,262	7,444

#### **APPENDIX 2**

#### Generation, transmission & distribution equipment

Description	Unit	In Commission 31.12.2006	Commissioned in 2007	Taken out of Commission in 2007	In Commission 31.12.2007
GENERATION PLANT:					
Dhekelia "B" Power Station					
Steam Turbines	No.	6	-	-	6
Capacity	MW	360	-	-	360
Moni Power Station:					
Steam Turbines	No.	6	-	-	6
Capacity	MW	180	-	-	180
Gas Turbines	No.	4	-	-	4
Capacity	MW	150	-	-	150
Vasilikos Power Station					
Gas Turbines	No.	1	-	-	1
Capacity	MW	38	-	-	38
Steam Turbines	No.	2	-	-	2
Capacity	MW	260	-	-	260
TRANSMISSION EQUIPMENT:					
220kV Transmission Lines operated at 132kV					
Route Length	km	1.40			1.40
Circuit Length	km	2.80	-	-	2,80
132kV Transmission Lines	KIII	2,00	-	-	2,00
Route Length	km	408,15	5,85	5,00	409,00
		761,51		10,01	763,20
Circuit Length 132kV Underground Cables	km	101,01	11,70	10,01	/03,20
Route Length	km	63,53	0,05	0.04	63,54
Circuit Length	km	91.60	0,05	0,04	91,61
132kV Underground Cables	KIII	91,00	0,05	0,04	91,01
operated at 66kV					
Route Length	km	8.33	_	_	8,33
Circuit Length	km	8,33	_	-	8,33
66kV Underground Cables		0,00			
Route Length	km	1,68	_	_	1,68
Circuit Length	km	1,68	-	-	1,68
132kV Transmission Lines		1,00			1,00
operated at 66kV					
Route Length	km	168.81	4.96	4.86	168.91
Circuit Length	km	267,35	9,92	9,72	267,55
66kV Transmission Lines				0,72	
Route Length	km	291,78			291,78
Circuit Length	km	291,78			291,78
132/66kV Interbus Transformers	No.	12	-	-	12
	MVA	603			603
		000			

Description	Unit	In	Commissioned	Taken out of	In
		Commission	in	Commission	Commission
		31.12.2006	2007	in 2007	31.12.2007
132/11kV					
Step Down Transformers	No.	67	3	-	70
	MVA	2 119	96	-	2 215
132/6,6kV					
Step Down Transformers	No.	2	-	-	2
	MVA	58	-	-	58
132/3,3kV					
Step Down Transformers	No.	2	-	-	2
66/11/0/	MVA	20	-	-	20
66/11kV Step Down Transformers	No.	68	1		69
	MVA	668,5	15	-	683.5
66/3.3kV		000,0	15		000,0
Step Down Transformers	No.	2	-	-	2
	MVA	5	-	-	5
15,75/132kV					
Step Up Transformers	No.	2	-	-	2
	MVA	330	-	-	330
11/132kV					
Step Up Transformers	No.	13	-	-	13
44 (001)	MVA	741	-	-	741
11/66kV	No.	4			4
Step Up Transformers	MVA	150	-	-	4 150
Substations	No.	50	1	-	51
Substations	NO.	50			51
Energisation					
of "Omonia" S/Station					
No De-energisation					
		F 050 07			F 4 4 4 0 7
MV Overhead Lines MV Underground Cables	km	5 059,07	111,43	29,13	5 141,37
	km	2 499,81	182,76	23,12	2 659,45
LV Overhead Lines	km	8 362,05	215,26 460,44	36,24	8 541,07
LV Underground Cables	km	2 559,68	460,44	0,14	3 019,98
22 000-11 000/433/250V P.M. Transformers	No.	8 190	312	98	8 404
	kVA	8 190 740 127	54 428	98 29 514	8 404 765 041
22 000-11 000/433V			20	23314	
G.M. Transformers	No.	4 208	316	7	4 517
	kVA	2 253 505	218 800	, 30 105	2 442 200
		2 200 000	210 000	00 100	2 772 200

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