

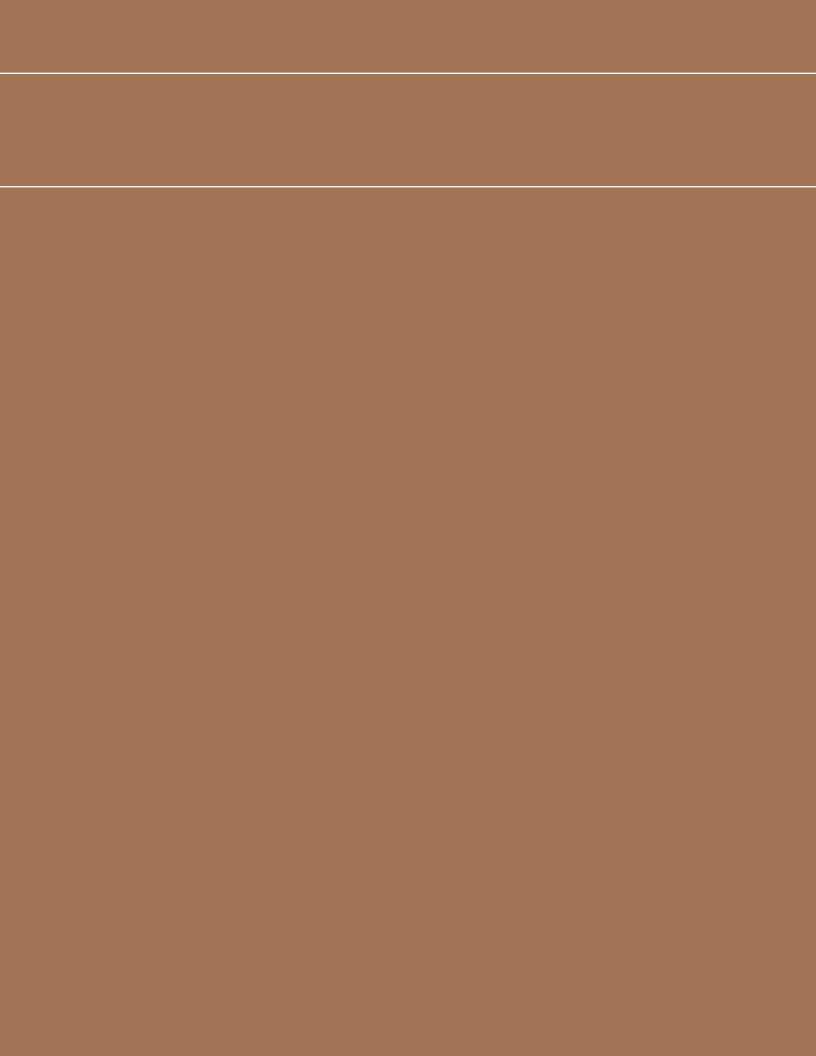






individual actions, individual talents, individual identities.

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 the 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...

the supply of safe and reliable electric energy at competitive prices, the undertaking of relevant public service obligations against due compensation, the supply of other services of the highest quality for the more efficient exploitation of its capital resources and its expertise.

The operations to be performed with due respect to the environment, the health and safety of its employees and the public in general, to respond to its customers needs and expectations and to safeguard satisfactory financial returns.



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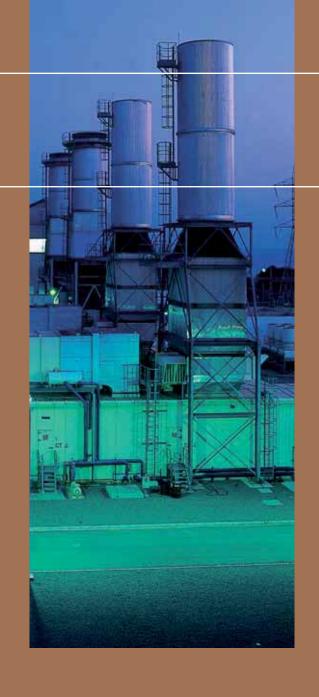
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His Excellency
The Minister of Commerce,
Industry & Tourism
Mr Antonis Michaelides
Ministry of Commerce,
Industry & Tourism
1421 Lefkosia

30th June 2006

#### Your Excellency

I have the honour to submit to you the 54<sup>th</sup> Annual Report and Accounts of the Electricity Authority of Cyprus for the year ended 31 December 2005 incorporating a copy of the Auditors Report.

These Reports and Accounts are submitted to you in compliance with the requirements of the Electricity Regulation Law of the Internal Market 2003 (as amended by N. 81 (I) 2004 – Section 9 (a)), and also of Sections 24(3) and 26 of the Electricity Development Law, CAP. 171.

Yours faithfully

Charilaos Stavrakis Chairman



## The Year in Brief

|   |             | 2005    | 2004    | %<br>Increase<br>(Decrease) |
|---|-------------|---------|---------|-----------------------------|
| GENERATION                                    |             |         |         |                             |
| Total units generated                         | million kWh | 4 347,9 | 4 176,1 | 4,1                         |
| Maximum output capacity of power stations     | MW          | 988     | 988     | -                           |
| Maximum demand met                            | MW          | 856     | 821,0   | 4,2                         |
| Thermal efficiency of generation              | %           | 32,8    | 33,1    | (0,9)                       |
| SALES OF ELECTRICITY                          |             |         |         |                             |
| Total sales                                   | million kWh | 3 932,9 | 3 741,8 | 5,1                         |
| Consumption in the turkish occupied area      | million kWh | 6,7     | 7,6     | (11,8)                      |
| Average charge per kWh sold                   | cent        | 6,431   | 5,646   | 13,9                        |
| Consumers at 31 December                      | thousand    | 436,3   | 419,3   | 4,1                         |
| FINANCE                                       |             |         |         |                             |
| Total income                                  | C£ thousand | 268.058 | 224.347 | 19,5                        |
| Operating costs                               | C£ thousand | 229.151 | 178.208 | 28,6                        |
| Operating profit                              | C£ thousand | 38.907  | 46.139  | (15,7)                      |
| Finance costs                                 | C£ thousand | 5.005   | 7.236   | (30,8)                      |
| Exceptional item                              | C£ thousand | 693     | 15.000  | (95,4)                      |
| Tax   | C£ thousand | 9.757   | 9.502   | 2,7                         |
| Profit for the year                           | C£ thousand | 23.452  | 14.401  | 62,8                        |
| Capital expenditure                           | C£ thousand | 56.248  | 88.452  | (36,4)                      |
| Average net assets employed                   | C£ thousand | 757.333 | 729.928 | 3,8                         |
| Return on average net assets employed         | %           | 5,1     | 6,3     | (19,0)                      |
| EMPLOYEES                                     |             |         |         |                             |
| Permanent employees in service at 31 December |             | 2 032   | 2 050   | (0,9)                       |
| Sales per employee                            | million kWh | 1,94    | 1,83    | 6,0                         |
| Consumers per employee                        |             | 215     | 205     | 4,9                         |

# Board of Directors and Management

#### THE AUTHORITY

#### Chairman

Ch. Stavrakis BA (Cantab), MBA (Harvard), ACIB

(since 22/6/2005)

G. Georgiades Business Consultant

Economist (until 15/6/2005)

Vice Chairman

Ch. Charalambous Master of Science in Engineering

(since 22/6/2005)

A. Louroutziatis BA (Hons) ECON

Businessman (until 9/6/2005)

**MEMBERS** 

I. Constantinides BA in Philosophy, Politics and Economics - Oxford University

MBA in Business Administration

Filitsa Ioannou Economist of National Kapodistriako University, Athens

M. Miltiades BSc (Hons) Psychology & Sociology (since 22/6/2005)

G. Pistentis H.T.I. Diploma in Computer Science (since 1/8/2005)

Y. Valanides Mechanical Engineering of National Metsovio University

(since 1/8/2005)

Ch. Rotsas BA (Hons) Economics & Finance

FCA (since 1/8/2005)

D. Psiloyenis BSc Electronic Engineering (since 1/8/2005)

Ch. Charalambous Master of Science in Engineering

(8/2/2005 until 21/6/2005)

S. Tsielepos Dipl. Pharmacist of National Kapodistriako University, Athens

(until 31/7/2005)

Y. Ioannou Business Administration, Economist (until 31/7/2005)

A. Papathomas Accountant / Auditor (until 31/7/2005)

M. Papadakis BSc (Eng), FCA, DipM.MCIM (until 31/7/2005)

Chartered Accountant

A. Gavrielides MSc., Ing. (ECON. & AGRIC. ECON.) (until 31/1/2005)

FELLOW EDI - World Bank



**Left up:** Ch. Rotsas Board Member, G. Pistentis Board Member, M. Stavrou General Manager, Y. Valanides Board Member, M. Miltiades Board Member, I. Constantinides Board Member

**Left down:** F. Ioannou Board Member, Ch. Stavrakis Chairman, Ch. Charalambous Vice Chairman,

#### D. Psiloyenis Board Member

#### **LEGAL ADVISERS**

Cacoyiannis & Demetriou, Lemesos - Lefkosia

#### **AUDITORS**

Auditor General of the Republic PricewaterhouseCoopers, Lefkosia

#### **EXECUTIVE**

#### **GENERAL MANAGER**

M. Stavrou FCCA, ACMA (since 1/4/2005)

Ch. Constantinides BSc (Eng), CEng, MIEE (until 31/3/2005)

#### **EXECUTIVE MANAGER FINANCE**

H. Hadjiyerou FCA, MBA (since 1/6/2005)

Vacant (1/4/2005 since 31/5/2005)

M. Stavrou FCCA, ACMA (until 31/3/2005)

#### **EXECUTIVE MANAGER CUSTOMER SERVICE**

G. Petoussis Dip. Eng. CEng, MIEE

#### **EXECUTIVE MANAGER NETWORKS**

Vacant (since 1/10/2005)

A. Anthimou BSc (Eng), CEng, MIEE (until 30/9/2005)

#### **EXECUTIVE MANAGER GENERATION**

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

#### **EXECUTIVE MANAGER COMMON SERVICES**

Vacant (since 1/9/2005)

M Antoniou BSc (Eng), CEng, MIEE (until 31/8/2005)

#### **EXECUTIVE MANAGER CORPORATE DEVELOPMENT**

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

# Board of Directors and Management

#### **POWER STATIONS**

#### **POWER STATION MANAGER**

Moni Power Station

G. Georgiades BSc (Eng), CEng, MIEE, MI Petroleum

#### **POWER STATION MANAGER**

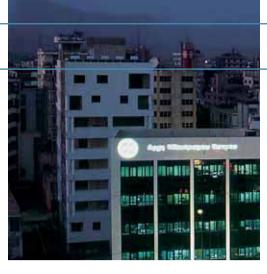
**Dhekelia Power Station** 

S. Savvides BSc (Eng), MSc, CEng, MIEE, MIMechE, MI Petroleum

#### **POWER STATION MANAGER**

Vasilikos Power Station

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









#### **AREAS**

#### **AREA MANAGER**

Lefkosia - Keryneia - Morfou Area

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

#### **AREA MANAGER**

Lemesos Area

Vacant (since 1/10/2005)

N. Drakos BSc (Eng), Ceng, MIEE (until 30/9/2005)

#### **AREA MANAGER**

Ammochostos - Larnaka Area

Y. Siekkersavvas BSc (Eng), MIEE

#### AREA MANAGER

Pafos Area

L. Papasavvas Dipl. Eng. CEng, MIEE

#### **INTERNAL AUDIT MANAGER**

I. Koumeras FCAA, CIA

#### **SECRETARY / MANAGER OF LEGAL SERVICES**

Vacant

#### **GENERAL MANAGER'S OFFICE MANAGER**

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

## Message from the Chairman

Every year at this time we look back and reflect on what our Organisation has achieved during the previous twelve months.

The current Board of Directors officially took up its duties on August 1, 2005. I consider it my duty at this point to thank the previous Chairman of the EAC Board, George Georgiades, and the other members of the Board for their valuable services and hard work, which provided the foundations for our Organisation's further progress and development.

During the year under review, the most important tasks on which the EAC focused its attention were:

- Full compliance with the new requirements of the European Union in the sectors of Electricity Generation, Transmission and Distribution
- Continuous collaboration with the Ministry of Commerce, Industry and Tourism, particularly on the important issue of the arrival of natural gas in Cyprus, and with the new institutions in the energy sector i.e. the Cyprus Energy Regulatory Authority and the Transmission System Operator
- The implementation of the Organisation's development programme
- The installation and operation of the Second Phase of the Vasilikos Power Station and the optimum use of the other two Power Stations at Dhekelia and Moni
- The introduction of best practices and ways of increasing productivity
- Maintaining the Organisation's robust financial position
- Providing the best possible service to customers
- The EAC's expansion into other sectors of the economy

#### The EAC's Future and Prospects

The new situation brought about by Cyprus' accession to the European Union is a major challenge for our Organisation. In the new competitive environment, we must place particular importance on flexibility and the need for fast decision making, areas in which the private sector currently enjoys an advantage. For this reason I wish to stress once again that there is a more than imperative need for a change to our Organisation's legal and regulatory framework. In the present circumstances, the EAC is in danger of losing a significant share of the market and consequently finding itself on an unwelcome course since any reduction in revenue will lead to a reduction in our ability to invest and, more generally, to the creation of problems with the Organisation's development.

#### The arrival of natural gas in Cyprus and the development of the Generation System

With the arrival of natural gas, the EAC's foremost aim is to offer the country a new choice of fuel where electricity generation is concerned – a choice that is more environmentally-friendly than Heavy Fuel Oil (HFO) which is at present the basic fuel used for this purpose. Continuous and close cooperation with the Ministry of Commerce, Industry and Tourism will be a key factor in achieving the goal we have set for the soonest possible independence from petroleum and its by-products.

As far as the completion of the Second Phase of the Vasilikos Power Station, with the installation of a third 130MW Generation Unit is concerned, work continued but with delays due to the contractor. In December 2005 a temporary certificate of delivery was issued for the Steam Unit and the transformers while later the same month a temporary delivery certificate was issued for the electrical equipment.

Regarding the implementation of the Third Phase at Vasilikos Power Station, which includes a Combined Cycle Unit of between 170 and 220 MW (Unit No. 4) and which will operate on natural gas and diesel, the EAC issued a request for tenders. In the summer of 2006, contracts were signed with the successful tenderer. For this Project, the method of a completed contract (Turn Key) was followed. This will include the design, supply, manufacture, construction, testing, delivery and maintenance of the Unit, which is due to come into commercial service at the start of 2009. During the first years of its operation, Unit No. 4 will be powered by diesel fuel, until the availability of Liquified Natural Gas (LNG) in Cyprus when this will be used for fuel. On the subject of how natural gas will be transported to the island, the EAC is in continuous and close contact with the Ministry of Commerce, Industry and Tourism in order to identify the most suitable solution for the benefit of the country.

#### **Development of the Transmission System**

In the brief time during which I have had the good fortune to lead this Organisation, I have had the opportunity to see at first hand the EAC's efforts and plans to provide uninterrupted service throughout Cyprus. Every year, the demand for electricity is growing and for this reason it is essential that the Transmission development plan be implemented without delay, so that the EAC remains capable of responding to this demand. Unfortunately, however, obstacles are frequently placed in our way, either by organised groups, and communities or otherwise, and these are hindering our efforts to serve customers in every part of the island.

A typical example of a delayed development project is the Tseri Substation. The EAC has been fighting to install it for the past 10 years and has only recently succeeded in obtaining building permit and this under certain conditions. The delay in giving the EAC the green light to build and operate this substation has left the broader area of the capital vulnerable in case of a serious fault, resulting in the likelihood of power cuts and inconvenience for a large number of consumers.

We all need to realise that there is no way of transmitting and distributing electricity other than via Substations and Power Lines.

On this matter we urgently request State assistance and support, so that the EAC timely secures the necessary permits to carry out the projects contained in its development programme. The aim of the EAC is not to inconvenience any citizens' group, association or community, but to provide the best and fastest possible service to the public.

Despite the difficulties and problems that arose during the implementation of the Organisation's development programme, during 2005 the EAC carried out a number of upgrades to its network which resulted in improved reliability and greater capacity.

## Message from the Chairman

#### **Customer Service**

In the framework of the EAC's policy of continuously enhancing its customer services, we set up the EAC Faults Reporting Centre (FRC). The aim of the FRC is to provide customers with the best possible information during faults on the network which can lead to isolated or extensive power cuts. Customers/consumers may also inform the IFRC of any problems or irregularities affecting the uninterrupted and smooth supply of electricity to their premises (e.g. burnt fuses, fluctuation of the supply voltage, burnt-out street lamps, tree branches touching power lines, etc.). The FRC began by providing service to the Lefkosia-Keryneia-Morfou Area, which was followed by the Ammochostos-Larnaka Area. Since April 2006 it has operated throughout the island with a single telephone number: 1800.

For even better customer service and information, the EAC has decided to operate a Call Centre. This will essentially be an extension of the IFRC and it will be developed in stages. The Call Centre will enable the EAC to provide customers effectively with timely, good quality information, to promote our Organisation's progressive, dynamic image and to respond to our customers' overall expectations. The Call Centre is due to become fully operational by the end of 2008.

The Call Centre's main tool and source of information will be the Customer Care and Billing System with which the EAC has replaced its existing, outdated billing system in order to respond properly in the new competitive environment following liberalisation of the Energy Market. The project will be completed at the end of 2006.

#### **Expansion into New Activities**

Within the framework of legislation enacted in November 2000, the Electricity Authority has reached agreement with two strategic partners to whom it has leased its telecommunications network. The EAC believes that the agreement with the two strategic partners will bring it positive results and enable it to play a dynamic role in the telecommunications market.

#### **Robust Finances**

Despite the difficulties faced by the EAC, including the fact that the average cost of Heavy Fuel Oil 2005 rose by 46,6% compared to 2004, the Organisation maintained its robust financial situation, with a pre-tax surplus of £33,2 million, representing 4,4% returned on capital employed.

#### **Marginal Cost Tariffs**

The EAC has set up a Charges & Tariffs Group and has procured Consultancy Services for the preparation of a complete study for the introduction of new, revised Tariffs which will be submitted to the Cyprus Energy Regulatory Authority for approval and adoption. The project is at an advanced stage and is expected to reach completion during 2006.

#### **Corporate Social Responsibility**

In the context of its social contribution, the EAC continued its multifarious activity during 2005. Theatre, music and art, as well as events and campaigns in support of education, sport, the environment and other areas arising from our deep cultural roots were just some of the sectors in which the EAC made a social contribution during the year under review.

#### The EAC's human face

I am convinced that the leading role in the EAC's efforts in this area is played by our personnel whose reliability and undisputed competences enable them to carry out their work successfully.

I want to stress that the new Board of Directors places particular importance on personnel matters because, in the brief time during which we have been directing the Organisation, we have seen for ourselves the zeal and hard work of the EAC's 2 000 and more employees. Our aim, together with the EAC Management, is to take care to provide staff with the best possible working conditions.

Since March 2005, the Head Offices have been housed in an impressive new building at the entrance to Lefkosia while work is currently in progress on the new EAC Area Offices in Larnaka and Pafos, and on new EAC Stores in both Areas.

Furthermore, various studies are under development concerning the optimum use of our personnel and the introduction of best working practices in order to increase productivity.

#### **Thanks**

To conclude this brief report on some of the most important issues to have occupied the EAC during 2005, I wish to express my thanks to the honorable Minister of Commerce, Industry and Tourism, Antonis Michaelides, and to his predecessor, the present Minister of Foreign Affairs, George Lillikas, for the help and cooperation that we have enjoyed since August 2005, when we took up our duties. It would be an omission here if I were not also to express my thanks to the former Vice-Chairman of the EAC and present Minister of Health, Charis Charalambous, for the collaboration we had during the time he served the EAC as Vice-Chairman. I also express particular thanks to the Cyprus Energy Regulatory Authority and the Transmission System Operator for the total and close cooperation that we have maintained throughout this period. Special thanks also go to the representatives of the Media who are always at the EAC's side during its activities and events.

I also wish to thank the other Members of the Board and the whole of the Organisation's Management Team, in particular the General Manager, Moisis Stavrou, for their cooperation and shared vision of how to handle all the issues facing the EAC in the past year, and finally, I thank all members of staff for the industriousness they showed during 2005.

Charilaos Stavrakis Chairman

## Development Plan

Every modern Organisation, as part of its efforts to respond to the continually increasing demands of customers, implements its own Development Plan.

The EAC, maintaining its policy which aims at high standards of safety and reliability in the provision of electricity, bearing in mind the predicted increase in load demand, continues to implement its Development Plan at a rapid pace. The Development Plan was drawn up after various studies and its basic aims are the following:

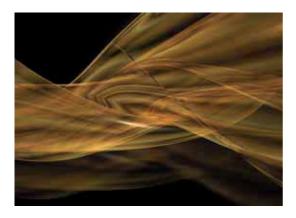
- The expansion and upgrading of customer services.
- Improved efficiency in all the EAC's areas of activity.
- Upgrading of IT Systems which will assist the EAC in achieving its business aims.
- The proper use of electricity with the aim of energy conservation and load management and control, particularly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

The Development Plan covers both the medium- and long-term requirements of the EAC. Some parts that have already been implemented, such as the introduction of new IT systems, significantly upgraded Substations and new links to the Transmission System, are of such importance that they will assist the EAC to successfully carry out its mission for a long period in the new century.

In the Generation sector, the main and most important project is the completion of Phase 2 and Phase 3 of the new Vasilikos Power Station, which will contribute to fulfilling the country's electricity needs for a long time.









Construction work for Phase 2 of the Vasilikos Power Station (No. 3, 130MW Steam Unit) was completed and the Unit set in commercial operation in December 2005.

Phase 3 consists of one combined cycle Unit between 170 and 220 MW, (Unit No. 4), which is expected to come into commercial operation in 2008. During the unit's first years of operation, diesel oil will be used until the arrival of liquefied natural gas (LNG) in Cyprus. Thereafter it will use liquefied natural gas as its main fuel.

For this Project, the turnkey completed contract method will be followed, to include the planning, supply, manufacture, construction, testing, delivery and maintenance of the Unit for a specified period. This is normal practice, applied internationally to Combined Cycle Units.

# Message from the General Manager

The year in review can certainly be considered a successful one for the EAC since, over and above the progress achieved in the context of our development programme, our Organisation once again managed the difficult task of providing the country with an uninterrupted supply of electricity, a task that in most developed countries is, as a rule, not fully achieved. The EAC's consistency and contribution have been firmly acknowledged by our customers.

The energy market underwent changes in 2005, following the Cyprus Energy Regulatory Authority's issuance to private companies of the first licenses to supply electricity. We at the EAC must be constantly vigilant so as to cope in the competitive environment that has been created. I am certain that the hard work, productivity and experience of the entire EAC staff will serve as our Organisation's weapons in the battles in the new competitive arena. In the first months since I had the good fortune to be given the opportunity to head the Organisation, I have seen for myself that the EAC's most valuable asset is its personnel.

Topping the list of infrastructure projects in progress during 2005 was preparatory work on the operation of the second phase of Vasilikos Power Station. The problems that inevitably arise with projects of this size were tackled and continue to be dealt with. Our main aim is the fastest possible delivery of Phase Two so that Cypriot consumers will receive an uninterrupted supply of electricity during the forthcoming period of high demand in summer 2006.

In March 2005, the EAC took delivery of its new Head Office building, an imposing jewel of a structure at the entrance to Lefkosia. The move of the Head Offices to a new, functional and ergonomic building had been a matter of concern for successive EAC Boards of Directors and Management teams since the Organisation's development and progress meant, that it could not continue to operate in old buildings constructed many years earlier.

In 2005, the Ammochostos area network was given a boost by the operation of the new 132/11kV G.I.S "Melizona" substation at Paralimni. Thanks to the latest technology, this substation is capable of responding satisfactorily to the constantly growing demand for electricity in the area.

The EAC makes a constant effort to provide sufficient electricity and good service throughout Cyprus, despite several instances of organised groups and even communities placing obstacles in the way of projects aimed at supplying electricity to various areas. Everyone – communities, organised groups, the state and the public – needs to realise that the EAC's aim is to serve the country and that every effort is made to cause the least possible disruption, and also that the only method of providing electricity is via Substations and transmission lines.





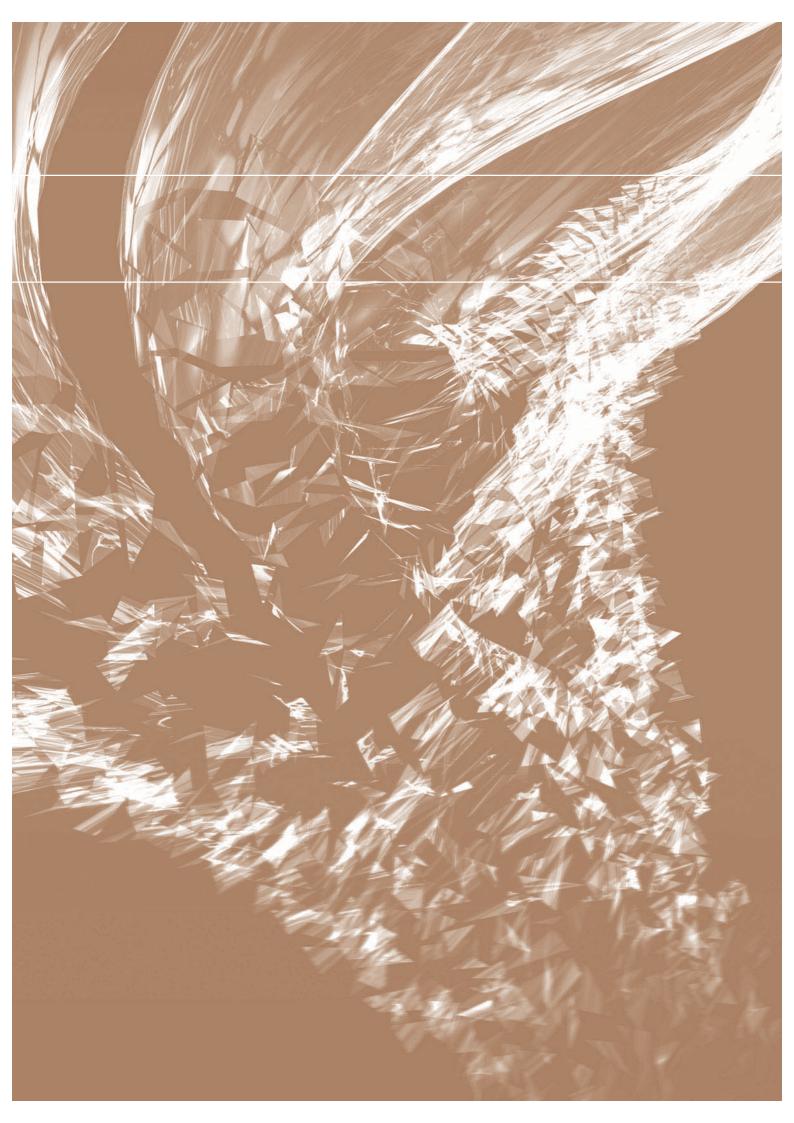
2005 was a year of change for the EAC since a new Board of Directors was appointed in the summer and after two consecutive three-year terms, the previous Board handed over to its successor. I would like to express special thanks to the former EAC Chairman, George Georgiades, and to the members of the previous Board for the cooperation we enjoyed during their six-year term. I also wish to assure the new EAC Board of Directors and, in particular, the Chairman, Charilaos Stavrakis, of our total cooperation with the sole aim of securing our Organisation's progress and our Staff's wellbeing.

One of the Organisation's chief concerns is the Staff, which is why all our efforts are aimed at providing better working conditions, greater security, constant retraining and incentives to every member. I want to believe that their devotion to duty will continue for the benefit of all, like the excellent labour relations that have been created with the cooperation of all the trade unions.

To end this brief message, I would like to express warm thanks to all my colleagues and, in particular, to the six Executive Directors of the Business and Development Units for their full cooperation, and to make a promise that the focus of the EAC Management will always be on finding an immediate resolution to any problem concerning the Organisation's present and future.

We are aware of the difficulties that we shall face as a result of the new situation brought about by liberalisation of the energy market but, to us, the EAC's contribution over the past 53 years is a legacy that will enable us to continue our task. Whatever problems arise must be overcome so that we manage to maintain the EAC's reputation as the Organisation that has made the greatest single contribution to the country.

Moysis Stavrou General Manager



# Business Units

### Generation Business Unit

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

During the year 2005, 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 298 MW (2 x 130 MW Steam Units and 38 MW Gas Turbine Unit) generated in 2005, 1 853 249 MWh, which corresponds to 42,62% of the total electricity generated from the Authority's Power Stations. During the same period the Station exported, 1 738 701 MWh, which corresponds to 42,38% of the total electricity exported from the Authority's Power Stations.

It should be noted that the new steam unit, with a capacity of 130MW, is under reliability operation since June 2005 and consequently part of the above generated units were generated by this unit. The new unit will be commissioned in 2006 at which time the new overall capacity of Vasilikos Power Station will be increased to 428MW.

The thermal coefficient of efficiency of the Steam Units for units generated reached 39,07% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 26,14%.

Moreover, the thermal coefficient of efficiency of the Steam Units, for units exported, reached 36,66% whereas the corresponding thermal coefficient of efficiency for the Gas Turbine reached 22,87%.

#### Maintenance

During the period January-December 2005, Units No.1 and No. 2 were taken out of service for a scheduled general maintenance of the Steam Turbines and of the Steam Boilers.

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

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





#### **DHEKELIA POWER STATION**

Dhekelia Power Station, with an installed capacity of 360 MW (6 x 60 MW Steam Units), generated in 2005, 1 925 566 MWh which corresponds to 44,29% of the total electricity generated from the Authority's Power Stations. During the same period, Dhekelia Power Station exported, 1 828 667 MWh which corresponds to 44,58% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Power Station for units generated reached 31,16% whereas the respective coefficient of efficiency for units exported reached 29,59%.

#### Maintenance

During the period January-December 2005 the yearly maintenance of Units No.1, 2 and 4 was completed. The yearly general maintenance of the two Units included all the electrical equipment, transformers, auxiliary equipment as well as repairs of various defects.

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

#### **New Equipment**

New flue gas dust monitors were installed on Units 1 and 2. Similar monitors will be installed in the other units during 2006. In addition new flue gas analysers were installed in Boilers No. 1, 2 and 4.

#### 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 2005, 569 128 MWh which corresponds to 13,09% of the total electricity generated from the EAC's Power Stations. During the same period the Station exported 535 116 MWh, which corresponds to 13,04% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units for units generated reached 24,52% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 23,00%.

Moreover, the thermal coefficient of efficiency of the Steam Units for units exported reached 22,04% whereas the corresponding thermal coefficient of efficiency for the Gas Turbines reached 21,43%.

### Generation Business Unit

#### Maintenance

During the period January-December 2005, the annual maintenance of Steam Boilers No. 1 and 2 was completed whereas the maintenance of Boiler No. 6 began and is in progress. The yearly maintenance of the above Boilers included visual checks and cleaning of all parts, various repairs inside the boilers, replacement of superheater tubes, which have reached their design limits, with other better quality material tubes and repairs in the air and flue gas ducts in order to avoid leakages.

During the same period the annual overhaul of Steam Turbines No. 4 and 5 was completed whereas the maintenance of Turbine No. 3 began and is in progress.

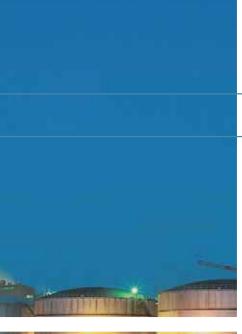
The yearly general maintenance of the above Turbines included all the electrical equipment, transformers and auxiliary equipment.

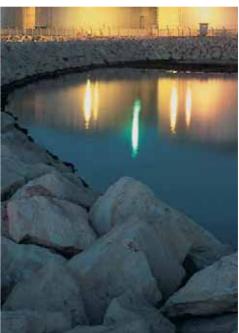
Gas Turbine No. 1 was stripped for inspection and maintenance of the hot flue gas path.

An external contractor repaired the Station pier and the roofs of the

#### **ENVIRONMENTAL ISSUES**

For the protection of the environment and the continuous monitoring of 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<sub>2</sub>) 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.









#### **STUDIES**

- Officers of the Generation Business Unit 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-April 2005 as per new National Law for the greenhouse gas Emissions Trading Directive. This report was subsequently submitted to the Ministry of Agriculture, Natural Resources and Environment. A complete externally verified report for the emissions of carbon dioxide for the whole year 2005 would be submitted by March 2006.
- An external consultant was employed to carry out a combustion study for the improvement of flue gas emissions from Units No. 1 and 2.



## Generation Business Unit

## VASILIKOS POWER STATION DEVELOPMENT WORKS

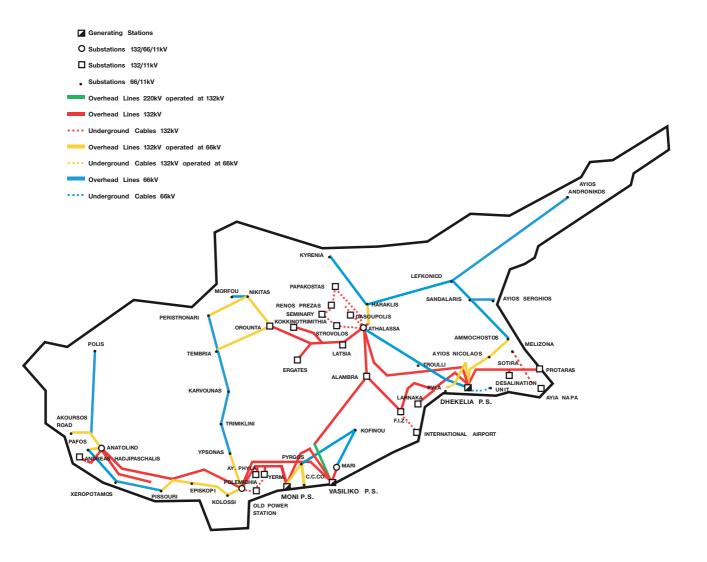
#### **Second Phase of Vasilikos Power Station**

- The first lightning of the Boiler took part on the 25<sup>th</sup> of February 2005. Since that date the Contractor has been working with the implementation of the program for commissioning of the Boiler. On the  $3^{\rm rd}$  of May 2005, and after a delay of 2,5 months, steam was sent to the Turbine (steam to set). The first synchronization of the steam Turbine took place on the  $9^{\rm th}$  of May 2005.
- The Turbine Contractor completed the implementation of its program. All associated systems were energized and on the 21st of December 2005 the preliminary certificate of acceptance was issued.
- All tests for the power transformers were completed successfully and on the 21<sup>st</sup> of December 2005 the preliminary certificate of acceptance of the transformers was issued.

The Electromechanical Equipment Contractor completed the installation of its equipment with no delay in the implementation of the program. On the 25<sup>th</sup> of December 2005 the preliminary certificate of acceptance of all electrical equipment was issued.

- The Flue Gas Desulphurisation Unit is under a reliability run since the  $20^{\rm th}$  of December 2005.





## Generation Business Unit

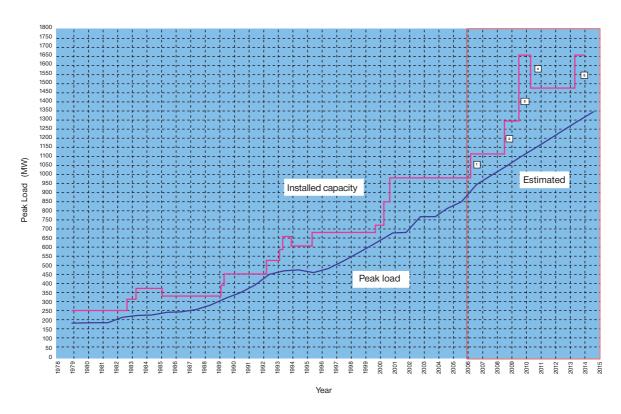
#### **Third Phase of Vasilikos Power Station**

- Phase III consists of one combined cycle Unit between 170 and 220 MW, (Unit No. 4), which is expected to be in commercial operation before the end of 2007. During the first years of operation of the unit, diesel oil will be used as fuel, until the arrival of liquefied natural gas (LNG) in Cyprus. Thereafter it will use liquefied natural gas as the main fuel. The arrival of liquefied natural gas, according to the Ministry of Commerce, Industry and Tourism, is expected in 2010.
- For this Project, the method of a completed contract (Turn Key) will be followed. This will include the planning, supply, manufacture, construction, tests, delivery and maintenance of the Unit for a specified time period. This is the usual practice that is applied internationally for Combined Cycle Units.
- After the cancellation of Tender 450/2003, on the 9<sup>th</sup> of January 2005, the specifications of the Tender were re-examined from the EAC project team and the Consultants of the project. The new Tender 40/2005 specifications were issued in April 2005 and the 14<sup>th</sup> of June 2005 was set as the new date of submission of tenders. Only two tenders were submitted by the above date. Stage A (preliminary evaluation) has already been completed and both tenders have been prequalified to the second stage (technical) of the evaluation.
- According to the existing program the commercial operation of the Combined Cycle Unit will be materialized 30 months after the award of the contract to the successful tenderer.

The consultants completed up to now a number of studies that are necessary for the initial planning and the preparation of specifications. The consultants have already submitted studies on the provision and layout of machinery, the points of connection, the delivery of diesel and afterwards of natural gas, the terms of Contract and the method of evaluation of offers.

Moreover EAC assigned to the same Consultants PBP, the preparation of an Environmental Study for the project based on the European Union Directives and the Cypriot Legislation. The final report was submitted in March 2004 and in 2005 the whole report was translated in Greek as per demand from the Environmental Committee, which consists of various Governmental services.





## **DEVELOPMENT PLAN OF EAC**

- (1) 1 X 130 MW (STEAM UNIT, VASILIKOS) 2006 (beginning)
- (2) 1 X 180 MW (COMBINED CYCLE UNIT, VASILIKOS 2008 (middle)
- (3) 2 X 180 MW (COMBINED CYCLE UNIT, VASILIKOS) 2009 (middle)
- (4) 6 X 30 MW (STEAM UNITS, MONI) 2010 (beginning)

It is estimated that the steam units at Moni P/S will be taken out of service at the beginning of 2010  $\,$ 

(5) 1 X 180 MW (COMBINED CYCLE UNIT, POST VASILIKOS) - 2013 (beginning)

# Networks Business Unit

## INTRODUCTION

The transmission network, which is the backbone of the Authority's System, interconnects the Power Stations with the load centres. The installation of new substations at strategic locations and the further development of existing substation infrastructure is a safeguard for the continuous and reliable supply to the major load concentration centres around Cyprus, avoiding the risk of prolonged interruptions. Long-term techno-economic studies ensure the optimisation and long-term viability of the development projects.

## **CONSTRUCTION WORK**

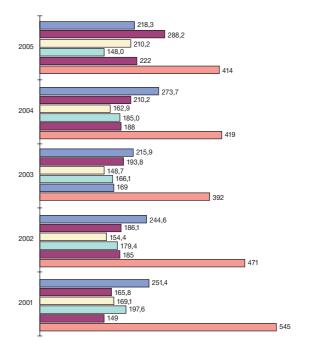
During the year 2005 the construction work continued with the usual intensive rhythm so as to implement the Authority's plan for the reinforcement and extension of the Transmission System.

The construction of the "Melizona" 132/11kV G.I.S substation in Ammochostos district was completed in 2005. It was commissioned with two transformers of installed capacity 40MVA each and a fully automated control and protection system. The supply to the substation was effected via the installation of 132kV underground cable, (XLPE 630mm²), from "Protaras" substation and "Ayia Napa" substation, with total length of 5.6km.

In addition, the installation of the new "Commercial Centre" G.I.S substation in Larnaka has been completed. Two power transformers 132/11kV with capacity of 31.5MVA have been installed, each with G.I.S. equipment and will operate using a G.I.S fully automated control and protection system. The final commissioning of the substation is expected to be completed in mid-January 2006.

The building permit was granted and the civil construction works are under way for the new "Omonia" 32/11kV G.I.S. substation in Lemesos since July 2005. It is anticipated to be completed within one year from the date that construction works were commenced. The installation of electrical equipment, will be undertaken by an external contractor and as envisaged, it will be completed within six months. The final tests and commissioning are expected to be completed by the end of 2006.





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

The upgrading of "District Office" 132/11kV substation in Lefkosia continues as planned. After the restoration of the existing building, the G.I.S equipment and the three low noise power transformers rated at 40MVA each will be installed. A fully automated control and protection system will be used. The restoration work has commenced in February 2005 and is expected to be completed soon. Subsequently, an external contractor will undertake the installation of the electrical equipment. Final commissioning is expected to be completed in November 2006.

The construction of the section of new overhead 132kV transmission line between Astromeriti and Korakou of about 19km length has been completed and energised. This line enabled the interconnection of the "Orounta' and "Tempria" substations. The installation of this new circuit provides alternative supply and increased reliability to "Tempria", "Karvounas" and "Trimiklini" substations, which supply the Troodos mountains.

In the Lefkosia area, work is in progress for the establishment of the "Tseri" 220/132/11kV substation. The construction of a new double circuit 220kV overhead transmission to supply the planned "Tseri" substation from Vasilikos Power Station has commenced. The length of the 220kV line will be about 45km and each circuit will incorporate two conductors per phase. Initially the line will be commissioned to operate at 132kV. The establishment of the new "Tseri" substation is considered as a project of paramount importance, which upon completion will ensure the security of supply to Lefkosia district.

At the "Dhekelia B" generation station the outdoor plant of the 66kV switchyard is being upgraded to 132kV G.I.S. The project entails the erection of a metal structure building in which the G.I.S electrical plant will be housed. Furthermore a normal control room building will be constructed to accommodate the medium voltage equipment. The upgraded substation will include two 66/11kV power transformers each rated at 16MVA and a third 132/66kV inter-bus transformer rated at 45MVA. Another feeder circuit will be established in the existing 132kV outdoor switchyard in order to supply the above-mentioned inter-bus transformer. Furthermore the bus bar protection system of the existing 132kV substation will be replaced.

The commissioning of the "Afroditi" 132/11kV substation is expected to take place in summer 2006.

The upgrading of "Pyrgos" substation in Lemesos district is currently in progress. The existing equipment will be dismantled and replaced with new modern equipment. In 2005, the supply of power to the substation was completed along with the establishment of the new control room and the installation of the first power transformer T1 15MVA, 66/11kV. The major upgrading works include the installation of new outdoor equipment including, new open-air 66kV switchyard, new bus-bars and two additional power transformer feeders, the construction of new control room for the HV an MV equipment and the installation of new control and protection systems. Additionally, new 11kV switchgear will be installed, and the existing 2x10MVA, 66/11kV power transformers will be replaced with 2x15MVA, 66/11kV.

The building permit for the establishment of "Agios Athanasios" substation 132/11kV near Lemesos has been secured. The civil construction works have already started by an external contractor in November 2005, and as envisaged, it will be completed by November 2006.

The following projects have also been completed in the year 2005, due to the EAC's continuous upgrading of the equipment:

- The installation of a 3rd power transformer of a capacity of 10MVA at "Polis" 66kV Substation along with the extension of the 11kV switchboard with the addition of new 11kV circuit breakers.
- The commissioning of a section of the existing 2nd overhead transmission line and the reinforcement of the "Pyla" substation with the installation of an additional 2nd transformer 66/11kV, with a capacity of 16MVA.
- The decommissioning of the inter-bus transformer I/B T2, 132/66kV at the "Polemidia" substation since the substation is being upgraded to operate at 132kV.

The total increase in system capacity reached 121 MVA (transformer capacity).

# Networks Business Unit

# TRANSMISSION SYSTEM DEVELOPMENT STUDIES

The following Transmission Development studies were undertaken during the year 2005:

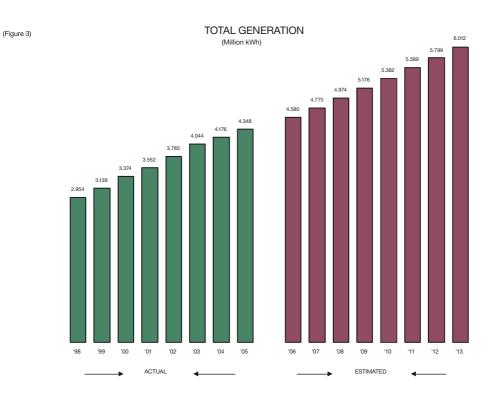
#### Lefkosia Area:

The following study was approved:

- 132kV transmission cable interconnection (800mm²) between the new "Tseri" 132/22-11kV substation and "Strovolos" 132/11kV substation.

The following studies will soon be completed and submitted for approval:

- Transmission/Distribution system development study for the Lefkosia town and its environs.
- 132kV transmission cable interconnection (800mm²) between "Tseri" 132/11kV substation and "Lakatamia" 132/22-11kV substation.
- Establishment of the new 132/22-11kV G.I.S transmission substation "Aluminium Tower" of capacity 2 x 40MVA.
- 132kV transmission cable interconnection (800mm²) between the future 'Aluminium Tower' substation and "District Office" substation.



- New 132/22-11kV G.I.S transmission substation "Dhali Industrial Area" of total capacity of 2 x 40MVA.
- New 132/11kV G.I.S transmission substation "Engomi", of total capacity of 3 x 40MVA in western area of Lefkosia
- $\,$  132kV transmission cable interconnection (800mm²) between the future "Engomi" substation and the "Seminary" substation.
- Additional interconnection between "Strovolos" substation and "Seminary" substation with a third 132kV transmission cable interconnection (800mm²).
- Interconnection of "Dhasoupolis" and "Strovolos" substations.
- Undergrounding of interconnection "Athalassa substation" "Dhasoupoli substation" "Athalassa substation" "Strovolos substation".

#### Lemesos Area:

The reinforcement of supply to Lemesos and its environs will be achieved with the implementation of the following approved studies:

- The study for upgrading the "Pissouri" 66/11kV substation - Interim measure.

The following studies will soon be completed and submitted for approval:

- Double circuit 132/66kV line 22km, interconnecting "New Trimiklini" substation to "Karvounas" and "Tembria" substations.
- Establishment of new switching transmission substation "Viomihaniki Periohi Ypsona".
- Upgrading of the second 132kV double circuit line (twin "Rubus") connecting Vasilikos Power Station to Moni Power Station.
- Construction of a new 132kV double circuit line (twin "Rubus") connecting Vasilikos Power Station to "Viomihaniki Periohi Ypsona" switching substation.

## Ammochostos / Larnaka Area:

For the town of Larnaka and the Ammochostos / Larnaka area the following studies were approved:

- The commissioning of the second feeder circuit at "Pyla" 132/11kV substation.
- The construction of a new transmission line to interconnect the substations "Vasilikos"-"Kophinou"-"Mari".
- "Alaminos" 132kV substation.

The following studies will soon be completed and submitted for approval:

- Establishment of the new transmission substation 132/11kV "Athienou"/ "Koshi" with a total capacity of 2  $\times$  16MVA.
- Installation of 132kV double circuit underground cable connecting "Pyla" substation with "Emporiko Kentro" substation in Larnaka.
- Dismantle part of the "Dekeleia Larnaka" 132kV transmission line.

# Networks Business Unit

#### Pafos Area:

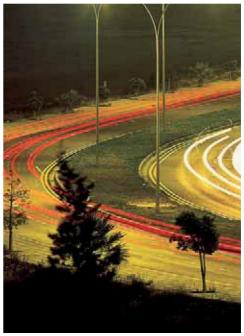
The reinforcement of supply to Pafos town and its environs will be achieved with the implementation of the following approved studies:

- Undergrounding part of the Transmission line interconnecting "Anatoliko" substation with "A. Hadjipaschalis" substation.
- Alternative temporary interconnection for the supply of "Xeropotamos" substation and the dismantlement of the existing 66kV transmission line between "Xeropotamos' substation and "Pafos" substation.
- Establishment of 132/22-11kV "Xeropotamos" substation at the new location.
- Upgrading the transformer capacity of "Akoursos" 66/11kV substation from 3 x 7.5/10MVA to 3 x 7.5/15MVA.
- Installation of a third 40MVA transformer at "Nea Pafos" 132/22-11kV substation.

The following studies will soon be completed and submitted for approval:

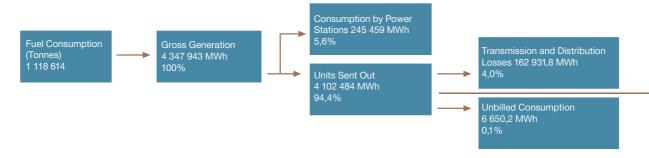
- Undergrounding part of the transmission line interconnecting "Anatoliko" substation with "New Pafos" substation.
- Establishment of the new primary substation "Ikaria".
- Installation of a third 132/22-11kV 40MVA transformer at "Andreas Hadjipaschalis" substation.





(Figure 4)

Electricity Generation & Sales 2005



## OTHER TRANSMISSION SYSTEM RELATED STUDIES

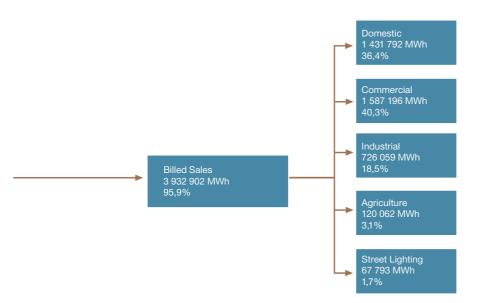
During the year 2005 the following studies were completed and approved:

- The transmission system reliability evaluation for the summer of year 2005.
- Budget expenditure for the development of the transmission system.
- Budget expenditure for the development of the distribution system.
- Digitisation of drawings.
- Hardware upgrade of drawing equipment.

The following studies will soon be completed and submitted for approval:

- Load forecasting for all Transmission substations for the period 2004-2024.
- Transmission system Power factor improvement study.
- Upgrading of the Ripple Control System.
- Study for interconnecting the distributed renewable energy sources to the distribution System.
- $\operatorname{\mathsf{Modelling}}$  of transmission system and equipment for analysis of the network.
- Transmission System Reactive Power Compensation Study.
- Calculation of electromagnetic fields strength in distribution substations.
- Calculation of maximum limit for the electromagnetic field strength along the route under transmission lines.
- Connection of high demand consumers to the distribution system.
- Introduction of the Geographical Information System (GIS).

All the development studies concerning the transmission system is carried out in cooperation with the TSO (Transmission System Operator).



# Networks Business Unit

#### **DISTRIBUTION SYSTEM**

During the year 2005, the number of completed and approved Distribution System studies was 7123 compared with 8865 for the year 2004. The expenditure for the completion of the 2005 program of works was 27,5 million pounds compared with 26,4 million pounds for the year 2004.

The remote operation of distribution system equipment has been installed, as a pilot project, in the Central and North West Area and covers both rural and residential areas. The remote system operation incorporates 38 distribution substations, 15 air-break disconnectors and 35 auto-reclosers. The purpose of implementing this remote system operation is to effectively speed up the switching operations of scheduled distribution work as well as the quick detection and isolation of faults in the distribution system enabling immediate restoration of power supply. This will entail significant savings in transport and manpower resources. The aim of the Authority is to render this new remote system operation a basic tool in the distribution asset management. The evaluation of the pilot project is expected to be completed soon in order to finalise the decision for the extension of the system to cover selective key equipment throughout the whole of the island.

The layout of the equipment installed in ground-mounted LV distribution substations has been re-designed in order to minimise the level of the electromagnetic field outside the substation building. The medium and low voltage switchgear are now centrally located within the substation building. The new design has been already implemented. Consequently, the design and manufacture of the LV distribution fuse-boards has also been revised in order to comply with the new design standards. Concerning the sensitive issue of electromagnetic fields, a research project has been initiated in cooperation with the University of Cyprus. The topic of the research study is: "Acceptable limits of exposure in the low frequency electromagnetic fields-Measurement and database set-up in Cyprus". This project is funded by EAC and has a completion target of 36 months.

During the year 2005, the staff of the Networks business unit has been heavily involved in the upgrading process of the SAP on-line system, concerning the materials management module and the project and scheme management (PSM) module.

# TELECOMMUNICATIONS AND ELECTRONIC SYSTEMS

## **Optical Telecommunications Network**

The EAC Optical Telecommunications Network, which was established in 2000, links 21 Substations, Power Stations and Area Offices. This network provides the communication facilities for the SCADA/EMS, Teleprotection, Telephone, Ripple Control, IT and other services. During 2005, the Multiplexers of the "Dhasoupolis" trasmission substation were upgraded to meet the requirements of the new Head Office, the Emergency control centre and the "Dhasoupoli" transmission substation.

## **Fibre Optic Network**

The Authority provides extensive overhead and underground fibre optic network.

In 2005, new fibre optic circuits were established throughout the EAC network for the needs of the EAC Strategic Partners in the Telecommunications. Two fibre optic rings were also established, one for the IT needs between the new Head Office – Lefkosia Area Office – Vasilikos Power Station, and one for the link between the Energy and Emergency Control Centres.





#### **Telephone Network**

The networking of the EAC telephone systems into one unified telephone network is towards the completion stage. The biggest part of this network will utilise the EAC fibre optic lines and only a small part of the network will use leased lines from the Cyprus Telecommunications Authority (CYTA). The completion of this network is expected in March 2006.

The study for a new structured telephone numbering scheme has been completed. The new scheme will cover all major EAC offices, Power Stations and Stores. Telephone re-numbering, is now in progress and it is expected to be completed by the end of March 2006.

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

The on-line and real-time Supervisory Control and Data Acquisition and Energy Management System (SCADA/EMS) which has been in service since 1997, provides facilities for the monitoring and controlling of the Generation, Transmission and Primary Distribution Systems through the Energy Control Center and the Distribution Control Centers.

In 2005, the project of upgrading continued with the establishment of an Emergency Control Center in the basement of the new Head Office building. A generator and an uninterruptible power supply system were also installed for the above needs. This project is being carried out in cooperation with the TSO that is fully responsible for the operation of the Energy Control System and the transmission system network.

The System was extended during 2005 to monitor and control two additional Transmission Substations whilst two new Terminal Equipment were installed in existing Substations. Furthermore, the monitoring and control system was further exploited to cover additional Substations.

## Load Management System (Ripple Control)

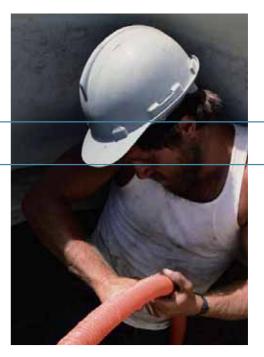
This system is used for the load management of controllable loads at the consumer premises (storage heaters, water heaters, water pumps, street lighting etc.) using power lines as communication medium.

The procedure for the System upgrade / expansion study was commenced in 2005, and it is expected to be completed in April 2006.

## **Security Systems**

The installation of the Security System (CCTV and Intrusion Alarm) of Pafos Customer Service Center has been completed and the System has been set in Operation.

Following a study for the security protection of Lefkosia Area Stores, Technical Specifications are under preparation for the supply and installation of a Security Alarm and Surveillance System.



# Networks Business Unit

#### Island - Wide Faults Reporting Center

During 2004, following an invitation of tenders and the relevant purchase requisition, EAC started cooperation with a private Call Center. The Call Center offers to EAC an Interactive Voice Response (IVR) system and other relevant equipment that are used by the Authority's Faults Reporting Center (FRC). A study took place and a telecommunications network was set up so that all incoming calls to EAC's FRC pass through the private Call Center (IVR) to the new FRC, which has been set up in Lefkosia Area Offices. After the FRC agents record the fault, a report is automatically sent to Lefkosia Service Center for immediate action. Following the solution of the commissioning problems, the FRC has been exploited in the Larnaka area with the relevant networking of the Larnaka Fault Reporting Center. Preparations are in progress for the expansion of FRC to cover the Lemesos and Pafos areas.

#### **Customer Contact Centre**

A study is in progress for the establishment of a Customer Contact Center that will provide telephone support to EAC's customers.

#### **Battery Chargers**

The work of replacement of the old batteries (which was commenced in 2003) for the 48VDC Battery Chargers supplying the Telecommunication Equipment has been completed in 2005. Batteries were replaced in 50 locations during the period 2003-2005.

#### **OTHER EFFORTS:**

# **Training Programs for AutoCAD**

Two training programmes were organised for the Authority's personnel in Head office and also the Area offices, covering the following subjects:

Basic Training in AutoCAD

Advanced Training in AutoCAD.

The training of the rest of the personnel groups, under this agreement, will be completed by the end of the 2006.

# **CIVIL AND BUILDING WORKS SECTION**

## INTRODUCTION

The Civil and Building Works Section is involved in all EAC major development projects concerning Transmission, Distribution and Power Generation. In addition it deals with all other Building and Civil Engineering projects of the Authority.







#### **POWER STATIONS**

#### **Moni Power Station**

The remedial works to the Cooling Water System and other structures of the Station that had commenced in 2004 have been completed in 2005. Other maintenance activities of a less urgent nature have been scheduled in subsequent years as part of a Term Maintenance Contract to be awarded in 2006.

#### **Dhekelia Power Station**

Drawings and specifications have been completed for inviting Tenders in 2006 for remedial works to the roof of the Turbine Hall and Annexes, the Desalination Plant and other buildings, to the coastal retaining wall and for upgrading other Station facilities. Remedial works of an urgent nature have been completed in 2005.

## Vasilikos Power Station

The Civil Engineering and Building Works for Unit 3 (Phase II) of the Power Station have been completed in 2005 with activities on the final account of the contract still in progress. Design drawings and specifications for upgrading station facilities and carrying out maintenance works have been completed for inviting tenders in 2006.

Within the context of the Turnkey Contract for Phase III development of the Power Station, the Tender Documents for the Building and Civil Engineering Works have been prepared and the Tendering procedure initiated.

During 2005 the following civil works were completed:

|                | Date of completion |
|----------------|--------------------|
| Constructions: |                    |

Melizona S/S February 2005 Commercial Centre Larnaka February 2005

Polemidhia S/S June 2005 Kofinou S/S May 2005

In addition the following civil works are under development:

# Expected date of completion: Constructions:

Larnaka Commercial Centre S/S February 2006
Ayios Athanasios S/S November 2006
Omonia S/S July 2006

## Extensions/Upgrades:

Alambra S/S June 2006
Karvounas S/S October 2006
Tembria S/S October 2006

# Networks Business Unit

#### **OTHER PROJECTS**

In addition to the Development Projects for the Generation and Transmission Systems, the Civil and Building Works Section dealt with the following projects:

## Renovation of the Old EAC Head Office Building

Tenders for the renovation of the old EAC Head Office building have been invited and the Contract was awarded. The works commenced in April 2005 and were completed in June 2005.

#### **EAC Stores in Larnaka**

The new EAC Stores in Larnaka are located in Aradippou Industrial Zone. The stores will be used by the Ammochostos - Larnaka Area Office and the Networks Business Unit. Construction commenced in March 2004 and is expected to be completed in April 2006.

#### **EAC Stores in Pafos**

The New Stores are under construction in the Ayia Varvara Industrial Zone in Pafos. The Stores will be used by the Pafos Area Office.

Construction commenced in November 2004 and is due to be completed in September 2006.

## **EAC Stores at Polis Chrysochous**

The New Stores are under construction in Polis Chrysochous Industrial Zone. The stores will be used by the Pafos Area Office for the needs of Polis Chrisochous Area. Construction has commenced in September 2005 and is expected to be completed by April 2007.

#### **New EAC Head Office**

The new EAC Head Office building handed by the contractor on the 18<sup>th</sup> March 2005. The personnel has moved in, on the 19<sup>th</sup> and 20<sup>th</sup> March 2005.

# **SYSTEM OPERATION**

## **Electricity supplied**

In 2005 the total number of units generated by the EAC's three Power Stations was  $4\,347\,943\,000\,$  kWh, compared with  $4\,176\,149\,060\,$  kWh in 2004, representing an increase of 4,11% over the previous year.

Figure 3 (page 38) shows the total number of units generated annually from 1998 to 2005. The predicted generation for the period 2006-2013 is also shown.

# **Generation, Transmission and Distribution Losses**

Electricity consumption at the power stations amounted to 5,6% of the total generation, compared with 5,4% the previous year.

Figure 4 (page 40) 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 1 102 621 metric tonnes, compared to 1 042 100 metric tonnes the previous year, representing an increase of 5,8%.

The total quantity of diesel fuel consumed by the power stations was 15 993 metric tonnes, compared to 8 430 metric tonnes the previous year, an increase of 89,7%.

The average calorific value of the fuel oil used was 42 696 kJ/kg compared to 43 250 kJ/kg in 2004.

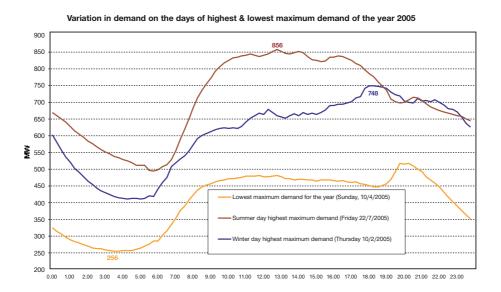
#### **Plant Efficiency**

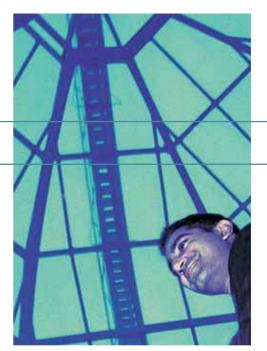
Average generating system efficiency in 2005, based on the total units generated by the EAC's three power stations, was 32,77% compared with 33,1% in 2004. The heat rate per kWh generated was 10 985 kJ/kWh compared to 10 880 kJ/kWh in 2004. The main aim was to utilise the higher efficiency units of the Vasilikos and Dhekelia Power Stations to cover the basic load to the maximum possible extent, taking into account maintenance and load demand.

# **System Reliability**

During 2005 a total of 20 faults occurred on the transmission system compared with 28 faults in 2004. These faults occurred mainly as a result of bad weather conditions.

(Figure 5)





# Customer Service Business Unit

#### **CONSUMERS**

At the end of 2005, the total number of consumers in the government-controlled areas of Cyprus stood at 436 279, a net increase of 16 932 or 4.04%.

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

# **BILLED SALES**

Billed sales in the government-controlled areas increased to 3 932,9 GWh, compared to 3 741,8 GWh the previous year, representing an increase of 5,1%.

- Table 2 (page 53) shows the allocation of billed sales to the various categories of consumers, as well as the percentage increase over the previous year.
- Electricity sales for the years 2003, 2004 and 2005 are shown in Fig. 6 (page 51). Electricity sales and revenue for 2005 are shown by consumer category as a percentage of total sales and revenue in Fig. 7 (page 58).

## **OFF-PEAK SUPPLIES**

Off-peak electricity sales (tariff Code 55) increased by 9 305 188 kWh or 8% compared to 2004. This increase is attributed mainly to the prevailing weather conditions. The number of consumers has increased by 695.

- Consumers opting for the off-peak tariff totalled 17 401, of whom 17 020 (97.5%) were domestic consumers with an average annual consumption of 7 205 kWh, compared to 6 922 kWh in 2004.
- Statistics for billed off-peak sales of electricity over the last five years are shown in Fig. 8 (page 59).



## **TARIFFS**

Following the introduction of new Cost-Related Tariffs on 1<sup>st</sup> March 2003, it became aware that a number of monthlybilled customers whose consumption had previously been classified under the Peak Demand Tariff were affected negatively and it was clear that some kind of rebalancing was required in order to satisfy this large section of our customer base.

By the relevant Amended Regulation 58/2004, which was published in the Official Gazette of the Republic, the method of temporarily regulating the bills of monthly billed customers was approved and implemented with immediate effect. This gave the EAC the required time to resolve the problem satisfactorily, through the introduction of revised Tariffs. Based on this temporary arrangement regarding monthly billed customers, from 1st March 2003 and for every 12-month period thereafter until the introduction of new Tariffs, if the Authority's total revenue from the specific consumer exceeds the amount it would have earned from the consumer based on the tariffs in place before the introduction of Cost-Related Tariffs, the additional income would be credited to the consumer's account.

This arrangement continued satisfactorily this year. For better customer service and information, a comparative electricity bill was sent to all monthly billed customers (giving the amount payable based on the present Cost-Related Tariffs as opposed to the previous tariff) irrespective of whether they had benefited or not from this arrangement. The bill in question concerns the period March 2004-February 2005.

The EAC has set up a Tariffs Group and procured Consultancy Services for the preparation of a complete study for the introduction of new revised Tariffs, in accordance with the Authorities for Regulatory Policy and Electricity Pricing Methodology in the context of the relevant Legal and Regulatory Framework, which will be submitted to the Cyprus Energy Regulatory Authority for approval and implementation. The whole project is at an advanced stage and is due to be completed during 2006.

In the context of the upgrading of the EAC's services and its efforts aimed at energy conservation, we again sent out an annual statistical report to all our monthly billed customers. This report includes information on monthly consumption and Peak Demand regarding their premises, as well as monthly voltage and load indicators, indicators that are directly linked to the proper energy use and conservation.

The Regulation of the Electricity Market Law of 2003, N.122(I)/2003 authorises the Minister of Commerce, Industry & Tourism to instruct the Cyprus Energy Regulatory Authority (CERA) to impose upon any holder of a License for the Provision of Electricity certain Public Interest Obligations which, among others, concern the price for supplying electricity. Following the issuing of relevant instructions by the Minister, the EAC is working on a special tariff for large and needy families which is due to come into force at the beginning of 2006.

The average selling price of electricity per kWh in all categories increased from 5,646 cent in 2004 to 6,431 cent in 2005, an increase of 13,9% as a result of the automatic fuel cost adjustment applied to the market price.

The above selling price does not include Value Added Tax. With VAT included, the average selling price per kWh rise from 6,4929 cent in 2004 to 7,3956 cent or 13,9%.

# Customer Service Business Unit

# **CUSTOMER SERVICE AND BILLING SYSTEM**

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

After the preparation of specifications and the publication/evaluation of tenders, the project was won by SPL World Group Ltd. Work began on 4<sup>th</sup> July 2005 and will take 15 months. The whole project is progressing according to schedule.

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

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

# **ISLAND WIDE FAULTS REPORTING CENTRE (IFRC)**

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

The IFRC is currently located on the second floor of the old Head Office building and is manned by ten clerks acting as Customer Service Officers. Following a competition, Faults Reporting Centre services have been procured from the company EVRESIS, with which our collaboration to date has been satisfactory.

IFRC service is currently provided to the Lefkosia-Keryneia-Morfou Area Office and to the Ammochostos-Larnaka Area Office. During the first third of 2006, IFRC service will be extended to cover the Pafos and Lemesos Area Offices.

In the future, the IFRC will be one of the main features of the EAC Call Centre.

# **CALL CENTRE**

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

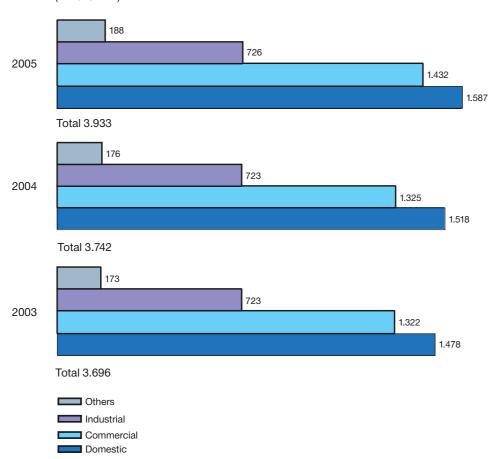
The Call Centre will enable the EAC to provide good quality service and information to consumers/customers quickly and efficiently, to promote the image of a progressive and dynamic Organisation and to respond to the expectations of consumers/customers.

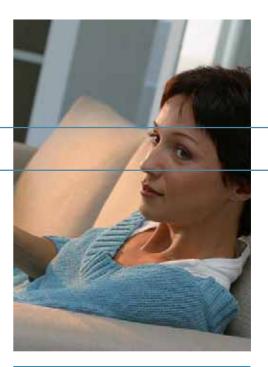
After the preparation of specifications and the publication/evaluation of tenders, the project was won by the Irish firm ESB International. A working group was established and the whole project began on schedule. The Call Centre is due to be up and running in two years.

The project is currently at the stage of evaluation/analysis, in collaboration with the Consultants.

(Fig. 6)







# Customer Service Business Unit

## **RENEWABLE ENERGY SOURCES**

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

The EAC cooperates well with the Energy Service of the Ministry of Commerce, Industry & Tourism for joint action on the subject of RES. Interested applicants/producers are given all possible technical assistance and priority examination of their applications to install units for generating electricity from RES. In order to set a good example, the EAC has installed an 86 KW Photovoltaic System in its new Head Offices in Lefkosia, thus giving it an active presence in the RES sector.

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

During 2005, some 23 Photovoltaic Systems were connected to the EAC Grid, producing up to 5kW of electricity and great interest has been expressed in connecting other new Systems, despite the high installation costs of such Systems at present. Several applications have also been received for the installation of Wind Farms but these are currently at the stage of obtaining the necessary approvals.

Table1

NUMBER OF CONSUMERS

|                   | AS AT 31.12.2005 | AS AT 31.12.2004 | INCREASE % |
|-------------------|------------------|------------------|------------|
| CONSUMER CATEGORY |                  |                  |            |
| Domestic          | 332 338          | 318 640          | 4,3        |
| Commercial        | 74 916           | 72 941           | 2,7        |
| Industrial        | 10 956           | 10 595           | 3,4        |
| Agricultural      | 10 931           | 10 400           | 5,1        |
| Street Lighting   | 7 138            | 6 771            | 5,4        |
| TOTAL             | 436 279          | 419 347          | 4,0        |

Table 2

BILLED SALES OF ELECTRICITY (MWh)

| CONSUMER CATEGORY | 2005      | 2004      | INCREASE % |
|-------------------|-----------|-----------|------------|
| Domestic          | 1 431 792 | 1 324 774 | 8,1        |
| Commercial        | 1 587 196 | 1 518 582 | 4,5        |
| Industrial        | 726 059   | 722 850   | 0,4        |
| Agricultural      | 120 062   | 117 478   | 2,2        |
| Street Lighting   | 67 793    | 58 146    | 16,6       |
| TOTAL             | 3 932 902 | 3 741 830 | 5,1        |

# Customer Service Business Unit

## LOAD RESEARCH AND CONTROL

In the context of its efforts to upgrade its load research, the EAC has been using since 2000 a software package by which data is retrieved via the telephone network. This program enables direct monitoring of customer loads, the automatic retrieval of data and the timely preparation of load research reports. It is anticipated that in 2005 this application will gradually cover all the Authority's corporate customers who are supplied at medium and high voltage.

Following the completion of the period for recording the load of domestic 05, 06 and 07 customers, recording equipment was reinstalled with the same sample of customers in order to record their load during 2006.

Another major customer category whose load was monitored with special load research recording equipment is that of monthly Peak Demand commercial customers, classified for tariffs 61, 62 and 63.

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

It is reasonable and to be expected that in the eventuality of the EAC proving unable to satisfy the increased demand due to major faults at Power Stations, especially during the summer months, the Transmission System Manager has no choice but to shed load by cutting power to our customers.

To avoid such a situation, possible solutions were studied with a view to dealing with increased demand by controlling the load to customers with centralised airconditioning systems and those with backup generators, in exchange for financial incentives to them in the form of special tariffs. To this end, special tariffs were approved by the Cyprus Energy Regulatory Authority on 20<sup>th</sup> May 2005.

Customer response was higher than in 2004, following the revision of the 2004 special tariff for backup generators. In 2005, 37 customers accepted the special tariff, representing 34% of the total number of customers with an installed load of 14.3 MVA, compared to last year's figure which was 26% with an installed load of only 7.2 MVA.





## **TECHNICAL ISSUES**

During 2005, the department of the Customer Service Business Unit responsible for Technical Issues dealt mainly with the following issues pertaining to:

- The Metering system
- Street Lighting
- Energy Conservation
- Wiring Regulations for electrical installations in buildings
- Electricity Generation via Renewable Energy Sources
- Revenue protection from electricity theft
- Monitoring of the quality of electricity supply.

Specifically, during the year under review, the Meter and Relay Testing Centre (MRTC) received 18 060 new meters. A total of 18 805 new meters were checked and calibrated, 903 second-hand meters were repaired and recalibrated, about 1 307 Ripple Control Receivers were programmed and tested and 1 180 street lamps were repaired and tested.

In 2005 the AMR system was expanded and all personnel involved in its use were given the relevant training. 364 meters have been disconnected and measurements are now recorded automatically. Moreover, specifications were drawn up and tenders awarded for the equipment used in the MRTC and Area Offices relevant to the Metering system and Street Lighting.

Regarding the monitoring of the quality of supply to customer premises, the Executive Section installs Power Disruption Analysers and, wherever it is considered necessary, corrective measures are taken.

# **EAC REVENUE PROTECTION**

In 2005, personnel dealing with EAC revenue protection from theft of electricity checked 4 891 meters on the premises of high-risk customers. Of these, 2 001 were found to be intact, while 2 724 meters had been tampered with, though they showed no sign of electricity theft. In 166 instances, meters were found to have been tampered with and there were signs of electricity theft. In relation to these, a total of £278.661 was recovered in respect of unrecorded consumption, damage to EAC equipment and the cost of investigating the cases.

Investigations that began in 2001 into 168 cases of electricity theft (the Masoura case) continued during 2005. The total value of unrecorded consumption has been estimated at  $\mathfrak{L}_{2,9}$  million and payment of  $\mathfrak{L}_{1.064.448.60}$  has been arranged. The EAC has taken legal action against those involved in order to recover the remainder.

# Customer Service Business Unit

# **QUALITY CERTIFICATION OF THE METER AND RELAY TESTING CENTRE (MRTC)**

In the context of the EAC's declared 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). Preparatory work has already started and is at an advanced stage, and it is planned that the necessary inspections for Certification will begin in April 2006. The relevant Accreditation work is due to be completed by December 2006. Upon completion the necessary inspections for Accreditation will begin.

Certification of the workshop will be in accordance with ISO 9001:2000 while Accreditation will be ISO/IEC17025.

The relevant Quality 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**

Following liberalisation of the market, there is an ever more imperative need that the Organisation's image be seen to be constantly improving. Competition brought about by Cyprus' European Union membership, rapid developments in technology and the continuously growing demands of its customers oblige the EAC to plan Public Relations campaigns aimed at letting customers know about all issues pertaining to energy and the work of the EAC.

It falls to the Public Relations Department to plan PR campaigns aimed at upgrading the image of the Organisation, establishing a single corporate identity, improving the EAC's relations with the general public, involving it in society and ensuring that the public is fully aware of the EAC's activities and services.

In this context, the EAC continued in 2005 to provide advisory services to all its customers on matters of interest to them. The General Terms governing the provision of electricity, EAC policy on electrification, tariffs and general information are among the topics that are always of interest. As it happens every year, during 2005 lectures were held to organised groups and to groups of EAC customers on issues concerning the conservation and safe use of electricity, the new cost-based tariffs and electromagnetic fields.

In the framework of improving internal communications among EAC personnel, the Authority publishes the magazine EAC News. This magazine is distributed not only to EAC personnel but also to various other organised groups, individuals and services outside the Organisation. In 2005 the Department was also responsible for sending regular e-mails to all the staff for better briefing on issues or events of interest. In the context of activities for improving the distribution of information to the public, a general review took place of all the information available via the EAC website and a timetable was adopted for the regular updating of this information.

Theatre, music, art and other cultural events, sport, education, the environment and, in general, projects and events that stem from our deep cultural roots, are areas to which the EAC gives emphasis in its sponsorships which it has been providing since 2002. The Organisation's aim is to leave its mark on endeavours to raise cultural standards on the island. In 2005, the EAC continued to support a variety of first-rate theatre, music and dance performances, the work of several charitable organisations, art events such as the Permanent Collections of the Lefkosia Municipal Arts Centre, 'The Power House', and the lighting of the excellent Photographic Exhibition, "Earth from Above".

In the same context of these sponsorships are the sponsoring of seminars and lectures on the subject of energy conservation and the promotion of Renewable Energy Resources. Broadening its social contribution and knowing the charitable feelings of the staff, the EAC Management accepted a request from UNICEF to organise events at the various EAC offices with the aim of raising funds for UNICEF. The coordination of these events, which were extremely successful and led to a desire on the part of UNICEF for similar cooperation this year, was undertaken by the Public Relations Department. The Authority was once again involved in sport as in 2005 was one of the major sponsors of the Basketball Federation and the country's national teams.

The EAC participated in various conferences, seminars and specialist exhibitions and fairs, enabling the public to obtain first-hand information on all aspects of the Authority's activities and its development projects. It is worth noting the EAC's participation in the 30th Cyprus International Fair, where the public had the opportunity to learn about EAC services and to ask questions. At the same time, the EAC had a chance to assess and evaluate complaints and problems facing its customers and to take remedial action to resolve them.

Each year the Public Relations Department undertakes the presentation of the EAC's Annual Report. On 24<sup>th</sup> October, 2005, representatives of the commerce and industry sector, government ministers, Members of Parliament, officials of other semi-government organisations, government departments and professional associations were invited to the presentation of the Annual Report. A full account of the Organisation's financial results and development program was given with the use of audiovisual means.

On the 28<sup>th</sup> of June 2005, the Public Relations Department organised the official opening of the EAC's pioneering new building which houses the Organisation's Head Offices in Strovolos. The opening ceremony was carried out by the President of the Republic, Mr Tassos Papadopoulos, before 250 invited guests, including state and government officials, EAC partners, etc.

In January 2005, the Department organised the Award Ceremony for the Architectural Competition for the new Larnaka Area Offices.

On the 18<sup>th</sup> of April 2005, the Public Relations Department organised a press conference concerning the signing of a Cooperation Agreement between the EAC and the University of Cyprus. The aim of this cooperation is the promotion of various activities in the field of Research and Development, and the exploitation of the experiences of the two Organisations for the benefit of Cypriot society.

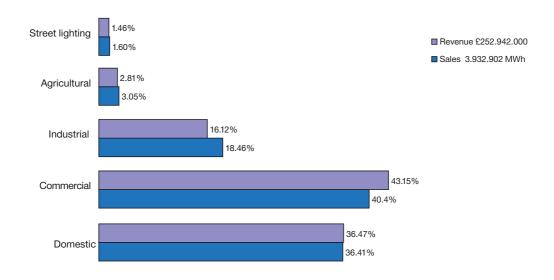
# Customer Service Business Unit

# MARKET RESEARCH INTO THE EAC'S IMAGE

In 2005 the Customer Service Business Unit assigned to RAI Consultants the task of carrying out market research concerning the general public's image of the EAC. Three surveys on Customer Service Centres, customer expectations/awareness of EAC services, and the public image of semi-government organisations. The results revealed that the image of the EAC had improved, compared with the results of similar market surveys carried out two years ago.

(Fig. 7)

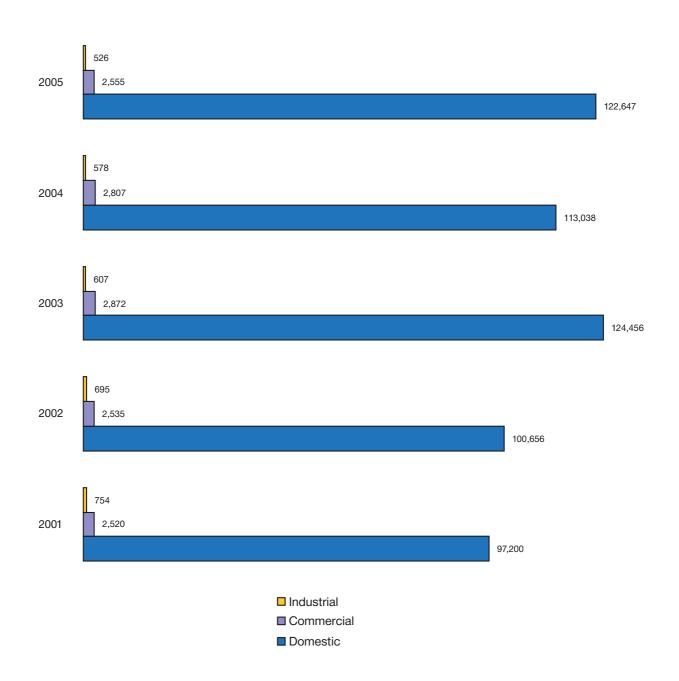
ELECTRICITY SALES & REVENUE BY CONSUMER CLASS



(Fig. 8)

# OFF PEAK ELECTRICITY SALES

Tariff Code 55 - thousand kWh



# Common Services Business Unit

#### PERSONNEL SERVICES

The Authority's staff

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

|              | 2005  | 2004  |
|--------------|-------|-------|
| Professional | 275   | 279   |
| Clerical     | 380   | 381   |
| Technical    | 1 377 | 1 390 |
| Total        | 2 032 | 2 050 |

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 2 028.

## The Authority's pensioners

The total number of pensioners at the end of the year who received pension was 942 (including six missing persons since the Turkish invasion of 1974) compared to 903 at the end of the previous year. In addition 207 pensions were paid to widows and orphans of deceased pensioners/employees compared to 196 at the end of the previous year.

#### **Manpower indicators and Productivity**

Variations in productivity are shown in Figure 9 (p. 63) which indicates the relationship between the Authority's manpower, the total units billed and the number of consumers during the ten year period 1996-2005.

Absenteeism due to sickness and/or industrial accidents was 3,4% or 12,3 days per EAC employee compared to 3,4% or 12,6 days per employee at the end of the previous year.

## **INDUSTRIAL RELATIONS**

The process for reaching an agreement with the Unions on a number of important issues was further promoted by the end of the year.

These issues concern the renewal of the Collective Agreement, the extension of the retirement age and the casual workers conditions of employment.

In particular, the Authority's Human Resources Management conducted several meetings with the Union representatives, examined the above-mentioned subjects and submitted to the Union representatives proposals for reaching an agreement.

Further meetings between the Human Resources Management and Union representatives were held during the year, for revising certain professional staff's schemes of service, for examining shift employees medical examinations and annual leave matters, for upgrading the shift employees facilities at the Dhekelia Power Station, for examining the allowances granted to eligible personnel, for signing an agreement for contructing Draughtsman services, for solving and finalizing issues related to the latest collective agreement and various other Human Resources related matters.

Furthermore, the Human Resources Management organized and participated in very important meetings related to the functioning of the recently formed Transmission Operators Unit (TSO).

It is also worth noting that the Human Resources Management coordinated a number of meetings between EAC's Senior Management and the Unions, held for examining major issues resulting from EAC's Development plan.

# Common Services Business Unit

## **HUMAN RESOURCE DEVELOPMENT**

#### **Education and Training**

EAC in striving to transform into a flexible, more efficient and competitive organization, especially now with the accession to the European Union, is paying particular attention to the role of Education and Training. Aiming at training its human resource on an organized and systematic basis and after a relevant study by external consultants EAC Training School has commenced its operation with a view to offer certified training for each class of employees.

During 2005, there were 2 806 participations from members of the staff in over 100 in-house courses and seminars, organised by the Authority's Training School, which covered a wide range of topics. 1 130 of these participations were in courses for the upgraded SAP IT System. We had 265 more participations from employees in various open educational programmes and training courses, organized by local educational institutions and other organisations, whilst 30 members of the professional staff attended training courses or participated in conferences and seminars abroad. In total 3 100 employees attended training courses, which is an all time record for EAC (increase 103% from last year) while the cost was reduced due to the fact that most employees are being trained in-house. The in-house training courses were subsidised by the HRDA with the amount of £67.000.

Within the operation of the Training school, for the first time two series of training were given of 130 hours duration to staff recently promoted to technicians for multiskilling (Linesmen and Cable Jointers).

Within its social responsibility EAC offered industrial training to 22 final-year students of the Higher Technical Institute (HTI) and summer vacation training to 49 University and HTI students. Moreover EAC participated in the programme of the International Association for the Exchange of Students for Technical Experience (IAESTE) offering technical experience to 4 international students.

## **Promotions**

During 2005 the procedure for promoting 112 employees was completed, one of which did not accept.

# Recruitment/Retirements/Termination of Employment

During the year, staff vacancies for several posts were announced and 47 new employees were recruited to fill various vacant posts. It should be noted that during the year, 33 employees retired due to age, one employee opted for early retirement, 21 employees took advantage of the early retirement scheme, seven employees terminated their services and two employees passed away.

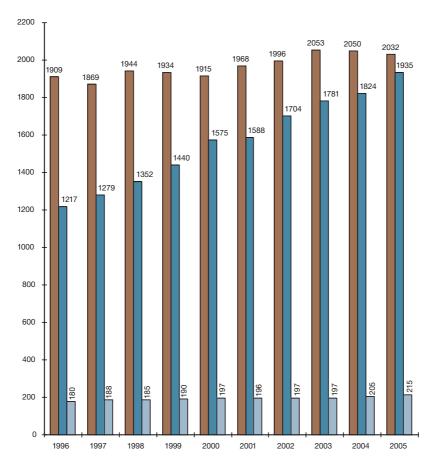
## **Scholarships**

During the year, EAC offered 66 scholarships to children of employees attending University courses abroad and 17 scholarships to children of employees attending courses in Cyprus.

(Fig. 9)

#### MANPOWER INDICATORS

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



# Common Services **Business Unit**

# SAFETY, HEALTH AND WELFARE

#### **Medical Care**

During the year the EAC contributed C£2.260.876 (C£2 .149.320 in 2004) to EAC Employees Medical Fund, as well as C£100.000 (C£100.000 in 2004) 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 2005 were 7 906 ( 2 009 employees/members, 948 pensioners and 4 949 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 C£228.000. 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 which were taken over by the EAC. The members of the Funds, as at 31 December 2005 were 1 873.

#### **Welfare Funds**

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

## **Long Service Certificates and Awards**

The following awards were presented:

- The EAC's Long Service Certificates were awarded to 52 employees, who retired during 2005 and had completed more than 20 years of service.
- The EAC's Silver Medal was awarded to one employee, who had completed during 2005, 30 years of service.
   The EAC's Gold Plated Plaques were awarded to 13 employees, who had completed during 2005, 40 years of service.





#### Safety and Health Inspections

The Safety Officers visited/inspected regularly during the year the following EAC departments:

- Area Overhead Construction departments
- Area Underground Construction departments
- Substation's maintenance departments
- Area offices and other premises
- Transmission and Distribution substations
- Power Stations
- Construction works for the 2nd phase of Vassilikos Power Station
- Construction works for the new Area Stores in Larnaka and Pafos

#### **Medical Examinations**

The routine medical examinations (radiography of thorax and audiograms), which the Power Stations employees are subjected to each year for preventive reasons have been successfully completed.

The personnel that work with materials containing asbestos in the Moni Power Station had additional medical examinations and a relevant medical Certificate was issued.

#### **Environmental auditing**

The environment in the Power Stations was monitored in accordance with the Directive  $\Delta A\Delta$  3/3/04 of the Human Resources Department.

Measurements for noise level, asbestos fibres in the air,  $SO_2$  leakages and environmental dust, were carried out regularly during the year.

Regarding the EU Directive 2004/40/EU, measurements of the Electromagnetic Field level in several places of all District Areas and Power Stations have been carried out.

#### Central and Local Safety Committees

The Central and Local Safety committees held regular meetings and examined various problems relating to the occupational health and safety.

# Common Services Business Unit

#### Safety and Health Week

The Safety and Health week was organised in the period 14-18 November. During this period various events and lectures were organised on subjects of Occupational Safety and Health in Power Stations and Area Offices of EAC such as:

- Evacuation exercises in cases of fire or earthquake
- Safe use of chemical substances
- Lectures on Safety Regulations and on other related subjects
- First Aid training

#### **Training**

The technical personnel (supervisors, technicians and workers) of the overhead and underground departments have attended a three-day course on health and safety matters related to their work.

#### Other activities

The Safety Officers prepared the specification for the Risk Assessment Contract.

The Central Safety Committee adopted and submitted to the Human Resources Manager the report on the upgrading of the First Aid training in EAC, which had been prepared by an assigned Working Group.

Regarding the Cyprus Legislation for «SEVESO II» and the relevant EU Directive a Safety Plan was prepared and the Ministry of Labour and Social Insurance was notified accordingly.

# **ADMINISTRATION**

## **Administrative Department**

During the period January-December 2005 the Administrative Department dealt with the following activities:

# **ADMINISTRATION SERVICES DEPARTMENT**

## **Various Agreements**

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

# Announcements/Publications

804 announcements concerning tenders, interruptions of supply, vacancies etc. have been handed over to the Press and Information Office, the local press and the Government Printing Office. Announcements concerning the interruptions of supply have also been handed over to CBC for radio broadcasting.

#### Maintenance of Office Buildings

The Administration Service Department dealt with 146 cases concerning the maintenance of office buildings as well as the office equipment.

## I.T DEPARTMENT

During the period January – December 2005 the I.T Department carried out the following tasks:

- In February 2005 the installation of the new I.T network was successfully completed, using the EAC's fiber optics.
- Successful completion of the major part of the SAP upgrade (apart from the Human Resources and Payroll modules which are due for completion in March 2006).
- Completion of the evaluation of Tenders for the purchase of a Billing & Customer Service package. Its implementation started and is due for completion towards the end of 2006.
- Completion of the evaluation of Tenders for the purchase of the Handheld Devices System (for meter readings). Its implementation was successfully completed at all EAC's Area Offices and Customer Service Centers.
- Completion of the evaluation of the Management Software and Hardware System for the Electronic Filing and Archiving of minutes of meetings (for the EAC's Board) the implementation of which was successfully completed in July 2005.
- Completion of the evaluation of Tenders for the purchase of special printers for using at the EAC's counters so that the use of a stamp on the electricity bills is avoided. Their installation was successfully completed in June 2005.
- The RFQ for the Hardware Infrastructure was published but due to problems considering the tenders it was cancelled. New specifications were prepared and sent to the Purchasing Department for re-tendering.
- Completion of the evaluation of Tenders for the purchase of personal computers, notebooks and printers. The personal computers and printers have been already delivered while the delivery of notebooks is due in early 2006.

## **PURCHASING SECTION**

Between January and December 2005, 18 high expenditure contracts were awarded, with a total cost of C£99.286.801.

Additionally, 215 low expenditure tenders were also issued for the procurement of materials and equipment costing a total of C£22.652.661.

# Corporate Development Management Unit

#### **NEW BUSINESS DEVELOPMENT**

Expansion of the EAC's activities in the Telecommunications sector and the commercial exploitation of its infrastructure

#### Agreements for Strategic Cooperation

In 2005, the Organisation continued to provide infrastructure to its Strategic Partners for the commercial exploitation of its Optical Fibre Network and other EAC infrastructure for telecommunications purposes.

During the year, numerous problems arose relating to late payments and to the interpretation of terms of the agreement regarding the Partners' contractual obligations to the EAC. In order to resolve these issues, meetings were held with the Strategic Partners. In the case of Primetel a mutually acceptable arrangement was agreed upon concerning pending issues, by which Primetel consented to provide a bank guarantee to the EAC for the total duration of the agreement, thereby securing the Authority's interests.

Despite warnings and the provision of additional time, NV Cable Communication Systems did not fulfil its obligations to the EAC. In October 2005, the contract with NV Cable Communication Systems was terminated as a result of the company's systematic failure to pay the EAC outstanding rent and other amounts owed for services rendered. In accordance with the terms of the contract, the company was requested to remove all its equipment installed on the EAC network within six months.

The EAC is looking into the development of other activities and the use of new technology in order to earn additional income to act as a counterbalance for the predicted reduction in its share of the liberalised energy market.

The Corporate Development Business Unit worked with the Ministry of Commerce, Industry and Tourism to obtain Liquified Natural Gas (LNG) which will be used as fuel in the new Units to be installed by the EAC from 2010 onwards.

At the same time, the Corporate Development Management Unit has been in contact with various companies specialising in LNG supply issues with a view to cooperating on the whole LNG supply project, which is seen as a new business opportunity for the EAC.





#### RESEARCH AND DEVELOPMENT

During 2005 the EAC completed its participation in the RES2H2 research project concerning the successful design and installation in Greece of two green hydrogen generation and storage pilot units using wind power. The EAC and the other participants in the project have received broad recognition for this, given that the pilot unit is the first of its kind in Europe.

The EAC has also almost completed its participation in the MAST B Liquid research project in the sector of new technology for mixed air-steam turbines.

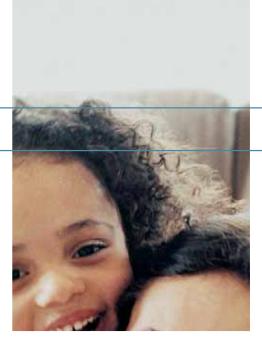
During 2005, the EAC continued its participation in three research projects: EU-DEEP, HYDRONOx and HYDROGEN/FUEL CELLS. EU-DEEP is one of the most important European research projects and is funded by the Sixth Framework Program of Research and Development of the European Union, while the other two projects are funded by the Research Promotion Foundation of Cyprus.

At the end of 2005, agreements were signed concerning the EAC's participation in the KORONA research project which was proposed by the EAC and is funded by the Research Promotion Foundation of Cyprus. The EAC is also an active participant in another important European research project, CACHET, which was evaluated in 2005 and recommended for funding by the Sixth Framework Program of Research and Development of the European Union.

Three more research proposals have been prepared and submitted by the EAC for evaluation under the Sixth Framework Program of Research and Development of the European Union. These are PV MARKET, Large Transmission and GROW-DERS. Moreover, two more proposals, currently at the negotiation stage, have already been evaluated successfully. They are DISTRES (a research project focusing on the Mediterranean countries, for which the EAC will be the coordinator) and SOLID-DER.

The EAC has created a website concerning its activities in research and development which can be accessed via the Organisation's homepage (www.eac.com.cy). Moreover, a number of articles have been published in international journals and conference presentations made in connection with these activities.

In April 2005, a Cooperation Agreement was signed between the EAC and the University of Cyprus. The resulting cooperation in the field of Research and Development will concern issues of mutual interest.



# Corporate Development Management Unit

# STRATEGIC PLANNING MANAGEMENT

With the help of consultants, the Strategic Planning Department has designed a systematic development process for Strategic, Policy and Annual Business Planning. Its aim is the efficient operation of the Organisation during this transition period which is crucial for business equilibrium, competitiveness, the partial liberalisation of the Electricity Market and future developments.

To this end, a Core Group of eight individuals was set up to collaborate directly with the consultants, while a broader group of 23 was created from all the Organisation's workplaces for direct briefings and making the entire staff aware of the EAC's strategy.

Once implemented, this new process will help the Organisation to focus its activities more effectively so as to become more flexible and competitive in the new competitive environment.

# QUALITY ASSURANCE & BUSINESS EXCELLENCE QUALITY ASSURANCE DEPARTMENT

During 2005, the Quality Assurance Department dealt with the following:

#### Certifications - Upgrades of Quality Systems

Work began on obtaining Quality Certification/Accreditation (ISO9001:2000 and ISO17025 respectively) for the Meter and Relay Testing Centre (MRTC). The aim is to gain Certification by May 2006 and Accreditation by the end of the year. This Quality Certification and Accreditation are part of the Quality Strategy for the eventual certification of the entire Organisation, thereby fulfilling the EAC's commitments to the Cyprus Energy Regulatory Authority and the Transmission Systems Manager in this sector.

Work began in collaboration with the IT department for the preparation of a computer system aimed at the full traceability of meter counting and movements and of customer equipment.

Throughout 2005, work aimed at obtaining ISO 9001:2000 Quality Certification of the Lemesos area Construction Department continued, as did efforts to integrate the existing Quality System with Islandwide Faults Reporting Centre (IFRC) which is in development.







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

Notifications of EAC Power Station operations were drawn up, containing sufficient information to identify dangerous substances, their physical form, quantity and storage facilities at Power Stations, as required by the Regulations concerning the prevention of major accidents which involve dangerous substances (507/2001).

The notifications were sent to the Ministry of Labour within the time prescribed by the Legislation. To complete the task, a large number of staff from the three Power Stations worked systematically in full cooperation with the main Quality Team.

Activities have been stepped up with the aim of preparing and implementing a Major Accident Prevention Policy, as well as all the Safety Management System archives, as provided for in this Regulation.

#### Internal Audits

In May 2005 an internal audit of all the ISO9001:2000 Quality System Processes was carried out by the internal auditors and Area Quality Assurance Officers.

Internal audits were also carried out by a select number of internal auditors, with regard to instances of non-conformance with the November audit.

At the request of the Lemesos Area Management, the main Quality Team carried out an internal audit in the area, covering certain aspects of ISO9001:2000 and EFQM criteria. The results were communicated to Area Management for further action.

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

From July 11-13, 2005, an external Quality Systems inspection was carried out by the Cyprus Organisation for Standardisation. The results of the inspection were presented to senior management with the aim of making constant improvements to the Systems.

### Corporate Development Management Unit

#### **Critical Indicators and Action Plans**

At the beginning of 2005, the Management Council proceeded with determining the EAC's Key Performance Indicator objectives, after taking into account proposals from Area Management and the Quality Assurance Department. The Area offices also began preparing Action Plans for each of the Critical Indicators with the ultimate aim of reaching all the set targets.

#### Reports to Management

The annual Management Review regarding Quality Assurance was prepared and presented to the Management Council in July. During the review, a detailed report was made regarding the Authority's results and, in particular, the key performance indicators regarding customers, personnel and Business Results.

#### Monthly review of Key Performance Indicators and special Indicators

A system has been designed to monitor monthly area performance indicators and forward them systematically to local management. Information received will include Continuous Improvement management indicators, personnel suggestions, customer complaints, etc.

#### **Productivity Indicators**

Following a decision by a personnel subcommittee, a report was drawn up concerning the preliminary methodology for measuring a number of Productivity Indicators which were presented to the Customer Service Business Unit.

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

Efforts are ongoing in the implementation of a system for measuring all Key Performance Indicators as determined by CERA and the recording of the relevant processes for systematic monitoring.





#### **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.

The website of the Quality Assurance Department's intranet was reviewed and upgraded by providing access to Area Complaints, Information and Faults systems as well as to all Management Reviews and to the Quality Manual. The website also enables access to Key Performance Indicators via an automated monitoring system.

Improvements were made to the existing Indicators and Quality Circle Monitoring System. The Area Continuous Improvement Management system was upgraded.

Automation of the monthly Area reports was also completed.

#### 360° Feedback

In collaboration with the Quality Assurance Department, an external partner concluded a study aimed at using a development tool to improve Management efficiency. The report contains results for Department Heads, colleagues and staff. The main aims of the study may be summed up thus:

- Determining the Management style used in the Organisation.
- Identifying the root causes of stressful relations between senior management and staff in the Organisation.

The results will be given personally to all Managers and members of staff involved in the study.

#### International Conferences - Presentations

International Conferences on Environmental and Quality Management took place in Cyprus. The EAC was directly involved in their organisation and in the submission of proposals. The Conferences were attended by a large number of senior managers.

### Finance Management Unit

### **FINANCIAL STATEMENTS**

The financial statements of the EAC for the year 2005 together with the supporting statements are set out in pages 82 to 109. The principal financial statistics for the ten-year period 1996-2005 are summarised on page 79.

**Table 3**Consolidated income statement for the year ended 31 December 2005 and changes from previous year

|  | C£        | 000                    |
|--|-----------|------------------------|
|  | 2005      | Increase<br>(Decrease) |
| INCOME                                 |           |                        |
| Sales of electricity                   | 252.942   | 41.634                 |
| Consumers' capital contributions       | 7.061     | 542                    |
| Other operating income                 | 3.972     | 2.555                  |
| Finance income                         | 4.083     | (1.020)                |
|  | 268.058   | 43.711                 |
|  |           |                        |
|  |           |                        |
| OPERATING COSTS                        | (229.151) | (50.943)               |
| Operating profit                       | 38.907    | (7.232)                |
| Finance costs                          | (5.005)   | 2.231                  |
| Profit before tax and exceptional item | 33.902    | (5.001)                |
| Exceptional item                       | (693)     | 14.307                 |
| Profit before tax                      | 33.209    | 9.306                  |
| Tax                                    | (9.757)   | (255)                  |
| Profit for the year                    | 23.452    | 9.051                  |
| Units sold (million kWh)               | 3 932,9   | 191,1                  |

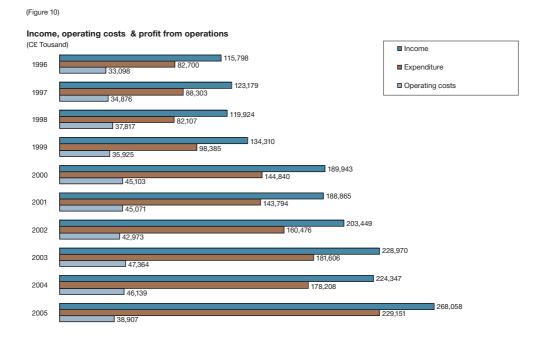
#### **FINANCIAL RESULTS**

The financial results for the year and the changes from the previous year are shown in Table No. 3 page 74. The income from sales of electricity for the year, totaled to C£252.942.000 (an amount of C£2.000 relates to charges arising from unrecorded consumption) showing an increase of C£41.634.000 or 19,7%. The total operating costs were C£229.151.000 showing an increase of C£50.943.000 or 28,6%. After accounting for finance cost amounting to C£5.005.000 there was a profit before the exceptional item of C£33.902.000 compared to a profit of C£38.903.000 in the previous year. After the deduction of tax amounting to C£9.757.000 the net profit was C£23.452.000 (2004: C£14.401.000).

#### **ANALYSIS OF OPERATING EXPENSES**

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

The average cost of fuel oil used by the EAC power stations increased by 37,7% to C£108,64 per metric tonne. The consumption increased by 6,5% to 1 118,6 thousand metric tonnes. As a result of the above the fuel oil bill increased by C£38.630.000 to C£121.523.000.



### Finance Management Unit

Table 4

Analysis of Operating costs

|  |         | 2005  |                          | crease(Dec<br>ver 2004 | rease) |
|--|---------|-------|--------------------------|------------------------|--------|
|  | C£0000  | %     | Cents<br>per kWh<br>sold | C£000                  | %      |
| Fuel oil                                   | 121.523 | 53,0  | 3,090                    | 38.630                 | 46,6   |
| Salaries and related costs                 | 41.966  | 18,3  | 1,067                    | 2.561                  | 6,5    |
| Deficiency contribution to pension schemes | 11.103  | 4,9   | 0,282                    | (604)                  | (5,2)  |
| Materials, services and other expenditure  | 23.181  | 10,1  | 0,589                    | 5.979                  | 34,8   |
| Depreciation                               | 31.378  | 13,7  | 0,798                    | 4.377                  | 16,2   |
| TOTAL                                      | 229.151 | 100,0 | 5,826                    | 50.943                 | 28,6   |

The total salaries and related costs amounted to C£63.004.000 out of which C£9.777.000 was capitalised in fixed assets and work in progress. The amounts capitalised relate to expenditure for development projects executed by the Authority's employees during the year. An amount of C£53.227.000 or 84,5% was charged to the revenue account. The increase of C£1.378.000 or 2,2% to the total salaries and related costs charge is due mainly to the increase of cost of living allowance.

The deficiency contribution to pension schemes was C£11.103.000 (2004: C£11.707.000). This contribution was the result of the latest actuarial valuation carried out as of 31 December 2005.

Materials services and other expenditure were C£23.181.000 (increase of C£5.979.000 or 34,8 %). The depreciation charge was C£31.378.000 (increase of C£4.377.000 or 16,2%).

#### CAPITAL REQUIREMENTS AND SOURCES OF FINANCE

Capital expenditure during the year amounted to C£56.248.000 compared with C£88.452.000 in 2004 (decrease of C£32.204.000). The amount paid for taxation during the year amounted to C£6.086.000 (2004:C£9.701.000). Loan repayments amounted to C£19.562.000 (2004: C£20.871.000).

Out of the total financing requirements of C£81.896.000 internal sources and consumers contributions provided C£67.321.000 and the balance of C£14.575.000 was covered by loans. Table 5 (page 77) shows the financing requirements during the year and the sources of finance.

Table 5
Financing Requirements and Sources of Finance

|  |         | 2005   | 2       | 004   |
|--|---------|--------|---------|-------|
|  | C£000   | %      | C£000   | %     |
| FINANCING REQUIREMENTS                     |         |        |         |       |
| Tax  | 6.086   | 7,4    | 9.701   | 8,2   |
| Capital expenditure                        | 56.248  | 68,7   | 88.452  | 74,3  |
| Loan repayments                            | 19.562  | 23,9   | 20.871  | 17,5  |
| SOURCES OF FINANCE                         | 81.896  | 100,0  | 119.024 | 100,0 |
| Profit before tax                          | 33.209  | 40,5   | 23.903  | 20,1  |
| Depreciation less consumers' contributions | 24.317  | 29,7   | 20.482  | 17,2  |
| Proceeds from disposal of fixed assets     | 3       | 0,0    | 3       | 0,0   |
| Unrealised foreign exchange gain           | (2.070) | (2,5)  | (2.213) | (1,9) |
| Consumers' contributions                   | 20.449  | 25,0   | 18.430  | 15,5  |
| Working Capital changes                    | (8.587) | (10,5) | 40.589  | 34,1  |
|  | 67.321  | 82,2   | 101.194 | 85,0  |
| Loans                                      | 14.575  | 17,8   | 17.830  | 15,0  |
|  | 81.896  | 100,0  | 119.024 | 100,0 |

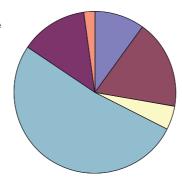
#### **FINANCIAL POSITION AT END OF YEAR**

The historical cost of the assets employed at 31 December 2005 was C£945.730.000 and total provision for depreciation was C£287.574.000. As a result the written down value was 70% of the original cost. The total net assets at 31 December 2005 were C£773.337.000. Finance derived from loans (C£161.806.000 or 20,9%) other long term liabilities (C£234.021.000 or 30,3%) and the balance (C£377.510.000 or 48,8%) from own sources.

C. Stavrakis M. Stavrou

CHAIRMAN GENERAL MANAGER

(Figure 11)
Expenditure as a percentage of total revenue
(C£ Thousand)



- Materials, services & other expenditure £23.181 (9,90%)
- Salaries & related expenses £41.966 (17,92%)
- ☐ Deficiency contribution to pension schemes £11.103 (4,74%)
- Fuel oil £121.523 (51,90%)
- Depreciation £31.378 (13,40%)
- Finance cost £5.005 (2,14%)

### Finance Management Unit

Table 6 Principal financial statistics 1996-2005

| During the financial year to 31 December               | 1996     | 1997    | 1998     | 1999    | 2000    | 2001     | 2002     | 2003     | 2004     | 2005    |
|--|----------|---------|----------|---------|---------|----------|----------|----------|----------|---------|
| Units sold (million KWh)                               | 2 315    | 2 391   | 2 629    | 2 785   | 3 011   | 3 125    | 3 423    | 3 696    | 3 742    | 3 933   |
| Consumption in the turkish occupied area (million kWh) | 34       | 12      | 6        | 5       | 6       | 6        | 6        | 7        | 8        |         |
| Total units (million KWh)                              | 2 349    | 2 403   | 2 635    | 2 790   | 3 017   | 3 131    | 3 429    | 3 703    | 3 750    | 3 940   |
|  |          |         |          |         |         |          |          |          |          |         |
| Installed capacity (MW)                                | 690      | 690     | 690      | 728     | 988     | 988      | 988      | 988      | 988      | 988     |
| moduled capacity (mit)                                 |          | 000     | 000      | 720     | 000     | 000      | 000      | 000      | 000      |         |
| INCOME (C£ THOUSAND)                                   |          |         |          |         |         |          |          |          |          |         |
| Sales of electricity                                   | 108.317  | 115.372 | 111.491  | 128.358 | 182.701 | 179.865  | 193.617  | 218.579  | 211.308  | 252.942 |
| Consumers capital contributions                        | 3.084    | 3.437   | 3.820    | 4.134   | 4.592   | 5.099    | 5.591    | 6.020    | 6.519    | 7.061   |
| Other operating income                                 | 551      | 617     | 537      | 702     | 786     | 749      | 638      | 507      | 1.417    | 3.972   |
| Finance income   | 3.846    | 3.753   | 4.076    | 1.116   | 1.864   | 3.152    | 3.603    | 3.864    | 5.103    | 4.083   |
|  | 115.798  | 123.179 | 119.924  | 134.310 | 189.943 | 188.865  | 203.449  | 228.970  | 224.347  | 268.058 |
| Total income   | 115.796  | 123.179 | 119.924  | 134.310 | 109.943 | 100.000  | 203.449  | 220.970  | 224.341  | 200.000 |
| 00070 (00 7110110110)                                  |          |         |          |         |         |          |          |          |          |         |
| COSTS (C£ THOUSAND)                                    | 74 007   | 70404   | 00.007   | 0.4.040 | 100 001 | 101 001  | 107101   | 454040   | 454.007  | 407.770 |
| Operating costs  | 71.667   | 76.164  | 69.227   | 84.016  | 126.634 | 121.904  | 137.121  | 154.840  | 151.207  | 197.773 |
| Depreciation   | 11.033   | 12.139  | 12.880   | 14.369  | 18.206  | 21.890   | 23.355   | 26.766   | 27.001   | 31.378  |
| Total operating costs                                  | 82.700   | 88.303  | 82.107   | 98.385  | 144.840 | 143.794  | 160.476  | 181.606  | 178.208  | 229.151 |
| Operating profit                                       | 33.098   | 34.876  | 37.817   | 35.925  | 45.103  | 45.071   | 42.973   | 47.364   | 46.139   | 38.907  |
| Finance costs  | (4.791)  | (6.217) | (3.543)  | (6.333) | (6.699) | (6.849)  | (5.523)  | (8.536)  | (7.236)  | (5.005) |
| Profit before tax and exceptional item                 | 28.307   | 28.659  | 34.274   | 29.592  | 38.404  | 38.222   | 37.450   | 38.828   | 38.903   | 33.902  |
| Exceptional item                                       | -        | -       | -        | -       | -       | -        | (20.000) | (25.000) | (15.000) | (693)   |
| Profit before tax                                      | 28.307   | 28.659  | 34.274   | 29.592  | 38.404  | 38.222   | 17.450   | 13.828   | 23.903   | 33.209  |
| Tax  | (10.689) | (7.824) | (10.075) | (8.142) | (7.937) | (10.576) | (4.960)  | (4.655)  | (9.502)  | (9.757) |
| Government grant                                       | 1.176    | -       | -        | -       | -       | -        | -        | -        | -        | -       |
| Profit for the year                                    | 18.794   | 20.835  | 24.199   | 21.450  | 30.467  | 27.646   | 12.490   | 9.173    | 14.401   | 23.452  |
|  |          |         |          |         |         |          |          |          |          |         |
| RATIOS TO TOTAL INCOME                                 |          |         |          |         |         |          |          |          |          |         |
| Profit from operations (%)                             | 28,6     | 28,3    | 31,5     | 26,7    | 23,7    | 23,9     | 21,1     | 20,7     | 20,6     | 14,5    |
| Profit before tax (%)                                  | 24,4     | 23,3    | 28,6     | 22,0    | 20,2    | 20,2     | 8,6      | 6,0      | 10,7     | 12,4    |
|  |          |         |          |         |         |          |          |          |          |         |

#### Consolidated balance sheet at 31 December

|  | 1996    | 1997    | 1998    | 1999    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| AS SETS (C£ THOUSAND)                  |         |         |         |         |         |         |         |         |         |         |
| Non Current Assets                     |         |         |         |         |         |         |         |         |         |         |
| Property, plant and equipment          | 287.806 | 323.509 | 397.535 | 468.082 | 483.085 | 504.811 | 525.336 | 571.846 | 633.294 | 658.156 |
| Trade and other receivables            | 1.673   | 1.676   | 1.515   | 5.159   | 4.279   | 4.230   | 3.468   | 2.974   | 2.742   | 2.231   |
|  | 289.479 | 325.185 | 399.050 | 473.241 | 487.364 | 509.041 | 528.804 | 574.820 | 636.036 | 660.387 |
| Current Assets                         | 103.595 | 106.843 | 98.057  | 69.140  | 125.416 | 135.338 | 210.014 | 220.754 | 168.763 | 176.484 |
| Total Assets                           | 393.074 | 432.028 | 497.107 | 542.381 | 612.780 | 644.379 | 738.818 | 795.574 | 804.799 | 836.871 |
| RESERVES AND LIABILITIES (C£ THOUSAND) |         |         |         |         |         |         |         |         |         |         |
| Reserves                               |         |         |         |         |         |         |         |         |         |         |
| Revenue reserve                        | 184.294 | 205.129 | 229.328 | 250.777 | 281.245 | 308.890 | 321.380 | 330.553 | 344.954 | 368.406 |
| Government grant                       | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   | 9.104   |
|  | 193.398 | 214.233 | 238.432 | 259.881 | 290.349 | 317.994 | 330.484 | 339.657 | 354.058 | 377.510 |
| Non-current liabilities                |         |         |         |         |         |         |         |         |         |         |
| Borrowings                             | 21.287  | 59.151  | 71.040  | 77.426  | 96.682  | 96.193  | 133.580 | 173.212 | 170.241 | 161.806 |
| Deferred tax liabilities               | 22.943  | 24.373  | 25.910  | 29.826  | 33.261  | 36.905  | 40.847  | 43.308  | 42.769  | 46.372  |
| Deferred income                        | 91.140  | 100.551 | 107.295 | 118.555 | 130.946 | 142.481 | 151.465 | 162.350 | 174.261 | 187.649 |
|  |         |         |         |         |         |         |         |         |         |         |
|  | 135.370 | 184.075 | 204.245 | 225.807 | 260.889 | 275.579 | 325.892 | 378.870 | 387.271 | 395.827 |
| Current liabilities                    | 64.306  | 33.720  | 54.430  | 56.693  | 61.542  | 50.806  | 82.442  | 77.047  | 63.470  | 63.534  |
| Total liabilities                      | 199.676 | 217.795 | 258.675 | 282.500 | 322.431 | 326.385 | 408.334 | 455.917 | 450.741 | 459.361 |
| Total reserves and liabilities         | 393.074 | 432.028 | 497.107 | 542.381 | 612.780 | 644.379 | 738.818 | 795.574 | 804.799 | 836.871 |

(Figure 12)

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



# Auditors' Report and Financial Statements

### **Consolidated financial statements** 31 December 2005

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## Report of the Auditors to the Electricity Authority of Cyprus

Report on the Consolidated Financial Statements

- 1 We have audited the consolidated financial statements of Electricity Authority of Cyprus and its subsidiary Elecktriki Limited (the Group) on pages 84 to 109, which comprise the consolidated balance sheet as at 31 December 2005, the consolidated income statement, consolidated statement of changes in equity and consolidated cash flow statement for the year then ended, and the related notes. These financial statements are the responsibility of the Authority's Board of Directors. Our responsibility is to express an opinion on these financial statements based on our audit. This report is made solely to the Electricity Authority of Cyprus, the Minister of Commerce, Industry and 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 and 1984, the Law regulating the Electricity Market of 2003 and the provisions of Section 156 of the Companies Law, Cap. 113. Our audit work has been undertaken so that we might state to the Authority matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the above, for our audit work, for this report, or for the opinions we have formed.
- 2 We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Authority's Board of Directors, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.
- 3 In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2005 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 International Financial Reporting Standards as issued by the IASB and the requirements of the Electricity Development Law Cap. 171, the requirements of the Law regulating the Electricity Market of 2003, and the requirements of the Cyprus Companies Law, Cap. 113.

#### Report on other legal requirements

4. 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.

PricewaterhouseCoopers Limited Chartered Accountants

Lefkosia, 30 May 2006

### 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 109 of the Electricity Authority of Cyprus for the year ended 31 December 2005, submitted by the appointed auditors in accordance with section 3(1) of the Public Corporate Bodies (Audit of Accounts) Law and I am satisfied that it is appropriate.

Chrystalla Georghadji Auditor General of the Republic

Lefkosia, 30 May 2006

## Consolidated Financial Statements

Consolidated income statement for the year ended 31 December 2005

| N                                      | Notes | 2005<br>C£000 | 2004<br>G£000 |
|--|-------|---------------|---------------|
| Sales                                  | 6     | 252.942       | 211.308       |
| Other operating income - net           | 7     | 15.116        | 13.039        |
| Operating costs                        | 8     | (229.151)     | (178.208)     |
| Operating profit                       |       | 38.907        | 46.139        |
| Finance costs                          | 10    | (5.005)       | (7.236)       |
| Profit before tax and exceptional item |       | 33.902        | 38.903        |
| Exceptional item                       | 11    | (693)         | (15.000)      |
| Profit before tax                      |       | 33.209        | 23.903        |
| Tax                                    | 12    | (9.757)       | (9.502)       |
| Profit for the year                    |       | 23.452        | 14.401        |

## Consolidated balance sheet at 31 December 2005

|                                | Notes | 2005<br>C£000 | 2004<br>C£000    |
|--------------------------------|-------|---------------|------------------|
|                                |       |               |                  |
| Assets                         |       |               |                  |
| Non-current assets             | 13    | 658,156       | 633.294          |
| Property, plant and equipment  |       |               |                  |
| Trade and other receivables    | 14    | 2.231         | 2.742<br>636.036 |
| O                              |       | 660.387       | 030.030          |
| Current assets                 | 45    | 50.740        | 20.000           |
| Inventories                    | 15    | 52.742        | 39.606           |
| Trade and other receivables    | 14    | 52.227        | 40.593           |
| Tax refundable                 |       | 4.270         | 4.337            |
| Short-term deposits            | 16    | 26.191        | 33.455           |
| Cash and cash equivalents      | 17    | 41.054        | 50.772           |
|                                |       | 176.484       | 168.763          |
| Total assets                   |       | 836.871       | 804.799          |
|                                |       |               |                  |
| Reserves and liabilities       |       |               |                  |
| Reserves                       |       | 377.510       | 354.058          |
| Non-current liabilities        |       |               |                  |
| Borrowings                     | 18    | 161.806       | 170.241          |
| Deferred tax liabilities       | 19    | 46.372        | 42.769           |
| Deferred Income                | 20    | 187.649       | 174.261          |
|                                |       | 395.827       | 387.271          |
|                                |       |               |                  |
| Current liabilities            |       |               |                  |
| Trade and other payables       | 21    | 43.248        | 44.562           |
| Borrowings                     | 18    | 20.286        | 18.908           |
|                                |       | 63.534        | 63.470           |
| Total liabilities              |       | 459.361       | 450.741          |
| Total reserves and liabilities |       | 836.871       | 804.799          |

On  $30^{th}$  May 2006 the Board of Directors of the Electricity Authority of Cyprus authorised these financial statements for issue.

C. STAVRAKIS Chairman
M. STAVROU General Manager

H. HADJIYEROU Executive Manager Finance

## Consolidated Financial Statements

Consolidated statement for changes in equity for the year ended 31 December 2005

| Re                          | Capital<br>eserve (1)<br>C£000 | Revenue<br>Reserve<br>C£000 | Total<br>C£000 |
|-----------------------------|--------------------------------|-----------------------------|----------------|
| At 1 January 2004           | 9.104                          | 330.553                     | 339.657        |
| Net profit for the year     | -                              | 14.401                      | 14.401         |
| Balance at 31 December 2004 | 9.104                          | 344.954                     | 354.058        |
| Balance at 1 January 2005   | 9.104                          | 344.954                     | 354.058        |
| Net profit for the year     | -                              | 23.452                      | 23.452         |
| Balance at 31 December 2005 | 9.104                          | 368.406                     | 377.510        |

(1) The Capital Reserve represents a government grant.

## Consolidated cash flow statement for the year ended 31 December 2005

| Notes  | 2005<br>C£000      | 2004<br>C£000 |
|--|--------------------|---------------|
| Cash flows from operating activities   |                    |               |
| Profit before tax and after exceptional item   | 33.209             | 23.903        |
|  |                    |               |
| Adjustments for:   | 04.070             | 07.004        |
| Depreciation of property, plant and equipment 13   | 31.378             | 27.001        |
| Amortisation of deferred income 20   | (7.061)            | (6.519)       |
| Loss on sale of property, plant and equipment  Interest expense 10   | 5<br>6.800         | 9.751         |
| to the property of the propert |                    |               |
| Unrealised exchange gain Interest income 7   | (2.070)<br>(4.083) | (2.213)       |
| Interest income /  | 58.178             | 46.821        |
| Changes in working capital:  | 30.170             | 40.021        |
| Inventories  | (13.136)           | 3.205         |
| Trade and other receivables  | (11.133)           | 2.286         |
| Trade and other payables   | (1.168)            | (11.280)      |
|  | , , , ,            | (,            |
| Cash generated from operations   | 32.741             | 41.032        |
| Tax paid   | (6.086)            | (9.701)       |
| Net cash from operating activities   | 26.655             | 31.331        |
| Cash flows from investing activities   |                    |               |
| Short-term deposits  | 7.264              | (2.348)       |
| Purchase of property, plant and equipment 13   | (56.248)           | (88.452)      |
| Proceeds from sale of property, plant and equipment  | 3                  | 3             |
| Additions to consumers' capital contributions 20   | 20.449             | 18.430        |
| Interest received  | 4.093              | 5.088         |
| Net cash used in investing activities  | (24.439)           | (67.279)      |
| Cash flows from financing activities   |                    |               |
| Proceeds from borrowings   | 14.575             | 17.830        |
| Repayments of borrowings   | (19.562)           | (20.871)      |
| Interest paid  | (6.947)            | (7.498)       |
| Net cash used in financing activities  | (11.934)           | (10.539)      |
| Net decrease in cash and cash equivalents  | (9.718)            | (46.487)      |
| Cash and cash equivalents at beginning of year   | 50.772             | 97.259        |
| Cash and cash equivalents at end of year 17  | 41.054             | 50.772        |
|  |                    |               |

#### 1. General

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 Lefkosia, 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 19<sup>th</sup> December 1996 concerning common rules for the internal market in electricity.

#### 2. Summary of significant accounting policies

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

#### **Basis of preparation**

The consolidated financial statements of the Electricity Authority of Cyprus have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board (IASB). The financial statements comply with both these reporting frameworks because at the time of their preparation all applicable IFRSs issued by the IASB have been adopted by the EU through the endorsement procedure established by the European Commission. In addition the financial statements have been prepared in accordance with the requirements of the Electricity Development Law, Cap. 171 of Cyprus and the Law regulating the Electricity Market of 2003 N.122(I)/2003. The financial statements have been prepared under the historical cost convention.

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

#### Adoption of new and revised IFRS

In the current year the Authority adopted all new and revised IFRS that are relevant to its operations and are effective for accounting periods beginning on 1 January 2005.

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

#### Consolidation

#### Subsidiary undertaking

Subsidiary undertaking, is that entity in which the Group has an interest of more than one half of the voting rights or otherwise has the power to exercise control over its operations. The subsidiary undertaking is consolidated from the date on which control is transferred to the Group and is no longer consolidated from the date that control ceases. All intercompany transactions, balances and 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 revenue account in the year in which they are granted.

#### Foreign currency translation

#### (a) Functional and presentation currency

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

#### (b) Transactions and balances

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

#### **Employee benefits**

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

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

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

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

#### 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.

#### Property, plant and equipment

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

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

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

|  | 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          |

#### Property, plant and equipment (continued)

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. When revalued assets are sold, the amounts included in the fair value reserves are transferred to retained earnings.

#### **Emission Rights**

Based on the Cyprus Law for the Scheme of Greenhouse Gas Emission Allowance Trading, N.132(I)/2004, greenhouse gas emission allowances are allocated to the various operators (companies) with the objective of reducing the level of pollution in the atmosphere. It is expected that, in the following years, the total number of emission allowances will be decreasing.

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 per each ton of excess emission.

Granted CO<sub>2</sub> emission allowances are initially recognised at nominal value (nil value) when the Group 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 is measured at the cost of purchased allowances and then at the market price of allowances ruling at the balance sheet date, with movements in the liability recognised in operating profit. The intangible asset is surrendered at the end of the compliance period reflecting the consumption of economic benefit.

#### Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the leaser are classified as operating leases. Payments made under operating leases (net of any incentives received from the leaser) 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 realizable value is the estimated selling price in the ordinary course of business less applicable variable selling expenses. Provision is made for damaged, deteriorated, obsolete and unusable items where appropriate.

#### Trade receivables

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

#### **Provisions**

Provisions are 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 and geographical segment.

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

The analysis per business segment is prepared for the activities of generation, transmission, distribution and supply which also complies with the requirements of the Law regulating the Electricity Market of 2003 N.122(I)/2003.

#### Comparatives

Where necessary comparative figures have been reclassified to conform with the current year's presentation.

#### 3. Financial risk management

#### Financial risk factors

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

#### a) Interest rate risk

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

#### b) Currency risk

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

The net foreign exchange difference credited to the income statement amounts to C£1.795.000 (2004: C£2.515.000) which relates to financing activities (Note 10).

#### c) Credit risk

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

#### Fair value estimation

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

#### 4. Critical accounting estimates and judgments

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

#### Critical accounting estimates and assumptions

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom differ from 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:

|                  | 229.151 |
|------------------|---------|
| Other Activities | 25      |
| Supply           | 4.578   |
| Distribution     | 47.608  |
| Transmission     | 10.131  |
| Generation       | 166.809 |
|                  | CA5000  |

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

The total assets/liabilities of each activity of the Authority are analysed below:

|                         | Generation  CY£000 | Transmission | Distribution  CY£000 | Supply | Other<br>Activities<br>CY£000 | Unallocated amounts | Total   |
|-------------------------|--------------------|--------------|----------------------|--------|-------------------------------|---------------------|---------|
| Non current assets      | 244.579            | 122.850      | 292.801              |        | 157                           |                     | 660.387 |
| Non current assets      |                    |              |                      | -      |                               | -                   |         |
| Current assets          | 38.820             | 7.304        | 13.437               | 45.257 | 151                           | 71.515              | 176.484 |
| Total Assets            | 283.399            | 130.154      | 306.238              | 45.257 | 308                           | 71.515              | 836.871 |
| Current liabilities     | 11.948             | 2.332        | 9.456                | 19.512 | -                             | 20.286              | 63.534  |
| Non-current liabilities | -                  | 9.382        | 178.266              | -      | -                             | 208.179             | 395.827 |
| Reserves                | -                  | -            | -                    | -      | -                             | 377.510             | 377.510 |
| Allocated Capital       | 271.451            | 118.440      | 118.516              | 25.745 | 308                           | (534.460)           | -       |
|                         | 283.399            | 130.154      | 306.238              | 45.257 | 308                           | 71.515              | 836.871 |

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

#### 6. Sales of electricity

Sales of electricity include an amount of C£2.000 (2004: C£31.000) arising from non-recorded electricity consumption at a number of premises at which illegal tampering at the Group's meters was observed. The amount of recognized charges arising from non-recorded electricity consumption has been restricted to the total of the amounts agreed with the consumers as payable.

Sales of electricity do not include the consumption in the Turkish occupied area where the Group has no access due to the prevailing conditions. The unbilled electrical energy, calculated at a special rate, amounts to C£366.000 (2004: C£329.000).

#### 7. Other operating income - net

|  | 2005<br>CY£000 | 2004<br>CY£000 |
|--|----------------|----------------|
|  |                |                |
| Income from damages to property of the Authority                     | 105            | 170            |
| Net Income from maintenance of public lighting and sale of materials | 136            | 195            |
| Net income from fees for telecommunication usage of optical fibres   | 35             | 740            |
| Income from usage of the transmission network - Scada                | 327            | -              |
| Consumers' capital contributions                                     | 7.061          | 6.519          |
| Storage and other fees from the Cyprus Organisation                  |                |                |
| for Storage and Management of Oil stocks (COSMOS)                    | 3.090          | -              |
| Sundry Income  | 279            | 312            |
| Interest income:   |                |                |
| Bank balances  | 3.540          | 4.756          |
| Other  | 543            | 347            |
|  | 15.116         | 13.039         |
|  |                |                |

#### 8. Operating costs by nature of expense

| 2005<br>CY£000                    | 2004<br>CY£000 |
|-----------------------------------|----------------|
| Fuel Oil 121.523                  | 82.893         |
| Salaries and related costs 51.993 | 51.112         |
| Depreciation 31.378               | 27.001         |
| Repairs and maintenance 6.294     | 4.983          |
| Other expenses 17.963             | 12.219         |
| 229.151                           | 178.208        |

#### 9. Staff costs

|   | 2005<br>CY£000 | 2004<br>CY£000 |
|---|----------------|----------------|
|   |                |                |
| Wages and salaries                              | 38.997         | 37.446         |
| Social insurance and other costs                | 3.709          | 3.534          |
| Pension costs - defined benefit retirement plan |                |                |
| - Current contribution                          | 7.758          | 7.545          |
| - Deficiency contribution to pension schemes    | 11.103         | 11.707         |
| Other defined contribution plans                | 1.437          | 1.394          |
|   | 63.004         | 61.626         |

The staff costs were allocated as follows:

| Income statement                                 | 53.227 | 51.263 |
|--|--------|--------|
| Capitalized in fixed assets and work in progress | 9.777  | 10.363 |
|  |        | 63.004 |

61.626

#### **Defined Benefit Retirement Plan**

The latest actuarial valuation was carried out as at 31 December 2005. The assets used for the purposes of the actuarial valuation were as extracted from the draft accounts of the Pension Fund for the year 2005 and therefore the actuarial valuation is presented in draft.

The amounts recognized in the consolidated balance sheet of the Group and which are in accordance with the draft actuarial valuation as at 31 December 2005, for the defined benefit retirement plan are as follows:

| 2005<br>CY£000  | 2004<br>CY£000 |
|---|----------------|
| Present value of funded defined benefit obligations 288.786 | 248.537        |
| Fair value of plan assets (243.984)                         | (230.504)      |
| 44.802  | 18.033         |
| Unrecognised transitional obligation (18.584)               | (27.875)       |
| Unrecognised actuarial (loss)/gain (25.243)                 | 9.031          |
| Net liability/(asset) in Balance Sheet 975                  | (811)          |

The amounts recognized in the consolidated income statement of the Group and which are in accordance with the draft actuarial valuation as at 31 December 2005 for the defined benefit retirement plan are as follows:

| Current service cost 6.135  | 7.631    |
|---|----------|
| Interest on obligations of the plan 14.021                        | 16.026   |
| Expected return on plan assets (8.813)                            | (14.080) |
| Amortisation of net asset at transition 9.291                     | 9.291    |
| 20.634  | 18.868   |
| Movement in net asset in balance sheet                            |          |
| Net asset in balance sheet at the beginning of the year (811)     | (418)    |
| Actual contributions paid by the Authority (18.848)               | (19.261) |
| Total expense recognized in the income statement 20.634           | 18.868   |
| Net liability/(asset) in balance sheet at the end of the year 975 | (811)    |
| Actual return on plan assets 5.804                                | 9.757    |
| Reconciliation of benefit obligation                              |          |
| Defined benefit obligations at start of year 248.537              | 252.162  |
| Service cost 6.135  | 7.631    |
| Interest cost 14.021  | 16.026   |

#### 9. Staff costs (continued)

| Employee contributions                     | 219            | 204            |
|--|----------------|----------------|
| Benefits paid by the Fund                  | (11.391)       | (11.198)       |
| Actuarial loss/(gain)                      | 31.265         | (16.288)       |
| Defined benefit obligations at end of year | 288.786        | 248.537        |
| Reconciliation of plan assets              | 2005<br>CY£000 | 2004<br>CY£000 |
| Market value at the beginning of the year  | 230.504        | 212.480        |
| Expected return                            | 8.813          | 14.080         |
| Company contributions                      | 18.848         | 19.261         |
|  | 219            | 204            |
| Employee contributions                     | 219            |                |
| Employee contributions Fund benefits       | (11.391)       | (11.198)       |
|  |                |                |

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

|   | 2005<br>% | <b>2004</b><br>% |
|---|-----------|------------------|
| Discount rate   | 5,00      | 5,75             |
| Average expected return on plan assets                | 3,75      | 3,75             |
| Average rate of salary increases (excluding increases |           |                  |
| due to age and promotions)                            | 5,75      | 3,0              |
| Average increase in basic insurable earnings          | 3,5       | 3,5              |
| Average rate of pension increases                     | 3,0       | 3,0              |
| Average rate of SIS pension plan increases            | 2,5       | 2,5              |
| Average rate of compensation increases                | 5,75      | 5,75             |

#### 10. Finance costs

|  | 2005<br>CY£000 | 2004<br>CY£000 |
|--|----------------|----------------|
| Interest expense:                      |                |                |
| Bank borrowings                        | (6.439)        | (6.726)        |
| Pension Fund                           | -              | (199)          |
| Overdue taxation                       | (130)          | (2.765)        |
| Other                                  | (231)          | (61)           |
|  | (6.800)        | (9.751)        |
| Net foreign exchange transaction gains | 1.795          | 2.515          |
|  | (5.005)        | (7.236)        |

#### 11. Exceptional item

The amount refers to a penalty imposed by the Commission for the Protection of Competition (CPC). CPC following ex – officio investigation against the Authority for likely infringement of article 6 of the relative Law, judged that the Authority committed infringement with regard to cross-subsidies, that resulted or had as a potential result the creation of not fair prices and preferential treatment of consumer categories as infringement of the institutional framework.

The amount for the year 2004 refers to a grant made to the Government Consolidated Fund in accordance with the Supplementary Budget of the Electricity Authority of Cyprus Law (No.3) of 2004 Law No. 35 (II) 2004.

#### 12. Tax

| 2005<br>CY£000               | 2004<br>CY£000 |
|------------------------------|----------------|
| Current tax:                 |                |
| Corporation tax 4.301        | 4.314          |
| Defence contribution 798     | 803            |
| Deferred tax (Note 19) 3.603 | 2.358          |
|                              |                |
| Tax prior years:             |                |
| Corporation tax 885          | 4.571          |
| Defence Contribution 170     | 353            |
| Deferred taxation (Note 19)  | (2.897)        |
| 9.757                        | 9.502          |

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

|   | 2005<br>CY£000 | 2004<br>CY£000 |
|---|----------------|----------------|
|   |                |                |
| Profit before tax   | 33.209         | 23.903         |
| Tax at the applicable corporation and defence tax rates   | 9.558          | 8.159          |
| Tax effect of expenses not deductible for tax purposes    | 255            | 1.160          |
| Tax effect of allowances and income not assessable to tax | (1.111)        | (1.427)        |
| Tax effect of change in applicable tax rates              | -              | (417)          |
| Tax for prior years                                       | 1.055          | 2.027          |
| Tax charge  | 9.757          | 9.502          |

The Authority is subject to corporation tax on taxable profits at the rate of 25%. For the years 2003 and 2004 any profits above C£1.000.000 were subject to an additional corporation tax rate of 5%. Its subsidiary undertaking, Electriki Limited is subject to corporation tax on taxable profits at the rate of 10%.

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

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

#### 13. Property Plant and Equipment

|                          | reehold<br>land<br>CY£000 | Buildings<br>CY£000 | Plant and<br>machinery<br>CY£000 | Lines, cables<br>& meters<br>CY£000 | Motors<br>vehicles<br>CY£000 | Furniture,<br>fittings & office<br>equipment<br>CY£000 | Tools & instruments CY£000 | Hardware<br>& software<br>CY£000 | Work in progress CY£000 | Total<br>CY£000 |
|--------------------------|---------------------------|---------------------|----------------------------------|-------------------------------------|------------------------------|--|----------------------------|----------------------------------|-------------------------|-----------------|
| At 1 January 2004        | 44.005                    | 75 700              | 054.407                          | 202 040                             | 0.004                        | 2 222  | 2 224                      | 0.700                            | 00.000                  | 204.044         |
| Cost                     | 11.005                    | 75.780              | 351.497                          | 283.212                             | 6.234                        | 2.089  | 3.031                      | 6.733                            | 62.060                  | 801.641         |
| Accumulated depreciation |                           | (18.328)            | (119.527)                        | (81.138)                            | (4.495)                      | (1.250)  | (1.437)                    | (3.620)                          |                         | (229.795)       |
| Net book value           | 11.005                    | 57.452              | 231.970                          | 202.074                             | 1.739                        | 839  | 1.594                      | 3.113                            | 62.060                  | 571.846         |
| Year ended 31 Dec. 2004  |                           |                     |                                  |                                     |                              |  |                            |                                  |                         |                 |
| Opening net book value   | 11.005                    | 57.452              | 231.970                          | 202.074                             | 1.739                        | 839  | 1.594                      | 3.113                            | 62.060                  | 571.846         |
| Additions                | 212                       | 650                 | 252                              | 753                                 | 909                          | 406  | 65                         | 344                              | 84.861                  | 88.452          |
| Disposals                | (2)                       |                     |                                  |                                     |                              |  |                            | (1)                              |                         | (3)             |
| Depreciation charge      |                           | (2.700)             | (13.564)                         | (8.320)                             | (810)                        | (185)  | (247)                      | (1.175)                          |                         | (27.001)        |
| Transfers                |                           | 15                  | 8.353                            | 21.410                              |                              |  |                            |                                  | (29.778)                |                 |
| Closing net book value   | 11.215                    | 55.417              | 227.011                          | 215.917                             | 1.838                        | 1.060  | 1.412                      | 2.281                            | 117.143                 | 633.294         |
| At 31 Dec. 2004          |                           |                     |                                  |                                     |                              |  |                            |                                  |                         |                 |
| Cost                     | 11.215                    | 76.445              | 360.102                          | 305.375                             | 7.143                        | 2.493  | 3.096                      | 7.070                            | 117.143                 | 890.082         |
| Accumulated depreciation |                           | (21.028)            | (133.091)                        | (89.458)                            | (5.305)                      | (1.433)  | (1.684)                    | (4.789)                          |                         | (256.788)       |
| Net book value           | 11.215                    | 55.417              | 227.011                          | 215.917                             | 1.838                        | 1.060  | 1.412                      | 2.281                            | 117.143                 | 633.294         |
| Year ended 31 Dec. 2005  |                           |                     |                                  |                                     |                              |  |                            |                                  |                         |                 |
| Opening net book value   | 11.215                    | 55.417              | 227.011                          | 215.917                             | 1.838                        | 1.060  | 1.412                      | 2.281                            | 117.143                 | 633.294         |
| Additions                | 270                       | 1.449               | 274                              | 796                                 | 711                          | 480  | 140                        | 556                              | 51.572                  | 56.248          |
| Disposals                |                           |                     |                                  | (1)                                 |                              | (2)  |                            | (5)                              |                         | (8)             |
| Depreciation charge      |                           | (3.508)             | (16.446)                         | (8.579)                             | (814)                        | (223)  | (240)                      | (1.568)                          |                         | (31.378)        |
| Transfers                | 44.40=                    | 24.343              | 84.516                           | 20.806                              | 4 705                        | 4 0 4 5  | 4.040                      |                                  | (130.968)               | 050450          |
| Closing net book value   | 11.485                    | 77.701              | 295.355                          | 228.939                             | 1.735                        | 1.315  | 1.312                      | 2.567                            | 37.747                  | 658.156         |
| At 31 Dec. 2005          |                           |                     |                                  |                                     |                              |  |                            |                                  |                         |                 |
| Cost                     | 11.485                    | 102.237             | 444.892                          | 326.950                             | 7.854                        | 2.916  | 3.235                      | 8.414                            | 37.747                  | 945.730         |
| Accumulated depreciation |                           | (24.536)            | (149.537)                        | (98.011)                            | (6.119)                      | (1.601)  | (1.923)                    | (5.847)                          |                         | (287.574)       |
| Net book value           | 11.485                    | 77.701              | 295.355                          | 228.939                             | 1.735                        | 1.315  | 1.312                      | 2.567                            | 37.747                  | 658.156         |

#### Fixed assets located in Turkish occupied area

The total fixed assets shown in the balance sheet include fixed assets located in the area occupied by the Turkish invasion force, whose cost approximates C & 7.596.000. The depreciation provision for the year in respect of these assets was NIL (2004: C & 3.000) bringing the accumulated provision at 31 December 2005 to C & 7.281.000 (2004: C & 3.000) and leaving a written down value of C & 3.000 (2004: C & 3.000). The consequences of the Turkish occupation on the value of these assets is unknown.

#### 14. Trade and other receivables

| 2005<br>CY£000   | 2004<br>CY£000 |
|--|----------------|
| Trade receivables 42.753   | 33.376         |
| Less: provision for impairment of receivables (911)                    | (665)          |
| Trade receivables - net 41.842   | 32.711         |
| Capital contributions receivable by installments 1.856                 | 2.682          |
| Advance payments to contractors 5.445                                  | 4.240          |
| Government of Cyprus 943   | 898            |
| Other receivables net of provision for impairment 4.202                | 2.523          |
| Prepayments 170  | 281            |
| 54.458   | 43.335         |
| Less: non-current portion of receivables and prepayments (2.231)       | (2.742)        |
| 52.227   | 40.593         |
| The maturity of non-current receivables and prepayments is as follows: |                |
| Between 1 and 2 years 839  | 802            |
| Between 2 and 5 years 1.274  | 1.798          |
| Over 5 years 118   | 142            |
| 2.231  | 2.742          |

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

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

#### 15. Inventories

|                        | 2005<br>C£000 | 2004<br>C£000 |
|------------------------|---------------|---------------|
| Fuel                   | 20.647        | 8.416         |
| Spares and consumables | 32.095        | 31.190        |
|                        | 52.742        | 39.606        |

The cost of inventories recognized as expense and included in "operating costs" amounted to C£125.705.000 (2004: C£85.562.000).

All stock items are stated at cost.

#### 16. Short-term deposits

|                     | 2005<br>C£000 | 2004<br>C£000 |
|---------------------|---------------|---------------|
| Short-term deposits | 26.191        | 33.455        |

The effective interest rate on these short term bank deposits was 3,75% - 6,00% (2004: 4,50% - 6,00%) and these deposits had a maturity of 12 months (2004: 12 months).

#### 17. 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:

|                          | 2005<br>C£000 | 2004<br>C£000 |
|--------------------------|---------------|---------------|
| Cash at bank and in hand | 9.277         | 15.640        |
| Short-term deposits      | 31.777        | 35.132        |
|                          | 41.054        | 50.772        |

The effective interest rate on short term bank deposits was 3,75% - 5,60% (2004: 4,25% - 5,60%) and these deposits had an average maturity of 72 days (2004: 53 days).

#### 18. Borrowings

|   | 2005<br>C£000 | 2004<br>C£000 |
|---|---------------|---------------|
| Current   |               |               |
| Bank loans  | 17.728        | 16.308        |
| Suppliers' credits                                    | 2.558         | 2.600         |
|   | 20.286        | 18.908        |
| Non-current   |               |               |
| Bank loans  | 150.281       | 156.009       |
| Suppliers' credits                                    | 11.525        | 14.232        |
|   | 161.806       | 170.241       |
| Total borrowings                                      | 182.092       | 189.149       |
| The maturity of non-current borrowings is as follows: |               |               |
| Between 1 and 2 years                                 | 20.447        | 19.051        |
| Between 2 and 5 years                                 | 54.754        | 51.826        |
| Over 5 years  | 86.605        | 99.364        |
|   | 161.806       | 170.241       |

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>2005</b><br>% | 2004<br>% |
|------------|------------------|-----------|
| Bank loans | 3,5              | 3,5       |

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

|                | 2005<br>C£000 | 2004<br>C£000 |
|----------------|---------------|---------------|
| Euro           | 175.702       | 181.975       |
| Swiss Frank    | 4.470         | 5.063         |
| Pound Sterling | 1.920         | 2.111         |
|                | 182.092       | 189.149       |

#### 19. Deferred tax liabilities

Deferred taxation is calculated in full on all temporary differences under the liability method using the applicable tax rates (note 12).

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 movement of the deferred taxation account which arises from the difference between depreciation and wear and tear allowance is as follows:

|                                       | 2005<br>C£000 | 2004<br>C£000 |
|---------------------------------------|---------------|---------------|
| At 1 January                          | 42.769        | 43.308        |
| Charged to income statement (Note 12) |               |               |
| - Current year                        | 3.603         | 2.358         |
| - Prior years                         | -             | (2.897)       |
| At 31 December                        | 46.372        | 42.769        |

#### 20. Deferred income

| 2005<br>C£000                           | 2004<br>C£000 |
|---|---------------|
| Consumers' capital contributions:       |               |
| Balance at 1 January 174.261            | 162.350       |
| Additions 20.449                        | 18.430        |
| Transferred to income statement (7.061) | (6.519)       |
| Balance at 31 December 187.649          | 174.261       |

### 21. Trade and other payables

|  | 2005<br>C£000 | 2004<br>C£000 |
|--|---------------|---------------|
| Fuel oil suppliers                             | 5.175         | 5.630         |
| Other Suppliers                                | 13.542        | 15.345        |
| Value Added Tax payable                        | 3.528         | 6.275         |
| Pay As You Earn payable                        | 459           | 440           |
| Retention on capital contracts                 | 4.575         | 6.351         |
| Consumers' deposits                            | 4.409         | 4.157         |
| Payments received in advance                   | 324           | 64            |
| Loan from Pension Scheme                       | -             | 7             |
| Interest payable                               | 1.020         | 1.167         |
| Accrued charges                                | 5.457         | 1.149         |
| Creditors for purchase of land and substations | 2.664         | 2.682         |
| Other creditors                                | 2.095         | 1.295         |
|  | 43.248        | 44.562        |

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

#### 22. Subsidiary undertaking

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

The accounts of Electriki Limited were consolidated in the Group accounts of Electricity Authority of Cyprus. The company remained dormant during 2005.

#### 23. Contingent liabilities and assets

#### (a) Contingent liabilities

-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 consumer's capital contributions. The Tax Authorities have questioned the accounting treatment applied by the Authority in relation to consumer's 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 £34.640.000, for which there is a provision in the account of deferred tax for the amount of £18.378.000. The Authority, based on independent professional advice, believes that the current accounting treatment of capital contributions is correct. As a result no provision has been made in these financial statements.

-At 31 December 2005 the Group had contingent liabilities in respect of pending litigation amounting to C£1.075.355.

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.

#### (b) Contingent asset

Based on the National Allocation Plan for greenhouse gas emission allowances for the years 2005 to 2007, the Authority, for the year 2005, has been allocated 3.752 thousand tonnes of CO<sub>2</sub> allowances.

The verified yearly emission report for 2005, verifies that the Authority's emissions had been 3.472 thousand tonnes leading to a surplus of 280 thousand tonnes of allowances.

The Ministry of Agriculture, Natural Resources and Environment (as the Responsible Authority) has not set in operation the national registry and it is unknown when this will become operational and consequently when the Authority will be able to trade those CO<sub>2</sub> allowances. The trading price of CO<sub>2</sub> allowances is volatile.

Due to the present uncertainty no provision has been made for the above in these financial statements.

#### 24. Commitments

#### **Capital commitments**

|                                     | 2005<br>C£000 | 2004<br>C£000 |
|-------------------------------------|---------------|---------------|
| Commitments in respect of contracts | 49.591        | 57.452        |
| Approved but not contracted         | 125.003       | 45.463        |
| Approved expenditure outstanding    | 174.594       | 102.915       |

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

#### Operating lease commitments

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

|  | 2005<br>C£000 | 2004<br>C£000 |
|--|---------------|---------------|
| Not later than one year                        | 227           | 316           |
| Later than one year and not later than 5 years | 52            | 199           |
| Over 5 years                                   | -             | -             |
|  | 279           | 515           |

#### 25. Post Balance sheet events

There were no significant post balance sheet events that would affect the understanding of these financial statements. Auditor's report pages 82 and 83.

### Appendices

Appendix 1 Consumers, Total and Average Sales and Average Prices

| AS AT 31 DECEMBER                            | 1996      | 1997      | 1998      | 1999      | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| NUMBER OF CONSUMERS                          |           |           |           |           |           |           |           |           |           |           |
| Domestic                                     | 260 076   | 266 435   | 272 591   | 278 521   | 284 486   | 291 476   | 298 277   | 307 206   | 318 640   | 332 338   |
| Commercial                                   | 66 020    | 65 700    | 66 897    | 68 269    | 69 512    | 70 250    | 70 867    | 71 589    | 72 941    | 74 916    |
| Industrial                                   | 8 820     | 9 504     | 9 566     | 9 578     | 9 662     | 9 712     | 9 829     | 10 107    | 10 595    | 10 956    |
| Agricultural                                 | 4 613     | 5 590     | 6 100     | 6 702     | 7 414     | 8 294     | 9 084     | 9 779     | 10 400    | 10 931    |
| Public Lighting                              | 3 461     | 4 363     | 4 711     | 5 095     | 5 421     | 5 720     | 6 099     | 6 428     | 6 771     | 7 138     |
| TOTALS                                       | 342 990   | 351 592   | 359 865   | 368 165   | 376 495   | 385 452   | 394 156   | 405 109   | 419 347   | 436 279   |
| SALES TO CONSUMERS (thousa                   | and kWh)  |           |           |           |           |           |           |           |           |           |
| Domestic                                     | 824 488   | 834 487   | 904 348   | 951 682   | 1 054 942 | 1 041 826 | 1 170 386 | 1 321 677 | 1 324 774 | 1 431 792 |
| Commercial                                   | 915 848   | 948 951   | 1 050 001 | 1 129 167 | 1 214 937 | 1 290 171 | 1 387 729 | 1 478 441 | 1 518 582 | 1 587 196 |
| Industrial                                   | 459 887   | 487 760   | 544 161   | 567 039   | 593 824   | 647 632   | 708 232   | 722 806   | 722 850   | 726 059   |
|  |           |           |           |           |           |           |           |           |           |           |
| Agricultural                                 | 75 704    | 75 837    | 85 075    | 88 708    | 94 888    | 92 567    | 101 515   | 113 761   | 117 478   | 120 062   |
| Public lighting                              | 39 371    | 43 970    | 45 439    | 48 818    | 52 640    | 52 557    | 54 670    | 59 386    | 58 146    | 67 793    |
| TOTAL  | 2 315 298 | 2 391 005 | 2 629 024 | 2 785 414 | 3 011 231 | 3 124 753 | 3 422 532 | 3 696 071 | 3 741 830 | 3 932 902 |
| AVERAGE SALES PER END<br>YEAR CONSUMER (kWh) |           |           |           |           |           |           |           |           |           |           |
| Domestic                                     | 3 170     | 3 132     | 3 318     | 3 417     | 3 708     | 3 574     | 3 924     | 4 302     | 4 158     | 4 308     |
| Commercial                                   | 13 872    | 14 444    | 15 696    | 16 540    | 17 478    | 18 365    | 19 582    | 20 652    | 20 819    | 21 186    |
| Industrial                                   | 52 141    | 51 322    | 56 885    | 59 202    | 61 460    | 66 684    | 72 055    | 71 515    | 68 226    | 66 270    |
| Agricultural                                 | 16 411    | 13 567    | 13 947    | 13 236    | 12 798    | 11 161    | 11 175    | 11 633    | 11 296    | 10 984    |
| Public lighting                              | 11 376    | 10 078    | 9 645     | 9 582     | 9 710     | 9 188     | 8 964     | 9 239     | 8 589     | 9 497     |
| AVERAGE REVENUE PER<br>UNIT BILLED (cent)    |           |           |           |           |           |           |           |           |           |           |
| Domestic                                     | 4,308     | 4,499     | 4,054     | 4,090     | 5,718     | 5,634     | 5,429     | 5,758     | 5,673     | 6,443     |
| Commercial                                   | 5,313     | 5,421     | 4,854     | 5,130     | 6,719     | 6,328     | 6,225     | 6,440     | 6,080     | 6,876     |
| Industrial                                   | 4,230     | 4,281     | 3,744     | 4,002     | 5,391     | 5,097     | 4,979     | 5,224     | 4,839     | 5,615     |
| Agricultural                                 | 3,751     | 4,053     | 3,539     | 3,895     | 5,407     | 5,168     | 5,135     | 5,263     | 5,055     | 5,915     |
| Public lighting                              | 3,978     | 4,169     | 3,710     | 3,802     | 5,278     | 5,139     | 4,975     | 5,124     | 4,938     | 5,442     |
| ALL CONSUMERS                                | 4,666     | 4,800     | 4,287     | 4,482     | 6,040     | 5,787     | 5,643     | 5,901     | 5,646     | 6,431     |

Appendix 2 Generation, transmission & Distribution equipment

| Description   | Unit      | In<br>Commission<br>31.12.04 | Commissioned in 2005 | Taken out of<br>Commission<br>in 2005 | In<br>Commission<br>31.12.2005 |
|---|-----------|------------------------------|----------------------|---------------------------------------|--------------------------------|
| GENERATION PLANT:   |           |                              |                      |                                       |                                |
| Dhekelia "B" Power Station                                    |           |                              |                      |                                       |                                |
| Steam Turbines  | No.       | 6                            | _                    | _                                     | 6                              |
| Capacity  | MW        | 360                          | _                    | _                                     | 360                            |
| Moni Power Station:   |           |                              |                      |                                       |                                |
| Steam Turbines  | No.       | 6                            | -                    |                                       | 6                              |
| Capacity  | MW        | 180                          | -                    | -                                     | 180                            |
| Gas Turbines  | No.       | 4                            | -                    | _                                     | 4                              |
| Capacity  | MW        | 150                          | _                    | _                                     | 150                            |
| Vasilikos Power Station:                                      |           |                              |                      |                                       |                                |
| Gas Turbines  | No.       | 1                            | _                    | _                                     | 1                              |
| Capacity  | MW        | 38                           | _                    | _                                     | 38                             |
| Steam Turbines  | No.       | 2                            | _                    | _                                     | 2                              |
| Capacity  | MW        | 260                          | _                    | _                                     | 260                            |
| 220kV Transmission Lines<br>operated at 132kV<br>Route Length | km        | 1,40                         | -                    | -                                     | 1,40                           |
| Circuit Length  | km        | 2,80                         | -                    | -                                     | 2,80                           |
| 132kV Transmission Lines                                      |           |                              |                      |                                       |                                |
| Route Length  | km        | 358,32                       | 0.06                 | -                                     | 358,38                         |
| Circuit Length  | km        | 711,62                       | 0,12                 | -                                     | 711,74                         |
| 132kV Underground Cables                                      |           |                              |                      |                                       |                                |
| Route Length  | km        | 50,34                        | 11,20                | -                                     | 61,54                          |
| Circuit Length  | km        | 76,42                        | 11,20                | -                                     | 87,62                          |
| 132kV U/G Cables-Operated at 66kV                             |           |                              |                      |                                       |                                |
| Route Length  | km        | 3,71                         | 0,23                 | -                                     | 3,94                           |
| Circuit Length  | km        | 3,71                         | 0,23                 | -                                     | 3,94                           |
| 66kV Underground Cables                                       |           | 4.00                         |                      |                                       | 4.00                           |
| Route Length  | km        | 1,68                         | -                    | -                                     | 1,68                           |
| Circuit Length  | km        | 1,68                         | -                    | -                                     | 1,68                           |
| 132kV Transmission Lines operated at 66kV                     | Luca      | 124,73                       | -07.20               | 0.06                                  | 151.07                         |
| Route Length  | km        | · · · · · ·                  | 27,30                | · · · · · · · · · · · · · · · · · · · | 151,97                         |
| Circuit Length 66kV Transmission Lines                        | km        | 230,37                       | 31.75                | 0.06                                  | 262.06                         |
|   | lem-      | 224 50                       |                      | 0.04                                  | 224.54                         |
| Route Length Circuit Length                                   | km<br>km  | 324,58<br>324,58             | -                    | 0,04<br>0,04                          | 324,54<br>324,54               |
| 132/66kV Interbus Transformers                                | km<br>No. | 324,56                       | <u> </u>             | 0,04                                  | 12                             |
| 102/00kv interbus fransionners                                | MVA       | 585                          | 63                   | 45                                    | 603                            |
|   | - IVIVA   | 363                          | - 03                 | 45                                    | 003                            |

| Description  | Unit     | In         | Commissioned | Taken out of | ln         |
|--|----------|------------|--------------|--------------|------------|
| Description  | Offic    | Commission | in           | Commission   | Commission |
|  |          | 31.12.04   | 2005         | in 2005      | 31.12.2005 |
|  |          | 31.12.04   | 2003         | 111 2003     | 31.12.2003 |
|  |          |            |              |              |            |
|  |          |            |              |              |            |
| 132/11kV Step Down Transformers  | No.      | 56         | 2            | -            | 58         |
|  | MVA      | 1744       | 80           | -            | 1824       |
| 132/6,6kV Step Down Transformers   | No.      | 2          | -            | -            | 2          |
|  | MVA      | 58         | -            | -            | 58         |
| 132/3,3kV Step Down Transformers   | No.      | 2          | -            | -            | 2          |
|  | MVA      | 20         | -            | -            | 20         |
| 66/11kV Step Down Transformers   | No.      | 66         | 3            | -            | 69         |
|  | MVA      | 622,5      | 41           | -            | 663,5      |
| 66/3,3kV Step Down Transformers  | No.      | 2          | -            | -            | 2          |
|  | MVA      | 5          | -            | -            | 5          |
| 15,75/132kV Step Up Transformers   | No.      | 2          | -            | -            | 2          |
|  | MVA      | 330        | -            | -            | 330        |
| 11/132kV Step Up Transformers  | No.      | 13         | -            | -            | 13         |
|  | MVA      | 739        | -            | -            | 739        |
| 11/66kV Step Up Transformers   | No.      | 4          | -            | -            | 4          |
|  | MVA      | 150        | -            | -            | 150        |
| Substations  | No.      | 46         | 1            | -            | 47         |
| Substations: Energization of Melizona S<br>No De-energization<br>DISTRIBUTION EQUIPMENT: | /Station |            |              |              |            |
| 11kV Overhead Lines  | km       | 4 829,36   | 148,02       | 40,88        | 4 936,50   |
| 11kV Underground Cables  | km       | 2 167,73   | 210,18       | 32,67        | 2 345,24   |
| LV Overhead Lines  | km       | 7 971,52   | 218,31       | 28,81        | 8 161,02   |
| LV Underground Cables  | km       | 1 888,24   | 288,16       | 0,34         | 2 176,06   |
| 11 000/415/240V P.M. Transformers  | No.      | 7 537      | 414          | 104          | 7 847      |
|  | kVA      | 663 754    | 65 603       | 28 958       | 700 399    |
| 11 000/415V G.M. Transformers  | No.      | 3 702      | 222          | 2            | 3 922      |
|  | kVA      | 1 917 110  | 204 660      | 51 480       | 2 070 290  |

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