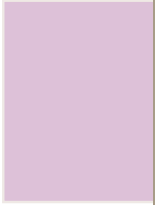


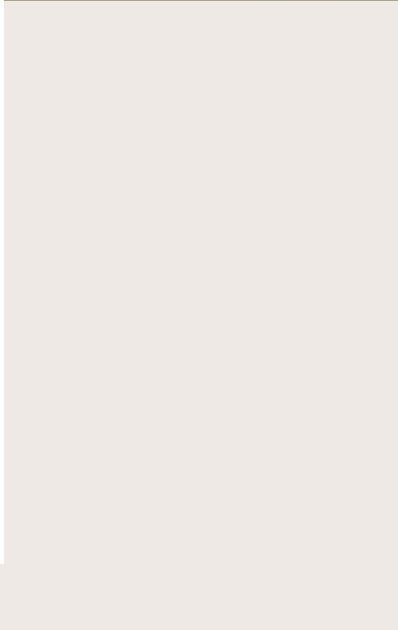
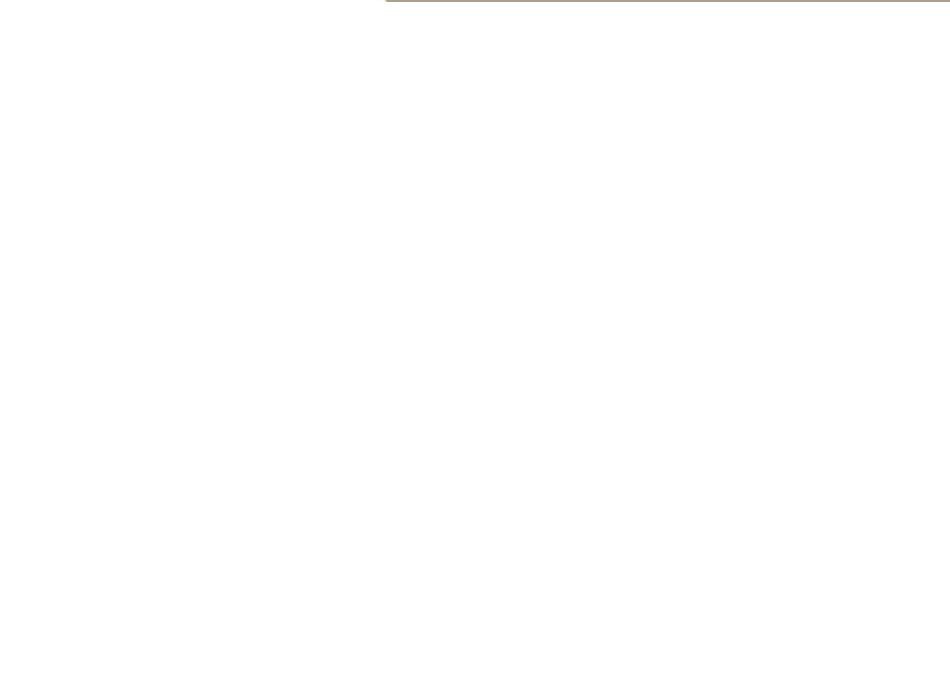


# Annual Report **2008**



Electricity  
Authority  
of Cyprus







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.

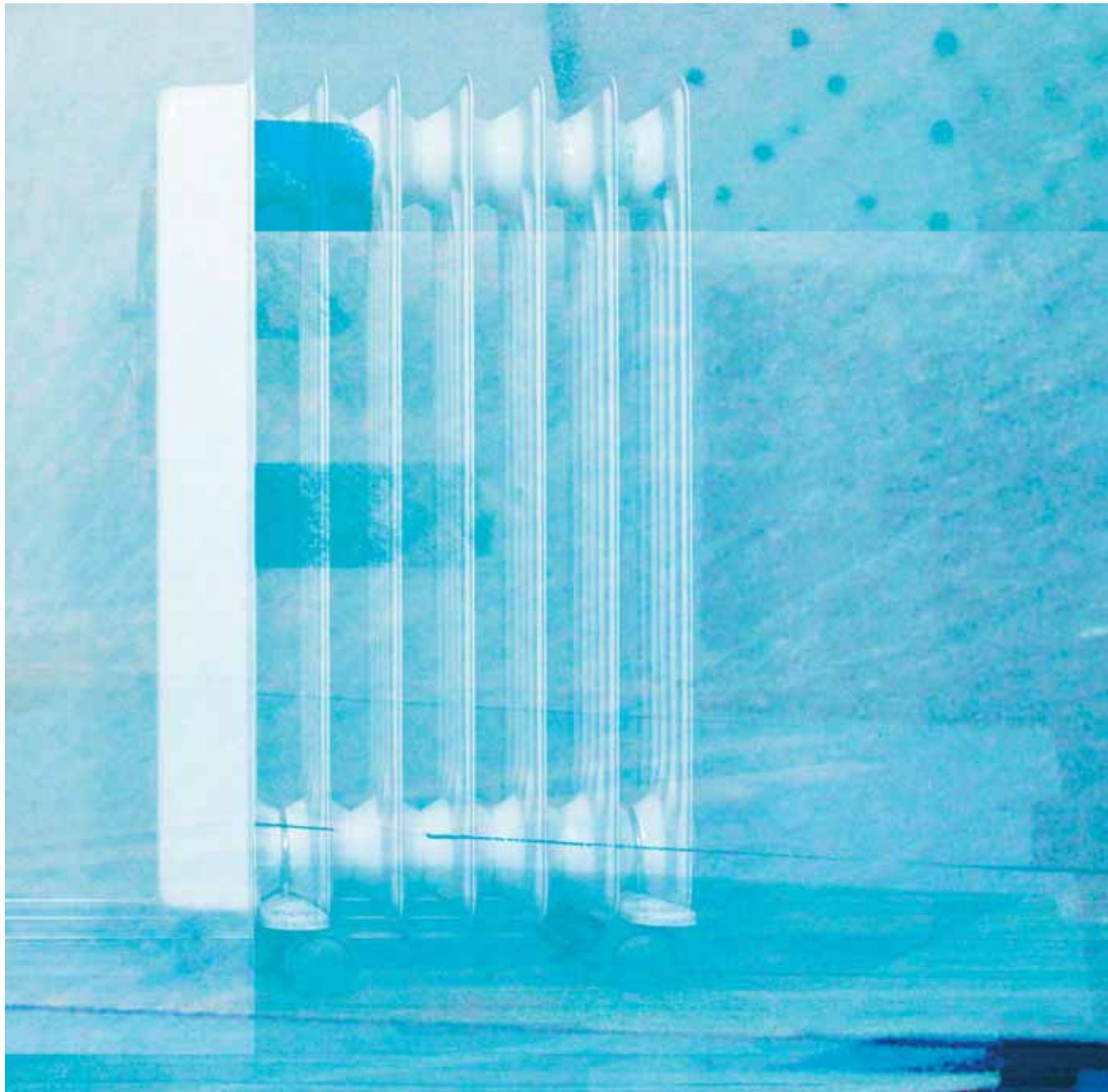
In case of the Electricity Authority of Cyprus, the government, through the Minister of Commerce, Industry and Tourism, is empowered to give directives to the Authority on matters appertaining to the general interest of the Republic.

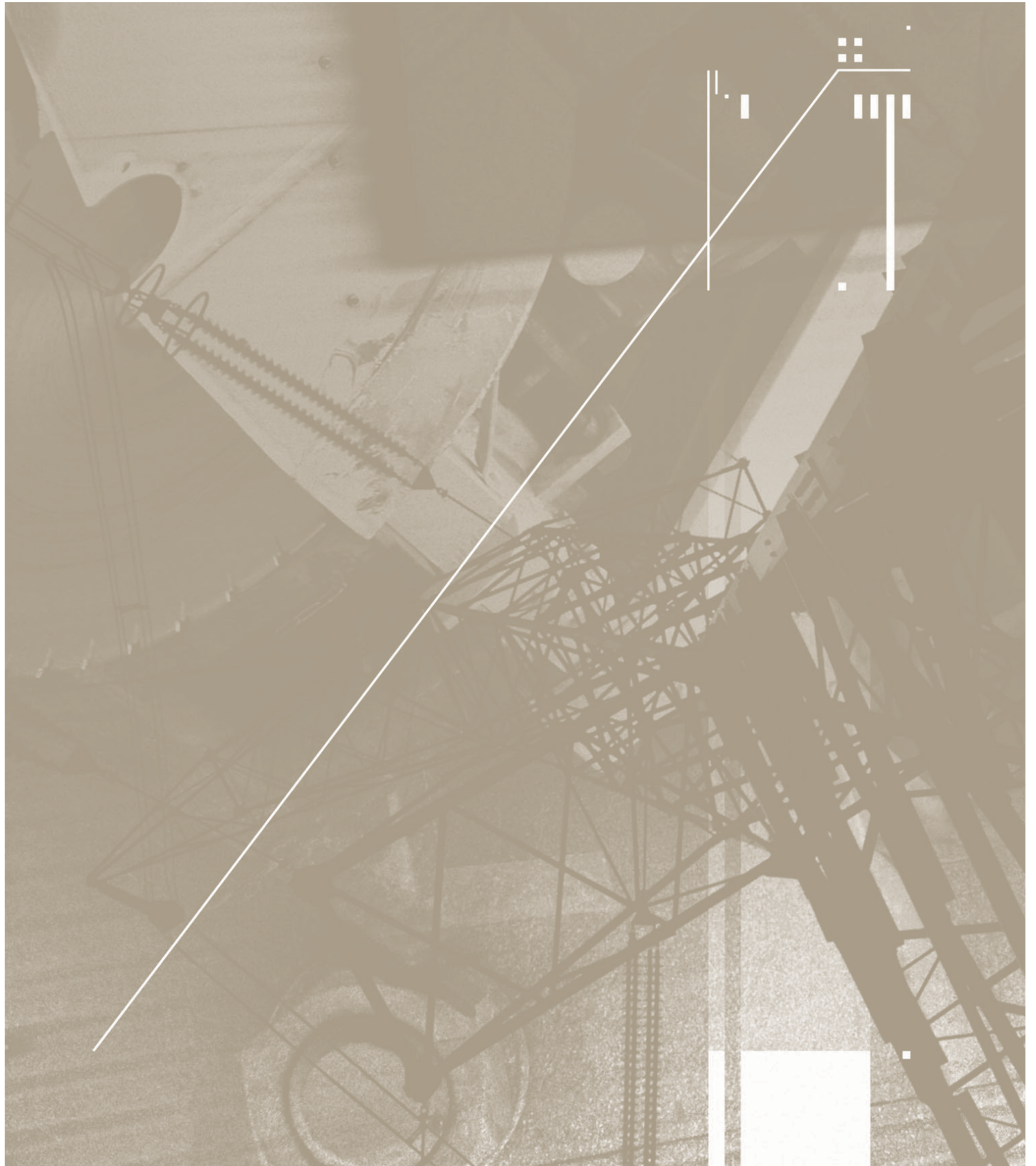


## Our Mission is...

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.

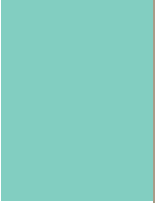






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# The Year in Brief

		2008	2007	% Increase (Decrease)
<b>GENERATION</b>				
Total units generated	million kWh	4 995,8	4 786,2	4,4
Maximum output capacity of power stations	MW	1 118	1 118	-
Maximum demand met	MW	1 004	1 047	(4,1)
Thermal efficiency of generation	%	33,7	33,8	(0,3)
<b>SALES OF ELECTRICITY</b>				
Total sales	million kWh	4 555,8	4 298,3	6,0
Consumption in the Turkish occupied area	million kWh	8,5	7,9	7,6
Average charge per kWh sold	€ cents	16,178	12,719	27,2
Consumers at 31 December	thousand	500,5	476,5	5,0
<b>FINANCE</b>				
Total income	€ thousand	771.870	575.522	34,1
Operating costs	€ thousand	724.296	503.920	43,7
Operating profit	€ thousand	47.574	71.602	(33,6)
Finance costs	€ thousand	19.310	14.779	30,7
Tax	€ thousand	7.933	16.802	(52,8)
Profit for the year	€ thousand	20.331	40.021	(49,2)
Capital expenditure	€ thousand	161.996	158.265	2,4
Average net assets employed	€ thousand	1.488.619	1.379.453	7,9
Return on average net assets employed	%	3,2	5,2	(38,5)
<b>EMPLOYEES</b>				
Permanent employees in service at 31 December		2 344	2 261	3,7
Sales per employee	million kWh	1,94	1,90	2,1
Consumers per employee		214	211	1,4

# Board of Directors and Management

## THE AUTHORITY

### CHAIRMAN

H. Thrassou	Civil Engineer, MSc, ex Minister of Communications & Works (since 11/3/2008)
Ch. Stavrakis	BA (Cantab), MBA (Harvard), ACIB (until 29/2/2008)

### VICE CHAIRMAN

G. Pistentis	Businessman - Computers (since 1/8/2008)
Y. Valanides	Managing Director, Laiko Group Mechanical Engineering of National Metsovio University (until 31/7/2008)

### MEMBERS

Filitsa Ioannou	Economist of National Kapodistriako University, Athens, Bank Employee
P. Chadjicharalambous	Mathematics University of Leipzig, Germany
G. Pistentis	Businessman - Computers (until 31/7/2008)
Y. Valanides	Managing Director, Laiko Group Mechanical Engineering of National Metsovio University (until 31/7/2008)
Y. Ioannou	Business Management - Economics - Greece (since 1/8/2008)
C. Enotiades	Businessman - Economist (since 1/8/2008)
S. Shialaros	Greek Literature teacher (since 1/8/2008)
L. Louca	Law - National Kapodistriako University, Athens (since 1/8/2008 until 21/12/2008)
A. Tzitzos	Economist (since 30/12/2008)
I. Constantinides	BA in Philosophy, Politics and Economics Oxford University, MBA in Business Administration (until 31/7/2008)
M. Miltiades	BSc (Hons) Psychology & Sociology (until 31/7/2008)





H. Thrassou  
Chairman



G. Pistentis  
Vice Chairman



Y. Valanides  
Board Member



F. Ioannou  
Board Member



P. Hadjicharalambous  
Board Member



Y. Ioannou  
Board Member



C. Enotiades  
Board Member



S. Shialaros  
Board Member



A. Tzitzos  
Board Member



M. Stavrou  
General Manager

Ch. Rotsas BA (Hons) Economics & Finance FCA  
(until 31/7/2008)

D. Psiloyenis BSc Electronic Engineering  
(until 31/7/2008)

#### 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. Eliopoulos  
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

### **POWER STATION MANAGER** **Dhekelia Power Station**

A. Polydorides  
MSc (Eng)

### **POWER STATION MANAGER** **Vasilikos Power Station**

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

## AREAS

### **AREA MANAGER** **LEFKOSIA - KERYNEIA - MORFOU AREA**

P. Sardos  
ACGI, BSc, DIC, MSc, CEng, MIET, MIEEE

### **AREA MANAGER** **LEMESOS AREA**

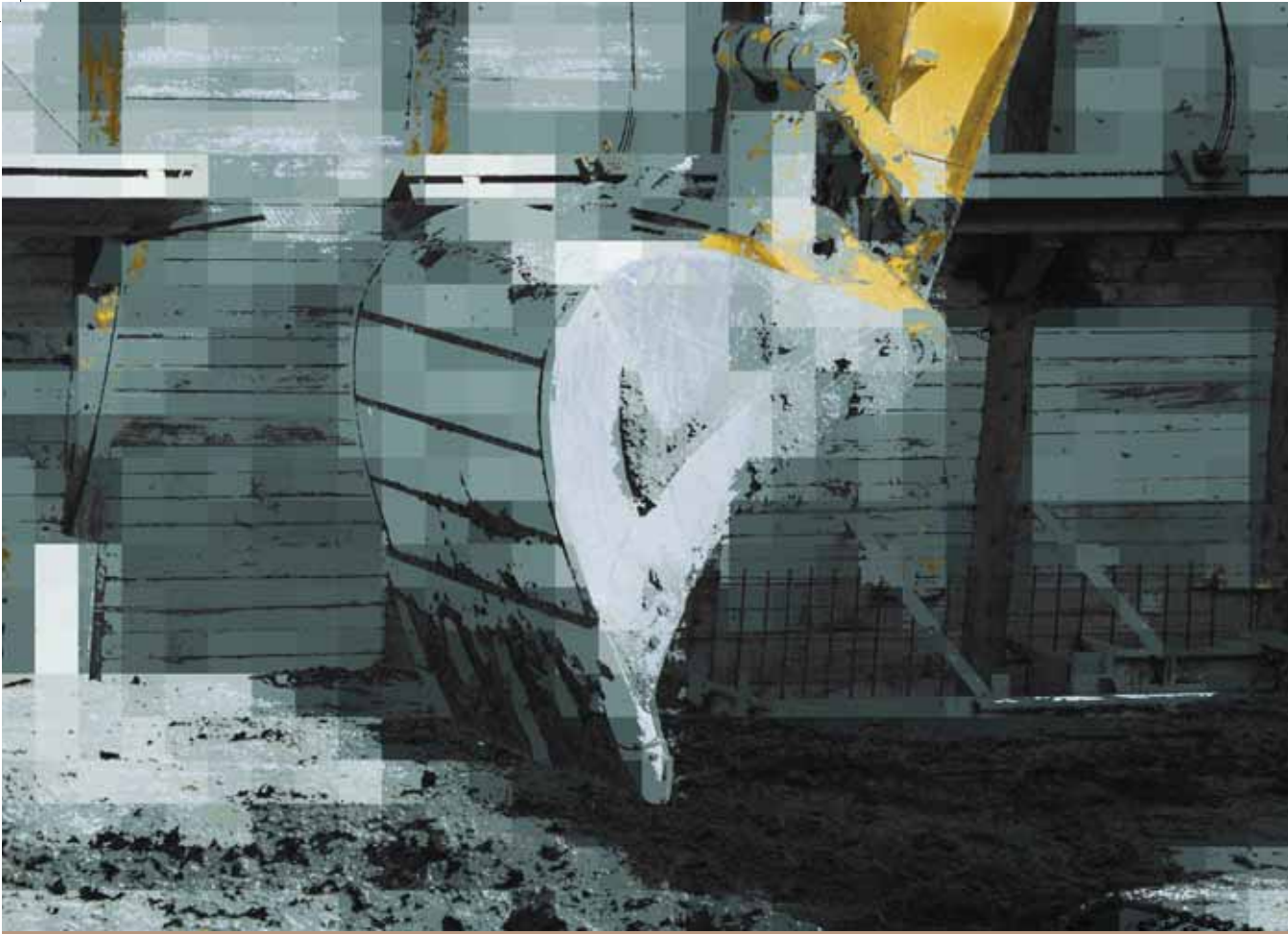
A. Malialis  
Dipl in Physics, MSc, CEng, MIEE

### **AREA MANAGER** **AMMOCHOSTOS - LARNAKA AREA**

Y. Siekkersavvas  
BSc (Eng), MIEE

### **AREA MANAGER** **PAFOS AREA**

S. Petousis  
BSc (Eng), CDipAF, MIEE, CEng, MCM



**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 RECOURCES MANAGER**

A. Patsalis  
BSc (Eng), MIOSH

# Chairman's Message



In the midst of major changes taking place in both the economical and social environments, I have been asked to outline our Organisation's progress during 2008. When the global financial crisis was bringing about truly universal changes with all their corresponding consequences for Cyprus in 2008, the EAC continued to work on realising its Development Plan with the aim of providing an uninterrupted supply of electricity to the country.

With these significant changes playing a major role, I shall attempt to summarise the year under review in order to see what we achieved.

## **Financial situation**

Our Organisation's financial situation is reflected in the statistics contained in this Annual Report. Extremely high fuel prices on the world's markets in 2008 resulted in fuel costs amounting to 63,4% of the EAC's total expenses for the year. This percentage reveals the long-term dependence of the EAC – and of the country in general – on oil and underlines the need for all of us to find and adopt alternative energy sources and, at the same time, to develop energy awareness.

The return of the average net assets employed declined from 6,88% in year 2002 to 4,03 in year 2008 (3,20% in case that the amount paid for the purchase of the greenhouse gas emission rights is not recovered) and it is expected to decline further for year 2009 (3,80%). Clearly, with annual net profits of the order of €20 to €25 million that encounters the last few years, the Development Plan of the Authority for the next decade cannot be materialised.

A key aspect in maintaining our Organisation's robust financial situation is the efficiency and productivity of our personnel. We consider that the knowledge and experience of the EAC's personnel are among the Organisation's advantages in the competitive struggle that has already begun. In recognition of this fact, the Board of Directors and Management has always endeavoured to provide our personnel with the best, safest possible working conditions to ensure that our demands for hard work and progress are met.

## **Natural Gas**

During 2008, work continued on the process for bringing Natural Gas to Cyprus. The importance of this issue is huge since it will determine significant developments in the state's energy policy with enormous financial consequences. For the EAC, Natural Gas means independence from oil and its by-products for the generation of electricity with a positive influence not only on generation costs and the environment but also, in the final analysis, on the actual price of KWh sold.



### Development Plan

In 2008 the EAC completed a number of important infrastructure projects affecting both the generation and the transmission/distribution of electricity.

More specifically, in the generation sector, the EAC's most important project in 2008 was the completion of final tests on the boiler of Unit No. 3 at Vasilikos Power Station which is now in commercial operation. The final delivery certificate is due to be signed in 2009.

Also in 2008, final testing took place on the 220 MW capacity combined cycle Unit No. 4 of Vasilikos Power Station Phase 3. From mid-August until 15 September 2008, the Unit was placed at the disposal of the Transmission System Operator (TSO) and, after a satisfactory number of hours of open cycle operation, was returned to the project contractor for completion and final delivery during 2009.

For Unit No. 5 (220 MW capacity) of Vasilikos Power Station Phase 4, three contractors have been pre-selected. Contracts for Unit No. 5 should be signed in 2009 and the Unit is due to operate in 2011.

In addition to the above, in the framework of its efforts to deal with the increased demand for load in summer 2008 and the subsequent increased load, the EAC awarded the Danish firm BWSC a contract for the temporary installation (on 1 July 2008) at Dhekelia Power Station of internal combustion units with a total capacity of 50 MW and the permanent installation of internal combustion units by 1 June 2009 with a total capacity of 52,44 MW. The temporary units operated during the period June-September 2008, after which the contractor dismantled and removed them, returning the site to the EAC in accordance with the contract.

In the transmission sector, the "Tseri" 220/132kV Substation and the "Ayios Athanasios" 132/22-11kV Substation were commissioned.

The "Tseri" and "Ayios Athanasios" Substations came into operation in key areas of Lefkosia and Lemesos respectively to substantially reinforce the EAC's ability to serve these two areas in which demand for new loads is on the rise.

The "Tseri" Substation is a branch Substation in which GIS switchgear, protection panels and a fully automatic monitoring system have been installed. The "Ayios Athanasios" Substation is connected to the "Yermasoyia" and "Old Power Station" Substations.

During 2008 work continued on the "Amathus", "Lakatamia" and "Trimiklini" 132/22-11kV Substations and on the "Vasilikos South" 132kV Substation.

# Chairman's Message

## **Transmission System Development Studies**

With the objective of expanding and developing the transmission system, 7 055 studies were completed in 2008, compared to 7 033 in 2007. Building costs for transmission system expansion and development amounted to €58,5 million in 2008.

The following studies have also been completed and approved:

- Connecting Renewable Energy Sources (RES) to the distribution system
- The reinforcement of medium voltage distribution system connections in Pafos and the surrounding area.

The following studies are planned:

- The use of distribution/power transformers.
- Guidelines and Code of Practice for Distribution Substations (Revised Manual)
- Connecting powerful motors to the distribution system

## **A customer-oriented approach**

We at the EAC place great importance on maintaining the Organisation's customer-oriented approach. In this context, the EAC set up the 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'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 fulfil its customers' expectations.

The Working Group set up by the EAC has been cooperating with the Irish firm ESB International, which was awarded the contract for consultancy services for the monitoring, installation and operation of the Call Centre.

The contract for the purchase of technical equipment and software for the Call Centre was awarded to GCC Computers Ltd which cooperates with Aspect Software. In 2008, work was completed on the building which will house the Call Centre, special furnishings and equipment were purchased and installed and recording/analysis began of the automated services that the Call Centre will provide to customers. The Call Centre will come into operation in stages and its first services are due to start by the end of 2009.

### **Customer Service and Billing System**

In order to provide the best possible service and information to the Organisation's customers, the EAC adopted a new, modern customer service and billing system, which can respond satisfactorily to the demands of the new competitive environment created by the liberalisation of the electricity market.

The project was awarded to SPL World Group Ltd and the system came into operation in May 2008.

With the implementation of this new system, the standard of EAC customer service and information has improved significantly. Moreover, the new system facilitates and speeds up the day-to-day work of the EAC's Customer Service Departments to a considerable degree.

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

For better customer service, the EAC has provided an additional way of settling electricity bills since 1st December, 2008. Customers can now settle their bills, at no additional charge, by credit card at all EAC Customer Service Offices and via the EAC website ([www.eac.com.cy](http://www.eac.com.cy)) or the JCC website ([www.jccsmart.com](http://www.jccsmart.com)).

### **New website**

Fully attuned to the times, in which the updating and modernisation of an organisation's website is deemed essential for the provision of correct information and good service to computer users, the EAC proceeded with a complete redesign of its website in 2008 and in July the new, enhanced site went live, covering a broad range of issues concerning the EAC's work and aims.

### **Social contribution**

In addition to its essential activities, the EAC has always given priority to its social contribution. As well as supporting events concerning education and sport and the work of charitable organisations in 2008, the EAC co-hosted with the Embassy of the Kingdom of the Netherlands the World Press Photo 2008 exhibition at its Head Offices. The exhibition, a major event which came to Cyprus for the first time, was open to the public for approximately one month and received extremely positive comments from visitors.

Also of great importance was the "Light up a Life" campaign which the EAC organised in collaboration with the Cyprus Anti-Cancer Society and which has now become a regular event.

### **Thanks**

To conclude this brief review of the year, I would like to give special thanks to the Minister of Commerce, Industry and Tourism, Mr. Antonis Paschalides, and to all his Ministry's staff for their collaboration.

Special thanks go to the Chairman and Members of CERA and to the Director of the Transmission System Operator for their cooperation on all issues concerning the EAC in 2008.

I would also like to thank the Government, the House of Representatives, the Auditor General of the Republic, and all those government departments and local government authorities with which the EAC has cooperated, as well as the representatives of the media for their promotion of the EAC's work.

Finally, I wish to thank all my colleagues on the EAC Board of Directors, the General Manager Mr. Moysis Stavrou and everyone on the Organisation's Management team, the Trade Unions and all members of our personnel for their superb cooperation throughout 2008.

**Harris Thrassou**  
**Chairman**



# General Manager's Message



As we look back over 2008, no-one can be in doubt that, during the year, the Electricity Authority of Cyprus once again achieved its permanent long-term aim of managing the difficult task of ensuring an uninterrupted supply of electricity to the island while providing the best possible service to the public. At the same time, a number of projects were completed in the framework of our Development Plan, a plan which, in addition to ensuring that our Organisation has the wherewithal for adequate electricity generation, will provide it with the necessary means to compete in the new environment that has been created.

The EAC's progress is clearly revealed in the analysis of the financial and technical data contained in the present Annual Report. I believe that the work of every member of staff has been crucial to this progress and I should like to take this opportunity to express my particular thanks to them. Together with our personnel, throughout the EAC's long and nationally beneficial existence, we have built up a strong and reliable Organisation and we are all proud to belong to the EAC family. We are ready and, at the same time, determined to exploit every challenge that arises and to compete successfully in the liberalised energy market.

Regarding electricity generation, in December 2008 final testing was completed on the Unit No. 3 Boiler (Phase 2) of Vasilikos Power Station. As for Phase 3 of Vasilikos Power Station, certain problems have resulted in the final delivery of Unit No. 4 from the contractor of the project now being due in the summer of 2009. Meanwhile, in June 2008, in the framework of a strict timetable, the EAC succeeded in bringing 50MW Internal Combustion Units into service at Dhekelia Power Station. The project to increase backup capacity by 50MW had been awarded by the Ministry of Commerce, Industry and Tourism and the Cyprus Energy Regulatory Authority in 2007.

Two new transmission substations were commissioned in 2008: In Lemesos the "Ayios Athanasios" 132/11kV Substation will serve an area that is under constant development, while strengthening the EAC's capability to supply new loads to the industries on the local Industrial Estate Area. In Lefkosia the "Tseri" 132/11kV Substation was brought into operation. Its establishment had occupied successive EAC Boards of Directors and Management for more than 10 years. We believe that this Substation will increase the reliability of the EAC network throughout the Lefkosia district, especially during the summer, and will assist in the development of the southern area of the capital.

An extremely important issue that concerned the Board, Management and Staff Unions during 2008 was that of bringing Natural Gas to Cyprus. The state has a duty to proceed with the creation of a permanent infrastructure that will become part of Cyprus' national wealth and will reinforce its national entity, while providing long-term economic benefits. Above all, it has a duty to obtain a continuous and uninterrupted supply of Natural Gas and, by extension, a secure future for electricity generation on the island.



In September 2007, the EAC had undertaken the free distribution of energy-saving Compact Fluorescent Lamps (CFLs) which, by decision of the Council of Ministers, it made available to the Special Fund to promote and encourage the use of Renewable Energy Sources (RES) and the promotion of Energy Saving (ES) methods. In 2007, some 350 000 CFLs were distributed to the public while by the end of 2008, this number had reached 698 000. 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 energy-saving CFLs.

In October 2008, the EAC implemented the targeted measures announced by the Government in support of families with at least three dependent children and an annual gross family income below €51.258. Support was also provided to families receiving Public Assistance Benefit from the Social Welfare Services.

In the context of its social contribution, in 2008 the EAC collaborated with the Rotary Club of Lefkosia – Lefkothea to donate a mobile incubator to the Makarios Hospital for use in its Neonatal Intensive Care Unit. Furthermore, as part of its support for culture, in collaboration with the Embassy of the Kingdom of the Netherlands the EAC organised and hosted the World Press Photo 2008 Exhibition at its Head offices from September 25-October 10. The exhibition, which was officially opened by the President of the House of Representatives, Marios Garoyian, received extremely positive reviews for the high standard of the photographs and for the way it was organised by the EAC.

In 2007, planning permission was obtained for new Area Offices in Larnaka and Pafos and in 2008 a Call for Tender was issued for the construction of the EAC's new Area Office in Pafos. Contracts were signed in March 2009 with the company which was awarded the project and on-site work is due to start in the course of the year. As Management, we place great importance on our Organisation's personnel and we endeavour to ensure that all members of staff have functional, ergonomic workplaces by offering the best possible working conditions. The EAC's aim is to provide its employees with comfortable and safe workplaces so that they, in turn, can give their very best for the progress and welfare of the Organisation.

On the occasion of my retirement, I wish to express my heartfelt thanks to all members of staff for their zeal and generosity, and to the unions that represent them for their excellent, constructive cooperation. I also feel the need to express separate thanks to the Executive Managers of the Business and Management Units for their harmonious cooperation, which has always aimed at ensuring the best interests of the Organisation in particular and of Cyprus generally.

At this point, I should also like to thank the Chairman of the EAC Board of Directors, Harris Thrassou, and all the Members of the Board for the excellent cooperation that I received during the period of our work together.

It goes without saying, in my view, that in the years to come the EAC will continue to provide a first-rate service to its customers and that in all its future battles it will be spearheaded by its personnel who, during the Organisation's long and beneficial existence, have turned it into one of the largest and most important semi-government organisations in the country.

**Moysis Stavrou**  
**General Manager**

# business and management units



# Generation Business Unit

## **GENERATION OF ELECTRIC POWER**

During the year 2008, 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 2008, 2 486 863 MWh, which corresponds to 49,78% of the total electricity generated from the Authority's Power Stations. During the same period the Station exported, 2 338 574 MWh, which corresponds to 49,55% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units for units generated reached 39,45% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 23,20%.

Moreover, the thermal coefficient of efficiency of the Steam Units, for units exported, reached 37,10% whereas the corresponding thermal coefficient of efficiency for the Gas Turbine reached 20,16%.

### **Maintenance**

During the period January-December 2008, Units No.1 and 3 were taken out of service for a scheduled general maintenance of the Steam Turbines and of the Steam Boilers. Modifications were carried out on the economizer of Boiler No. 3 as well as improvements in the operation of the frequency converters of ID, FD and RG Fans. Moreover the manufacturer carried out performance tests on Boilers No. 1 and 2.

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

During the same period the annual overhaul of the black start gas turbine was also completed.

An external Contractor carried out the annual inspection and maintenance of the single mooring and the heavy fuel oil underwater unloading pipes whereas improvement works were carried out on the underwater installation (PLEM).

# Generation Business Unit

## **DHEKELIA POWER STATION**

Dhekelia Power Station, with an installed capacity of 360 MW (6 x 60 MW Steam Units), generated in 2008, 2 053 090 MWh which corresponds to 41,10% of the total electricity generated from the Authority's Power Stations. During the same period, Dhekelia Power Station exported, 1 953 224 MWh which corresponds to 41,38% of the total electricity exported from the Authority's Power Stations. It should be noted that for the period June-September the EAC rented on a temporary basis internal combustion engines with a total capacity of 50 MW which were operated and generated in order to cover the increased load demand.

The thermal coefficient of efficiency of the Station for units generated reached 30,85% whereas the respective coefficient of efficiency for units exported reached 29,33%.

### **Maintenance**

During the period January-December 2008 the yearly maintenance of Units No. 1, 2, 3 and 5 was completed whereas the maintenance of Unit No.6 which began in 2007 continued and completed also during 2008.

The yearly general maintenance of the 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, 455 885 MWh which corresponds to 9,12% of the total electricity generated from the EAC's Power Stations. During the same period the Station exported 428 081 MWh, which corresponds to 9,07% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units for units generated reached 24,86% whereas the thermal coefficient of efficiency for the Gas Turbines was 21,95%.

Moreover, the thermal coefficient of efficiency of the Steam Units for units exported reached 23,28% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 21,48%.



### **Maintenance**

During the period January-December 2008, the annual maintenance of Steam Boiler No. 1 was completed. The yearly maintenance of the Boiler included visual checks and cleaning of all parts, various repairs inside the boiler, 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.

During the same period the annual overhaul Steam Turbines No. 4 and 5 were completed.

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

During 2008 the annual maintenance of Boiler No. 4 and Steam Turbine No. 3 also began and their maintenance continued in 2009.

The Station moorings were inspected and maintained by an external Contractor.

### **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 (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), carbon dioxide (CO) and ozone (O<sub>3</sub>). The units are also capable of measuring other meteorological data such as the wind speed and direction, the air temperature and the relative humidity.

# Generation Business Unit

## 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 2007 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 completed a study in which various ways of improving the efficiency of the three Power Stations were examined.

## PROJECTS

- **Modifications of the combustion systems on Boilers 1 and 2 at Vasilikos Power Station**

The Contract for the modifications of the combustion systems on Boilers 1 and 2 at Vasilikos Power Station was awarded in June 2008 to DOOSAN BABCOCK. The works on Boilers 1 and 2 are expected to be completed in the spring and autumn of 2009 respectively.

## CONTRACTS

- **Extension pipeworks for the ICE Plant at Dhekelia Power Station**

The Contract was awarded to Caramontani Bros who completed successfully the required works.

- **Repair Works on BFOTs 3 and 4 at Dhekelia Power Station**

The Contract was awarded to CR Rogiros Constantinou Electrical Contractors Ltd. The works began in September 2008 and are expected to be completed in 2009.

## VASILIKOS POWER STATION DEVELOPMENT WORKS

### Second Phase 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.
- After the completion of various improvement works on the Boiler, during the period October-December 2008, the tests on completion were carried out successfully. Thereafter the Contractor carried out the performance tests.
- After the submission of the performance tests report at the beginning of 2009, the issue of the Boiler delivery certificate will depend on the progress of the combustion improvement and more specifically whether the reduction of NOx emissions is within the specified limits.
- As a result, the new date of issuing the Boiler delivery certificate is transferred to 2009. It should be noted that the Unit is currently operating and generating.



# Generation Business Unit

## **Third Phase of Vasilikos Power Station**

Phase 3 consists of one combined cycle Unit with a capacity of 220 MW, (Unit No. 4), which was expected to be in commercial operation on the 30th of December. 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 EPC (Engineer Procure Construct) is followed.

- 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.
- The first fuel firing of Gas Turbine GT42 was achieved on the 25th of June 2008 and the respective firing of Gas Turbine GT41 on the 1st of July 2008. The performance tests were then carried out and the two gas turbines operated and generated. The turbines were available as from the 18th and 21st of August respectively up until the 15th of September 2008. On the 15th of September, after completing 184 and 235 hours of operation respectively, they both stopped generating and returned back to the Contractor in order to complete the project and deliver the complete unit in 2009.
- According to the latest monthly progress report of the Contractor, dated 18th of December 2008, the date of delivering the combined cycle plant as a whole is the 28th of June 2009, that is a delay of 178 days.

## **Fourth Phase 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 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 liberalized electricity market.



# Generation Business Unit

The report was submitted in November 2006 and thereafter, the Generation Business Unit, after considering the best applicable scenario as well as other parameters analyzed 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 materialized 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 2009. The Unit is expected to operate in an open cycle mode by the end of May 2011 and in a combined cycle mode in November 2011. The exact operating date of Unit No. 6 will depend on all future developments.

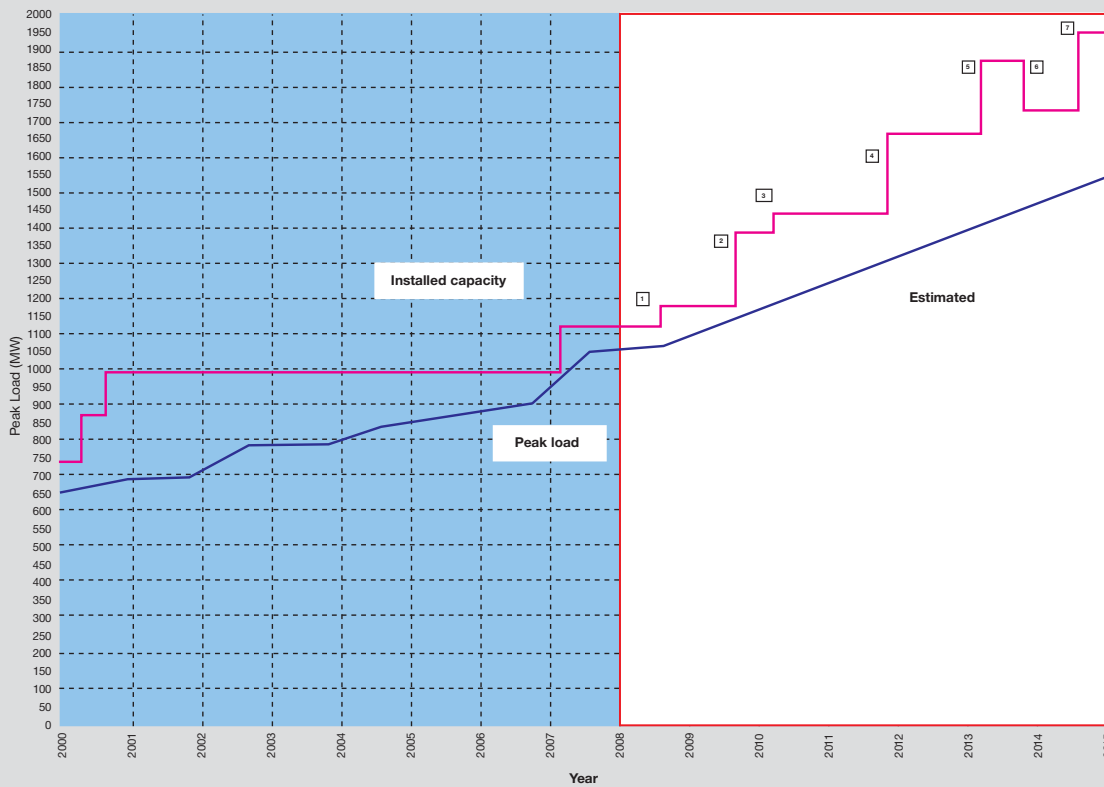
## **DHEKELIA POWER STATION DEVELOPMENT WORKS**

### **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 1st of June 2008 and the permanent installation of internal combustion engines of 52,44 MW by 1st of June 2009.

The temporary units operated successfully for the period June-September and thereafter the Contractor removed the units from the site as per contract clause.

Figure 1



#### 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 (June 2009)
- (3) COMMISSIONING OF DIESEL POWER PLANT 50 MW (June 2010)
- (4) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT, VASILIKOS) - 2011 (end)
- (5) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT) - 2013 (beginning)
- (6) DE-COMMISSIONING 6 x 30MW = 180MW (STEAM UNITS, MONI) - 2013 (end)

It is estimated that the steam units at Moni P/S will be taken out of service at the end of 2013. Thereafter, the land will be suitably prepared for the installation of new combined cycle units (2014).

- (7) COMMISSIONING 1 x 220 MW (COMBINED CYCLE UNIT, MONI) - 2014

# Generation Business Unit

## SYSTEM OPERATION

### Electricity supplied

In 2008 the total number of units generated by the EAC's three Power Stations was 4 995 838 000 kWh, compared with 4 786 171 000 kWh in 2007, representing an increase of some 4,38% over the previous year.

Figure 2

### TOTAL GENERATION (Million kWh)

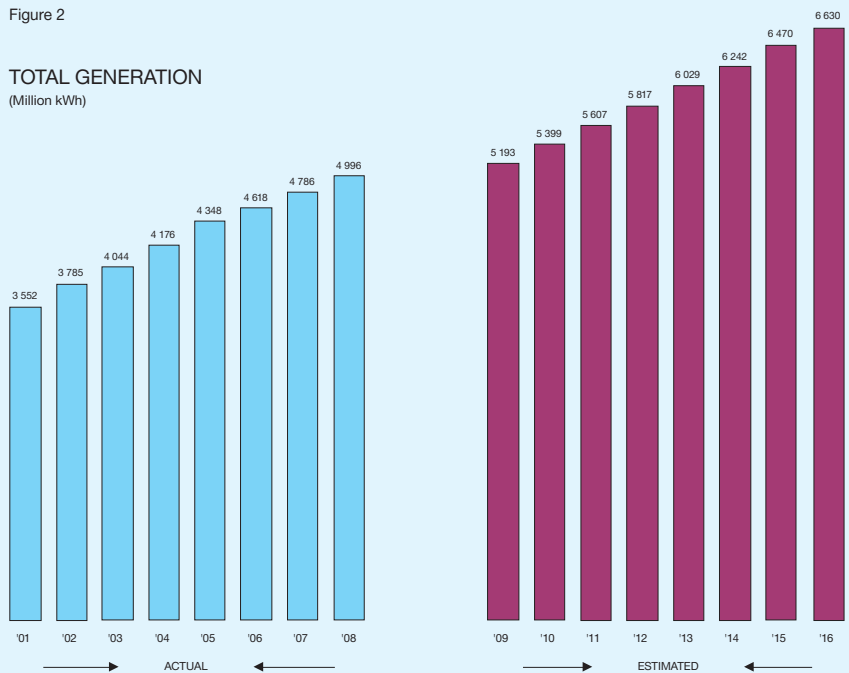


Figure 3

### Electricity Generation & Sales 2008

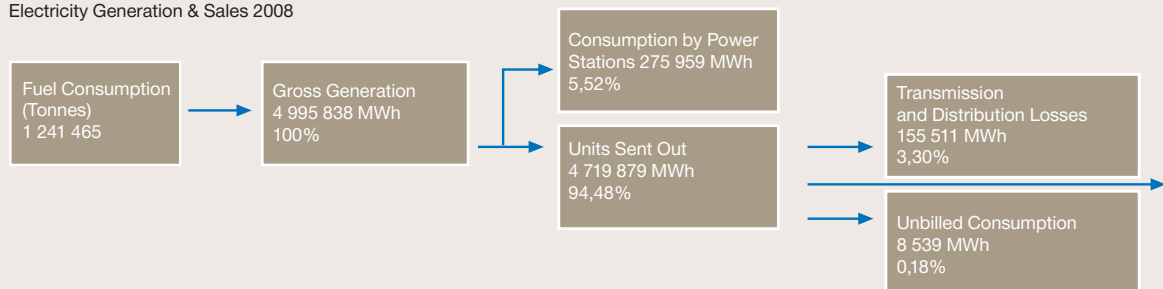


Figure 2 (page 32) shows the total number of units generated annually from 2001 to 2008. The predicted generation for the period 2009-2016 is also shown.

#### Generation, Transmission and Distribution Losses

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

Figure 3 (pages 32&33) shows electricity generation and sales distribution of sales to the various consumer categories.

#### Fuel Consumption

The amount of heavy fuel oil consumed by the power stations totalled 1 218 577 metric tonnes, compared to 1 174 656 metric tonnes the previous year, representing an increase of 3,74%.

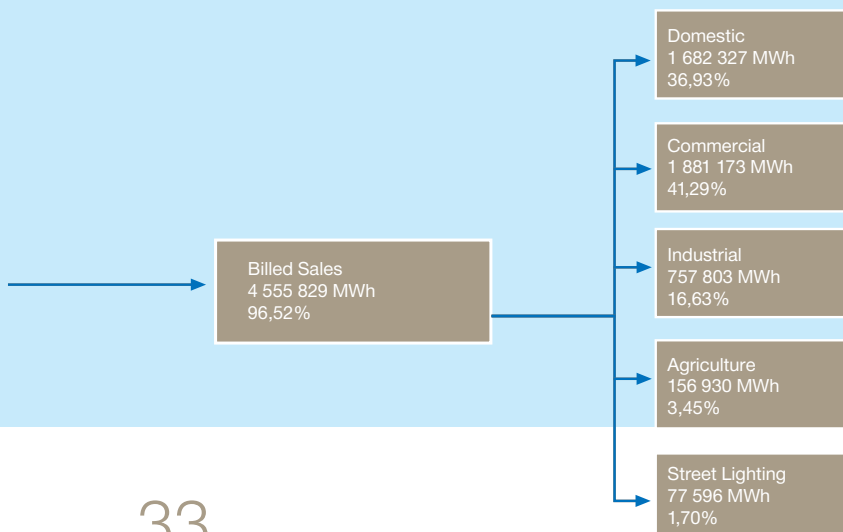
The total quantity of diesel fuel consumed by the power stations was 16 244 metric tonnes, compared to 16 034 metric tonnes the previous year, representing an increase of 1,31%.

For the operation of the internal combustion engines at Dhekelia Power Station, 6 644 metric tonnes of Eurodiesel consumed during 2008.

The average calorific value of the fuel oil used was 42 928 kJ/kg compared to 42 816 kJ/kg in 2007.

#### Plant Efficiency

Average generating system efficiency in 2008, based on the total units generated by the EAC's three power stations, was 33,74% compared with 33,8% in 2007. The heat rate per kWh generated was 10 668 kJ/kWh compared to 10 652 kJ/kWh in 2007. 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

## TRANSMISSION NETWORK

### INTRODUCTION

The transmission network is the backbone of the Authority's system, connecting the Power Stations with the load centres.

Transmission system development works that were completed in 2008 increased the reliability of the system and raised the installed capacity of the transmission substations by 163MVA.

### CONSTRUCTION WORK

#### New substations

#### Completed substations:

##### Tseri 220/132 kV substation

During the year under review, commissioning work was completed on the Tseri 220/132 kV substation in Lefkosia. It is a branch substation in which GIS switchgear, protection panels and a fully automatic monitoring system have been installed but there are no transformers. It has been connected to the 132kV Orounda-Peristeronari substation and operates at 132kV.

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

In Lemesos, the 80MVA (2x40MVA) capacity Ayios Athanasios 132/22-11kV substation was commissioned. To supply the substation and connect it to the Yermasoyia and Old Power Station substations, a 132kV 630 sq. mm. XLPE double circuit underground cable, approximately 1 250 metres long, was installed.

#### New substations under development:

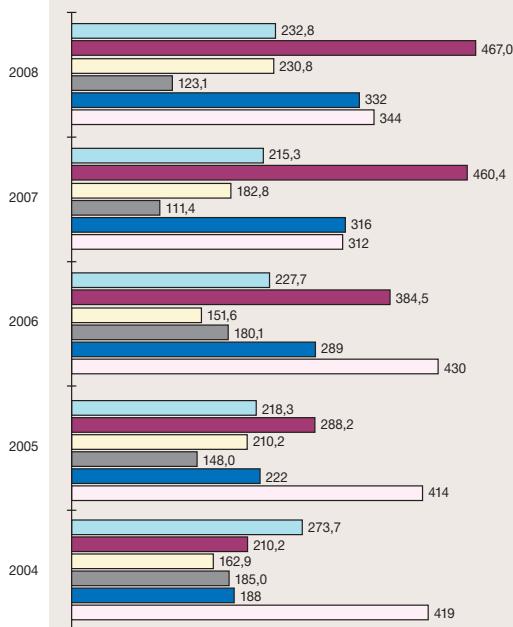
##### Amathus 132/22-11kV substation

Installation of the electrical equipment began in September 2008 and was expected to last eight months. The substation, which is due to operate in autumn 2010, will be powered via underground cables that will be laid during the undergrounding of the 132kV Moni-Polemídia overhead power line.

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

Building work on the substation began in September 2008. The tender for the supply of electrical equipment has been awarded and the substation is due to operate in April 2010.

Figure 4  
NEW DISTRIBUTION PROJECTS EXECUTED  
IN THE LAST FIVE YEARS



- 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



### **Trimikli 132/22-11kV substation**

Commissioning procedures for the substation are ongoing. The contract for building work was awarded in February 2009 with a completion time of 14 months. Electrical equipment installation work will be undertaken by EAC personnel.

### **Vasilikos South 132kV substation**

In June 2008 the equipment at Vasilikos South was powered up to connect to Unit No. 4 at Vasilikos Power Station. Procedures are ongoing for the further upgrading of the substation with the installation of an 18-bay 132kV GIS switchboard to interconnect the new combined cycle units. The switchboard will monitor three generation units (3 generators per unit), four links to the existing Vasilikos substation, the Ripple Control system, two transformer circuits for the supply of power to the desalination plant, a busbar circuit, a divider circuit and a future circuit.

### **Upgrades to substations**

#### **Completed upgrades**

##### **Alambra 132/11kV substation**

On 14th of July, 2008 the 3rd 16MVA transformer circuit was activated, thereby completing the substation upgrade.

#### **Ongoing upgrades**

##### **Dhekelia 132/11kV substation**

In December 2008 building work began on the substation in which two 40MVA, 132/23-11 5kV transformers will be installed. Completion is due in June 2010.

##### **Episkopi, Pissouri and Xeropotamos substations**

The present Episkopi, Pissouri and Xeropotamos 66/11kV substations are being totally renovated and upgraded to open type 132/22-11kV. At the same time, the Xeropotamos substation is being relocated to new premises. 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. The substations are due to operate fully in autumn 2009.

##### **Kolossi 132/11kV substation**

The equipment for upgrading the substation has been delivered and building work is due to start at the beginning of February 2009. Electrical equipment installation work will be undertaken by EAC personnel with the aim of bringing the substation into operation in autumn 2009.

##### **Hadjipaschalis 132/11kV substation**

The substation upgrade includes the installation of new closed-type switchgear, an improved control system and replacement of the medium voltage circuit breaker panel. The installed capacity of the substation is being increased from 80MVA to 120MVA. Work is due to be completed in summer 2009.

##### **Akoursou Road 66/11kV substation**

Work to increase the capacity of the 3rd transformer circuit from 10MVA to 16MVA was completed.

##### **Desalination Plant at Moni Power Station**

To supply the desalination plant at Moni Power Station, a 15MVA, 66/11kV transformer circuit was installed and activated.

# Networks Business Unit

## **Overhead power lines**

### **New construction**

#### **Vasilikos-Tseri 220/132kV overhead power line**

The Vasilikos-Tseri 220/132kV overhead double circuit power line with two RUBUS conductors per phase was activated. The 44km line provides a direct link from the Tseri substation to Vasilikos Power Station and operates at 132kV.

### **Upgrades/Relocations of overhead power lines**

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

Construction work on the new Ypsonas-Trimiklini 132kV overhead transmission line is due to start in summer 2009 and should be completed in spring 2010. The double circuit line, which is approximately 15km in length, will replace the now obsolete single circuit 66kV line.

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

The project is at the stage of awarding the tender and work is due to begin in autumn 2009. A new double circuit 132kV line, some 22 km in length, will replace the existing 66kV single circuit Stroumbi-Polis line.

### **Undergrounding of existing transmission lines**

#### **Athalassa-Strovolos and Athalassa-Dasoupolis overhead lines**

Undergrounding work is proceeding according to plan and is due for completion in June 2009.

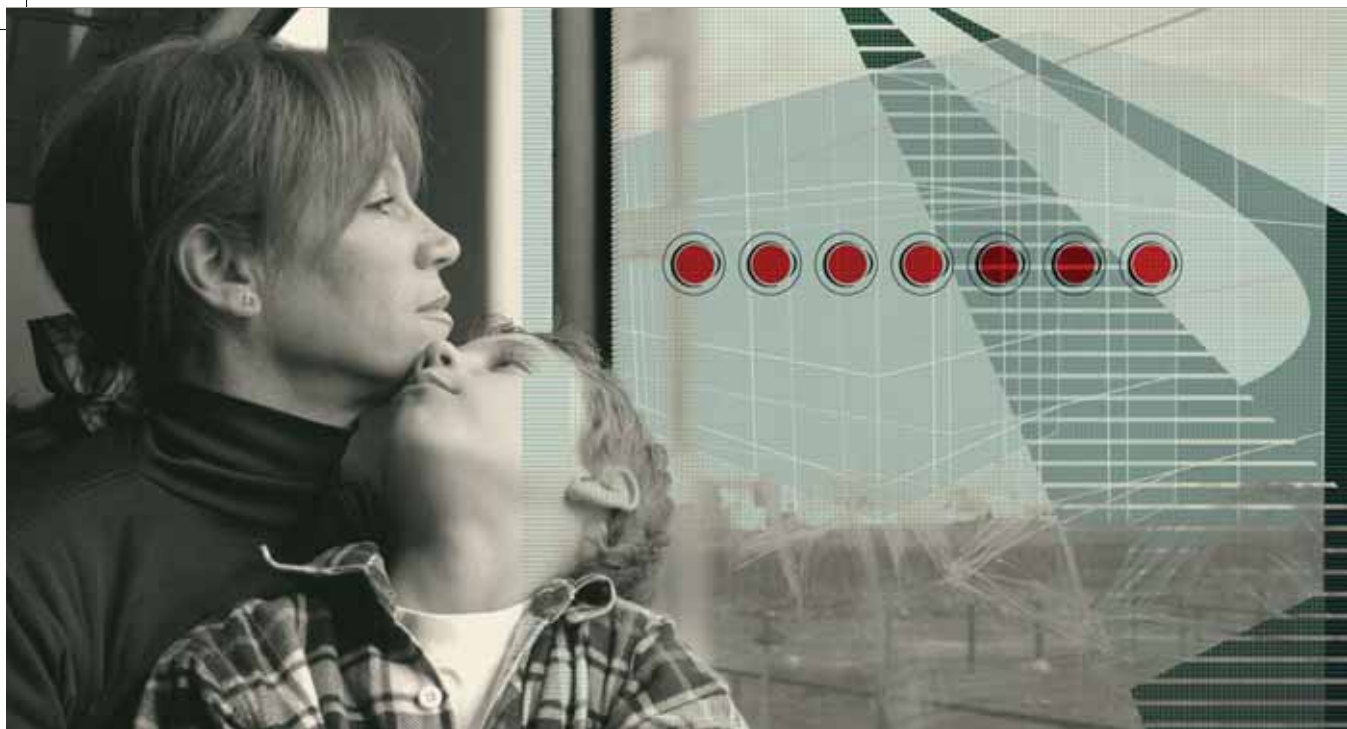
#### **Undergrounding of transmission lines in the Lemesos Area**

Undergrounding of the Moni-Yermasoyia-Ayia Phyla-Polemidia 132kV transmission line, which traverses greater Lemesos from Moni Power Station to Polemidia, is due to begin in 2009. Approximately 18 km of underground cables will be laid.

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

The following transmission network projects are at a preliminary stage:

- Commissioning of the Pafos substation.
- Commissioning of the Athienou substation and the routing of an overhead power line to the substation.



## **TRANSMISSION SYSTEM DEVELOPMENT STUDIES**

**In 2008 the following studies were undertaken:**

### **Lefkosia Area**

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

- Interconnection of the Dasoupolis and District Office transmission substations.
- The need for a Tseri-Strovolos double circuit underground transmission cable.
- Relocation of the Dhekelia-Athalassa overhead power line which traverses the residential area of the Dhali Municipality.
- Preliminary study on the undergrounding of a section of the Athalassa-Tseri overhead power line and of the Athalassa-Kokkinotrimithia overhead line in the Latsia area.
- Commissioning and power supply of the new Dhali Industrial Estate 2x40 MVA 132/22-11kV transmission substation.

**The following studies are planned:**

- Upgrading of the Latsia transmission substation.
- Undergrounding of the section of the Athalassa-Orounta overhead power line which traverses the residential area of Lakatamia.

### **Lemesos Area**

**The following study was prepared and approved for Lemesos and the surrounding area:**

- Supply of power to the desalination plant in the grounds of Moni Power Station.

**The following studies are planned:**

- West Lemesos 132 kV nodal transmission substation
- Trimiklini-Karvounas-Tembria 132/66kV double circuit overhead power line
- Upgrading of the Vasilikos-Moni 132kV overhead transmission line
- Upgrading of the Moni transmission substation from a 66kV open type to a 132kV GIS open type
- Lemesos Marina 22/11kV primary substation

# Networks Business Unit

## **Ammochostos - Larnaka Area:**

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

- Upgrading of the Larnaka Industrial Free Zone 132kV/11kV transmission substation.
- Preliminary study on the conversion of the existing Larnaka 132kV/11kV transmission substation from an open type to a GIS closed type.

## **The following studies are planned:**

- Development of the Transmission System at Vasilikos Power Station
- Interconnection of the Pyla and Commercial Centre 132kV/11kV transmission substations via a double circuit underground transmission cable
- Revised study on the new Pyla 66kV/11kV substation
- Alternative temporary power supply of the Ammochostos substation by the Ayios Nikolaos 66kV/11kV substation
- Undergrounding of the section of the Dhekelia-Larnaka-Industrial Free Zone overhead power line that traverses the residential areas of Pyla and Voroklini

## **Pafos Area**

The following studies are being prepared for Pafos and the surrounding area:

- Supply of power to the desalination plant at Kouklia village
- Undergrounding of part of the Anatoliko-Hadjipaschalis overhead power line

## **Other studies:**

### **The following studies have been completed:**

- Policy on the undergrounding/relocation of overhead power lines
- Standardisation of open type transmission substations
- Short circuit currents
- Transmission System Project Costing Manual
- Connecting Renewable Energy Sources (RES) to the EAC system

### **The following studies are planned:**

- Transmission System power factor improvement
- Examination of the reliability of the Transmission System for summer 2009
- Substation load prediction for 2010-2030



All studies on the development of the Transmission System, which are included in the Ten-Year Transmission System Development Programme, are carried out in collaboration with the Transmission System Operator (TSO) which 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.

The technical specifications for all distribution network equipment and materials are under constant revision due to changes to international standards, improvements in technology and/or alterations in the use of materials. There is a total of 251 approved technical specifications concerning 1 457 materials. In 2008, six new technical specifications were drawn up while 49 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 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. 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.

# Networks Business Unit

## **DISTRIBUTION SYSTEM DEVELOPMENT STUDIES**

In the context of efforts to expand and develop the distribution system, 7 055 studies were completed in 2008 compared with 7 033 in 2007. Expenditure on construction work for the expansion and development of the distribution system in 2008 amounted to €58,5 million compared with €62,58 million in 2007.

### **Other studies:**

The following studies have also been completed and approved:

- Connecting Renewable Energy Sources (RES) to the distribution system
- The reinforcement of medium voltage distribution system connections in Pafos and the surrounding area

The following studies are planned:

- The use of distribution/power transformers
- Guidelines and Code of Practice for Distribution Substations (Revised Manual)
- Connecting powerful motors to 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**

During 2008, four of the system's digital multiplexers were upgraded while a number of new telecommunication channels were created, mainly for the protection of transmission lines.

### **Optical Fibre Network**

In 2008, the optical fibre network was reinforced by the new 44km Tseri-Vasilikos overhead power line and the replacement of the old 32km Alambra-FIZ-Larnaka overhead fibre optic cable. Work was also carried out on the Lemesos underground network for the connection of the two new Omonia and Ayios Athanasios distribution substations.

Also, additional optical fibre circuits were made available during 2008 to the EAC's two strategic partners in telecommunications, PrimeTel and Cablenet.





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

In collaboration with the TSO, expansion of the SCADA/EMS system continued in 2008 to include control of two additional transmission substations, while monitoring equipment was upgraded in six more substations.

#### **Load Management System (Ripple Control)**

In 2007 a study was completed on the expansion/upgrading of the system which is due to be implemented in 2009-2011.

#### **Security Systems**

Security systems in EAC installations were upgraded in 2008.

#### **Telephone Network**

Upgrading was completed on the connections enabling the operation of the EAC's unified internal telephone network. Work also began on connecting the existing telephone network and systems to the EAC Call Centre.



# Networks Business Unit

## **CIVIL AND BUILDING WORKS SECTION**

**The Civil and Building Works Section deals with the EAC's construction projects.**

### **Power Stations**

Maintenance and civil engineering work continued at the EAC's Power Stations in 2008 on the basis of a three-year contract.

Civil engineering work was completed on Phase 3 of the development of Vasilikos Power Station.

Additionally, in collaboration with the EAC's consultants, (a) preliminary planning was completed, specifications were drawn up and tender documents prepared for Phase 4 of the same power station and (b) preliminary plans submitted by the contractor were checked and civil engineering work began on Internal Combustion Engine No 1 at Dhekelia Power Station.

### **Transmission/Distribution systems projects**

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

### **Stores and Technical Staff Offices**

The section dealt with building work on the new Lemesos Area stores, work on which began in April 2008 and is due to reach completion in 2010.

### **Area Offices**

Architectural design and other related work on the construction of the Authority's new Famagusta-Larnaka and Pafos Area Offices continued in 2008. Construction work on the Pafos Area Offices is due to begin at the start of 2009 and on the Famagusta-Larnaka Area Offices at the end of 2009.

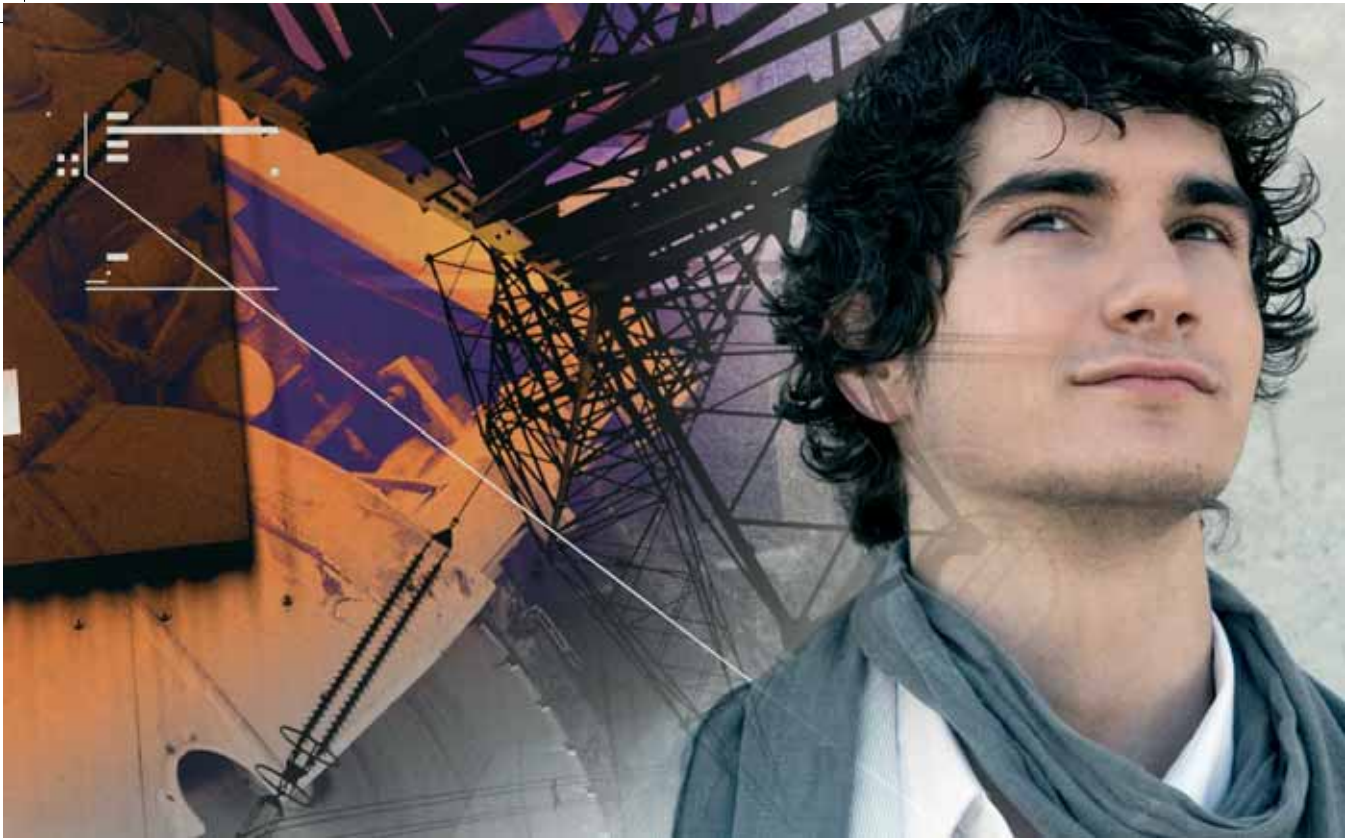
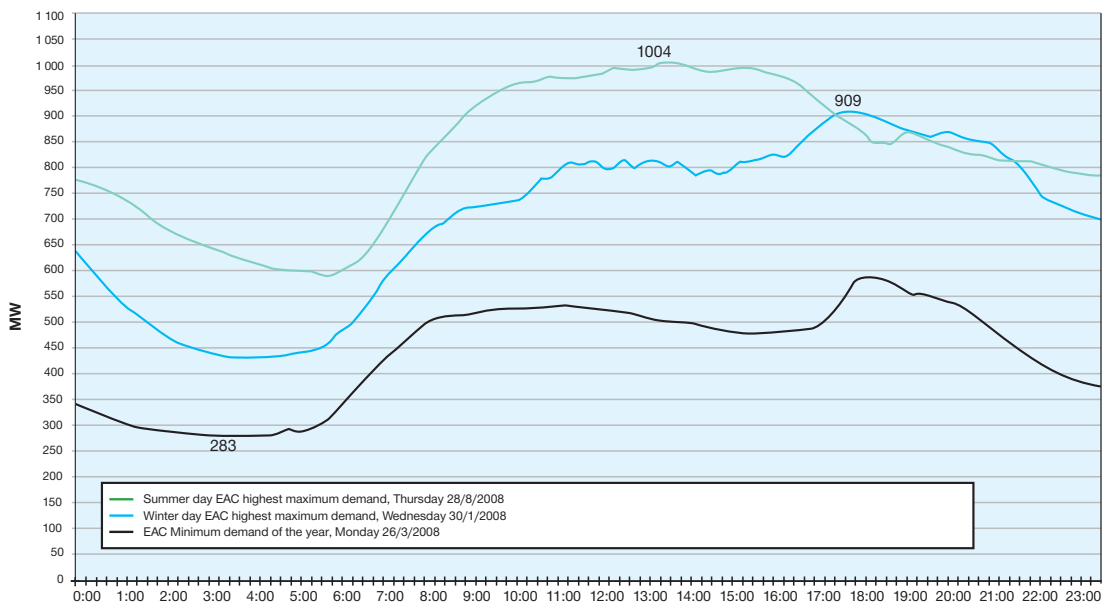


Figure 5



Note: As shown in T.S.O. 2008 Annual Report

# Customer Service Business Unit

## CONSUMERS

At the end of 2008, the total number of consumers in the government-controlled areas of Cyprus stood at 500 489, a net increase of 23 989 or 5,0%.

Table 1 (page 49) shows the number of consumers by category as well as the percentage increase over the previous year.

## BILLED SALES OF ELECTRICITY

Billed sales of electricity in the government-controlled areas increased to 4 555,8 GWh, compared to 4 298,3 GWh the previous year, representing an increase of 6,0%.

- Table 2 (page 49) shows the allocation of billed sales of electricity to the various categories of consumers, as well as the percentage increase over the previous year.
- Sales for the years 2006, 2007 and 2008 are shown in Fig. 6 (page 47). Sales and revenue for 2008 are shown by consumer category and as a percentage of the EAC's total sales and revenue in Fig. 7 (page 55).

## OFF-PEAK SUPPLIES

Off-peak sales (tariff Code 55) totalled 101 476 MWh, representing a reduction of 9 112 MWh or 8,2% compared to 2007. 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 6,63 cents in 2007 to 9,73 cents in 2008. The number of consumers increased by 881.

- Consumers opting for the off-peak tariff totalled 20 010, of whom 19 623 (98,1%) were domestic consumers with an average annual consumption of 5 046 kWh compared to 5 754 kWh in 2007.
- Statistics for billed off-peak sales of electricity over the last five years are shown in Fig. 8 (page 55).

## 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. In collaboration with its consultants, the Group prepared an initial proposal for the introduction of new tariffs which was submitted to the Cyprus Energy Regulatory Authority (CERA) for negotiation.

The EAC is in ongoing negotiations with CERA for the preparation of new tariffs. The new tariffs are 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 once again sent out an annual statistical report to all our monthly billed customers. This report includes information on monthly consumption and peak demand for 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 2008, some 18 145 customers were benefitting from this. The total benefit to customers in 2008 and, consequently, the reduction in revenue to the EAC as a result of this special tariff, was approximately €2.087.564 compared to what 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 12,719 cents in 2007 to 16,178 cents in 2008, an increase of 27,2%, as a result of increased fuel costs and the automatic fuel cost adjustment.

On the 1st of October 2008, following negotiations with the government, the EAC implemented targeted measures to assist vulnerable groups of the population such as those receiving Public Assistance Benefit and large and five-member families, as well as pensioners or low-paid workers who normally have a very low electricity consumption.

Specifically, further reductions were made to the special tariff (code 08) which already applied to large and needy families and eligibility for the tariff was extended. Accordingly, five-member families (with 3 or more dependent children and an annual gross family income not exceeding €51.258) are now eligible for the special tariff (code 08) while for 12 months (6 two-month periods) a special 20% reduction will be applied to all domestic customers whose consumption for each two-month period is less than 500 kWh. These measures will cost around €10.000.000.

#### **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 meter data is retrieved automatically. This program enables direct monitoring of customer loads, the automatic retrieval of data and the timely preparation of load research reports.

During 2008 the EAC continued to implement this Load Research method for all its corporate customers who are supplied at high and medium voltage. The data obtained was analysed, processed and subsequently used in the drawing up of the relevant load research reports. The conclusions of these studies 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 has adopted a new, modern customer service and billing system, which can respond satisfactorily to the demands of the new competitive environment created by the liberalisation of the electricity market.

The project was awarded to SPL World Group Ltd and the system came into operation in May 2008.

# Customer Service Business Unit

With the implementation of this new system, the standard of EAC customer service and information has improved significantly. Moreover, the new system will facilitate and speed up the day-to-day work of the EAC's Customer Service Departments to a considerable degree.

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

For better customer service, the EAC has provided an additional way of settling electricity bills since the 1st of December 2008. Customers can now settle their bills, at no additional charge, by credit card at all EAC Customer Service Offices and via the EAC website ([www.eac.com.cy](http://www.eac.com.cy)) or the JCC website ([www.jccsmart.com](http://www.jccsmart.com)).

## **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 can 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.

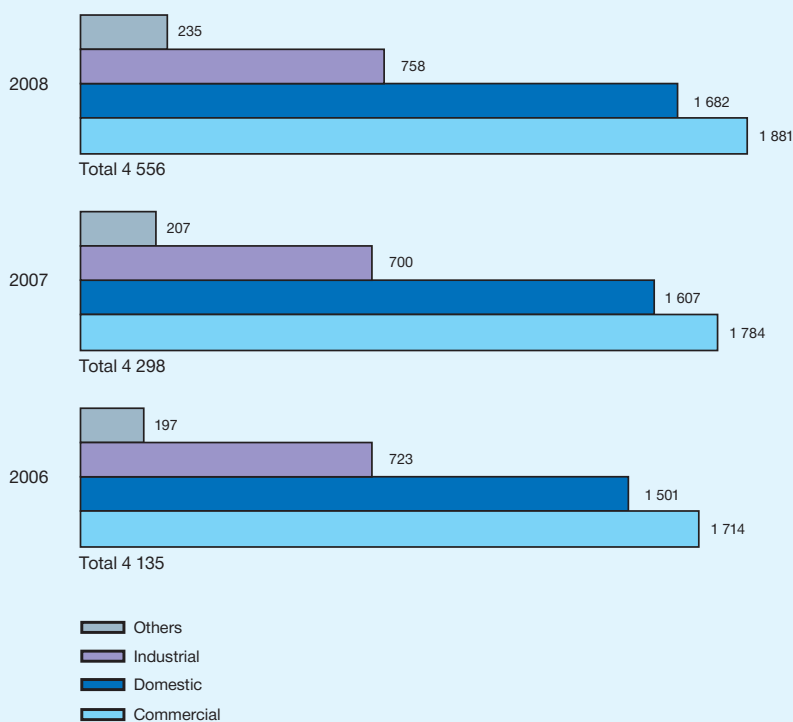
The IFRC, which is currently located on the second floor of the old Head Office building and is manned by nine Customer Service Officers, is successfully providing service to all the government-controlled areas of Cyprus.

Customer calls to the islandwide four-digit telephone number 1800 are routed to the IFRC, where the reported faults are registered electronically before being sent on to the Area emergency/faults crews for corrective action and the restoration of power.

The EAC is striving constantly to improve its service to customers, particularly in cases of repairing faults and restoring the power supply, through the use of suitable equipment. The IFRC also receives calls on 22 572 299 on a daily basis (07.00-21.30) from EAC customers regarding meter readings which could not be carried out by EAC meter readers due to their premises being 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 the Organisation already finds itself in 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 Implementation Group set up by the EAC has been cooperating with the Irish firm ESB International, which won the tender for consultancy services for the monitoring, establishment and operation of the Call Centre.

The tender for the purchase of technical equipment and software for the Call Centre was awarded to GCC Computers Ltd which collaborates with Aspect Software.

In 2008 the 2nd floor of the old Head Office building was renovated and the Call Centre furnishings and equipment were purchased and installed there. Personnel training began, as did the recording/analysis of the automated services that the Call Centre will provide to EAC customers. The Call Centre will come into operation in stages and its first services are due to start by the end of 2009.

# Customer Service Business Unit

## **RENEWABLE ENERGY SOURCES**

In accordance with the provisions of European Directive 2001/77/EC issued during Cyprus' accession process and its compliance with the directives, legislation and regulations of the European Union, the Government proceeded, among other things, with 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 enjoys good cooperation with the Energy Service of the Ministry of Commerce, Industry & Tourism, with the Cyprus Energy Regulatory Authority (CERA) and the Transmission System Operator regarding joint action on the subject of RES. Interested applicants/producers are given all possible technical assistance and 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 (a 20-year agreement according to a proposed new scheme). 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, having been approved/registered with the Special Fund for Grants/Subsidies and having signed the Subsidy Agreement with the Special Fund Management Committee.

By the end of 2008, a total of 321 photovoltaic systems had been installed and were producing up to 20 kW (compared to 196 photovoltaic systems at the end of 2007, i.e. an increase of 63,8%), with a total voltage of 1 586,37 kW (843,39 kW at the end of 2007, i.e. an increase of 88,1%) and a total production of 1 636 867 kWh (compared to 932 959 kWh in 2007, i.e. an increase of 75,5%). It should also be noted that by the end of 2008, eight Generation Units using Biomass/Biogas were in operation with a total installed capacity of 3 310 kW and total production of 7 808 694 kWh (the first 250 kW Biomass/Biogas Generation Unit was connected to the EAC grid on the 10th of December, 2007). Considerable interest has been shown in new photovoltaic systems, despite the relatively high capital outlay required for the installation of such systems, and in Biomass/Biogas Generation Units. Unfortunately, applications 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 31.12.2008	AS AT 31.12.2007	INCREASE %
Domestic	386 489	366 799	5,4
Commercial	80 913	78 294	3,3
Industrial	11 792	11 299	4,4
Agricultural	12 796	12 117	5,6
Street Lighting	8 499	7 991	6,4
<b>TOTAL</b>	<b>500 489</b>	<b>476 500</b>	<b>5,0</b>

Table 2

## BILLED SALES OF ELECTRICITY (MWh)

CONSUMER CATEGORY	2008	2007	INCREASE %
Domestic	1 682 327	1 607 048	4,6
Commercial	1 881 173	1 783 885	5,5
Industrial	757 803	699 746	8,3
Agricultural	156 930	137 339	14,3
Street Lighting	77 596	70 301	10,4
<b>TOTAL</b>	<b>4 555 829</b>	<b>4 298 319</b>	<b>6,0</b>

**TECHNICAL ISSUES**

During 2008, 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
- The 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 15 428 new meters. A total of 45 942 new meters were checked and calibrated, 505 second-hand meters were repaired and recalibrated, 1 798 Ripple Control Receivers were programmed and tested and 1 090 street lamps were repaired and tested.

During 2008, the EAC Area Offices inspection departments carried out 31 143 inspections of electrical installations throughout Cyprus.

In the course of the year, special training seminars were held for all personnel of the Electrical Installation Inspection department on the 16th Edition of the IEE Wiring Regulations published by the IET.

In 2008 the Medium Voltage Automatic Meter Reading system was completed with the purchase and operation of MV90 system software and its connection to the Customer Service and Billing System. Moreover, all personnel involved in its use were given additional training.

By the end of 2008, some 489 such metering systems had been connected, enabling automatic readings and/or the issuing of bills.

Additionally, specifications were drawn up, Calls for Tenders were issued and the subsequent tenders were assessed for the purchase of materials and equipment used in the Meter and Relay Testing Centre (MRTC) and Area Offices relevant to the metering system, street lighting and electrical installation inspection.

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

## **EAC REVENUE PROTECTION**

In 2008, personnel dealing with EAC revenue protection from electricity theft checked 3 177 meters on the premises of high-risk customers. Of these, 561 were found to be intact, while 2 373 had been tampered with, though they showed no sign of electricity theft. In 243 instances, meters were found to have been tampered with and there were signs of electricity theft. In relation to these, a total of €1.630.588 was recovered in costs for investigating the cases, damage to meters/equipment, additional load (exceeding the approved load), disconnection of supply due to non-payment of bills and unrecorded consumption due to unauthorised tampering with meters.

Investigations that began in 2001 into 168 cases of electricity theft (the Masoura case) continued during 2008. The total value of unrecorded consumption has been estimated at €4.95 million and, up to now, payment of approximately €2.2 has been arranged. The EAC has taken legal action against those involved in order to recover the outstanding amount. It should be noted that, in addition to the Masoura case, the EAC has also secured payment of €333.229 relating to other cases of electricity theft.



In the framework of the EAC's efforts to improve its Revenue Protection measures, work continued in 2008 on the replacement of electromechanical meters with electronic meters. By the end of 2008, some 40 000 meters had been replaced.

# Customer Service Business Unit

## **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 expected that procedures for obtaining the required Quality Certification/Accreditation will be completed during 2009. 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.

## **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 to provide advisory services to all its customers on matters of interest to them in 2008. 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 2008 lectures were given to organised groups and to EAC customers on issues concerning the conservation and safe use of electricity, new tariffs and electromagnetic fields.

In recent years, technology has been developing so rapidly that modern websites have become an essential tool for organisations wishing to provide correct information and good service to computer users. Attuned to the message of the times, in 2008 the EAC proceeded with a complete redesign of its website and in July 2008 the new, enhanced site went live, covering a broad range of issues concerning the EAC's work and aims. The new, dynamic, more user-friendly EAC website is viewed as a means by which the Organisation can come even closer to its customers.



- In the framework of improving relations among members of staff, the Organisation publishes “EAC News”. This magazine is distributed not only to EAC personnel but also to various other groups, individuals and services outside the Organisation. During 2008, issues 92-95 were published.
- In 2008, in collaboration with the Ministry of Commerce, Industry & Tourism, the free distribution of 2 000 000 energy-saving Compact Fluorescent Lamps (CFLs) continued. 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 a budget 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 an integrated public information campaign.
- In the context of its broader social contribution, in 2008 the EAC continued to support the Cyprus Anti-Cancer Society with which it organised the “Light up a Life” Christmas event for the 7th consecutive year. In the health sector, with the aim of further improving the already high standard of health care in the country, the EAC collaborated with the Rotary Club of Lefkosia – Lefkothea to donate a mobile incubator to the Makarios Hospital as a contribution to the valuable work carried out by its Neonatal Intensive Care Unit.

# Customer Service Business Unit

- In the framework of showing our cultural heritage to its best advantage, the EAC undertook the illumination of the Church of the Anastasis at Alambra and of the Church of Saint Fanourios in Aradippou.
- In 2008 the EAC hosted a world-class exhibition of photographs at its Head Offices. In collaboration with the Embassy of the Kingdom of the Netherlands, the EAC brought the World Press Photo 2008 Exhibition to Cyprus for the first time. The World Press Photo competition attracts more than 5 000 entries taken by press photographers in the course of their work in 125 countries. The exhibition of the winning entries goes on tour every year to more than 50 countries (100 cities) and is seen by more than two million people.
- Each year various campaigns and schemes are implemented in the context of the EAC's policy of developing energy awareness in the Cypriot public. In 2008 an islandwide media campaign was carried out with the aim of raising consumer awareness on the issue of saving electricity and, by extension, protecting the environment.
- The EAC was again involved in sport as the main sponsor of the national men's basketball team, and it also supported many other educational, cultural and charity events.
- The EAC participated in various conferences, seminars and specialist exhibitions and fairs, enabling the public to obtain first-hand information on all aspects of its activities and its development projects. It is worth noting the EAC's participation in the 33rd Cyprus International Fair and in the 4th Savenergy Exhibition, co-organised with the Employers & Industrialists Federation, at which 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 any 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. 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 2007 Annual Report at which a full audiovisual account of the Organisation's financial results and its Development Plan was given.

Figure 7

ELECTRICITY SALES & REVENUE BY CONSUMER CLASS

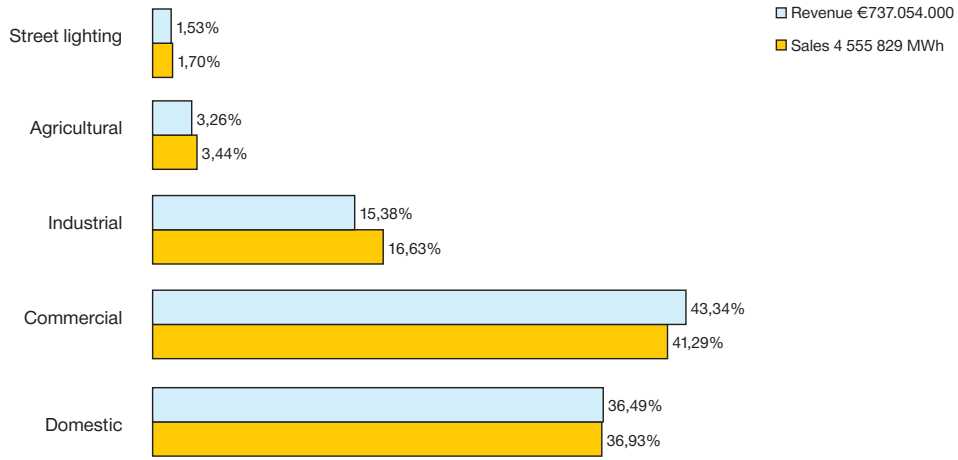
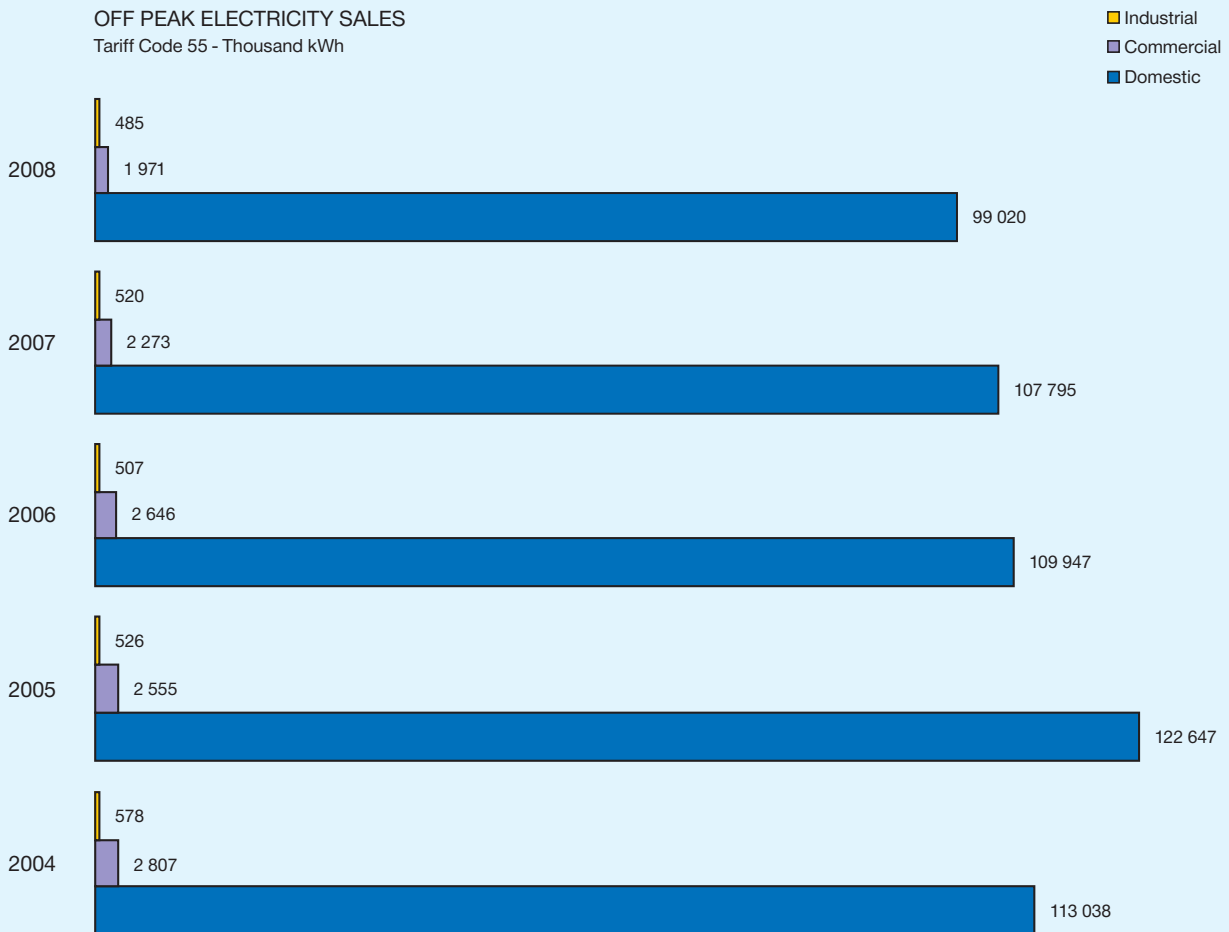


Figure 8

OFF PEAK ELECTRICITY SALES

Tariff Code 55 - Thousand kWh





# Common Services Business Unit

## **ADMINISTRATION SECTION**

The mission of the Administration Section is to provide swift, reliable, professional and efficient administrative support to the other Business Units and autonomous Sections.

Within this framework, the Administration Section deals with:

- Management of contracts, including those pertaining to:
  - Agreements concerning the leasing of buildings, parking space, stores, housing for technical consultants
  - Canteen Management agreements
  - Maintenance agreements for photocopiers, fax machines, lifts, etc.

In 2008, 36 such agreements were concluded or renewed.

- The publication of notices concerning tenders, job vacancies, interruptions to the power supply etc., in the local press and the Official Gazette of the Republic and the dissemination of these to the CyBC.

In 2008, the Authority published 777 such notices.

- Head Office Building Maintenance, including:
  - Cleaning.
  - Functionality regarding electrical/mechanical issues, repairs and office operations.
  - The monitoring and settings system (BMS).
  - Photovoltaic system monitoring.
  - Access cards.
- Support for telephony services, including the installation of telephone lines, transfers, obtaining GSM cards, etc.
- Maintenance of the Head Office Archive, daily distribution/sending of correspondence, customs-related issues.
- Purchase and supply of stationery and general provisions for all Units, Sections, Areas and Power Stations.

## **IT SECTION**

The mission of the IT Section is to select, provide and support IT systems, to ensure that Information Technology is used as a strategic tool to achieve the EAC's business aims in a reliable, fast and efficient manner, and to cultivate in the Authority's personnel a modern mentality that is fully in tune with IT.



In this framework, the IT Section deals with:

- The provision of information services
- IT service for customers
- The development, implementation and maintenance of IT software and systems
- Technical infrastructure services
- Security services and management

During the period January-December 2008:

- The Euro conversion project was successfully completed for the SAP R/3 system, the billing system, the pension payment system and the EAC Employees Medical Fund.
- The Euro conversion project was successfully completed for the data held in the SAP R/3 Business Data Warehouse.
- The Authority's new SAP R/3 Payroll system came into operation.
- The parameterisation and testing of the new SAP R/3 Pensioners pension payment system was successfully completed, together with the parallel running of the new and current systems from the 1st of January 2007, to the 31st of December 2008, with the aim of activating the new system from January 2009.
- The parameterisation and testing of the new Customer Care & Billing system was successfully completed and the system came into operation.
- The conversion of the Lotus Notes e-mail system to Microsoft Exchange was successfully completed. The process was implemented for the creation of Public Folders as central points for the forwarding of notices and announcements.

# Common Services Business Unit

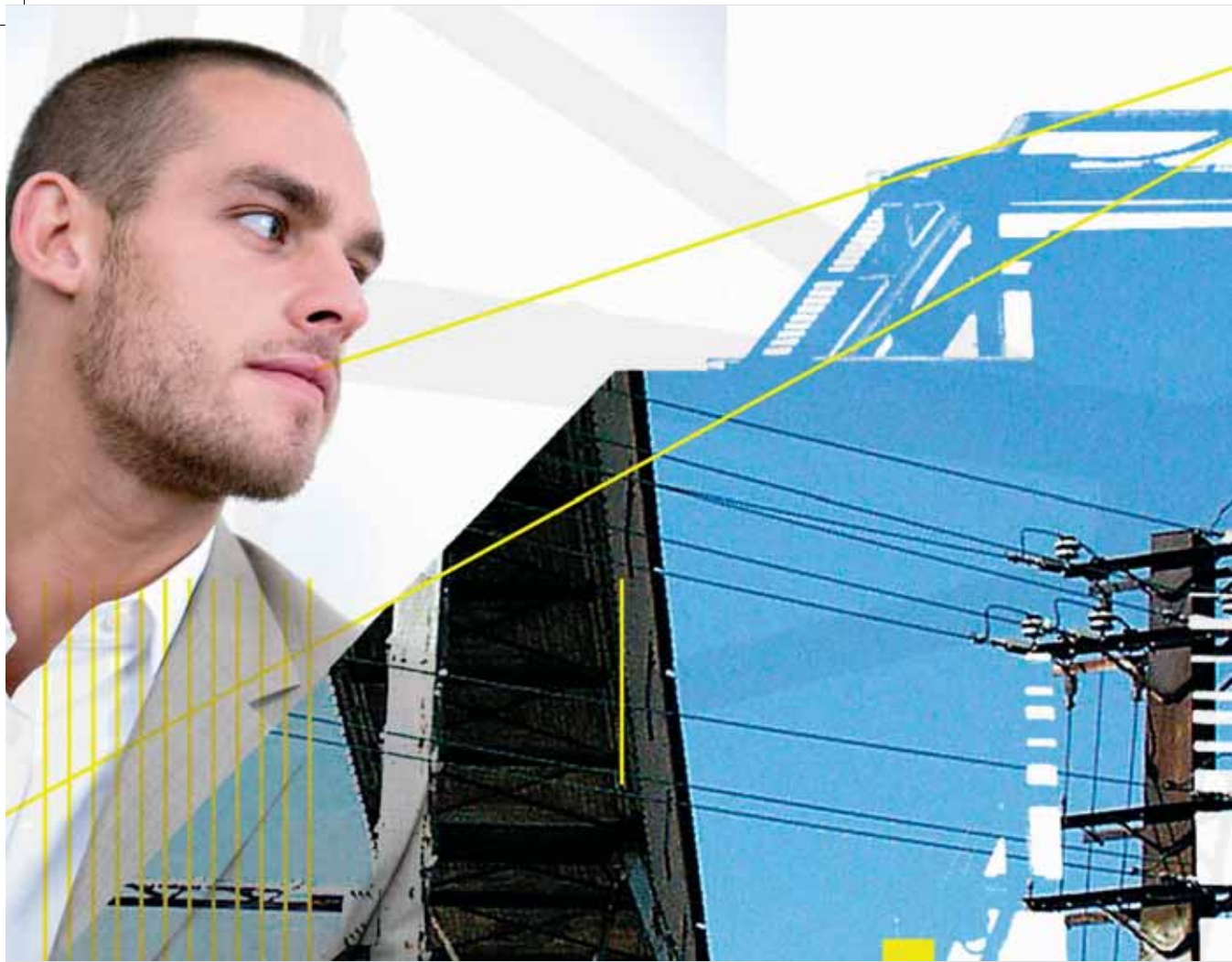
- The redesign of the EAC website ([www.eac.com.cy](http://www.eac.com.cy)) was completed and the new site went live.
- The new billing system operated successfully and was integrated into the new Customer Care & Billing system.
- The use of credit cards to settle bills at EAC customer service centres and online via the EAC website was introduced.
- The parameterisation of MV-90 software began for the automatic metering of corporate customers (tariff codes 63,73, 83) and the project is approximately 80% complete. It is due to come into operation at the beginning of 2009.
- Most of the work was completed on the project to digitalise the Authority's design workshops and to implement the ESRI GIS system which is due to come into operation at the beginning of 2009.
- The tender was awarded for the creation of a Call Centre and work started on the project.
- A pilot scheme began, with the participation in a European research project of the EAC, the Public Power Corporation of Greece and Energias de Portugal, to monitor and improve the management of the EAC's fleet of vehicles.
- Windows Server Consolidation was completed for more efficient monitoring and better management of resources on computers supporting the Authority's software applications via the Windows platform.
- The AIX Operating System and the SAP ORACLE database were upgraded to the latest versions.

## **PURCHASING SECTION**

The mission of the Purchasing section is to draw up contracts for the supply of materials, services and works at competitive prices for the safe and smooth operation of the Authority, to ensure strict adherence to the principles of Equality and total Transparency, and to properly apply EU and National Legislation, Regulations and Internal Directives related to the awarding of contracts.

In this framework, the Purchasing Section deals with:

- Formulating policy on issues concerning the processes that lead to the awarding of contracts.



- Ensuring the implementation of this policy.
- Issuing all the tenders of the Business Units and autonomous Sections apart from local tenders and small purchases.
- Supporting the Business Units and autonomous Sections in the management of their contracts.
- Monitoring, planning and securing adequate stocks of materials and equipment.
- Centrally managing the EAC's fleet of vehicles.

During the period January-December 2008:

- Twenty three community contracts were awarded, the total value of which (€138.384.115) exceeded the minimum stipulated in Law 11(l) 2006 and was covered by the provisions of the same Law 11(l) 2006.
- Some 336 non-community contracts were awarded, the total value of which (€67.785.660,73) did not exceed the minimum stipulated in Law 11(l) 2006 for the undertaking of works, the provision of services and the supply of materials and equipment.
- Four contracts were awarded with a total value of €716.728.789 for the supply of heavy fuel and gasoil.

# Human Resources Management

## The Authority's staff

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

	2008	2007
Professional	291	279
Clerical	387	381
Technical	1 666	1 601
<b>TOTAL</b>	<b>2 344</b>	<b>2 261</b>

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 2 340.

## The Authority's pensioners

The total number of pensioners at the end of the year who received pension was 1 015 (including five missing persons since the Turkish invasion of 1974) compared to 999 at the end of the previous year. In addition 247 pensions were paid to widows and orphans of deceased pensioners/employees compared to 214 at the end of the previous year.

## Increase of the Retirement Age Limit from the 60th to the 63rd year of age

As from 25th 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:

- For those employees that become 60 years old on or before the 30/6/2008, the usual for retirement age is the age of 62.
- 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 62) which indicates the relationship between the Authority's manpower, the total units billed and the number of consumers during the ten year period 1999-2008.

Absenteeism due to sickness and/or industrial accidents was 3,7% or 13,1 days per EAC employee compared to 3,6% or 12,9 days per employee at the end of the previous year.





## **INDUSTRIAL RELATIONS**

Throughout the year, the Human Resource Services and the Unions met on several occasions and examined a number of important issues.

Specifically, the Authority's Human Resources Management conducted several meetings with the Staff Unions and discussed the Unions' demands and the Authority's proposals concerning the renewal of the Collective Agreement which expired on December 2006.

Further discussions between the Human Resources Management and the Unions dealt with issues such as, to resolve problems concerning contract employment, the renewal of various Schemes of Service, the new conditions of employment with a five year contract for the General Manager's post, the conditions of employment for EAC's newly constructed Call Center and reaching a settlement on a number of industrial disputes.

Moreover the two sides also examined issues concerning EAC's organisational structure and human resources planning and other issues arising from the implementation of EAC's Conditions of Employment.

Finally it is worth mentioning that EAC's Human Resource Services provided so that the Unions were kept informed about the work progress of EAC's ASPROFOS consultants.

# Human Resources Management

## HUMAN RECOURSES DEVELOPMENT

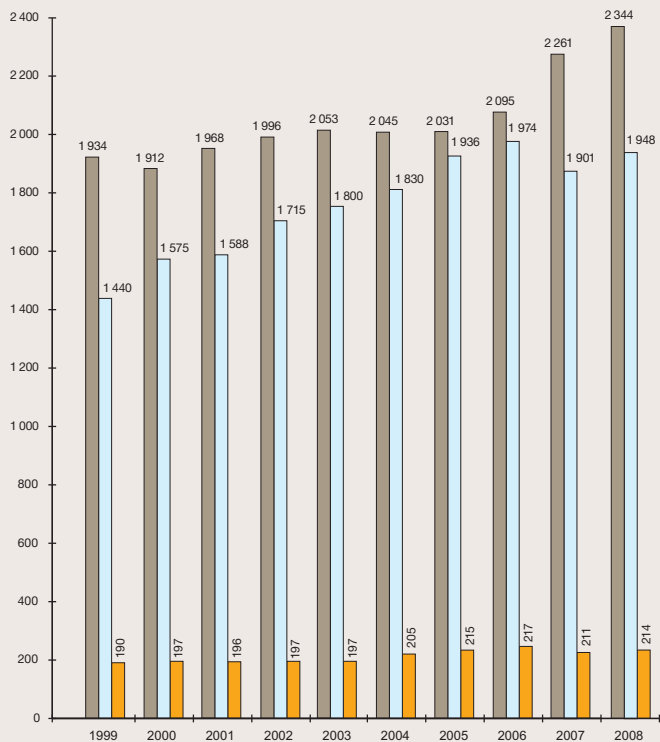
### Education and Training

During 2008, 1 943 members of the staff attended 127 in-house courses and seminars, organised by the Authority's Training School, which covered a wide range of topics. We had 370 more participations from employees in various open educational programmes and training courses, organised by local educational institutions and organisations, whilst 75 members of the professional staff attended training courses or participated in conferences and seminars abroad.

Figure 9

### MANPOWER INDICATORS

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





In total 2 388 employees attended training courses at an overall cost €146,92 per participation. The in-house training courses were subsidised by the HRDA with the amount of €87.561,29.

Within its corporate social responsibility initiative EAC offered six-month industrial training to 15 University and Higher Technical Educational Institutions students, 16 final-year students of the Higher Technical Institute (HTI) and summer vacation training to 28 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 four international students.

#### **Promotions**

During 2008 the procedure for promoting 97 employees was completed.

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

During the year, staff vacancies for several posts were announced and 135 new employees were recruited to fill various vacant posts and 129 current employees were recruited to new posts. It should be noted that during the year, 19 employees took advantage of the early retirement scheme, three employees chose early retirement, 25 employees terminated their services, one employee passed away and one employee retired for health reasons.

#### **Scholarships**

During the year, EAC offered 68 scholarships to children of employees attending University courses abroad, 38 scholarships to children of employees attending courses in Cyprus and two scholarships to children of employees attending a master degree.

### **SAFETY, HEALTH AND WELFARE**

#### **Medical Care**

During the year the EAC contributed €5.878.253,31 (€5.272.228 in 2007) to EAC Employees Medical Fund, as well as €222.258,04 (€222.118,19 in 2007) 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 2008 were 8 713 (2 284 employee-members, 803 pensioners, 214 widows and 5 412 dependants).

#### **Benevolent Funds**

The EAC's Employees Benevolent Funds continued to function satisfactorily during the year. The financial relief offered to needy members, pensioners or members of their families, exceeded €365.000. 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 their being undertaken by the EAC. The members of the Funds, as at 31 December 2008 were 2 192.

#### **Welfare Funds**

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

# Human Resources Management

## **Long Service Certificates and Awards**

The following Awards were presented:

- The EAC's Long Service Certificates were awarded to 23 employees, who retired during 2008 and had completed more than 20 years of service.
- The EAC's Gold Plated Plaques will be awarded to 15 employees, who had completed during 2008, 40 years of service and a silver metal will be awarded to 25 employees who had completed 30 years of service.

## **Occupational Health and Safety**

### **Health and Safety Management**

The Electricity Authority of Cyprus, through its consultants "Management Force", launched in February 2008 the project on the development of the "Health and Safety management system". Its purpose is to draw up a complete management system and lay the foundations for the continuous development and improvement on occupational health and safety matters within the Organisation.

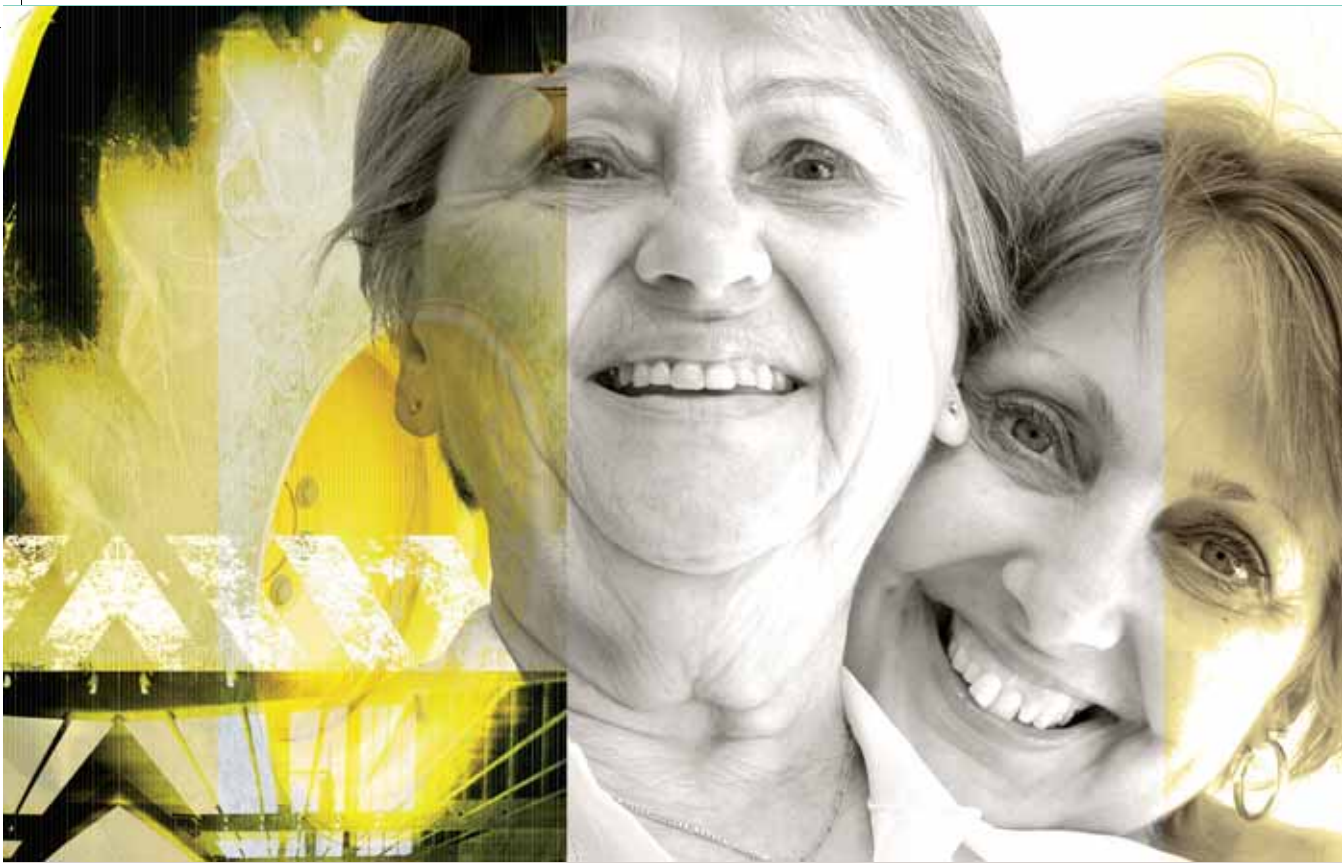
Furthermore, the project will also include a written risk assessment of industrial hazards, covering all workplaces and activities of the Organisation.

### **Health and Safety in the working environment**

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

The Human Resources Management upgraded the Health and Safety at work standards by purchasing safety shoes with improved standards and special safety helmets for the personnel of the overhead construction department. Safety standard will be further enhanced by the purchase of new convenient safety helmets for the rest of the personnel.

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 2008 a total number of 32 occupational accidents happened, four of which were road accidents. All the accidents were investigated and were evaluated by the Central Safety Committee.

From the total number of accidents only one of them was serious and had direct relation with electrocution. The Human Resources Management has further investigated this accident and drawn up, that the main cause of the accident was the violation of the safety rules.

#### **Safety Week and Fire drill exercises**

The EAC's Safety Week was organised in the last week of January 2008. During the Safety Week various events took place, including lectures on safety and health matters, fire drills and evacuation exercises in cooperation with the Fire Department.

#### **Safety Awards**

The safety award in memory of Archbishop Makarios III for the year of 2007 was given to the Lemesos District Area. The safety award in memory of Georgios Kontopoulos was given to the Vasilikos Power Station.

#### **Education and Training**

Linesmen received special training on the newly purchased equipment suitable for working safely on heights.

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

# Corporate Development Management Unit

## **NEW BUSINESS DEVELOPMENT**

New Business Development management focused on the development of new activities and the use of new technology as a counterbalance to the predicted reduction in the EAC's share of the liberalised energy market.

### **Telecommunications**

In 2008 there was a relative increase in the optical fibre network infrastructure and other installations and services provided to the EAC's strategic partners in telecommunications.

During the year, various technical and financial issues were resolved with the EAC's two strategic partners, PrimeTel PLC and Cablenet Communications Systems Ltd.

The Agreements on Strategic Cooperation in Telecommunications signed by the EAC with the two companies in 2003 provided for a review of optical fibre network rates. In 2008, the Board of Directors approved the revised rates and their decision was forwarded to the EAC's strategic partners.

The EAC examined the possibility of participating in the share capital of Cablenet Communications Systems Ltd. On the basis of the commercial data presented, the Board of Directors decided not to exercise the right to participate in the strategic partner's capital.

Furthermore, the Authority decided to expand the leasing of its infrastructure to include telecommunications service providers so as to operate as a Carriers' Carrier. Consultants were appointed to prepare a business plan for the expansion of the optical fibre network and to determine the EAC's role in the context of a National Broadband Strategy. Once the study had been completed and submitted to the Board of Directors, a decision was taken to submit proposals for further action.

### **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 for possible cooperation.

### **Desalination**

The EAC issued a Call for Tenders for the installation of a desalination plant (owned by the EAC) at Vasilikos Power Station with a daily production of 50 000m<sup>3</sup> to operate at the beginning of 2011.

The EAC appointed Consultants to assist in the tender assessment process and to oversee the construction of the plant. The tender will be awarded at the beginning of 2009.



Independently of this project, the EAC has also rented space in the grounds of Moni Power Station to the Water Development Department for a three-year period for the installation of a prefabricated desalination unit with a daily production of 20 000m<sup>3</sup>.

#### **Renewable Energy Sources (RES)**

Various proposals from foreign companies concerning the possibility of undertaking joint ventures for the establishment and operation of photovoltaic parks and solar energy power stations are under consideration.

Furthermore, a study was carried out on the potential of wind power in Cyprus, the strategy that the EAC will adopt regarding wind power and its participation in possible joint ventures for the construction of wind parks.

#### **Other activities**

In the context of our policy of expansion into new areas of activity, the EAC examined various proposals from other companies and organisations on the possibility of cooperation in the fields of Renewable Energy Sources, desalination, natural gas, telecommunications and the renting of storage space for liquid fuels.

# 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 stage due to the partial liberalisation of the energy market, and taking the matter of forthcoming competition into account, the EAC proceeded to implement a systematic development process for Strategic 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 2008 work continued on the implementation of the Crucial Business Projects which had been identified and codified earlier in accordance with the above-mentioned process.

## **QUALITY ASSURANCE & BUSINESS EXCELLENCE**

During 2008, the Department dealt mainly with the following issues:

### **Introduction of an Integrated Management System**

Following the relevant decision by the EAC, work began on the implementation of an integrated management system throughout the Organisation, based on ISO 9001:2000 quality assurance and ISO 14001:2004 environmental management standards as well as OHSAS18001 Health and Safety occupational management standards. The implementation of such a management system will help the EAC to improve the quality of the services it provides, while ensuring respect for the environment and guaranteeing the health and safety of its personnel.

### **Internal Audits**

During the year a number of internal audits were 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 of internal audits are analysed by the responsible sections of management so that corrective measures may be taken.

### **External Quality Systems Inspection**

In October 2008, 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. The results were also presented in the form of a comparative performance table for all areas.

### **Monthly Review of Key Performance Indicators**

A system has been designed to monitor monthly area performance indicators and forward them systematically to local management. The information includes the results of the continuous improvement system, personnel suggestions, customer complaints, etc.

### **Consumer Protection Specifications – CERA**

Work was completed on designing the process for the payment of fines arising from the CERA indicators in collaboration with the Executive Management, Finance and Data Management. The results of the CERA indicator measurement 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 system for monitoring indicators, quality circles, action plans and troubleshooting teams.

### **Support for Certified Areas**

During the year continuous support was provided for the Area Quality system, performance indicators and the automated 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.

### **Export of Key Performance Indicators via SAP**

In June 2008, work began on exporting key business indicators via SAP with a view to simplifying and recording customer service processes and to show the distribution list to be followed by the responsible department officials in each Area. The aim of the exercise is to obtain a uniform response in the management of cases in all Areas and the export of comparative results.



# Corporate Development Management Unit

## RESEARCH AND DEVELOPMENT SECTION

During 2008 the EAC continued its active participation in six research projects: EU-DEEP, CACHET, CORONA (which was completed in September 2008), DISTRES, GROW-DERS and WEC (which started in September 2008). The WEC research project is funded by the Seventh Framework Programme of Research and Development of the European Union while EU-DEEP and CACHET, two of the most important European research projects, are funded by the Sixth Framework Programme, as are DISTRES and GROW-DERS. The CORONA research project was funded by the Cyprus Research Promotion Foundation.

Below is a brief description of the six 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.
- **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.

- WEC: The project aims at designing and establishing eleven high-tech 7MW Wind Energy Converters (WECs) in a wind park in Belgium. The installation of the WECs will be accompanied by the use of new technology for network stability, electronic equipment and wind speed/characteristics forecasting. Among the main aims of the WEC project is the transfer of the acquired technology to the case of Cyprus where, so far, no wind parks have been built. Specifically, special simulation software will be created to assess the potential for the development of a wind park in Cyprus, with the use of advanced network stability technology which will take into consideration the needs and particularities of the small and isolated electricity network in Cyprus.

The EAC's Research and Development section organised two important workshops with the aim of disseminating the results of the R&D projects. The workshops were the following:

- "Current RES policies within EU and Mediterranean countries", for the dissemination of the results of the DISTRES research project, Marrakesh, 5 June 2008.
- "Solar thermal and photovoltaic market financing schemes in EU and Mediterranean countries", for the dissemination of the results of the DISTRES project, Algiers, 17 December 2008.

Finally, the EAC's Research and Development section carried out techno-economic studies on the installation of photovoltaic parks, desalination plants, and units for new technology for the production of electricity through carbon monoxide capture in Cyprus. Also, a large number of articles were published in respected international journals and conference presentations were made on the EAC's Research and Development activities.

# Finance Management Unit

## FINANCIAL STATEMENTS

The financial statements of the EAC for the year 2008 together with the supporting statements are set out in pages 84 to 111. The principal financial statistics for the ten-year period 1999-2008 are summarised on page 76.

## FINANCIAL RESULTS

The financial results for the year and the changes from the previous year are shown in Table No. 3 below. The income from sales of electricity for the year, totalled to €736.215.000 (an amount of €38.000 relates to charges arising from unrecorded consumption) showing an increase of €189.478.000 or 34,7%. The total operating costs were €724.296.000 showing an increase of €220.376.000 or 43,7%.

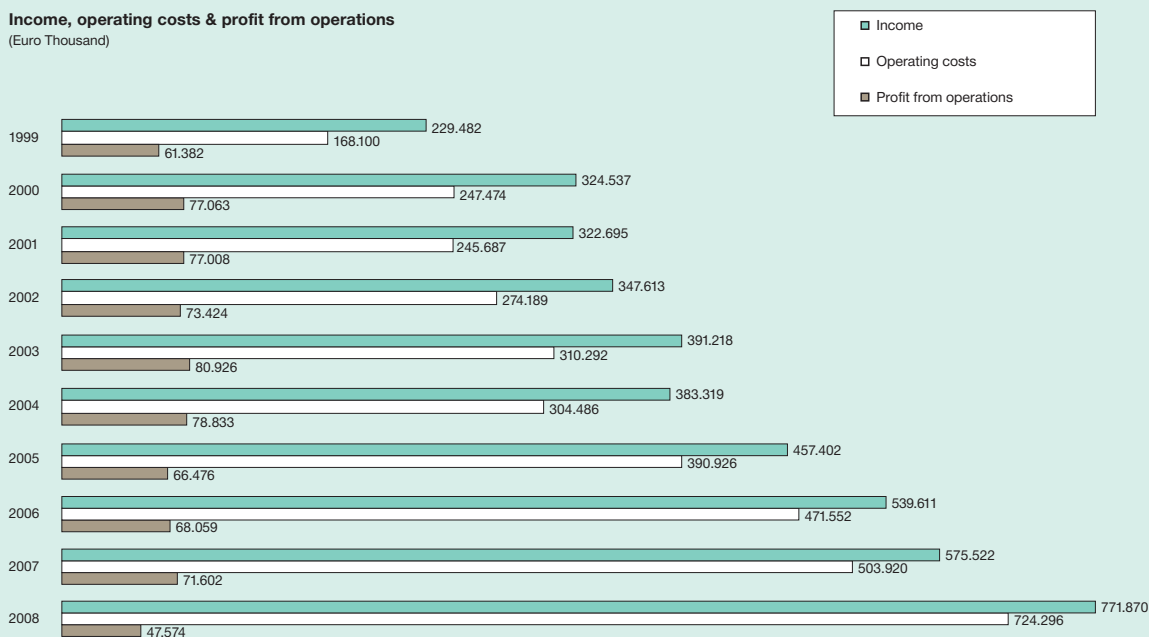
**Table 3**

**Consolidated income statement for the year ended 31 December 2008 and changes from previous year**

	€000	
	2008	Increase/ (Decrease)
<b>INCOME</b>		
Sales of electricity	736.215	189.478
Consumers' capital contributions	15.389	1.148
Other operating income	17.629	5.700
Finance income	2.637	22
	771.870	196.348
<b>OPERATING COSTS</b>	724.296	220.376
Operating profit	47.574	(24.028)
Finance costs	(19.310)	(4.531)
Profit before tax	28.264	(28.559)
Tax	(7.933)	8.869
Profit for the year	20.331	(19.690)
Units sold (million kWh)	4 555,8	257,5

Figure 10

**Income, operating costs & profit from operations**  
(Euro Thousand)



After accounting for finance costs amounting to €19.310.000 there was a profit before tax of €28.264.000 compared to a profit of €56.823.000 in the previous year. After the deduction of tax amounting to €7.933.000 the net profit was €20.331.000 (2007:€40.021.000).

**ANALYSIS OF OPERATING COSTS**

Table 4 (page 74) 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 49,6% to €379,75 per metric tonne. The consumption increased by 4,3 % to 1 241,5 thousand metric tonnes. As a result of the above the fuel oil bill increased by €169.215.000 to €471.461.000.

Greenhouse gas emission rights of €12.424.000 represent the excess of the actual greenhouse gas emissions over the allowances granted, valued at the market price ruling at the balance sheet date.

COSMOS fees increased by €4.999.000 as a result of an increase in price during October 2007, from €5,80/ MT to €9,90/ MT.

The total salaries, related costs and deficiency contribution to pension scheme amounted to €123.969.000 out of which €5.699.000 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 €118.270.000 or 95,4% was charged to the income statement. The increase of €5.338.000 or 4,5% 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 €13.351.000 (2007: €16.907.000). This contribution was the result of the latest actuarial valuation carried out as of 31 December 2007.

Materials, services and other expenditure were €50.379.000 (increase of €17.181.000 or 51,8%).

The depreciation charge was €59.703.000 (increase of €1.505.000 or 2,6%).

# Finance Management Unit

**Table 4**

## **Analysis of Operating costs**

	2008		Increase (Decrease) over 2007		
	€000	%	Cents per kWh sold	€000	%
Fuel oil	471.461	65,1	10,348	169.215	56,0
Greenhouse gas emission rights	12.424	1,7	0,273	12.424	100,0
COSMOS fees	12.059	1,7	0,265	4.999	70,8
Salaries and related costs	104.919	14,5	2,303	18.608	21,6
Deficiency contribution to pension schemes	13.351	1,8	0,293	(3.556)	(21,0)
Materials, services and other expenditure	50.379	7,0	1,106	17.181	51,8
Depreciation	59.703	8,2	1,310	1.505	2,6
<b>TOTAL</b>	<b>724.296</b>	<b>100,0</b>	<b>15,898</b>	<b>220.376</b>	<b>43,7</b>

## **CAPITAL REQUIREMENTS AND SOURCES OF FINANCE**

Capital expenditure during the year amounted to €161.996.000 compared with €158.265.000 in 2007 (increase of €3.731.000).

The amount paid for taxation during the year amounted to €6.958.000 (2007:€11.596.000).

Loan repayments amounted to €30.484.000 (2007: €35.197.000).

Out of the total financing requirements of €199.438.000 internal sources and consumers contributions provided €99.438.000 and the balance of €100.000.000 was covered by loans. Table 5 (page 75) shows the financing requirements during the year and the sources of finance.

**Table 5**

**Financing Requirements and Sources of Finance**

	2008		2007	
	€000	%	€000	%
<b>FINANCING REQUIREMENTS</b>				
Tax	6.958	3,5	11.596	5,6
Capital expenditure	161.996	81,2	158.265	77,2
Loan repayments	30.484	15,3	35.197	17,2
	199.438	100,0	205.058	100,0
<b>SOURCES OF FINANCE</b>				
Profit before tax	28.264	14,2	56.823	27,7
Depreciation less consumers' contributions	44.314	22,2	43.957	21,4
Proceeds from disposal of fixed assets	110	0,1	164	0,1
Unrealised foreign exchange loss	209	0,1	2.341	1,1
Consumers' contributions	43.048	21,6	39.163	19,1
Working Capital changes	(16.507)	(8,3)	12.610	6,2
	99.438	49,9	155.058	75,6
Loans	100.000	50,1	50.000	24,4
	199.438	100,0	205.058	100,0

**FINANCIAL POSITION AT END OF YEAR**

The historical cost of the assets employed at 31 December 2008 was €2.046.360.000 and total provision for depreciation was €659.048.000. As a result the written down value of the assets employed was 67,8% of the original cost. The total net assets at 31 December 2008 were €1.550.821.000. Finance derived from loans (€334.773.000 or 21,6 %) other long term liabilities (€497.684.000 or 32,1 %) and the balance (€718.364.000 or 46,3%) from own sources.

H. THRASSOU  
CHAIRMAN

M. STAVROU  
GENERAL MANAGER

Expenditure  
(Euro Thousand)  
As percentage  
of total revenue

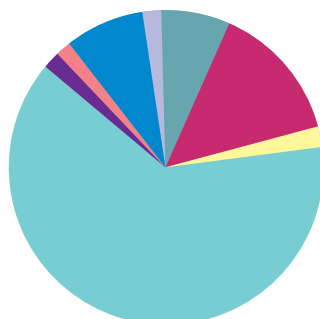


Figure 11

- Materials, services & other expenditure €50.379 (6,77%)
- Salaries & related expences €104.919 (14,11%)
- Deficiency contribution to pension schemes €13.351 (1,80%)
- Fuel oil €471.461 (63,40%)
- Greenhouse gas emission rights €12.424 (1,67%)
- COSMOS fees €12.059 (1,62%)
- Depreciation €59.703 (8,03%)
- Finance cost €19.310 (2,60%)

# Finance Management Unit

**Table 6**  
**Principal Financial Statistics 1999-2008**  
**During the Financial Year to 31 December**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Units sold (million kWh)	2 785	3 011	3 125	3 423	3 696	3 742	3 933	4 135	4 298	4 556
Consumption in the turkish occupied area (million kWh)	5	6	6	6	7	8	7	7	8	9
Total units (million kWh)	2 790	3 017	3 131	3 429	3 703	3 750	3 940	4 142	4 306	4 565
Installed capacity (MW)	728	988	988	988	988	988	988	988	1 118	1 168
<b>INCOME (€ THOUSAND)</b>										
Sales of electricity	219.313	312.163	307.318	330.814	373.464	361.041	432.177	513.105	546.737	736.215
Consumers capital contributions	7.063	7.846	8.712	9.553	10.286	11.138	12.064	13.085	14.241	15.389
Other operating income	1.199	1.343	1.280	1.090	866	2.421	6.185	8.622	11.929	17.629
Finance income	1.907	3.185	5.385	6.156	6.602	8.719	6.976	4.799	2.615	2.637
Total Income	229.482	324.537	322.695	347.613	391.218	383.319	457.402	539.611	575.522	771.870
<b>OPERATING COSTS (€ THOUSAND)</b>										
Operating costs	143.550	216.367	208.286	234.285	264.560	258.352	337.314	416.805	445.721	664.593
Depreciation	24.550	31.107	37.401	39.904	45.732	46.134	53.612	54.747	58.199	59.703
Total operating costs	168.100	247.474	245.687	274.189	310.292	304.486	390.926	471.552	503.920	724.296
Operating profit	61.382	77.063	77.008	73.424	80.926	78.833	66.476	68.059	71.602	47.574
Finance costs	(10.821)	(11.446)	(11.702)	(9.437)	(14.585)	(12.363)	(8.551)	(13.182)	(14.779)	(19.310)
Profit before tax and exceptional item	50.561	65.617	65.306	63.987	66.341	66.470	57.925	54.877	56.823	28.264
Exceptional item	-	-	-	(34.172)	(42.715)	(25.629)	(1.184)	-	-	-
Profit before tax	50.561	65.617	65.306	29.815	23.626	40.841	56.741	54.877	56.823	28.264
Tax	(13.911)	(13.561)	(18.070)	(8.475)	(7.953)	(16.235)	(16.671)	(16.251)	(16.802)	(7.933)
Profit for the year	36.650	52.056	47.236	21.340	15.673	24.606	40.070	38.626	40.021	20.331
<b>RATIOS TO TOTAL INCOME</b>										
Profit from operations (%)	26,7	23,7	23,9	21,1	20,7	20,6	14,5	12,6	12,4	6,2
Profit before tax (%)	22,0	20,2	20,2	8,6	6,0	10,7	12,4	10,2	9,9	3,7

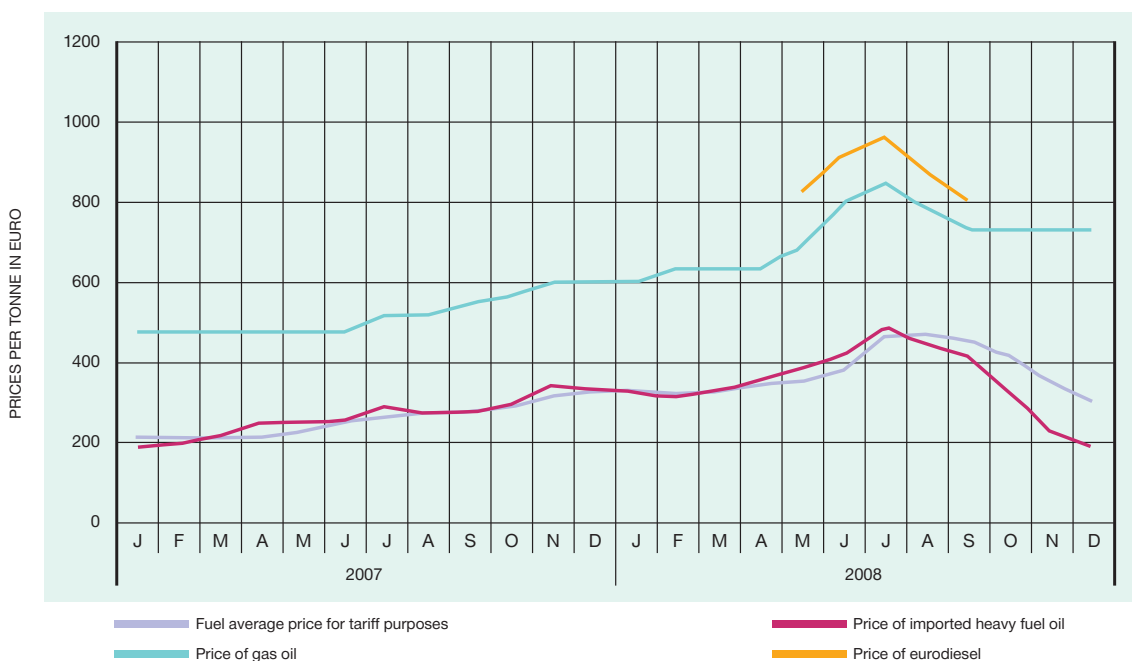


## CONSOLIDATED BALANCE SHEET AT 31 DECEMBER

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>ASSETS (€ THOUSAND)</b>										
<b>Non Current assets</b>										
Property, plant and equipment	799.765	825.400	862.521	897.590	977.057	1.082.047	1.124.526	1.185.076	1.285.124	1.387.312
Trade and other receivables	8.815	7.311	7.227	5.925	5.081	4.685	3.812	2.860	1.898	1.800
	808.580	832.711	869.748	903.515	982.138	1.086.732	1.128.338	1.187.936	1.287.022	1.389.112
<b>Current assets</b>	118.133	214.286	231.239	358.830	377.181	288.349	302.096	293.755	280.641	325.719
<b>Total assets</b>	926.713	1.046.997	1.100.987	1.262.345	1.359.319	1.375.081	1.430.434	1.481.691	1.567.663	1.714.831
<b>RESERVES AND LIABILITIES (€ THOUSAND)</b>										
<b>Reserves</b>										
Revenue reserve	428.478	480.536	527.770	549.110	564.783	589.389	629.459	642.456	682.478	702.809
Government grant	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555
	444.033	496.091	543.325	564.665	580.338	604.944	645.014	658.011	698.033	718.364
<b>Non - current liabilities</b>										
Borrowings	132.290	165.191	164.356	228.235	295.950	290.874	276.462	243.396	265.372	334.773
Deferred tax liabilities	50.961	56.830	63.056	69.791	73.996	73.075	79.231	84.036	91.042	98.056
Deferred Income	202.563	223.734	243.443	258.793	277.392	297.743	320.617	347.048	371.969	399.628
	385.814	445.755	470.855	556.819	647.338	661.692	676.310	674.480	728.383	832.457
<b>Current Liabilities</b>	96.866	105.151	86.807	140.861	131.643	108.445	109.110	149.200	141.247	164.010
<b>Total Liabilities</b>	482.680	550.906	557.662	697.680	778.981	770.137	785.420	823.680	869.630	996.467
<b>Total reserves and liabilities</b>	926.713	1.046.997	1.100.987	1.262.345	1.359.319	1.375.081	1.430.434	1.481.691	1.567.663	1.714.831

Figure 12

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





# Auditor's Report and Financial Statements

# Report and consolidated financial statements 31 December 2008

## Contents

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Consolidated balance sheet	85
Consolidated statement of changes in equity	86
Consolidated cash flow statement	87
Notes to the consolidated financial statements	88

# Electricity Authority of Cyprus

## **Report of the Board of Directors**

1. 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 2008.

## **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 84. The net profit for the year is transferred to reserves.

## **Board of Directors**

5. The members of the Board of Directors at 31 December 2008 and at the date of this report are presented on page 12. Mr Charilaos Stavrakis who was Chairman as at 1 January 2008 resigned on 29 February 2008. Mr Harris Thrassou was appointed as Chairman on 11 March 2008. Mr Yiannos Valanides who was Vice-Chairman as at 1 January 2008, was appointed as a member on 1 August 2008. Mr Georgios Pistentis who was a member as at 1 January 2008, was appointed as Vice-Chairman on 1 August 2008. Messrs Iacovos Constantinides, Christos Rotsas, Michalis Miltiades and Demetris Psilogenis who were members as at 1 January 2008 resigned on 31 July 2008. Messrs Sotos Shialaros, Yiannis Ioannou, Christis Enotiades and Loukas Louka were appointed as members on 1 August 2008. Mr Loukas Louka resigned on 21 December 2008 and Mr Angelos Tzitzos was appointed on 30 December 2008 in his place.
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. As discussed in Note 26 of the consolidated financial statements, there were no material events which occurred after the end of the financial year.

**Branches**

8. The Group did not operate through any branches during the year.

**Auditors**

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

**By order of the Board of Directors**

**Harris Thrassou**  
Chairman

**Nicosia 19 May 2009**

# 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 7 to 32, which comprise the consolidated balance sheet as at 31 December 2008, 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 2003-2008 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 estimates made by the Board of Directors, as well as evaluating 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 2008, 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 Laws Regulating the Electricity Market of 2003-2008 and 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 pages 80 to 81 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 2003-2008 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

Nicosia, 19 May 2009

## **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 84 to 111 of the Electricity Authority of Cyprus for the year ended 31 December 2008, 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

Nicosia, 19 May 2009



# Consolidated Financial Statements

## Consolidated income statement for the year ended 31 December 2008

	Notes	2008 €000	2007 €000
Sales	6	736.215	546.737
Other operating income - net	7	35.655	28.785
Operating costs	8	(724.296)	(503.920)
<b>Operating profit</b>		<b>47.574</b>	<b>71.602</b>
Finance costs	10	(19.310)	(14.779)
<b>Profit before tax</b>		<b>28.264</b>	<b>56.823</b>
Tax	11	(7.933)	(16.802)
<b>Net Profit for the year</b>		<b>20.331</b>	<b>40.021</b>

The notes on pages 88 to 111 are an integral part of these financial statements.

Consolidated balance sheet  
at 31 December 2008

	Notes	2008 €000	2007 €000
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	14	1.387.312	1.285.124
Trade and other receivables	15	1.800	1.898
		1.389.112	1.287.022
<b>Current assets</b>			
Inventories	16	125.755	114.950
Trade and other receivables	15	121.279	108.361
Tax refundable		14.049	8.010
Short-term deposits	17	1.226	3.890
Cash and cash equivalents	18	63.410	45.430
		325.719	280.641
<b>Total assets</b>		1.714.831	1.567.663
<b>Reserves and liabilities</b>			
<b>Reserves</b>			
		718.364	698.033
<b>Non-current liabilities</b>			
Borrowings	19	334.773	265.372
Deferred tax liabilities	20	98.056	91.042
Deferred Income	21	399.628	371.969
		832.457	728.383
<b>Current liabilities</b>			
Trade and other payables	22	133.316	110.877
Borrowings	19	30.694	30.370
		164.010	141.247
<b>Total liabilities</b>		996.467	869.630
<b>Total reserves and liabilities</b>		1.714.831	1.567.663

On 19 May 2009 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

The notes on pages 88 to 111 are an integral part of these financial statements.

# Consolidated Financial Statements

## Consolidated statement of changes in equity for the year ended 31 December 2008

Notes	Capital Reserve (1) €000	Revenue Reserve €000	Total €000
<b>Balance at 1 January 2007</b>	15.555	642.457	<b>658.012</b>
Net profit for the year	-	40.021	<b>40.021</b>
<b>Balance at 31 December 2007</b>	15.555	682.478	<b>698.033</b>
<b>Balance at 1 January 2008</b>	15.555	682.478	<b>698.033</b>
Net profit for the year	-	20.331	<b>23.331</b>
<b>Balance at 31 December 2008</b>	15.555	702.809	<b>718.364</b>

(1) The Capital Reserve represents a government grant.

The notes on pages 88 to 111 are an integral part of these financial statements.

**Consolidated cash flow statement  
for the year ended 31 December 2008**

	Notes	2008 €000	2007 €000
<b>Cash flows from operating activities</b>			
Profit before tax		28.264	56.823
Adjustments for:			
Depreciation of property, plant and equipment	14	59.703	58.199
Amortisation of deferred income	21	(15.389)	(14.242)
Profit on sale of property, plant and equipment		(5)	(146)
Interest expense	10	16.711	12.568
Unrealised exchange loss		209	2.341
Interest income		(2.637)	(2.615)
		86.856	112.928
Changes in working capital:			
Inventories		(10.805)	(17.484)
Trade and other receivables		(12.514)	(17.412)
Trade and other payables		22.787	(3.156)
<b>Cash generated from operations</b>		86.324	74.876
Tax paid		(6.958)	(11.596)
<b>Net cash from operating activities</b>		79.366	63.280
<b>Cash flows from investing activities</b>			
Short-term deposits		2.664	38.394
Purchase of property, plant and equipment	14	(161.996)	(158.265)
Proceeds from sale of property, plant and equipment		110	164
Additions to consumers' capital contributions	21	43.048	39.163
Interest received		2.331	2.615
<b>Net cash used in investing activities</b>		(113.843)	(77.929)
<b>Cash flows from financing activities</b>			
Proceeds from long term borrowings		100.000	50.000
Repayments of long term borrowings		(30.484)	(35.197)
Interest paid		(17.059)	(12.533)
<b>Net cash from financing activities</b>		52.457	2.270
<b>Net increase/(decrease) in cash and cash equivalents</b>		17.980	(12.379)
<b>Cash and cash equivalents at beginning of year</b>		45.430	57.809
<b>Cash and cash equivalents at end of year</b>	18	63.410	45.430

The notes on pages 88 to 111 are an integral part of these financial statements.

# Consolidated Financial Statements

## 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 harmonization 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 (IFRS), 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 2008 have been adopted by the EU through the endorsement procedure established by the European Commission with the exception of certain provisions 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 2003-2008.

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**

During the current year the Authority adopted all the new and revised International Financial Reporting Standards (IFRS) that are relevant to its operations and are effective for accounting periods beginning on 1 January 2008. This adoption did not have a material effect on the accounting policies of the Authority.

At the date of approval of these financial statements the following accounting standards were issued by the International Accounting Standards Board but were not yet effective:

<b>Standard / Interpretation</b>	<b>Effective for annual periods beginning on or after</b>
<b>(i) Adopted by the European Union</b>	
Improvements to IFRSs – 2008	1 January 2009
Amendments to IFRS 1 and International Accounting Standard (IAS) 27 “Cost of an Investment in a Subsidiary, Jointly Controlled Entity or Associate”	1 July 2009
Amendment to IFRS 2 “Share Based Payment: Vesting Conditions and Cancellations”	1 January 2009
IFRS 8 “Operating Segments”	1 January 2009
IAS 1 (Revised) “Presentation of Financial Statements”	1 January 2009
IAS 23 (Revised) “Borrowing Costs”	1 January 2009
Amendments to IAS 32 and IAS 1 “Puttable Financial Instruments and Obligations arising on Liquidation”	1 January 2009
International Financial Reporting Interpretation Committee (IFRIC) 13 “Customer Loyalty Programmes”	1 July 2008
<b>(ii) Not adopted by the European Union</b>	
IFRS 1 (Revised) “First Time Adoption of International Financial Reporting Standards”	1 January 2009
IFRS 3 (Revised) “Business Combinations”	1 July 2009
IAS 27 (Revised) “Consolidated and Separate Financial Statements”	1 July 2009
Amendment to IAS 39 “Eligible Hedged Items”	1 July 2009
Amendment to IAS 39 “Reclassification of Financial Assets: Effective date and Transition”	1 July 2008
IFRIC 15 “Agreements for the Construction of Real Estate”	1 January 2009
IFRIC 16 “Hedges of a Net Investment in a Foreign Operation”	1 October 2008
IFRIC 17 “Distributions of Non cash Assets to Owners”	1 July 2009
IFRIC 18 “Transfers of Assets from Customers”	1 July 2009

# Consolidated Financial Statements

The Board of Directors expects that the adoption of these accounting standards in future periods will not have a material effect on the financial statements of the Authority except from the application of IAS 1 (Revised) "Presentation of Financial Statements" which will have a material effect on the presentation of the financial statements.

## **Subsidiary undertaking**

Subsidiary undertaking, is that entity in which the Authority has an interest of more than 50% of the voting rights or otherwise has the power to exercise control over its decisions. The subsidiary undertaking is consolidated from the date on which control is transferred to the Authority and is no longer consolidated from the date that control ceases. All intercompany transactions, balances and unrealized 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 consolidated income statement 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 Euro (€), which is the Authority's functional and presentation currency.

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 €1 = £0,585274.

### **(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.

The present value of the liability and the retirement benefit costs relating to the defined benefit plan are assessed using the projected unit credit method. The accumulated surplus or deficit arising from the changes of the rate used for discounting projected future cash outflows concerning benefits and from differences between expected and actual return of the investments and other actuary judgements are deferred and charged to the income statement over the remaining working lives of the employees participating in the relevant plans, in accordance with an actuary valuation performed at least 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 participating in the plan. Because the IAS permits earlier recognition of the accumulated actuarial losses and of a larger amount than the excess amount, it has been decided to recognise the full amount of the unrecorded actuarial loss over a period of 5 years.

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

### **Tax**

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.

# Consolidated Financial Statements

## 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 estimated useful lives of the major elements of property, plant and equipment are as follows:

	Years
Freehold land	Indefinite
Power station buildings	30
Other buildings	35
Power station plant and machinery	25
Other plant and machinery	25 - 30
Lines and cables	35 - 40
Meters	15
Motor vehicles	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 recognized 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.

### **Greenhouse Gas Emission Allowances**

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 environment.

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 CO<sub>2</sub> emission allowances are initially recognised at nominal value (nil value) when the Authority is able to exercise control. Purchased CO<sub>2</sub> 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 includes the total cost of the purchased allowances and any additional deficit at the current market value of the allowances as at the balance sheet date. Movements in the liability are 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 be sold. Proceeds from the sale of surplus emission allowances are recognized upon the sale of these rights. The liability includes the total cost of the purchased allowances and any additional deficit at the current market value of the allowances as at the balance sheet date.

### **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. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or delinquency in payments are considered indicators that the trade receivable is impaired.

The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the income statement within 'selling and marketing costs'. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables.

Subsequent recoveries of amounts previously written off are credited against 'selling and marketing costs' in the income statement.

# Consolidated Financial Statements

## **Provisions**

Provisions are recognized 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 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 2003-2008.

## **Comparative information**

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

## **3. Financial risk management**

### **(i) 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, Pound Sterlings and Swiss Franks. 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 €2.599.000 (2007: €2.211.000) 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. Short term deposits and cash at bank are held with high credit quality financial institutions and the Authority has policies to limit the amount of credit exposure to any financial institution. The credit rating of the Authority's financial assets is presented at Note 13.

**(ii) Capital risk management**

The capital as defined by management at 31 December 2008 and 2007 was as follows:

	<b>2008</b>	2007
	<b>€000</b>	€000
Total borrowings (Note 19)	<b>365.467</b>	295.742
Less Short term deposits (Note 17)	<b>(1.226)</b>	(3.890)
Cash and cash equivalents (Note 18)	<b>(63.410)</b>	(45.430)
Net debt	<b>300.831</b>	246.422
Total equity	<b>1.117.992</b>	1.070.002
<b>Total Capital as defined by Management</b>	<b>1.418.823</b>	1.316.424
<b>Gearing ratio</b>	<b>21%</b>	19%

# Consolidated Financial Statements

The increase in the gearing ratio during 2008 resulted primarily from borrowings taken during the year for financing the working capital needs of the Authority and capital expenditure.

The Authority's objectives when managing capital are to safeguard the Authority's ability to continue as a going concern and to maintain an optimal capital structure to reduce the cost of capital.

The Authority monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including 'current and non-current borrowings' as shown in the balance sheet) less short term deposits and cash and cash equivalents. Total capital is calculated as 'equity' ('Reserves' and 'Deferred Income' as shown in the balance sheet) plus net debt.

During 2008, the Authority's strategy, which was unchanged from 2007, was to maintain the gearing ratio within 15% to 25%.

### **(iii) Fair value estimation**

The fair value of the financial assets and liabilities of the Group approximate their carrying values at 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**

Significant 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:

	2008 €000	2007 €000
Generation	573.276	380.874
Transmission	33.391	25.040
Distribution	105.611	89.910
Supply	11.815	7.748
Other Activities	203	348
	<b>724.296</b>	<b>503.920</b>

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 Cyprus Energy Regulatory Authority. The total assets/liabilities of each activity of the Authority for the year 2008 and 2007 are analysed below:

	Generation 2008 €000	Transmission 2008 €000	Distribution 2008 €000	Supply 2008 €000	Other Activities 2008 €000	Unallocated amounts 2008 €000	Total 2008 €000
Non current assets	504.903	248.687	630.460	4.558	504	-	1.389.112
Current assets	87.570	5.617	43.287	103.630	780	84.835	325.719
Total Assets	592.473	254.304	673.747	108.188	1.284	84.835	1.714.831
Current Liabilities	42.210	7.383	26.969	49.510	1	37.937	164.010
Non-current Liabilities	-	19.981	379.647	-	-	432.829	832.457
Reserves	-	-	-	-	-	718.364	718.364
Allocated Capital	550.263	226.940	267.131	58.678	1.283	(1.104.295)	-
	<b>592.473</b>	<b>254.304</b>	<b>673.747</b>	<b>108.188</b>	<b>1.284</b>	<b>84.835</b>	<b>1.714.831</b>

# Consolidated Financial Statements

	Generation	Transmission	Distribution	Supply	Other Activities	Unallocated amounts	Total
	2007 €000	2007 €000	2007 €000	2007 €000	2007 €000	2007 €000	2007 €000
Non current assets	458.882	251.152	573.825	2.770	393	-	1.287.022
Current assets	86.457	6.805	32.858	86.318	665	67.538	280.641
<b>Total assets</b>	<b>545.339</b>	<b>257.957</b>	<b>606.683</b>	<b>89.088</b>	<b>1.058</b>	<b>67.538</b>	<b>1.567.663</b>
Current Liabilities	37.468	4.766	24.204	37.341	39	37.429	141.247
Non-current Liabilities	-	17.433	354.536	-	-	356.414	728.383
Reserves	-	-	-	-	-	698.033	698.033
Allocated Capital	507.871	235.758	227.943	51.747	1.019	(1.024.338)	-
	<b>545.339</b>	<b>257.957</b>	<b>606.683</b>	<b>89.088</b>	<b>1.058</b>	<b>67.538</b>	<b>1.567.663</b>

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 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 €1.354.000 (2007: €866.000).



## 7. Other operating income - net

	2008 €000	2007 €000
Income from damages to property of the Authority	194	178
Net income from maintenance of public lighting and sale of materials	379	251
Net income from fees for telecommunication usage of optical fibres	1,347	762
Consumers' capital contributions	15,389	14,241
Storage and other fees relating to the Cyprus Organisation for Storage and Management of Oil Stocks (COSMOS)	12,059	7,060
Sundry income	3,650	3,678
Interest income:		
Bank balances	2,524	2,279
Other	113	336
	35,655	28,785

## 8. Analysis of operating costs by nature

	2008 €000	2007 €000
Fuel Oil	471,461	302,246
Greenhouse Gas Emission Rights	12,424	-
Cyprus Organisation for Storage and Management of Oil stocks (COSMOS) fees	12,059	7,060
Salaries and related costs (Note 9)	118,270	103,218
Depreciation (Note 14)	59,703	58,199
Repairs and maintenance	11,360	8,719
Other expenses	39,019	24,478
	724,296	503,920

## 9. Staff costs

	2008 €000	2007 €000
Wages and salaries	79,638	72,450
Social insurance and other costs	7,809	7,350
Social cohesion fund	1,580	1,408
Pension costs - defined benefit retirement plan		
- Current contribution	18,060	17,376
- Deficiency contribution to pension schemes	13,351	16,907
Other defined contribution plans	3,531	3,140
	123,969	118,631

The staff costs were allocated as follows:

	2008 €000	2007 €000
Income statement (Note 8)	118,270	103,218
Capitalized in fixed assets and work in progress	5,699	15,413
	123,969	118,631

# Consolidated Financial Statements

## Defined Benefit Plan

The latest actuarial valuation was carried out as at 31 December 2008. The assets used for the purposes of the actuarial valuation were as extracted from the draft accounts of the Pension Fund for the year 2008 and therefore the actuarial valuation is presented as draft.

According to International Accounting Standard (IAS) 19 the Authority recognised the portion of the actuarial losses in excess of the greatest of the 10% of the present value of the liability of the defined benefit plan and the 10% of the fair value of the assets according to the average future service of the active members of the Plan (21,4 years). Because the IAS permits the use of earlier recognition of the cumulative actuarial losses and of an amount larger than the excess amount it has been decided to recognise the full amount of the unrecorded actuarial loss over a period of 5 years.

The amounts recognized in the consolidated balance sheet of the Group as at 31 December 2008 are in accordance with the draft actuarial valuation as at 31 December 2008. The comparative amounts as at 31 December 2007 have been adjusted and are based on the final actuarial valuation as at 31 December 2007.

	<b>2008</b> <b>€000</b>	2007 €000
Defined benefit obligation	<b>564.325</b>	553.720
Fair value of plan assets	<b>(518.371)</b>	(500.849)
Net obligation	<b>45.954</b>	52.871
Unrecognised actuarial losses	<b>(43.861)</b>	(50.686)
Net liability in balance sheet	<b>2.093</b>	2.185

The amounts recognized in the consolidated income statement of the Group for the year ended at 31 December 2008 are in accordance with the draft actuarial valuation as at 31 December 2008 for the defined benefit plan. The comparatives at 31 December 2007 have been adjusted and are based on the final actuarial valuation as at 31 December 2007.

	<b>2008</b> <b>€000</b>	2007 €000
Current service cost	<b>17.638</b>	15.024
Interest on obligation	<b>29.017</b>	26.483
Expected return on plan assets	<b>(25.339)</b>	(23.272)
Net actuarial losses recognised in year	<b>10.137</b>	170
Recognised transitional liability	-	15.878
Total, included in 'staff costs'	<b>31.453</b>	34.283

### Movements in balance sheet provision

Net liability at start of year	2.185	-
Expense recognised in the consolidated income statement	31.453	34.283
Employer contributions	(31.545)	(32.098)
<b>Net liability at end of year</b>	<b>2.093</b>	<b>2.185</b>

### Change in benefit obligation during the year

	2008 €000	2007 €000
Benefit Obligation at start of year	553.720	532.354
Current service cost	17.638	15.024
Members contributions	454	517
Interest cost	29.017	26.483
Benefits paid	(20.124)	(20.934)
Actuarial loss of obligation	(16.380)	276
<b>Benefit obligation at end of year</b>	<b>564.325</b>	<b>553.720</b>

### Change in plan assets during the year

	2008 €000	2007 €000
Fair value of plan assets at start of year	500.849	459.598
Expected return on plan assets	25.339	23.272
Employer contributions	31.545	32.098
Employee contributions	454	517
Benefits paid	(20.124)	(20.934)
Actuarial(loss)/gain on plan assets	(19.692)	6.298
<b>Fair value of plan assets at end of year</b>	<b>518.371</b>	<b>500.849</b>

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

	2008 %	2007 %
Discount rate	5,75	5,25
Average expected return on plan assets	5,00	5,00
Average rate of salary increases	3,5% plus scale	3,5% plus scale
Pension increases	3,50	3,50
Price inflation	2,50	2,50
Mortality	85% of PA (90)	85% of PA (90)

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## 10. Finance costs

	2008 €000	2007 €000
Interest expense:		
Bank borrowings	(16.798)	(12.375)
Overdue taxation	(7)	(63)
Other	94	(130)
	(16.711)	(12.568)
Net foreign exchange transaction losses	(2.599)	(2.211)
	(19.310)	(14.779)

## 11. Tax

	2008 €000	2007 €000
Current tax:		
Corporation tax	678	8.613
Defence contribution	241	1.182
Deferred tax (Note 20)	7.014	7.007
	7.933	16.802

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

	2008 €000	2007 €000
Profit before tax	28.264	56.823
Tax at the applicable corporation and defence tax rates	8.065	16.057
Tax effect of expenses not deductible for tax purposes	412	1.042
Tax effect of allowances and income not assessable to tax	(275)	(297)
Tax for prior years	(269)	-
Tax charge	7.933	16.802

The Authority is subject to corporation tax on taxable profits at the rate of 25%. The Subsidiary Elektriki 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. Financial instruments by category

	Loans and receivables	
	2008	2007
	€000	€000
<b>Assets as per balance sheet</b>		
Non-current receivables	1.800	1.898
Trade and other receivables <sup>(1)</sup>	120.502	107.525
Short term deposits	1.226	3.890
Cash and cash equivalents	63.410	45.430
<b>Total</b>	<b>186.938</b>	<b>158.743</b>

	Other financial liabilities	
	2008	2007
	€000	€000
<b>Liabilities as per balance sheet</b>		
Borrowings	365.467	295.742
Trade and other payables <sup>(2)</sup>	105.486	95.261
<b>Total</b>	<b>470.953</b>	<b>391.003</b>

(1) The rest of the balance sheet item 'trade and other receivables' is prepayments.

(2) The rest of the balance sheet item 'trade and other payables' is accruals.

## 13. Credit quality of financial assets

The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to external credit ratings (if applicable):

	2008	2007
	€000	€000
<b>Short term bank deposits</b>		
A1	271	1.958
Aa3	248	605
Non Assessed	707	1.327
	<b>1.226</b>	<b>3.890</b>

### Cash and cash equivalents <sup>(1)</sup>

	2008	2007
A1	3.908	21.409
A2	7.429	2.101
A3	18.896	3.292
Aa2	336	310
Aa3	16.441	7.196
Baa2	11.518	3.107
Non Assessed	4.838	7.988
	<b>63.366</b>	<b>45.403</b>

(1) The rest of the balance sheet item 'cash and cash equivalents' is cash in hand.

None of the financial assets that are neither past due nor impaired has been negotiated.

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## 14. Property Plant and Equipment

	Freehold land	Buildings	Plant & machinery	Lines, cables & meters	Motor Vehicles	Furniture, fittings and office equipment	Tools & Instruments	Hardware & software	Work in progress	Total
	€000	€000	€000	€000	€000	€000	€000	€000	€000	€000
<b>At 1 January 2007</b>										
Cost	19.808	195.633	760.608	595.505	15.238	5.486	5.741	15.211	116.063	1.729.293
Accumulated depreciation	-	(48.551)	(281.871)	(182.844)	(11.733)	(3.121)	(3.706)	(12.391)	-	(544.217)
Net book amount	19.808	147.082	478.737	412.661	3.505	2.365	2.035	2.820	116.063	1.185.076
<b>Year ended 31 December 2007</b>										
Opening net book amount	19.808	147.082	478.737	412.661	3.505	2.365	2.035	2.820	116.063	1.185.076
Additions	806	5.793	310	2.641	1.411	197	516	865	145.726	158.265
Disposals	(7)	-	-	(5)	(2)	-	-	(4)	-	(18)
Depreciation charge	-	(7.209)	(28.941)	(17.205)	(1.648)	(414)	(459)	(2.323)	-	(58.199)
Transfers	-	11.477	26.160	62.076	(57)	-	-	1.942	(101.598)	-
Closing net book amount	20.607	157.143	476.266	460.168	3.209	2.148	2.092	3.300	160.191	1.285.124
<b>At 31 December 2007</b>										
Cost	20.607	212.897	787.086	659.139	16.558	5.678	6.256	17.857	160.191	1.886.269
Accumulated depreciation	-	(55.754)	(310.820)	(198.971)	(13.349)	(3.530)	(4.164)	(14.557)	-	(601.145)
Net book amount	20.607	157.143	476.266	460.168	3.209	2.148	2.092	3.300	160.191	1.285.124
<b>Year ended 31 December 2008</b>										
Opening net book amount	20.607	157.143	476.266	460.168	3.209	2.148	2.092	3.300	160.191	1.285.124
Additions	1.166	3.164	541	1.317	2.040	299	177	2.491	150.801	161.996
Disposals	(27)	(1)	-	-	(67)	(10)	-	-	-	(105)
Depreciation charge	-	(7.413)	(28.123)	(18.591)	(1.574)	(418)	(469)	(3.115)	-	(59.703)
Transfers	1	3.468	24.723	52.813	-	-	-	3.004	(84.009)	-
Closing net book amount	21.747	156.361	473.407	495.707	3.608	2.019	1.800	5.680	226.983	1.387.312
<b>At 31 December 2008</b>										
Cost	21.747	219.528	812.350	713.269	16.955	5.953	6.433	23.142	226.983	2.046.360
Accumulated depreciation	-	(63.167)	(338.943)	(217.562)	(13.347)	(3.934)	(4.633)	(17.462)	-	(659.048)
Net book amount	21.747	156.361	473.407	495.707	3.608	2.019	1.800	5.680	226.983	1.387.312

### 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 €12.978.000. The depreciation provision for the year in respect of these assets was NIL (2007: NIL) bringing the accumulated provision at 31 December 2008 to €12.440.000 (2007: €12.440.000) and leaving a written down value of €538.000 (2007: €538.000) which represents the cost of land. The consequences of the Turkish occupation on the value of this land and equipment is unknown.

### 15. Trade and other receivables

	2008 €000	2007 €000
Trade receivables	102.195	87.866
Less: Provision for impairment of receivables	(2.217)	(1.517)
Trade receivables - net	99.978	86.349
Capital contributions receivable by installments	1.124	1.678
Advance payments to contractors	12.933	12.252
Other receivables net of provision for impairment	8.267	9.144
Prepayments	777	836
	123.079	110.259
Less: non-current portion of receivables and prepayments	(1.800)	(1.898)
	121.279	108.361
The maturity of non-current receivables and prepayments is as follows:		
Between 1 and 2 years	530	603
Between 2 and 5 years	1.053	1.054
Over 5 years	217	241
	1.800	1.898

The fair values of current trade and other receivables approximate their carrying values at the balance sheet date.

Concentrations of credit risk with respect to trade receivables are limited due to the Authority's large number of customers who have a variety of end markets in which they sell. The Authority'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 Authority's trade receivables.

The carrying amounts of the Group's trade and other receivables are denominated in the following currencies:	2008 €000	2007 €000
Currency		
Euro	123.036	108.206
Japanese Yen	-	1.791
Pound Sterling	43	78
Swiss Franc	-	184
	123.079	110.259

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<b>16. Inventories</b>	<b>2008 €000</b>	<b>2007 €000</b>
Fuel	<b>54.143</b>	49.077
Spares and consumables	<b>71.612</b>	65.873
	<b>125.755</b>	114.950

The cost of inventories recognized as expense and included in "operating costs" amounted to €478.478.000 (2007: €307.003.000).

<b>17. Short-term bank deposits</b>	<b>2008 €000</b>	<b>2007 €000</b>
Short-term bank deposits	<b>1.226</b>	3.890

The effective interest rate on these short term bank deposits was 3,35% - 5,00% (2007: 3,00% - 5,00%) and these deposits had a maturity of 12 months (2007: 12 months).

## **18. 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:

	<b>2008 €000</b>	<b>2007 €000</b>
Cash at bank and in hand	<b>32.485</b>	17.687
Short-term deposits	<b>30.925</b>	27.743
	<b>63.410</b>	45.430

The effective interest rate on short term bank deposits was 3,00% - 7,05% (2007: 2,75% - 4,50%) and these deposits had an average maturity of 83 days (2007: 85 days).



<b>19. Borrowings</b>	<b>2008</b>	<b>2007</b>
	<b>€000</b>	<b>€000</b>
<b>Current</b>		
Bank loans	<b>26.239</b>	25.915
Suppliers' credits	<b>4.455</b>	4.455
	<b>30.694</b>	30.370
<b>Non-current</b>		
Bank loans	<b>328.060</b>	254.206
Suppliers' credits	<b>6.713</b>	11.166
	<b>334.773</b>	265.372
<b>Total borrowings</b>	<b>365.467</b>	295.742

The maturity of non-current borrowings is as follows:	<b>2008</b>	<b>2007</b>
	<b>€000</b>	<b>€000</b>
Between 1 and 2 years	<b>34.090</b>	30.676
Between 2 and 5 years	<b>120.888</b>	113.373
Over 5 years	<b>179.795</b>	121.323
	<b>334.773</b>	265.372

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:

	<b>2008</b>	<b>2007</b>
	<b>%</b>	<b>%</b>
Bank borrowings	<b>3,7</b>	4,9

The exposure of the Authority's borrowings to interest rate changes and the contractual repricing dates at the balance sheet dates are as follows:

	<b>2008</b>	<b>2007</b>
	<b>€000</b>	<b>€000</b>
Floating rate 6 months or less	<b>310.063</b>	228.997
Fixed rate	<b>55.404</b>	66.745
	<b>365.467</b>	295.742

The Company has the following undrawn borrowing facilities:

	<b>2008</b>	<b>2007</b>
	<b>€000</b>	<b>€000</b>
<b>Floating rate:</b>		
Expiring within one year	<b>19.000</b>	10.251
Expiring beyond one year	<b>6.063</b>	7.689
	<b>25.063</b>	17.940

The carrying value of borrowings per currency is as follows:

	<b>2008</b>	<b>2007</b>
	<b>€000</b>	<b>€000</b>
Euro	<b>358.694</b>	287.751
Swiss Frank	<b>5.227</b>	5.585
Pounds Sterling	<b>1.546</b>	2.406
	<b>365.467</b>	295.742

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## 20. 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 is as follows:

	2008 €000	2007 €000
At 1 January	91.042	84.035
Charged to Income Statement (Note 11)		
- Current year	7.014	7.007
At 31 December	98.056	91.042

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

	Accelerated Tax Depreciation €000
<b>Deferred tax liabilities</b>	
At 1 January 2007	146.471
Charged to the Income Statement	10.744
At 31 December 2007	157.215
Charged to the Income Statement	12.285
At 31 December 2008	169.500

	Deferred Income €000	Other €000	Total €000
<b>Deferred tax assets</b>			
At 1 January 2007	(57.278)	(5.158)	(62.436)
(Credited)/Debited to the Income Statement	(4.430)	693	(3.737)
At 31 December 2007	(61.708)	(4.465)	(66.173)
Credited to the Income Statement	(4.811)	(460)	(5.271)
At 31 December 2008	(66.519)	(4.925)	(71.444)

## 21. Deferred income

	2008 €000	2007 €000
<b>Consumers' capital contributions:</b>		
Balance at 1 January	371.969	347.048
Additions	43.048	39.163
Transferred to Income Statement	(15.389)	(14.242)
Balance at 31 December	399.628	371.969

## 22. Trade and other payables

	2008 €000	2007 €000
Fuel oil suppliers	14.184	30.695
Other Suppliers	28.859	27.925
Value Added Tax payable	29.220	5.886
Pay As You Earn payable	978	793
Retention on capital contracts	9.239	8.647
Consumers' deposits	9.255	8.610
Payments received in advance	125	145
Interest payable	1.182	1.529
Accrued charges	15.406	15.616
Greenhouse gas emission rights	12.424	-
Creditors for purchase of land and substations	9.820	9.473
Other creditors	2.624	1.558
	133.316	110.877

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

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## 23. 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 2008.

## 24. 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 €85.457.000. The Authority has filed a recourse at the Tax Tribunal in respect of the additional tax, interest and other charges. The Authority, based on independent professional advice, believes that the current accounting and tax treatment of capital contributions is correct. As a result no provision has been made in these financial statements.

(b) At 31 December 2008 the Group had contingent liabilities in respect of pending litigation amounting to €6.372.770 (2007: €2.555.251).

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.

## 25. Commitments

### Capital commitments

	2008 €000	2007 €000
Commitments in respect of contracts	264.333	156.925
Approved but not contracted	367.001	341.807
Approved expenditure outstanding	631.334	498.732

50% of the above will be financed by long-term borrowings.

### Operating lease commitments

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

	2008 €000	2007 €000
Not later than one year	655	656
Later than one year and not later than 5 years	706	947
Over 5 years	105	2
	1.466	1.605

## 26. Events after the balance sheet date

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

Independent Auditor's report pages 82 to 83.

# Appendices

## APPENDIX 1 CONSUMERS, SALES AND AVERAGE PRICES

AS AT 31 DECEMBER	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>NUMBER OF CONSUMERS</b>										
Domestic	278 521	284 486	291 476	298 277	307 206	318 640	332 338	348 394	366 799	386 489
Commercial	68 269	69 512	70 250	70 867	71 589	72 941	74 916	76 272	78 294	80 913
Industrial	9 578	9 662	9 712	9 829	10 107	10 595	10 956	11 198	11 299	11 792
Agricultural	6 702	7 414	8 294	9 084	9 779	10 400	10 931	11 597	12 117	12 796
Public lighting	5 095	5 421	5 720	6 099	6 428	6 771	7 138	7 581	7 991	8 499
<b>TOTALS</b>	<b>368 165</b>	<b>376 495</b>	<b>385 452</b>	<b>394 156</b>	<b>405 109</b>	<b>419 347</b>	<b>436 279</b>	<b>455 042</b>	<b>476 500</b>	<b>500 489</b>
<b>SALES TO CONSUMERS (Thousand kWh)</b>										
Domestic	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	1 682 327
Commercial	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	1 881 173
Industrial	567 039	593 824	647 632	708 232	722 806	722 850	726 059	723 038	699 746	757 803
Agricultural	88 708	94 888	92 567	101 515	113 761	117 478	120 062	128 701	137 339	156 930
Public lighting	48 818	52 640	52 557	54 670	59 386	58 146	67 793	68 851	70 301	77 596
<b>TOTALS</b>	<b>2 785 414</b>	<b>3 011 231</b>	<b>3 124 753</b>	<b>3 422 532</b>	<b>3 696 071</b>	<b>3 741 830</b>	<b>3 932 902</b>	<b>4 135 022</b>	<b>4 298 319</b>	<b>4 555 829</b>
<b>AVERAGE SALES PER CONSUMER (kWh)</b>										
Domestic	3 417	3 708	3 574	3 924	4 302	4 158	4 308	4 307	4 381	4 353
Commercial	16 540	17 478	18 365	19 582	20 652	20 819	21 186	22 471	22 784	23 249
Industrial	59 202	61 460	66 684	72 055	71 515	68 226	66 270	64 568	61 930	64 264
Agricultural	13 236	12 798	11 161	11 175	11 633	11 296	10 984	11 098	11 334	12 264
Public lighting	9 582	9 710	9 188	8 964	9 239	8 589	9 497	9 082	8 798	9 130
<b>AVERAGE PRICE PER UNIT BILLED (cents)</b>										
Domestic	6,988	9,770	9,626	9,276	9,838	9,693	11,009	12,492	12,746	15,988
Commercial	8,765	11,480	10,812	10,636	11,003	10,388	11,748	13,009	13,328	16,982
Industrial	6,838	9,211	8,709	8,507	8,926	8,268	9,594	11,111	11,458	14,955
Agricultural	6,655	9,238	8,830	8,774	8,992	8,637	10,106	11,434	11,675	15,296
Public lighting	6,496	9,018	8,781	8,500	8,755	8,437	9,298	10,981	11,233	14,554
<b>AVERAGE PRICE</b>	<b>7,658</b>	<b>10,320</b>	<b>9,888</b>	<b>9,642</b>	<b>10,082</b>	<b>9,647</b>	<b>10,988</b>	<b>12,408</b>	<b>12,719</b>	<b>16,178</b>

APPENDIX 2

Generation, transmission & distribution equipment

Description	Unit	In Commission 31.12.2007	Commissioned in 2008	Taken out of Commission in 2008	In Commission 31.12.2008
<b>GENERATION PLANT:</b>					
Dhekelia Power Station					
Steam Turbines	No.	6	-	-	6
Capacity	MW	360	-	-	360
Internal Combustion Engines (in two groups)					
	No.	-	1	1	-
Capacity	MW	-	50	50	-
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	1	-	3
Capacity	MW	260	130	-	390
<b>TRANSMISSION EQUIPMENT:</b>					
220kV Transmission Lines operated at 132kV					
Route Length	km	1,40	44,00	-	45,40
Circuit Length	km	2,80	88,00	-	90,80
132kV Transmission Lines					
Route Length	km	409,00	0,62	-	409,62
Circuit Length	km	763,20	1,00	-	764,20
132kV Underground Cables					
Route Length	km	63,54	2,50	-	66,04
Circuit Length	km	91,61	2,50	-	94,11
132kV U/G Cables-Operated at 66kV					
Route Length	km	8,33	-	-	8,33
Circuit Length	km	8,33	-	-	8,33
66kV Underground Cables					
Route Length	km	1,68	-	-	1,68
Circuit Length	km	1,68	-	-	1,68
132kV Transmission Lines operated at 66kV					
Route Length	km	168,91	1,05	-	169,96
Circuit Length	km	267,55	1,88	-	269,43
66kV Transmission Lines					
Route Length	km	291,78	-	-	291,78
Circuit Length	km	291,78	-	-	291,78

Description	Unit	In Commission 31.12.2007	Commissioned in 2008	Taken out of Commission in 2008	In Commission 31.12.2008
132/66kV Interbus Transformers	No. MVA	12 603	1 45	- -	13 648
132/11kV Step Down Transformers	No. (*) MVA (*)	71 2 231	4 136	- -	75 2 367
132/6,6kV Step Down Transformers	No. MVA	2 58	- -	- -	2 58
132/3,3kV Step Down Transformers	No. MVA	2 20	- -	- -	2 20
66/11kV Step Down Transformers	No. MVA	69 683,5	4 57	5 30	68 710,5
66/3,3kV Step Down Transformers	No. MVA	2 5	- -	- -	2 5
15,75/132kV Step Up Transformers	No. MVA	2 330	1 165	- -	3 495
11/132kV Step Up Transformers	No. MVA	13 741	- -	- -	13 741
11/66kV Step Up Transformers	No. MVA	4 150	- -	- -	4 150
Substations	No.	52	6	1	57

(\*) the figures include one 16MVA transformer the energisation of which has been omitted inadvertently in 2007, at "Episkopi" 132kV Substation.

Energisation of "Agios Athanasios", "Tseri" and "Vasilikos South" Substations. Also, the three substations located within the three Power Stations are being added. Dismantling of "Episkopi" 66kV Substation.

<b>DISTRIBUTION EQUIPMENT:</b>					
MV Overhead Lines	km	5 141,37	123,09	34,25	5 230,21
MV Underground Cables	km	2 659,45	230,80	29,50	2 860,75
LV Overhead Lines	km	8 541,07	232,78	29,72	8 744,13
LV Underground Cables	km	3 019,98	466,97	0,46	3 486,49
22000-11000/433/250V P.M. Transformers	No. kVA	8 404 765 041	344 50 990	103 24 569	8 645 791 462
22000-11000/433V G.M. Transformers	No. kVA	4 517 2 442 200	332 267 855	5 42 720	4 844 2 667 335