



NATIONAL REPORT

CYPRUS ENERGY REGULATORY AUTHORITY (C.E.R.A)



Report to the European Commission in line with the Electricity and Gas Directives for the period July 2010 to July 2011

October 2011









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1. FOREWORD

Cyprus Energy Regulatory Authority (CERA) was established by virtue of the Law on Regulating the Electricity Market of 2003 N.122(I)/2003, which was enacted by the House of Representatives on 25 July 2003, for harmonisation purposes with the Aquis Communitaire. Also, this Law establishes CERA as the Authority responsible for Regulating the Natural Gas Market. The relevant EU Directive was transposed into national Legislation by Law 183(I)/2004.

The Members of the current board of CERA were appointed on 22 January 2010 and took up their duties on 3 February 2010 after giving the prescribed affirmation for the faithful execution of their duties, to the President of the Republic of Cyprus.

The present Report covers the period from July 2010 to July 2011 and is the seventh one to be issued.

In reading this Report one should bear in mind that Cyprus operates under the provisions of the Directive, for "Small Isolated Systems".

The establishment of CERA and the appointment of the Transmission System Operator (TSO) during 2004 constitute two very important events in the field of Energy, a field that prior to the entry of Cyprus into the European Union (EU), had purely a monopolistic character. It was and still is among the basic priorities of Cyprus to get fully harmonised with the Acquis Communitaire in the field of Energy. This process passes through a series of actions, the most important being the one that aims at a healthy competition with the abolition of monopolistic attitudes and conduct.

One of the urgent priorities of CERA was the opening of the Electricity Market. This was achieved and the Electricity Market was liberalised by 35% with effect from 1st May 2004. Also, with effect from 1st of January 2009 the market was further liberalised including all "non domestic" consumers which are free to select their Supplier. However, there are no other Suppliers at the moment. As from 1st of January 2014 the market will be liberalised by 100%, as the ultimate target is for all consumers of electrical energy to be able to choose their Supplier.

The basic characteristic of CERA activities in the period under review was the taking of a series of important decisions that will create the basis and the prerequisites for the functioning of the electricity market.

For the first time, the Fees for the Use of the Transmission and the Distribution Network as well as the charges for Ancillary Services and those for the Transmission System Operator have been approved. Moreover the Regulatory Decision on the Methodology for the supply and compensation of Ancillary Services and Long-Term Capacity Reserve has been approved and published, following a public consultation.

In addition, a decision has been issued imposing an obligation to keep minimum reserves of alternative fuel in power generation installations, which use natural gas as their fuel, in order to ensure security of supply in this respect.

During the year under review, CERA has decided the amendment and rebalancing of EAC tariffs, on the basis of its previous decision dated 27.10.2009 providing a general increase by 1,5% on all tariffs, in an effort to reduce as far as possible the cross subsidisations which may be observed, with a view to their gradual elimination. In the same draft proposal, CERA proposed, inter alia, the imposition of conditions on the Electricity Authority of Cyprus which





will lead to a transparent unbundling of its accounts and to a programme of reducing its expenses for the benefit of consumers. The draft was published in the Official Gazette of the Republic on 26.11.2010 and called on all interested persons to submit possible comments within 30 days from the date of publication.

Following consultations, CERA decided that the approved general increase in tariffs by +1,5% as from 1.1.2011 and 1,5% as from 1.1.2012 on the basic price of €309,78/MT which is envisaged in its Decision No 385/2009, be amended and increases from 0% up to 3,50% along with decreases from 1,25% up to 3% on different tariffs were imposed.

The average selling price of electricity per kWh in all categories increased from 13,473 € cent in 2009 to 16,232 € cent in 2010 as a result of the increased fuel costs in 2010 compared to 2009.

CERA participated actively in all events related to its function. On the question of renewable energy sources, on a CERA initiative, a working group was established which prepared a study on the way of attaining the targets set for the electricity sector by European Directive 2009/28 for the year 2020. The results, of the study were included in the RES National Action Plan for 2010-2020. CERA's main concern is to attain the targets set at the minimum possible cost for the consumer, without affecting negatively the security of supply.

The planning made by CERA for 2011 includes the following important targets:

- Harmonising national legislation on Regulating the Electricity and the Natural Gas Market with European Directives 2009/72 and 2009/73
- Implementing the decision on the restructuring of EAC tariffs and planning their complete restructuring, after implementing a transparent unbundling of EAC accounts by activity
- · Completing the decisions relating to the operation of the electricity Market
- Amending the Legislation on Renewable Energy Sources in such a way as to ensure their participation in the electricity system without creating distortions.
- Monitoring, in line with CERA competencies, the most speedy and financially most beneficial arrival of Natural Gas in Cyprus, mainly for electricity generation, at the first stage, bearing in mind that Natural Gas:
 - Enriches the island's energy mix,
 - Leads gradually to a decrease on dependence on oil and improves security of supply and
 - Complies with Cyprus' commitments to attain environmental targets and more specifically the gradual decrease of Greenhouse Gas Emissions in order to combat the climate change.
- Strengthening the organisational structure of CERA Office in such a way as to achieve the smooth functioning of the Authority in line with the legislation
- At the same time the support of CERA Office will be strengthened through the restructuring and modernisation of its information systems and office management systems.

Concluding this brief reference to 2010, we would like to express our thanks to all those who helped and cooperated with us. These definitely include CEER, ACER and ERGEG. The bridges of communication built and the cooperation and common understanding between everybody involved help greatly the work of CERA.

GEORGIOS SHAMMAS Chairman Cyprus Energy Regulatory Authority





2. MAIN DEVELOPMENTS IN THE GAS AND ELECTRICITY MARKETS

2.1 Wholesale Electricity Market

2.1.1 Development of Wholesale Electricity Market

The Electricity Market was liberalised by 35% with effect from 1st May 2004 and was further liberalised by approximately 65% in total with effect from January 2009, to include all "non domestic" consumers which are able to select their Supplier according to what is in their best interest. However, currently there is no other Supplier in Cyprus apart from the Electricity Authority of Cyprus (EAC).

As from 1st of January 2014 the market will be liberalised by 100%, as the ultimate target is for all consumers of electrical energy to be able to choose their Supplier.

The essence of the set legal framework is that any enterprise, which is interested in generating and supplying electricity, may submit an application to CERA and obtain the relevant Licence if it fulfils the criteria set. The enterprises that will obtain such a Licence have the right to use the existing electricity transmission and distribution network. Although these networks remain the property of EAC, a Transmission System Operator (TSO) has been appointed and functions independently in terms of organisation and decision making from EAC and from its activities of production, distribution and supply, in order to safeguard third party access onto the transmission network and equal treatment of all users of the said network. The Owner of the distribution system has also been nominated as the Distribution System Operator (DSO) and although it is not independent in the sense that the Transmission System Operator is, it has the same duty of safeguarding third party access to the distribution network and the equal treatment of all users of the said network.

Furthermore, in accordance with the new Directive 2009/72/EC on the common rules for the internal electricity market and the repealing of Directive 2003/54/EC, Cyprus has secured derogation from article 9 on the network ownership issues.

In accordance with the diagram below it can be seen that the market is characterised by the following:

Market Regulation: CERA (with almost full authority).

System & Market Operation: Director TSO (independent in legal and management

terms).

Basic Trading Arrangement: Bilateral Agreements.

Balancing Market: Balancing energy requirements through TSO.

Captive Market: EAC, ~33% (domestic consumers only).

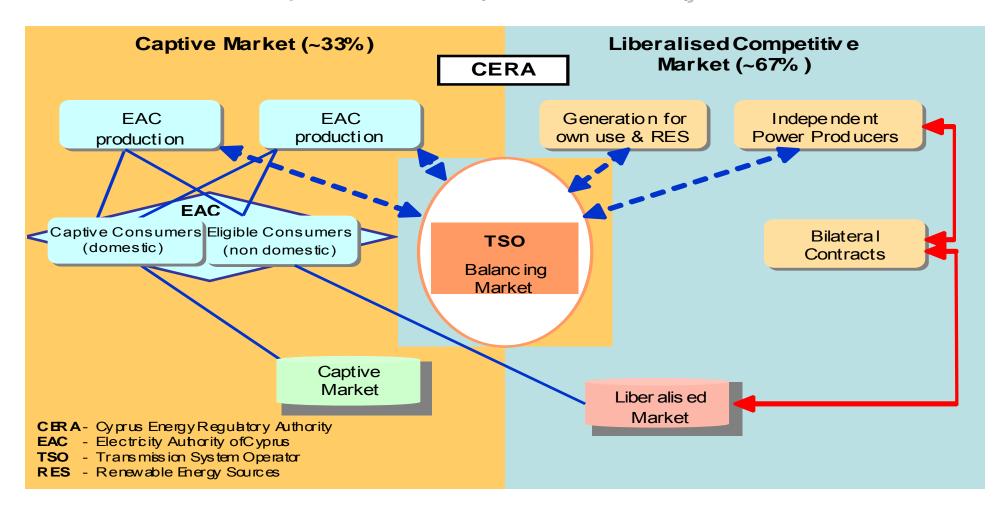
Eligible Market: ~67% (all non domestic consumers).

Competition in generation: EAC, IPPs, RES and Producers for Own Use.





2.1.1 Dev elopment of Electricity Market - Electricity Market Model



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As far as the "Trading and Settlement Rules" (Market Rules) are concerned, they are based on the bilateral agreements operating model of the liberalised electrical energy market. A special character of the Cyprus market is that every supplier must own his own generation.

2.1.2 Market Integration

Market integration results in decreasing electricity bill for consumers in countries enjoying large power generation capacities at low cost. Generally, the rationale for opening-up the market makes sense if adequate freedom of choice exists so that considerable effects of production reallocation can be expected. When there are too many restrictions in the system, market opening leads to redistribution without any reallocation. In the case of Cyprus where currently there is only one Supplier of electricity, the Regulator secures that the electricity prices of the "dominant" enterprise reflect the actual cost of the services offered with a reasonable profit.

Even though, CERA has provided an investment friendly framework, involving stable regulatory system and fair incentives for investments on a transparent and non-discriminatory basis, market integration has still not developed to a sufficient extent and this is due to the fact that several licenced (by conventional units) projects are delaying their materialisation awaiting Natural Gas to be introduced to the island. Thus, the main bottleneck in the development and integration of the electricity market is the absence of Natural Gas.

It is worth noting that Natural Gas was defined by a Ministerial Direction as the basic fuel for the production of electricity with regards to future installations of sizeable capacity. CERA has decided that sizeable capacity has to be over 50MW.

2.2 Retail Electricity Market

2.2.1 Development of Retail Electricity Market

Number of Electricity Suppliers to final customers:

Total number of Electricity Suppliers to final customers	ONE
Number of electricity suppliers selling <u>at least 5%</u> of total electricity consumed by final customers	ONE

2.2.2 Development of Switching

With regards to final customers switching, their supplier or renegotiating contracts, two groups of figures can be established as shown below:

- Percentage of final customers switching from one supplier to another during the year
 2010 and volume of consumption represented by those customers (in GWh).
- Percentage of final customers renegotiating contracts with their supplier during the year 20101 and volume of consumption represented by those customers (in GWh).





	Eligible C (non-domesti		Non-Eligible (domestic d	
	Percentage (%)	Volume (GWh)	Percentage (%)	Volume (GWh)
Customer switching	n/a	n/a	n/a	n/a
Customer renegotiating	n/a	n/a	n/a	n/a

Table 2.2.2 - Development of Customer Switching and Renegotiating

As a consequence of the absence of any other Supplier apart from EAC, customer switching as well as customer renegotiations cannot in fact take place in the electricity market in Cyprus as yet.

2.2.3 Price Development

The average selling price of electricity in €cent / kWh for all categories is given below:

AVERAGE SELLING PRICE OF ELECTRICITY (€cent / kWh)									
Year Category	2004	2005	2006	2007	2008	2009	2010		
Domestic	9,693	11,009	12,492	12,746	15,988	13,321	16,192		
Commercial	10,388	11,748	13,009	13,328	16,982	14,196	16,905		
Industrial	8,268	9,594	11,111	11,458	14,955	12,325	14,982		
Agricultural	8,637	10,106	11,434	11,675	15,296	12,697	15,440		
Public Lighting	8,437	9,298	10,981	11,233	14,554	12,129	14,711		
Average Selling Price (€cent / kWh)	9,647	10,988	12,408	12,719	16,178	13,473	16,232		

Table 2.2.3 - Average Selling Price





2.3 Wholesale and Retail Gas Market

Unlike the electricity sector, which is characterised by ownership differentiation, the gas sector according to the last amendment of the Law regulating the Natural Gas market as well as the relevant Ministerial Decision, shall be monopolistic.

Cyprus will establish its gas industry by granting a supply permit to a single legal entity, which will be controlled by the state (Shareholding: 56% by Government with option to release 5% to 3rd parties, 44% by EAC), called 'DEFA'. In general DEFA would have the sole right to import gas into Cyprus and to sell gas to all gas consumers. In addition the Council of Ministers has decided the creation of a land based Energy Center as the exclusive receiving terminal, with storage facilities and installations for regasification of Liquified Natural Gas (LNG).

During 2009 DEFA issued a request for an Expression of Interest by potential LNG Suppliers in order to purchase and import the LNG pursuant to a LNG Sale and Purchase Agreement (SPA), preferably on a delivered ex-ship (DES) basis which ended on 11/12/2009. In all fifteen tenders were submitted and after the completion of the first round of negotiations with prospective Natural Gas Suppliers their number was reduced to seven.

Subsequently, negotiations were held, inter alia, on the basis of the methodology of evaluating the new quotations. After this procedure only three companies submitted new quotations. The DEFA Negotiating Team and the Support Group, in cooperation with the specialised Consultants started a new round of negotiations with the three remaining Suppliers in connection with the terms of the Heads of Agreement of SPA and a change in the purchase price. The round of negotiations ended in December 2010 with DEFA's Negotiating Team to decide on a particular Supplier, submitting a relevant recommendation to the DEFA Board. It was expected that DEFA Board will take a decision on the subject during 2011.

Natural Gas is still not available on the island. In spite of this, Natural Gas was defined by a Ministerial Direction as the basic fuel for the production of electricity with regards to future installations of sizeable capacity.

The Natural Gas sector has been put in line with the relevant EU Directive 2003/55/EC, relating to the common rules of the internal Natural Gas market and CERA has prepared and submitted a draft bill to the Government of Cyprus, in order to transpose the provisions of the new relevant EU Directive 2009/73/EC into the national law. The draft bill is under consideration taking into account any new facts and developments in the hydrocarbon field. It is anticipated that, once the final legislative text is finalized and approved by the Ministry, it will then be put to public consultation, prior to approval by the Council of Ministers and subsequently, the Cyprus Parliament.

As mentioned above, the Council of Ministers has decided the creation of a land based Energy Centre as the exclusive Receiving Terminal, with storage facilities and installation for Regasification of Liquefied Natural Gas (LNG). In March 2009, the Electricity Authority of Cyprus (EAC) received a mandate from the Government of the Republic of Cyprus (GoC) to proceed with the formation of a Joint Venture Company that will be responsible for the





development, financing, operation and management of the onshore liquefied natural gas (LNG) import and re-gasification terminal (LNG Terminal) to be located at Vasilikos on the South coast of Cyprus. During 2009, the Electricity Authority of Cyprus accepted applications for Expression of Interest in participation and investment in the Liquefied Natural Gas Terminal which would be responsible for the development, financing, operation and management of the LNG Terminal at Vasilikos.

On 26.2.2010 the prequalified perspective candidates submitted applications to the Electricity Authority of Cyprus for the selection of the Strategic Partner for the LNG Terminal. The proposals submitted included well-known companies involved in Liquefied Natural Gas Terminals and also in the supply of LNG.

The candidates were selected on 25.5.2010, through the Proposal Evaluation process and on 21.6.2010 direct negotiations started among the prevalent candidates for a Strategic Partner for the Liquefied Natural Gas Terminal at Vassilikos. The aim of the negotiations between the Electricity Authority of Cyprus and the most prevalent candidates for a Strategic Partner was the improvement of the Documents of Cooperation (Joint Development and Partners' Agreement) of their Proposal and the selection of the preferred Strategic Partner for the joint development, construction and operation of the Liquefied Natural Gas Terminal at Vasilikos.

On 12.7.2010 the second round of negotiations started, the object of which was to determine issues which touch upon the planning, the budget, the financing, the manning and the award of contracts for the LNG Terminal.

At a meeting on 30.12.2010, the Board of the Electricity Authority of Cyprus examined the question of selecting a Strategic Partner to participate in the Joint Venture, which will undertake the development, financing, operation and management of the Liquefied Natural Gas Terminal at Vasilikos. The Board of the Electricity Authority unanimously agreed with the recommendation of the Independent Consultants, the Managing Committee and the Negotiating Team of the Electricity Authority of Cyprus, on the ranking of Strategic Partners, as well as the selection of the Strategic Partner with whom the Electricity Authority should consult. This decision has been notified to CERA and the competent Minister.

It has to be noted that an appraisal of Cyprus offshore hydrocarbon potential will be performed through an exploratory drilling to take place in September 2011. It is anticipated that developments in the gas sector in terms of possible discovery of indigenous gas reserves, could lead to a redesign of the gas sector structure in Cyprus and revisions of policies, political decisions and schedules would have to be done, which could convert Cyprus into an natural gas exporting country.





2.4 Public Service Obligations and Consumer Protection

2.4.1 Transparency

The Trading and Settlement Rules have been drafted by TSO and approved by the Minister and CERA in accordance with section 79 of the Law.

The main objectives of the Rules are to:

- Enable the Transmission System Operator to fulfil its obligations under the Law.
- Regulate the means by which Participants may trade Energy.
- Allow the calculation and settlement of payments in respect of Energy and Ancillary Services.
- Specify the way in which settlement and billing shall be carried out and
- Deliver the Electricity Trading Rules as envisaged in the Law.

Also, TSO shall in accordance with section 81 of the Law establish the Trading and Settlement Rules Committee which shall be a standing body constituted to:

- Generally review and discuss the Trading and Settlement Rules and its workings.
- Review and discuss suggestions for amendments to the Trading and Settlement Rules which the TSO, the Regulator or any Party may wish to submit for consideration by the Trading and Settlement Rules Committee from time to time, and
- Publish recommendations and encourage Parties to discuss such recommendations.

The Trading and Settlement Rules, as described above, constitute, inter alia, one of the major factors to achieve transparency between licensed electricity producers/suppliers and to ensure consumer protection.

2.4.2 Complaints

CERA has the power to issue Regulations concerning the protection of the interests of the consumers of electricity requiring that any Supplier of electricity and the Distribution System Owner (DSO), within a prescribed time period, propose and implement procedures for the submission of complaints by consumers, which procedures allow consumers to register complaints and prescribing how any Supplier and the DSO shall respond to complaints received by consumers.

The Regulations may impose requirements on suppliers and the DSO relating but not limited to:

- Procedures for the submission and, where appropriate, re-submission of proposed complaints procedures for approval.
- The timetable for the implementation of the complaints procedures.
- Penalties for failure to comply with the consumer complaints Regulations relating to the preparation or implementation or review of complaint procedures.
- A requirement that suppliers and the DSO review their complaints procedures at intervals
 of not more than five years.





• Establishing procedures to deal with complaints from consumers that are not settled through complaint procedures to the satisfaction of consumers.

Specifically, the following Regulations relevant to the above mentioned were enacted:

- Regulations on Regulating the Electricity Market (Procedure for Submitting Complaints) of 2005.
- Regulations on Regulating the Electricity Market (Performance Indicators) of 2005.

The first of the above mentioned Regulations determine the procedure for submission of complaints by consumers in cases were suppliers of electricity and/or the Owner of the Distribution System, or both, are in breach of their obligations or duties and/or are acting outside the scope of their prescribed by the Law jurisdiction.

Specifically, the above mentioned Regulations provide for the following, inter alia;

- Consumers' right to submit complaints to the Suppliers and/or the Owner of the Distribution System.
- The obligation of the Supplier and/or Owner of the Distribution System to respond to the complaints.
- The right to submit complaints to CERA and the procedure for examining complaints by CERA
- The omission of the Supplier and Owner of the Distribution System to comply with CERA's' decisions.
- The penalties provided for in the Regulations.

The second of the Regulations mentioned above, sets the minimum level of performance in relation to the performance indicators of the Supplier of electricity, which must be achieved by the Supplier and the Owner of the Distribution System.

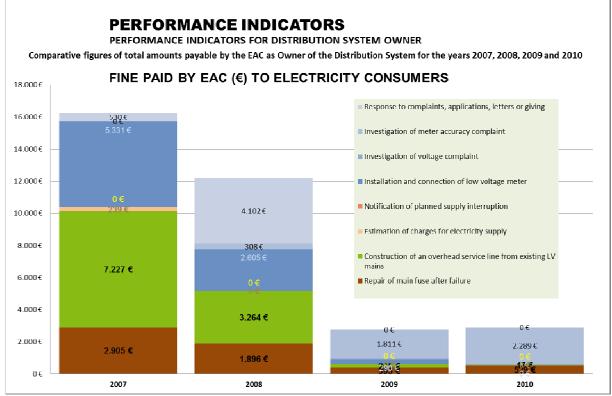
Furthermore, this Regulation provides for a Charter of Consumer Rights and sets the time limit within which a Supplier and the Owner of the Distribution System must respond, determines the fines, the procedure of payment and the time at which the fines are to be paid in cases where a Supplier or the Owner of the Distribution System fails to comply with the performance indicators set out therein.

By the implementation of these Regulations the rights of the consumers are safeguarded, their protection is secured, the procedure for the submission of consumer complaints is regulated in the event that Suppliers of Electrical Energy and/or the Owner of the Distribution System or both are in breach of their obligations, competences and duties, the end result being the improvement of the services offered to consumers.

The following tables show the results for the years 2007, 2008, 2009 and 2010 of the penalties (€) imposed to EAC as DSO and as a Supplier for failure to comply with the customer complaints regulation relating to the preparation or implementation or review of complaints procedures.







PERFORMANCE INDICATORS

FOR DISTRIBUTION SYSTEM OWNER

PERFORMANCE INDICATORS FOR DISTRIBUTION SYSTEM OWNER

Comparative figures of total amounts payable by the EAC as Owner of the Distribution System for the years 2007, 2008, 2009 and 2010

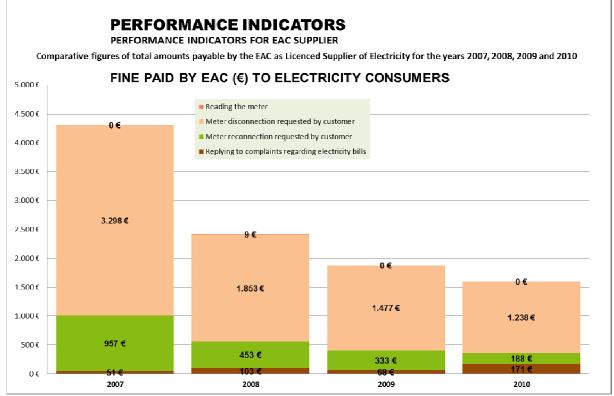
FINE PAID BY EAC (€) TO ELECTRICITY CONSUMERS

Indicator		2007	2008	2009	2010
1	Repair of main fuse after failure	2.905€	1.896€	393€	529€
2	Installation and connection of low voltage meter	5.331 €	2.605€	290 €	0€
3	Construction of an overhead service line from existing LV mains	7.227€	3.264 €	205€	17€
4	Estimation of charges for electricity supply	239 €	0€	0€	0€
5	Notification of planned supply interruption	0€	0€	0€	0€
6	Investigation of voltage complaint	34 €	34 €	68€	68€
7	Investigation of meter accuracy complaint	0€	308€	1.811€	2.289€
8	Response to complaints, applications, letters or giving	530 €	4.102€	0€	0€

Table 4.2.4(a) – Performance Indicators Regulations of EAC as DSO







PERFORMANCE INDICATORS

FOR EAC SUPPLIER

PERFORMANCE INDICATORS FOR EAC SUPPLIER

Comparative figures of total amounts payable by the EAC as Licenced Supplier of Electricity for the years 2007, 2008, 2009 and 2010

FINE PAID BY EAC (€) TO ELECTRICITY CONSUMERS

Indicator		2007	2008	2009	2010
1	Replying to complaints regarding electricity bills	51 €	103€	68€	171 €
2	Arrangement of appointments	0€	0€	0€	0€
3	Meter reconnection requested by customer	957 €	453 €	333 €	188€
4	Meter disconnection requested by customer	3.298€	1.853€	1.477 €	1.238€
5	Reading the meter	0€	9€	0€	0€
6	Response to complaints, applications, letters or giving information	*	*	*	0€

^{*} This Indicator is included in Indicator (8) of EAC as DSO

Table 4.2.4(b) – Performance Indicators Regulations of EAC as a Supplier

From Tables 4.2.4(a) and (b) it is evident that EAC performance in 2010 compared with the previous years, both as Owner of the Distribution System as well as a Supplier, may be considered quite satisfactory, showing a gradual improvement of the Performance Indicators with every passing year.

It should be noted that Table 4.2.4(a) shows a very small increase in the total amount paid by the EAC as Owner of the Distribution System compared with 2009, in respect of which CERA intends, on the basis of Legislation, to take the necessary action, so that EAC performance improves in the sectors where this is required.





Regarding consumer complaints, which have been presented or formally submitted to CERA, it could be said that they were maintained within acceptable levels. Registered consumer complaints are shown in the table below:

Consumer Enquires/Complaints									
20	007	20	2008 2009		09	2010			
Enquiries/ advice	Formal complaints	Enquiries/ advice	Formal complaints	Enquiries/ advice	Enquiries/ advice	Enquiries/ advice	Enquiries /advice		
	7	10	3	2	8	4	8		

Table 4.2.4(c) – Customer enquiries / advice or complaints presented or submitted to CERA

The majority of the above complaints were based on bill issues, prices and tariffs. CERA handled with care the above complaints, with the collaboration of EAC and TSO, leaving the consumers in most cases satisfied.

With regards to consumer complaints there are basically four (4) types of complaints, as given in the table below:

Type of Complaint	Number of complaints received in 2010
High Consumption	1.439
Entangled tree brunches with overhead conductors	3.723
Blown Street Lighting Lamps	5.127
Blown fuses	16.072
Total Complaints for 2010	26.361

Table 2.4.2 – Customers Complaints 2010

Furthermore, CERA, in addition to the mechanisms (through events and seminars) at its disposal for informing the public, in recent years participates in the "Informing the Public Campaigns" conducted at European Level and organised with the initiative of CEER and ERGEG as, for example, the following campaigns:

- Consumer Information Campaign
 - (http://ec.europa.eu/energy/energy_policy/consumers/index_en.htm)
- You Choose Campaign
 - (www.agathepower.eu)



• Individual Consumer Information supplied to Eligible Consumers either electronically or by mail.

It should be noted that in all cases, printed information material was distributed to the public.





2.5 Infrastructure

2.5.1 Development in Tariffs

During the period under review, CERA has decided the amendment and rebalancing of EAC tariffs, on the basis of its previous decision dated 27.10.2009 providing a general increase by 1,5% on all tariffs, in an effort to reduce as far as possible the cross subsidisations which may be observed, with a view to their gradual elimination. In the same draft proposal, CERA proposed, inter alia, the imposition of conditions on the Electricity Authority of Cyprus which will lead to a transparent unbundling of its accounts and to a programme of reducing its expenses for the benefit of consumers. The draft was published in the Official Gazette of the Republic on 26.11.2010 and called on all interested persons to submit possible comments within 30 days from the date of publication.

Following consultations, CERA decided that the approved general increase in tariffs by +1,5% as from 1.1.2011 and 1,5% as from 1.1.2012 on the basic price of €309,78/MT which is envisaged in its Decision No 385/2009, be amended and increases from 0% up to 3,50% along with decreases from 1,25% up to 3% on different tariffs were imposed.

On the basis of the above changes relating to the basic price of €309,78/MT, the Electricity Authority of Cyprus will be called upon to set its new tariffs which will be valid from the date they come into force at a rounded up price of €300/MT, so as to make it easier for consumers to check the fuel adjustment clause.

Furthermore for purposes of greater convergence towards the desirable cost orientation, CERA decides that the fixed charge for all categories of consumers be increased (including the general increase/decrease in tariffs above).

It is clarified that on the basis of this Decision, the revenues of the Electricity Authority of Cyprus are estimated to be reduced by about € 3.700.000, compared with those approved by CERA's previous decision No 385/2009, however, the rebalancing of tariffs is achieved to a satisfactory degree with the ultimate aim of abolishing smoothly and gradually all the cross-subsidies observed.

The changes in tariffs apply as from the dates shown in the above tables. However, the implementation of changes as from 1.1.2012 is subject to the following conditions:

- (a) Preparation of a transparent unbundling of the EAC accounts on the basis of the regulated activities and its submission to CERA by 31.7.2011 for approval.
- (b) Rationalisation of the Organisational Structure of the Electricity Authority of Cyprus with a view to increasing productivity and substantially reducing costs for consumers.
- (c) Implementation of a compulsory programme for the substantial reduction of operational expenses, with emphasis on administration expenses which are apportioned to regulated activities as well as on the issues in respect of which the Electricity Authority of Cyprus undertook to make savings during its consultations with CERA on various occasions.
- (d) Suspension of non-productive capital expenses.
- (e) Carrying out of a detailed study by a specialised firm of consultants on the financial situation of the Electricity Authority of Cyprus in relation to its ten-year development plan and its submission to CERA by 31.7.2011.

As mentioned in the Foreword of this Report, the average selling price of electricity per kWh in all categories increased from 13,473 € cent in 2009 to 16,232 € cent in 2010, an increase





of 20,48% as a result of the increased fuel costs in 2010 compared to 2009 and the automatic fuel cost adjustment applied to the market price.

It has to be noted that an explosion that occurred at the southern coast of Cyprus next to the Vasilikos Power Station on the 11th of July 2011, has caused extensive damages to the power station that was taken out of operation. Cyprus suffered a severe energy crisis since it lost more than 50% of its total electricity capacity.

CERA decided, for as long as the energy crisis lasts, to maintain the feed-in-tariff for renewable energy sources at the same level as it was before the explosion.

2.6 Security of Supply

For the purpose of harmonisation with the Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006, concerning measures to safeguard security of electricity supply and infrastructure investments, all necessary amendments were effected to our National Laws on Regulating the Electricity Market.

In the year under review, a decision has been issued by CERA imposing an obligation to keep minimum reserves of alternative fuel in power generation installations, which use natural gas as their fuel, in order to ensure the security of supply. These reserves must be adequate to maintain the production for at least eight days at the maximum power of each Unit, as this would be achieved through the use of natural gas.

On the basis of this decision, which was published in the Official Gazette of the Republic all relevant existing licenses were amended.

2.7 Regulation / Unbundling

2.7.1 Competences of NRAs

The main statutory objectives of CERA are set out below:

- To encourage, promote and safeguard the healthy and essential competition in the Electricity and Natural Gas Markets.
- To protect Consumers' interests.
- To promote the development of economically viable and efficient Electricity and Natural Gas Markets.
- To ensure the Security, Continuation, Quality and Reliability of Electricity and Natural Gas Supply.
- To ensure the security of supply.
- To take into consideration the Protection of the Environment.
- To encourage the efficient generation and use of Electricity.
- To promote the use of Renewable Energy Sources (RES).

CERA is an independent authority of the Republic of Cyprus and has executive powers and competences in the Energy Field.

Among others, CERA has the following powers and competences:

(A) Electricity Market





- Issues, controls, enforces, amends and revokes Licences to Generate and Supply of Electricity.
- Advises the Minister of Commerce, Industry and Tourism in all subjects relating to electricity.
- Ensures that the Rules for the Transmission and Distribution and the Rules for the Electricity Market are prepared and approved in accordance with the Law.
- Safeguards the adequacy in electrical energy for the satisfaction of all reasonable needs and demands for electricity.
- Regulates tariffs, charges and other conditions and presuppositions which are imposed on the Licence Holders for any services offered in accordance with the conditions of their Licences.
- Determines, publicises and enforces quality standards with which the Licence Holders must comply.
- Determines the rules and the procedures according to which complaints are examined which relate to services offered by the Licence Holders including, when it considers it appropriate, the carrying out of investigations and the taking of decisions for such complaints.
- Encourages and facilitates competition with the ultimate target of lowering of prices.
- Protects the interests of the consumers.
- Ensures the Continuation, Quality, Reliability and Security of Electricity Supply.
- Protects the Environment.
- Encourages the use of Renewable Energy Sources (RES).
- Encourages Research and Development in the field.
- Ensures that the Licence Holders operate efficiently and have the ability to finance the business activities for which they are licenced.
- Promotes the development of an economically viable and efficient electricity market.
- Takes into consideration the needs of the consumers of rural areas, the consumers who
 are in a disadvantageous position and the elderly.

(B) Natural Gas Market

- Protects the interests of natural gas consumers.
- Safeguards the satisfaction of the demand for natural gas.
- Promotes the development of an economically strong and effective natural gas market.
- Safeguards the Safety, Continuity, Quality and Effectiveness in the supply of natural gas.
- Protects the environment.
- Encourages the research and development regarding the transmission, distribution, storage, supply and use of natural gas.

It is also the duty of CERA to:

 Safeguard and publicise measures which may be taken in case of unforeseeable crisis in the energy field, or when there is a danger to the safety of people, works, installations or the integrity of the networks, and





• Follow up the issues of security of the supply, and especially the balance of supply and demand in the market, the level of the expected future demand and the available plant.

During the execution of its duties, CERA takes the necessary measures to comply with the Public Service Obligations. The ultimate aim of CERA is to protect in the best possible way the interests of Energy Consumers but at the same time to protect the public interest.

2.7.2 Sanctions imposed by NRAs

CERA may on its own initiative or after receiving a complaint to investigate whether a licence holder is infringing or omitting to comply with any condition of the licence or any Regulatory Decision or Decision.

After carrying out such an investigation, CERA shall notify a notice to the aforementioned persons by which it shall determine:

- The term of the license or exemption or the regulatory decision or decision which, in CERA's opinion may be infringed at first sight or which is likely to be infringed by the licensee.
- The acts or omissions which in CERA's opinion may or are likely to constitute an infringement of the relevant term, decision or regulatory decision of CERA.
- The deadline within which the licensee may submit objections in writing, which deadline shall not exceed the 30 day time limit from the date that the notice is notified.

CERA shall examine any objections submitted. In examining any objection, CERA may issue a decision by which, it shall order the licensee to take such measures as may be necessary for remedying the infringement or preventing future infringements.

In the event that the licensee fails to remedy the infringement within one month from being notified of the decision of CERA, or within a reasonable period of time as CERA may prescribe by its decision, CERA may:

- Impose an administrative fine on the licensee depending on the nature, seriousness and duration of the infringement or omission as may be prescribed by Regulations issued under the relevant Law; and/or,
- Decide that an administrative fine depending on the seriousness of the case, shall be owed for each day on which the infringement or omission is continuing as referred to above; and/or.
- Revoke an authorisation, exemption, order or prior permit in accordance with the procedure prescribed by Regulations issued by CERA.

CERA's decision to impose an administrative fine or to revoke a license must be in writing and duly reasoned.

CERA's reasoned decision to impose an administrative fine shall be notified to the person who has been considered to be responsible for the infringement or omission. Such person may, after being notified of the decision, make written representations to CERA which must be lodged within 30 days of the notification of the decision. CERA shall collect the administrative fine if the 75 day time limit for filing a recourse before the Supreme Court of Justice has passed without any action being taken from the date of notification of the decision to impose such administrative fine, or, in the event that the recourse has been filed, following the issuing of a court decision which does not annul the fine.

If a fine imposed by CERA in accordance with the Law and the Regulations issued under it is not paid, CERA shall initiate court proceedings and shall collect the sum as a civil debt due to the Fund of the Office of CERA.





2.7.3 Role of TSO in the Electricity Market

Cyprus has established a single TSO, independent in legal terms (the Manager of TSO's Office being appointed by the Council of Ministers), in management terms (organisation and decision making) as per Law L.122 (I)/2003.

The main functions and responsibilities of the TSO are to secure the operation of the Electricity Transmission System and to manage the electricity market on an objective, non-discriminatory basis in a competitive environment, while at the same time supporting and promoting electricity generation from renewable energy sources. The TSO ensures access to the Transmission System of all producers and suppliers of electricity. The TSO also coordinates the actions taken for the repair and clearing of faults occurring in the Generation or Transmission Systems, in order for them to operate in an efficient co-ordinated, secure, reliable, and economical way, ensuring unhindered and uninterrupted supply of electricity to all consumers.

The two principal documents that the Transmission System Operator manages within the legal framework are the Transmission and Distribution Rules that primarily govern the technical aspects of planning and operating the transmission and distribution systems and the Trading and Settlement Rules (Market Rules) that primarily govern the commercial interactions of all parties using the transmission and distribution systems.

In general, the responsibilities of the TSO are:

- The efficient operation of the Transmission System.
- To ensure, on a day-to-day basis, the availability of generation resources and ancillary services.
- To ensure that the Transmission System is developed and maintained so that it sustains safety, reliability, security of supply, economic viability and efficiency.
- To prepare and annually revise a ten-year development and investment plan of the Transmission System.
- To operate the electricity market.
- To ensure the co-ordinated operation of the Transmission and Distribution Systems by arriving to all necessary agreements with the DSO, which in the case of Cyprus is EAC.
- To prepare, revise, as necessary, and submit to CERA for approval the Transmission and Distribution Rules as well the Market Rules.
- To determine the connection and use of system charges and arrange for the charging of all those who use or intend to use the Transmission System for transferring the energy they produce to their Consumers.
- To keep all necessary system records regarding the use of the Transmission System.
- To prepare all necessary monthly accounts according to the exact operation of each Producer with respect to the energy used by his Consumers.

2.7.4 Development of TSO and DSO unbundling

The function of the single DSO has remained within the Network Business Unit of EAC in agreement with the relevant clauses of the Electricity Directive (see Article 15) and the approval of the Government of Cyprus.





Neither the TSO nor DSO is ownership unbundled, and according to the 3rd Energy Package (amendments on the Directives for gas and electricity) Cyprus is exempted from this provision due to its small and isolated system nature.

Although the DSO has no legal independence, the accounts of this activity are unbundled and all medium and low voltage installations of the Distribution System are among the assets allocated as own.

As it has been mentioned before, in accordance with the new Directive 2009/72/EC on the common rules for the internal electricity market and the repealing of Directive 2003/54/EC, Cyprus has secured derogation from article 9 on the unbundling of transmission systems and transmission system operators.

2.8 General Conclusions

2.8.1 Conclusions Related to 3rd Package

The energy package adopted by the EU emphasises the objective of a single competitive energy market. It is indeed, a proper functioning and competitive market with adequate infrastructure, including storage, gas pipelines and a developed electricity grid, that is required.

In general CERA supports the Commission's decision concerning the measures proposed for strengthening the powers and independence of National Regulators which are substantial in harmonising and leveling up the powers of National Regulators.

CERA strongly supports the focus that the package gives to the development of investments, the diversification of sources and routes as well as the determination and implementation of measures towards safeguarding security of supply. But as the Green Paper entitled 'A European Strategy for Sustainable, Competitive and Secure Energy' quite rightly states, there can be no truly competitive and single European energy market, when islands such as Cyprus, is totally dependent remain 'energy islands' isolated from the rest of the Community. This poses a challenge for Cyprus whose isolated energy network and small market make it difficult to achieve the objective of a secure and competitive energy supply. This is even more so given that our limited market is not conducive to economies of scale or scope.

Having said that, there is no detracting from the importance of a sustainable energy policy which not only aims to ensure a secure, competitively priced and environmentally sound energy supply, but also seeks to reduce dependence on imported energy and to replace it by indigenous renewable energy sources.

Initiatives to reduce energy demand coupled with investment in clean and more eco-efficient technology also contribute to this objective, as well as, to reduce green-house gas emissions.

3. REGULATION AND PERFORMANCE OF THE ELECTRICITY MARKET

3.1 Regulatory Issues [Article 23(1) except "h"]

3.1.1 Management and Allocation of interconnection capacity and mechanisms to deal with congestion





As already mentioned, one of the urgent priorities of CERA was the opening of the Electricity Market. This was achieved at the beginning when the Electricity Market was liberalised by 35% on 1st May 2004. Furthermore, with effect from 1st of January 2009 the electricity market has been further liberalised for all "non domestic" consumers (approximately ~67% of the market). Cyprus has obtained a derogation with effect from 1st of January 2014 all consumers of electrical energy will be able to select their Supplier according to what is in their best interest.

Year	Market Opening (%)
1995	0
1997	0
2003	0
2004	35
2005	35
2006	35
2007	35
2008	35
2009	67
2010	67
2011	67
2012	67
2013	67
2014	100

Table 3.1.1- Electricity Market Opening Table

At present, Cyprus, as an island, operates without cross-border links. Thus, cross-border congestion management rules are not applicable. In the primary legislation, there is a clear definition of the role of the TSO to observe and record on an annual basis an assessment regarding expected flows and other conditions related to transmission capacity and ensuring that measures are taken to avoid breaching security of supply standards. According to the primary legislation, the TSO is obliged to publish a ten-year development plan which is approved by CERA and is available to all market participants. The above mentioned development plant is revised at least once a year.

3.1.2 The regulation of the tasks of transmission and distribution companies

Cyprus, being a small isolated system, has opted through the Law of 2003 on Regulating the Electricity Market, L.122(I)/2003, (further down referred to as the Law) for,

- (a) A single TSO unbundled in legal and management terms from the System Owner.
- (b) A common, bundled distribution network, Owner & DSO, as part of the Electricity Authority of Cyprus (EAC) which is the vertically integrated utility of Cyprus involved in all the functions of the electricity market.

Network Tariffs

For the network tariffs, in close cooperation with the TSO and EAC, reports have been prepared using external consultants (from Greece, UK, Ireland, and Netherlands) which have





already been approved. The methodology developed in the reports is based on the following principles:

- Unbundling of EAC accounts under the following broad categories:
 - Generation
 - Transmission Network
 - Transmission System Operator
 - Distribution
 - Supply
 - Other business
- Re-evaluation of generation and network assets.
- Identification of ancillary services and cost valuation of each one separately.
- Identification of Public Service Obligations.
- Benchmarking of various activities with reference to published performance indices of European Utilities.

These will facilitate the formulation of network tariffs that will guarantee the following prerequisites:

- Economic Efficiency/cost reflectivity.
- Cost recovery.
- Efficient Regulation.
- Simplicity, transparency and stability.
- Non-discrimination.
- Facilitation of competition.

CERA has been vested through the Law with the responsibility of approving tariff methodologies and actual tariffs and charges of the Monopoly Sectors of the industry and all activities of EAC who is the dominant participant in the Electricity Market.

What is important to mention is that the philosophy behind the structuring of the tariffs for which CERA has the final word, is to protect the consumers against monopolistic prices.

In addition the goal of CERA is to encourage, via the tariffs structure, the efficiency and the quality of services, which need to be provided to the consumers by the licence holders for generation and supply of electrical energy.

The regulation of the Electricity Tariffs is applied with the aim of maximising the long term benefit of competitiveness in the Cyprus economy, the protection of the consumers, the performance of the Obligations of Public Service and the securing of continuous and normal energy supply.

Within this framework the regulation of Electricity Tariffs seeks to achieve the following main goals:

- Tariffs to reflect the real cost plus reasonable profit for every sector of the electrical energy.
- Unnecessary consumption not to be encouraged, but, on the contrary, energy savings should be encouraged.





- Sufficient incentives to exist for the participants in the Electrical Energy Market, so that they improve the cost of the services they provide.
- The competitiveness of the services provided to be secured.
- Not to create discrimination between consumers.
- Not to distort competition.
- Electricity bills to show in a transparent and clear way the consequences that application
 of other Policy decisions (e.g. Renewable Sources of Energy) may have on electricity
 tariffs.
- The structure of the bills and the items comprising them to be as clear and understandable as possible.
- Changes in prices to be anticipated so as to avoid up rapid changes which may cause uncertainty to investors and consumers.

The Electricity Market Law of 2003 adequately covers the requirements of the Electricity Directive under Article 3 for consumer protection and performance standards that affect the quality of supply to all consumers with particular emphasis to vulnerable consumers. Regulations were enacted pursuant to Article 88 of the Law laying down demanding obligations on the network owner and on suppliers to meet such quality standards that will safeguard the quality and continuity of electricity supply to all consumers.

The TSO in close cooperation with EAC has drafted proposals for the Use of Transmission System Charges.

The proposal for the Use of System Charges was under consideration by CERA and the final approval. Finally, after a lot of efforts, calculations, meetings and study, CERA has approved the tariffs to be used for the purpose of Use of System Charges for the years 2010-2012.

The proposal for the Transmission and Distribution Use of System Charges were scrutinized by CERA and after long deliberations, comparisons with other countries, specific analyses they were finally approved for the years 2010-2012





CHARGES FOR THE USE OF NETWORKS AND OTHER OPERATIONAL EXPENSES	2010	2011	2012
	€cent/kWh	€cent/kWh	€cent/kWh
Expenses of the Transmission System Operator	0,07	0,08	0,08
Supplementary Services	0,18	0,20	0,21
Long-term Standby	0,46	0,46	0,46
Sub-Total	0,71	0,74	0,75
Producer interconnection to the High Voltage			
Expenses of the High Voltage Network	0,81	0,83	0,86
Total for Producers Interconnected to High Voltage	1,52	1,57	1,61
Producer interconnection to Medium Voltage			
Expenses of the High Voltage Network	0,81	0,83	0,86
Expenses of the Medium Voltage Network	1,24	1,28	1,33
Total for Producers Interconnected to Medium Voltage	2,76	2,85	2,94
Producer interconnection to the low voltage			
Expenses of the High Voltage Network	0,81	0,83	0,86
Expenses of the Medium Voltage Network	1,24	1,28	1,33
Expenses of the Low Voltage Network	1,43	1,45	1,47
Total for Producers Interconnected to Low Voltage	4,19	4,30	4,41

Table 3.1.2- Charges for the use of networks and other operational expenses Table

The Cyprus Energy Regulatory Authority, exercising its powers under Article 26 of the Regulating the Electricity Market Laws for the purposes of implementing the provisions of the Law on Energy End-Use Efficiency and Energy Services decided to amend the Statement of Regulatory Practice and Methodology on Electricity Tariffs, with the addition of supplementary targets which must be attained by Electricity Tariffs and which include the provision of information to consumers on:

- a. comparisons between the current consumption of the end user and consumption during the corresponding period of the previous year, preferably in the form of a graph.
- b. comparisons with some normal or model energy consumer of the same category.
- c. addresses etc of consumer associations, energy organisations, or similar organs including website addresses providing information on available measures to improve energy performance, comparisons of various categories of end users and/or objective technical specifications for energy consuming equipment.

Balancing

As mentioned in the beginning in this report, an important itemised and very complicated issue that CERA had to carry out was the finalisation of the document of the "Trading and Settlement Rules" (Market Rules). The above document was proposed by the TSO to CERA on 15 October 2008. CERA approved it and submitted it to the Minister on 23 December 2008. Subsequently, the Minister gave his approval on 22 January 2009 when the Trading and Settlement Rules were officially published and placed into force on 30 January 2009.

Furthermore, the Trading and Settlement Rules:





Enable the TSO to fulfill its obligations under the Law.

- Regulate the means by which Participants may trade Energy.
- Allow the calculation and settlement of payments in respect of Energy and Ancillary Services.
- Specify the way in which settlement and billing shall be carried out.
- Deliver the Electricity Trading Rules as envisaged in the Law.

The Trading and Settlement Rules provide all necessary information concerning the operation of the electricity market in the country. The balancing arrangements are also described in the Transmission and Distribution Rules.

The system applied in Cyprus is based on Bilateral Agreements between producers and their customers, who must nominate their productions to the TSO 24hrs ahead of their planned production. Their production must balance within ±10% of their customers demand. The difference between total supply and total demand is settled through the balancing market. Gate closure is applied at midnight – as provided by Market Rules. Settlement of imbalances will be arranged on a monthly basis. It should be noted that the balancing interval is 30min.

Participants acknowledge the following principles governing Energy Balance:

- As a bilaterally contracted market, primary Energy Balance is achieved by Participants contracting for delivery of Energy for expected Customer offtakes. Energy Contracts are for delivery of defined amounts of Energy in a Settlement Period.
- Generators will nominate physical positions to the Transmission System Operator representing their intentions to deliver the physical Energy for which they have made Energy Contracts.
- When the Transmission System Operator believes that the net generation does not equate to net demand (adjusted for losses), then it will contract to buy or sell residual Energy to bring the two into balance.

Participants acknowledge the following principles governing System Balance:

- Energy Contracts are for delivery of total Energy over a Settlement Period. However, for
 particular minutes within a Settlement Period, the system may be long or short of Energy
 even when, in aggregate for the Settlement Period, the system is in balance. The
 Transmission System Operator will need to contract to buy and sell Energy to achieve
 minute-by-minute Energy Balance within the Settlement Period.
- In addition to achieving Energy Balance, the Transmission System Operator will contract for other services to manage system constraints, voltage control and frequency control.

The market is not yet operating in practise since there is only one Power Producer and Supplier, namely the EAC.

3.1.3 Effective unbundling

- Cyprus has established a single TSO, independent in legal terms (the Manager of TSO's Office being appointed by the Council of Ministers), in management terms (organization and decision making) as per Law L.122 (I)/2003.
- The function of the single DSO has remained within the Network Business Unit of EAC in agreement with the relevant clauses of the Electricity Directive (see Article 15) and the approval of the Government of Cyprus.





- Neither the TSO nor DSO is ownership unbundled, and according to the 3rd Energy Package (amendments on the Directives for gas and electricity) Cyprus is exempted from this provision due to its small and isolated system nature.
- Although the DSO has no legal independence, the accounts of this activity are unbundled and all medium and low voltage installations of the Distribution System are among the assets allocated as own.

GENERATION SUPPLY AND TRANSMISSION ACTIVITIES	TSO	DSO
Separate Headquarters (Y/N)	Yes	No
Separate corporate presentation (Y/N)	Yes	No
Unbundled regulatory accounts as per guidelines (Y/N)	Yes	Yes
Audit of unbundled accounts (Y/N)	No	No
Publication of unbundled accounts (Y/N)	No	No
Separate board of Directors without Directors from other group companies? (Y/N)	No	No

Table 3.1.3 - Summary Information on TSO & TSO Unbundling (Electricity)

On the basis of the above the following are adhered to:

- Unbundled corporate accounts of EAC will include separate accounts for Transmission as Owner, Distribution as Owner and Operator and any subsidies to the Transmission System Operator.
- The unbundling methodology of EAC has been prepared by reputable consultants (ESBI Ireland) and the Board of EAC has given its preliminary approval. The methodology has been submitted to CERA together with historic accounts and these are currently in the final stages of clarifications and approval.
- It was agreed with EAC that unified accounts should be acceptable for the time being. In the future however, its intended that unbundled accounts will be issued and separately audited by external auditors.
- In accordance with article 27 of Law 122(I)/2003, sanctions available to the Regulator for Companies failing to comply with management or accounts unbundling vary in accordance with the seriousness of the breach, from fines of a minimum of €1,710 up to 10% of the gross annual income of the enterprise.

In the event that the breach continues, in spite of the fine imposed, CERA may additionally impose an administrative fine of €85.50 to €8,550 for each day that the breach continues taking into consideration the seriousness of the breach.

In the event that the person/legal entity responsible for the breach has obtained illegal gain due to the breach, CERA has the power to impose a fine which may reach a sum double that of the proven sum illegally gained.

Also, it should be noted that CERA may revoke the License.





TSO is located separately from EAC. The TSO presents himself to customers as a separate entity with his own name, logo and website.

Employees directly employed by network operators (TSO's & DSO's) as share of employees of the total electricity sector approximates to 39,6%.

Employees also providing services to other parts of the group as percentage of the total employees in the network business (the denominator includes the shared employees & the exclusive network employees) approximates to 96,8%.

TSO and DSO are provided with all of their employees by the single vertically integrated utility, namely the EAC.

Share of shared services adds up to 100% and shared employees likewise.

3.2 Competition Issues [Article 23(8) and 23(1)(h)]

3.2.1 Description of the wholesale market

Cyprus has opened the electricity market by 35% of the annual consumption as from 1st May 2004 and for all "non domestic" consumers (approximately by 67%) as from 1st January 2009. Up to now only one generator (EAC) is operating in Cyprus covering all the needs of the country. Furthermore and as mentioned before, the Trading and Settlement Rules (Market Rules) have been officially published and placed into force on 30 January 2009. The Law allows a retail market to operate for participants that own and operate enough generation for the needs of their customers.

In this respect no wholesale market is envisaged to function in Cyprus in the near future.

A brief description of the generation structure of Cyprus is as given below:

The installed generating capacity is 1438 MW (June 2011) by the generating stations of EAC plus 21,6 MW by the independent producers for own use and 95,4 MW from RES (Photovoltaics, Wind Energy, Biomass and Biogas) with a recorded maximum demand of 907 MW in July 2006, 1056 MW in July 2007, 1010 MW in August 2008, 1103 MW in July 2009 and 1148MW in August 2010. It was expected that the maximum demand for 2011 would reach 1155 MW.

The annual consumption was 4650 GWh for 2006, 4850 GWh for 2007, 5049 GWh for 2008 and 5133 GWh for 2009 and 5205 for 2010.

More details regarding the above are presented in Section 5 – Security of Supply.

Cyprus is currently operating a national electricity market that is totally dominated by EAC who is the providing all of ancillary service requirements. In the future, market participants, with generating capacity exceeding 50MW can participate in the market for ancillary services.

Although demand side management is covered in the approved Transmission and Distribution Rules there is no active participation in demand side management as yet.

Since there is no wholesale market in Cyprus Table 3.2.1 is not applicable. Furthermore, there is only one supplier the Electricity Authority of Cyprus and trading is carried out only through bilateral agreements (by choice of available tariffs). Hence Table 3.2.1(a) is not applicable.





	Dem	and	Installed	No. of companies	Share of largest	HHI (where a	vailable)
Year	Gapacity Wi		with >5% generation	three generation	All plant, by	All plant, by	
	Total (TWh)	Peak (GW)		generanen	companies	capacity	volume
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2011	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 3.2.1(a) - Development of wholesale market – Not Applicable

Year	Total Consumption	Traded in spot PX market	Traded in forward PX market	Bilateral OTC trading
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a
2011	n/a	n/a	n/a	n/a

Table 3.2.1(b) - Volume of electricity traded (TWh) - Not Applicable

Concerning the degree of integration of the market with neighbouring Member States, as previously mentioned Cyprus constitutes a small isolated system.

It has to be noted that an explosion that occurred at the southern cost of Cyprus next to the Vassilikos Power Station on the 11th of July 2011 has caused extensive damages to the power station that was taken out of operation. The Vassilikos Power Station covered more than 50% of Cyprus electricity needs.

The total electricity generation in the governmental controlled areas of the Republic of Cyprus (with the exception of those north of the confrontation line where the Cyprus Government does not exercise effective control) after the 11th of July consisted of:





Power Station	Capacity (MW)	Installed capacity (MW)	Available Generation Capacity (MW)
Vassilikos Power Station	3 x 130MW Steam units 1 x 38MW Gas Turbine 1 x 220MW CCGT 1 x 145MW CCGT	793MW out of operation	OMW 53% of the total capacity out of operation
Dhekelia Power Station	6 x 60MW Steam Units 2 x 50MW ICE	460MW	460MW
Moni Power Station	6 x 30MW Steam Units 1 x 20MW Steam Unit 4 x 37,5MW Gas Turbines	350MW	229MW

Table 3.2.1(c) – Energy Generated by the three Power Stations of EAC after the 11th of July

Since there is no other Supplier in Cyprus apart from EAC because of that absence, and taking into account that the country is not interconnected to neighbouring systems, Cyprus was considered in a state of emergency.

In order to remedy the sudden difficulties which have arisen, Cyprus has temporarily taken some safeguard measures. In particular, the measures consisted of:

- mandatory use of all stand-by units (260 units of an estimated capacity of 68MW),
- temporary closure of all desalination units,
- voluntary reduction of consumption from all consumers,
- selective sequential interruption of geographical areas for a period of between 1-2 hours, (interruption of important and sensitive groups of consumers was avoided)
- voluntary load shedding.
- priority of supply to certain type of consumers, etc.

As it was expected all the above said measures were not sufficient to meet the remaining electricity demand, therefore additional measures were introduced with a view, in particular, to safeguarding supplies of electricity to certain customer classes.

An Energy Crisis Management Team (Stakeholders: CERA, TSO, EAC, MCIT) was established by CERA Decision.

Due to lack of electricity generating capacity, Cyprus has decided to proceed immediately with a Tendering Procedure for New Generating Capacity. CERA was appointed through a Decree by the Minister of Commerce, Industry and Tourism for the organisation, monitoring and control all necessary steps to establish adequate supply including the tendering procedure.

CERA, on July 13th, 2011 issued a decision whereby ordered EAC, who acts as a Universal Supplier, to ensure new generating capacity is installed and connected to the system,

EAC contracted for a six month period temporary generating units with a total capacity of 165MW. The temporary generating units were installed and put in operation before the 31st of August 2011.

Furthermore in order extensive interruptions of supply to be avoided, power was purchased through a third party under the green line trade collaboration originating from power stations operating in the areas of Cyprus where the Government does note exercise control.





CERA is closely monitoring the situation and further measures will be taken if and when it is necessary until the energy crisis ends.

3.2.2 Description of the retail market

As already pointed out, Cyprus has opened the Electricity Market on the 1st May 2004 for the 35% of the annual consumption and on 1st January 2009 extended up to 67%. Before May 2004, EAC was the sole licencee to produce and sell electricity in Cyprus and the situation remains the same up until today, as no new players already being licensed have been put into operation.

EAC is currently supplying the following groups of consumers:

- Households and small commercial sector: 531.500 consumers (less than 70 kVA) share 100%.
- Medium sized industrial and commercial sector: 2.975 consumers (above 70 kVA, LV metering) 100% share.
- Large and very large industrial customers: 575 consumers (MV and HV metering) 100% share.

The total consumption of customers and consumption by sector is given below:

CONSUMERS, TOTAL & AVERAGE SALES & AVERAGE PRICES									
As at 31 December 2006 2007 2008 2009 201									
NUMBER OF CONSUMERS									
Domestic	348 394	366 799	386 489	402 671	415 150				
Commercial	76 272	78 294	80 913	83 160	84 800				
Industrial	11 198	11 299	11 792	11 618	11 391				
Agricultural	11 597	12 117	12 796	13 546	14 209				
Public Lighting	7 581	7 991	8 499	9 035	9 500				
TOTAL	455 042	476 500	500 489	520 030	535 050				

SALES TO CONSUMERS (thousands kWh)									
Domestic	1 500 511	1 607 048	1 682 327	1 720 777	1 737 474				
Commercial	1 713 921	1 783 885	1 881 173	1 918 932	1 990 994				
Industrial	723 038	699 746	757 803	791 640	816 074				
Agricultural	128 701	137 339	156 930	143 971	152 642				
Public Lighting	68 851	70 301	77 596	80 426	84 788				
TOTAL	4 135 022	4 298 319	4 555 829	4 655 746	4 781 972				

AVERAGE SALES PER END YEAR CONSUMER (kWh)										
Domestic	4 307	4 381	4 353	4 273	4 185					
Commercial	22 471	22 784	23 249	23 075	23 479					
Industrial	64 568	61 930	64 264	68 139	71 642					
Agricultural	11 098	11 334	12 264	10 628	10 743					
Public Lighting	9 082	8 798	9 130	8 902	8 925					





AVERAGE REVENUE PER UNIT BILLED kWh (€cent)										
Domestic	12,492	12,746	15,988	13,321	16,192					
Commercial	13,009	13,328	16,982	14,196	16,905					
Industrial	11,111	11,458	14,955	12,325	14,982					
Agricultural	11,434	11,675	15,296	12,697	15,440					
Public Lighting	10,981	11,233	14,554	12,129	14,711					
ALL CONSUMERS	12,408	12,719	16,178	13,473	16,232					

As mentioned above, during the year under review, CERA has decided to amend and rebalance the EAC tariffs, on the basis of its previous decision dated 27.10.2009 providing an overall increase of 1,5% on all tariffs, in an effort to reduce as far as possible the cross subsidisations observed, with a view to their gradual elimination. In the same draft proposal, CERA proposed, inter alia, the imposition of conditions on the Electricity Authority of Cyprus which will lead to a transparent unbundling of its accounts and to a programme expense reduction for the benefit of the consumers. The draft was published in the Official Gazette of the Republic on 26.11.2010 and called on all interested persons to submit possible comments within 30 days from the date of publication.

Following consultations, CERA decided that the approved general increase in tariffs by +1,5% as from 1.1.2011 and 1,5% as from 1.1.2012 on the basic price of €309,78/MT which is envisaged in its Decision No 385/2009, be amended and increases from 0% up to +3,50% along with decreases from -1,25% up to -3% on different tariffs were imposed.

As there is one supplier operating at present, switching procedures for customers to change suppliers are not possible. Regarding the average (typical) contract duration for households, this for the time being is not applicable in Cyprus. Domestic consumers constitute non-eligible electricity customers. However, domestic customers will continue to be supplied only by EAC until the 1st of January 2014 where the 100% opening of the market is expected and all consumers will be able to choose their producer-supplier according to their interest. As a general assessment to whether the market is seen to be active or dormant, it could be said that the market seems to become active. By considering the above conditions under which Cyprus has to act, i.e. small isolated system, the progressively opening of the electricity market where it constitutes a contemporary activity for the island, the above situation can be justified.





					Market share of three largest companies (Producers)			Cumulative % customers having changed supplier (by volume)			
Year	Total consumption (TWh)	No. of companies with >5% retail market	Number of <u>fully</u> independent suppliers (1)	Large and very large industrial	Small- medium industrial and business	Very small business and household	Large and very large industrial	Small- medium industrial and business	Very small business and household		
2001	3,13	1	0	n/a	n/a	n/a	0	0	0		
2002	3,40	1	0	n/a	n/a	n/a	0	0	0		
2003	3,66	1	0	n/a	n/a	n/a	0	0	0		
2004	3,74	1	0	n/a	n/a	n/a	0	0	0		
2005	3,93	1	0	n/a	n/a	n/a	0	0	0		
2006	4,14	1	0	n/a	n/a	n/a	0	0	0		
2007	4,30	1	0	n/a	n/a	n/a	0	0	0		
2008	4,56	1	0	n/a	n/a	n/a	0	0	0		
2009	4,66	1	0	n/a	n/a	n/a	0	0	0		
2010	4,78	1	0	n/a	n/a	n/a	0	0	0		

(1) i.e. fully independent from Production companies

Table 3.2.2 - Development of Retail Market

3.2.3 Measures to avoid abuses of dominance

All information regarding generation, planned and actual, together with all the necessary transmission system developments is published on CERA's and TSO's websites. Furthermore, the current vertically integrated utility (EAC) is going to be totally regulated both for the network activities, but also for generation and supply when fully unbundled accounts to the requirements of the Directive and its tariffs and other charges are approved by CERA. This situation will continue until competitive conditions are established after new entries come into operation.

In addition, as already pointed out in other sections of the report:

- The TSO is independent from the vertically integrated Utility (EAC) in management (organisation and decision making) terms and is totally responsible for the operation of the electricity transmission system and the market as far as generation, supply, the balancing market and the provision of ancillary services.
- Performance quality indices are already in effect for all critical factors of the electricity network with penalties on the provider so that actual service to electricity consumers is closely monitored.
- All applications for connection to the Transmission network is totally the responsibility of the TSO as far as the issuing of terms for connection to the network and furthermore to oversee that the system owner (EAC) takes all the necessary steps to construct the necessary network without delay.





- The TSO submits the Transmission Use of System Charges to CERA for approval. The TSO is responsible for the operation of the Electricity Market.
- CERA is the responsible Authority to regulate and monitor conditions of the market, so
 that abuses of dominance as well as other breaches of the Rules of the free Market are
 avoided. To this effect CERA takes appropriate and effective measures through the
 approvals of the above itemised issues for control and transparency, so as to avoid
 possible misuse of dominant positions and in particular of such misuses to the detriment
 of consumers.

4. REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET [Article 25(1)]

4.1 Regulatory Issues [Article 25 (1)]

Natural Gas is still not available on the island; nevertheless, the Natural Gas Sector has been put in line with the relevant EU Directive 2003/55/EC, relating to the common rules of the internal natural gas market. The provisions of the Directive have been incorporated into the Laws on Regulating the Natural Gas Market of 2004-2007.

Unlike the electricity sector which is characterised by ownership differentiation, the gas sector according to the last amendment of the law regulating the Natural Gas Market as well as the relevant Ministerial Decision will be fully monopolistic.

Furthermore, having taken into consideration the Decisions of the Council of Ministers regarding the importation and transportation of Natural Gas for the needs of Cyprus for generation of electricity and the construction of an LNG Terminal at the Vasilikos area, the Minister of Commerce, Industry and Tourism determined (Ministerial Direction dated 17/3/2006) natural gas as the primary source of energy for all sizeable capacity electricity generating Power Plants which will be licenced by CERA. The Directive is in effect from the date of its publication on 17th of March 2006. In accordance with the said Directive, CERA decided that any Power Producing Unit of considerable capacity should be fuelled with Natural Gas.

Furthermore, on the 18th of June 2008 the Government of Cyprus has decided to establish a new Public Gas Company that will undertake exclusively the import of LNG, and the supply of natural gas to the market, with the Government holding 100% of the issued shares and with the option for Electricity Authority of Cyprus (EAC) to participate in its share capital with 44%. EAC is in the process of exercising its option to acquire the 44% of the share capital.

Additionally, the corporate structure of the entity responsible for the establishment (ownership, financing, operation and management) of the Vasilikos Energy Centre onshore LNG terminal will be in the form of a Joint Venture with the significant participation of EAC and other interested strategic investors.

The onshore LNG terminal shall be the exclusive terminal for the importation, storage and regasification of LNG in Cyprus. Based upon current projections, the natural gas consumption for Power Generation will range from 0,68mtpa in 2014 and will gradually increase to 1,47mtpa by 2035. It is expected, according to estimations, that the LNG Terminal will be commissioned by the end of 2014.

DEFA is a private corporation which will purchase and import the LNG pursuant to a LNG Sale and Purchase Agreement ("SPA"), preferably on a delivered ex-ship ("DES") basis.





DEFA will enter into an agreement with a second corporation, which is to be established, (the "LNG Terminal Company"), for the provision of LNG receiving, storage and re-gasification services at its terminal pursuant to a Terminal Use Agreement (the "TUA").

The LNG Terminal Company will be responsible for the development, construction and operation of the LNG Terminal and will provide LNG regasification services to DEFA pursuant to a "TUA").

The LNG Terminal Company will not take ownership of the LNG, which will remain the property of DEFA throughout the supply chain, but will own, finance, manage and operate the assets of the LNG Terminal through a Joint Venture to be established, with the significant participation of EAC and other interested strategic investors.

It is evident that the authority and competence of CERA as well as the model of the natural gas market in Cyprus are drastically transformed setting in real terms a monopoly model in gas market which will eventually affect competition in electricity market as well.

Based on current projections, the natural gas consumption for Power Generation will range from 0,68mtpa in 2014, 1,054mtpa in 2015 and will gradually increase to 1,47mtpa by 2035 with an annual increase of approximately 2%. It is expected, according to GoC estimations, that the LNG Terminal will be commissioned by mid 2014.

The natural gas requirement for power generation in April of 2015 is estimated at 0,068mtpa, which is approximately 64 % of the peak requirement in July and August of 2015, estimated at 0,108 mtpa. Respectively the natural gas requirement in April of 2025 is estimated at 0,083 mtpa, approximately 68% of the peak requirement in July and August of 2025, estimated at 0,122 mtpa.

The above forecasts are indicative, it is expected that the numbers (total LNG demand) will change due to the fact that Natural Gas will be used mainly for electricity generation. In this respect if the electricity demand increases so as the LNG demand.

The table below gives the type of gas usage, distinguishing among industrial, residential, power generation and commercial. For each kind of usage also provides the level and percentages of total levels of consumption for the next 8 years.

Natural gas consumption by sector (MSmc)											
Year	Industry Resi		Resid	dential	Commercial		nercial Power Generation		Oth	ers	Total
		%		%		%		%		%	
2008		0		0		0		0		0	0
2009		0		0		0		0		0	0
2010		0		0		0		0		0	0
2011		0		0		0		0		0	
2014		0		0		0		100		0	0
2015		0		0		0		100		0	0
2016		0		0		0		100		0	0





Furthermore, the seasonality of natural gas demand it is expected to be affected by the seasonality of electricity demand (maximum demand in summer time- usually July).

Derogations secured by the Republic of Cyprus

In accordance with the new Directive 2009/73/EC in connection with the common rules for the internal market of natural gas and the repealing of Directive 2003/55/EC, Cyprus secured derogation from article 9 on the new Directive on the unbundling of transmission systems and transmission systems operators.

Furthermore, Cyprus may deviate from the application of articles 4 (Authorisation Procedure), 9 (Unbundling of transmission systems and transmission system operators), 37 (Market opening and reciprocity) or/and 38 (Direct lines). The deviation will end from the moment Cyprus will cease to be regarded as an isolated market.

Also Cyprus may deviate from the application of Articles 4 (Authorisation Procedure) and 9 (Unbundling of transmission systems and transmission systems operators), article 13 (Tasks of transmission, storage and/or LNG system operators), paragraphs 1 and 3, articles 14 (Independent system operators), 24 (Designation of distribution system operators),25 (Tasks of distribution system operators) paragraph 5, 26 (Unbundling of distribution system operators) 31(Unbundling of accounts), 32 (Third party access), 37 (Market opening and reciprocity) paragraph 1 and/or article 38 (Direct lines). This derogation will end the moment Cyprus will cease to be described as an emerging market.

❖ CERA strongly supports the partial use of derogation in order to be able to ensure security of supply, adequacy of gas supply, transparency, consumer protection and sustainability of investments by proper licensing and supervising the operation of Natural Gas undertakings. Preparation of Legislative Measures -Security of Natural Gas Supply

Regarding the security of Natural Gas Supply, the 994/2010 Regulation concerning measures to safeguard security of gas supply is automatically applicable in the event a gas market exists and therefore any implementing measures are not required. It should be noted that N-1 formula in the event of a disruption of the single largest gas infrastructure, is considered not to be applicable in the case of Cyprus.

4.1.1 Management and allocation of interconnection capacity and mechanism to deal with congestion & the regulations of the tasks of transmission and distribution companies

Cyprus, as an island, will operate without any cross-border links. Thus, cross-border congestion management rules are not applicable.

In view of the fact that the gas market is still non-existent in Cyprus the following Tables are not applicable.





Year	Threshold GWh / Year	Market Open (%)
1999	n/a	n/a
2001	n/a	n/a
2003	n/a	n/a
2005	n/a	n/a
2006	n/a	n/a
2007	n/a	n/a
2008	n/a	n/a
2009	n/a	n/a
2010	n/a	n/a

Table 4.1.1.(a) – Gas market opening table. Not Applicable

	Number of regulated companies	Approx. ne	twork acces €/ m³	s charge	Interruptions minutes lost per customer per year
	Companies	14	I 1	D3	per year
Transmission	n/a	n/a	n/a	n/a	n/a
Distribution	n/a	n/a	n/a	n/a	n/a

Table 4.1.1.(b) - Regulation of Network Companies. Not Applicable

	Transmission	Distribution
Separate Headquarters (Y/N)	n/a	n/a
Separate corporate presentation (Y/N)	n/a	n/a
Unbundled regulatory accounts with guidelines (Y/N)	n/a	n/a
Audit of unbundled accounts (Y/N)	n/a	n/a
Publication of unbundled accounts (Y/N)	n/a	n/a
Separate board of Directors without Directors from other group companies? (Y/N)	n/a	n/a

Table 4.1.1.(c) – Summary Information on Unbundling (Gas). Not Applicable

4.2 Competition Issues [Article 25(1)(h)]

4.2.1 Description of the Wholesale and Retail Market

Unlike the electricity sector which is characterised by ownership differentiation, the gas sector according to the last amendment of the law regulating the Natural Gas Market as well as the relevant Ministerial Decision shall be monopolistic.





As mentioned in previous paragraphs, Cyprus has established its gas industry by granting a supply permit to a single legal entity, which will be controlled by the state (Shareholding: 56% by Government with option to release 5% to 3rd parties, 44% by Electricity Authority of Cyprus), called 'DEFA'.

The Council of Ministers have already decided (Decision on 18.6.2008), to assign the import and supply of natural gas to the Republic of Cyprus to only one company, called 'DEFA'. In addition the Council of Ministers has decided the creation of a land based Energy Center as the exclusive Receiving Terminal, with Storage facilities and installations for Regasification of Liquified Natural Gas (LNG).

In general 'DEFA' would have the sole right to import gas into Cyprus and to sell gas to all gas consumers. Aggregating gas demand through DEFA could also facilitate Cyprus' ability to acquire a relatively small quantity of gas on the best terms to satisfy demand. In addition the Council of Ministers has decided the creation of a land based Energy Center as the exclusive Receiving Terminal, with Storage facilities and installations for Regasification of Liquified Natural Gas (LNG).

In accordance with the last amendment of the Law on Regulating the Natural Gas Market as well as the above Ministerial Decision (18.6.2008), CERA cannot grant any licenses in natural gas field.

The tables below are prescribing the development of the wholesale and retail market as well as specific parameters regarding the volume of gas traded (bcm) till 2010 and the breakdown of currently prevailing price levels (which is not applicable).

	Den	nand	Production	Import capacity (bcm/year)		No. of companies with >5%	No. of companies with >5%	Share of largest		
Year	Total (bcm)	Peak (bcm/year)	bcm	Total	Reserved transit	Reserve d other LT	Unreserved	production and import capacity	available gas	three gas wholesalers
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 4.2.1(a) – Development of Wholesale Market - Not Applicable

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	Total consumption	Traded in spot hub market	Traded in forward hub market	Bilateral OTC trading
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a

Table 4.2.1(b) - Volume of Gas Traded (bcm) - Not Applicable

				Market share of three largest companies					ulative % c nged supp		_
Year	Total consumptio n (bcm)	No. of companie s with >5% retail market	Number of fully independent suppliers (1)	Power plants	Large and very large industrial	Small- medium industrial and business	Very small business and househol d	Power plants	Large and very large industrial	Small- medium industrial and business	Very small business and househol d
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(1) i.e. fully independent from network companies

Table 4.2.2 (a) - Development of Retail Market - Not Applicable

	14	I1	D3
Network charges (excl. levies)	n/a	n/a	n/a
Levies included in network charges	n/a	n/a	n/a
Energy costs and supply margin	n/a	n/a	n/a
Taxes	n/a	n/a	n/a
Total (including all taxes)	n/a	n/a	n/a

Table 4.2.2 (b) – Breakdown of currently prevailing price levels - Not Applicable

5. SECURITY OF SUPPLY

5.1 Electricity [Article 4 and 2005/89/EC Article 7]

For the purpose of harmonisation with the directive of the European Union entitled as "Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006,

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concerning measures to safeguard security of electricity supply and infrastructure investments", all necessary amendments where effected to our National Law on Regulating the Electricity Market. On 29 October 2008 the new amending Law 92(I)/2008 has been published and placed into force.

In 2010 the Power Maximum Demand recorded was on the 3rd of August 2010 and reached a level of 1148 MW, (vis -à-vis a Demand Forecast of 1105MW). The total Energy generated for the whole of the year was of the order of 5272 GWh (vis-à-vis a forecast of 5380 GWh). The load factor for the year was of the order of 0.52.

In recent years the average annual rate of increase in Power Maximum Demand was of the order of 7.09% and the average annual rate of increase in generated energy was of the order of 3.65%.

The levels of annual maximum demand as well as the annual energy generated are expected to continue a similar increasing trend.

The forecasted maximum demand for electricity is as follows:

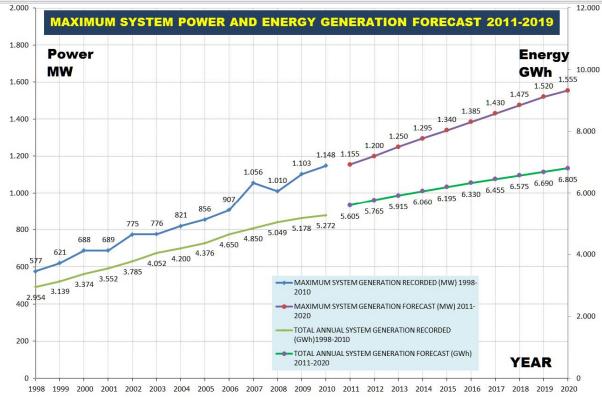
⇒ 2012 (forecasted) 1200 MW
 ⇒ 2013 (forecasted) 1250 MW
 ⇒ 2014 (forecasted) 1295 MW
 ⇒ 2015 (forecasted) 1340 MW
 ⇒ 2016 (forecasted) 1385 MW

The installed generating capacity is 1438 MW (June 2011) by the generating plants of EAC plus 21,6 MW by the independent producers for own use and 95,4 MW from RES (Photovoltaics, Wind Energy, Biomass and Biogas) with a recorded maximum demand of 907 MW in July 2006, 1056 MW in July 2007, 1010 MW in August 2008, 1103 MW in July 2009 and 1148MW in August 2010. It is expected that the maximum demand for 2011 will reach 1155 MW.

The graph below present historical data for the period 2000 - 2008 and the forecasted quantities for the period 2011 – 2020:







GENERATION LICENCES ISSUED:

(a) Conventional Units

Until July 2011, CERA issued Licences for existing and new Electrical Energy Generating Stations (Conventional Units of Generation) as follows:

S/N	COMPANY NAME	TYPE OF LICENCE	MW
1	EAC (Heavy Fuel Oil & Diesel)	Operation of Power Plant at Vasilikos (Existing Units)	298
2	EAC (Heavy Fuel Oil)	Construction and Operation of Power Plant at Vasilikos (Unit No.3)	130
3	EAC (Heavy Fuel Oil)	Operation of Power Plant at Dhekelia (Existing Units)	360
4	EAC (Heavy Fuel Oil & Diesel)	Operation of Power Plant at Moni (Existing Units)	330
	EAC (Heavy Fuel Oil & Diesel)	Construction & Operation of Power Plant at Vasilikos, Unit 3	130
5	Vasilikos Cement Works Ltd	Operation of Power Plant (Existing Unit – own use generation)	6
6	Vouros Power Industries Ltd (Heavy Fuel Oil)	Construction and Operation of Power Plant (ICE)	49,9
7	EAC	Construction and Operation of Power Plant at Vasilikos – Unit No.4 (CCGT)	220
8	EAC	Construction and Operation –	220

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		Unit No.5 at Vasilikos (CCGT)	
9	EAC	Construction and Operation – Unit No.6 at Vasilikos (CCGT)	220
10	Vasilikos Cement Works Ltd	Construction and Operation (ICE – own use generation)	5
11	Elmeni Quarries Ltd	Construction and Operation (ICE – own use generation)	1,6
12	Golar Energy Ltd	Construction and Operation of a Floating Power Plant- Vasilikos (CCGT)-Natural Gas	240
13	Latomia Farmakas Ltd	Operation & Generation of Electrical Energy (Existing Unit-own use generation)	2
14	Hellenic Copper Mines Ltd	Operation & Generation of Electrical Energy (ICE-for own use generation)	3,8
15	Sewerage Board of Limassol- Amathus	Operation & Generation of Electrical Energy – for own use generation	1,2
16	Sewerage Board of Limassol- Amathus	Operation & Generation of Electrical Energy – for own use generation	1,2
17	EAC (Diesel)	Construction & Operation of Electrical Energy - Dekhelia	50
18	M.S.Scyra Vasas Ltd	Operation and Generation of Electrical Energy (ICE – for own use generation)	3,192
19	СҮТА	Construction and Operation of Electrical Energy (ICE – for own use generation)	1,36
20	JCC Payment System Ltd	Construction and Operation of Electrical Energy (ICE – for own use generation)	1,28
21	PEC Powerenergy Cyprus Ltd	Construction and Operation (CCGT)	230
22	EAC – Dhekelia Power Station	Construction and Operation (ICE)	50
		TOTAL LICENCED CAPACITY (100%)	2.424,50
		EAC (77,45%)	1.878,00
		OTHERS (22,55%)	546,50

EAC - Electricity Authority of Cyprus
RES - Renewable Energy Sources
IPPs - Independent Power Producers
CCGT - Combined Cycle Gas Turbine
ICE - Internal Combustion Engine

During the period July 2010 – July 2011 four applications for the purpose of authorising new generation investments regarding conventional units of generation had been applied.

(b) RES Systems

The year 2010 can be regarded as a landmark year in the promotion of large scale Energy Projects from Renewable Energy Sources. Following the start of operation in the previous

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years, of small but important electricity generation units from Biogas, in 2010 important strides were made in the penetration of Wind and Solar Energy in the electricity system of Cyprus.

Until July 2011, CERA issued Licences for new Electrical Energy Generating Stations (Electricity Production from RES) as follows:

(i) Renewable Energy Sources 547,89MW which include:

Wind Parks: 510,44 MW (93,16%) Biomass: 18,48 MW (3,37%) PV Systems: 18,97 MW (3,46%)

Total Installed Capacity of Generating Stations using the wind energy potential interconnected with the electricity grid amounted to 82MW in 2010. By the end of the year the Wind Farm at Orites locality was operational and interconnected.

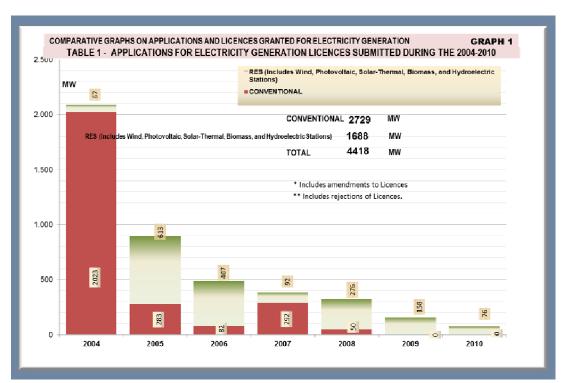


Table 5.1(a) Applications for Electricity Generation Licences submitted during the 2004-2010

The first Wind Park was put in operation on November 2010 at Orites locality, having 82MW installed capacity and consisting of 41 wind generators of 2,0MW installed capacity each. Furthermore, additional two Wind Farms is expected to be fully operated by the end of 2011. In the period under review three Wind Farms with total capacity of 100,7 MW were licenced.

Having in mind the already licensed electricity generation installations from RES and the prospective investments as well as the submitted timetables of the investors, it is believed that more projects will materialise and operate in the following years, if subject to the limitation of long procedures for obtaining the necessary approvals.

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It is noted that, a small number of investments (biomass, biogas and small PV systems) have been materialised. The relevant details are given below:

(ii) Installed RES Units of a total capacity of 97,52MW

Wind Parks:
 Biomass/Biogas:
 PV Systems (grid connected):
 PV Systems (autonomous):
 82 MW (84,08%)
 7,96 MW (8,162%)
 6,841 MW (7,01%)
 0,730 MW (0,75%)

CERA is examining the following applications for the purpose of authorising new RES generation investments (electricity generation from RES).

(iii) RES Applications under review of a total capacity of 177,43 MW

Wind Parks:
Biomass/Biogas:
PV Systems (grid connected):
Hydroelectric Systems:
Solar thermal Systems:
4 MW (2,25%)
9,1 MW (5,13%)
99 MW (55,79%)
0,33 MW (0,18%)
65 MW (36,63%)

Currently Cyprus is totally dependent on Heavy Fuel Oil and Diesel, which are 100% imported. As mentioned above, in November 2010 the first Wind Park (82 MW) was put in operation thus improving the generation mix to include renewable generation sources (wind, solar, animal waste etc) and eventually natural gas.

The TSO, in close cooperation with EAC, (the Transmission network owner) has the legal responsibility of preparing a ten year plan for the network requirements to satisfy the secure flow of energy from the generators to the distribution network and customers connected to the transmission network.

❖ New Directive 2009/28/EC on RES and National Mandatory Targets for 2020

On 23 April 2009, the new Directive 2009/28/EC on the promotion of the use of RES was finalised and published and on 30 June 2009 came into force.

Directive 2009/28/EC establishes a common framework for the promotion of energy from renewable sources. It sets mandatory national targets for the overall share of energy from renewable sources in gross final consumption of energy and for the share of energy from renewable sources in transport. Cyprus national RES energy target has been set to 13%. It lays down rules relating to statistical transfers between Member States, joint projects between Member States and with third countries, guarantees of origin, administrative procedures, information and training, and access to the electricity grid for energy from renewable sources. It establishes sustainability criteria for biofuels and bioliquids.

Directive 2009/28/EC requires each Member State to adopt a national renewable energy action plan. These plans are to set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, taking into account the effects of other policy measures relating to energy efficiency on final consumption of energy, and adequate measures to be taken to achieve those national overall targets, including cooperation between local, regional and national authorities, planned statistical transfers or joint projects, national policies to develop existing biomass resources and mobilise new biomass resources for different uses, and the measures to be





taken to fulfill the requirements of Articles 13 to 19 of Directive 2009/28/EC (2). In accordance with Directive 2009/28/EC, the Commission had to adopt by 30 June 2009 a template for the national renewable energy action plans comprising the minimum requirements set out in Annex VI to that Directive,

Regarding the above issue, CERA had convened a special technical advisory Committee, which is composed by representatives from different Ministries, Authorities and Organisations of Cyprus. The main target of the committee is to investigate an optimum strategic plan for the integration of the necessary renewable energy sources for electricity production (RES-E) technologies mixture in the existing Cyprus power generation system, which will be used for the completion of the above mentioned template.

The Committee working within a tight schedule, managed to complete its study and to submit it at the end of June 2010 to the Minister of Commerce, Industry and Tourism. The study comprised the analysis of a proposed strategic plan for the promotion of renewable energy sources in the Cyprus electricity generation system.

The main purpose of the analysis was to assess the unavoidable increase in the cost of electricity of the Cyprus generation system by the integration of the necessary RES-E technologies for Cyprus to achieve its national RES energy target. The optimisation model developed uses a genetic algorithm (GA) technique for the calculation of both the additional cost of electricity due to the penetration of RES-E technologies as well as the required RES-E levy in the electricity bills in order to fund this RES-E penetration. Also, the procedure enables the estimation of the level of the adequate feed-in-tariff to be offered to future RES-E systems in Cyprus.

Based on the analysis carried out in this investigation and regarding the optimum strategic plan for the integration of the necessary RES-E technologies mixture in the existing Cyprus power generation system drawn in this study, the committee has recommended the following:

- In addition to the suggested RES-E penetration scenario (16% RES-E penetration with 300MWe wind contribution) which relies solely on domestic RES-E production for the achievement of Cyprus national RES energy target, the possibility of using one of the measures of cooperation between Member States or with third countries, such as, (a) statistical transfers between Member States, (b) joint projects between Member States, (c) joint projects between Member States and third countries and (d) joint support schemes, should be investigated.
- The RES fund income from CO₂ trading auctioning is beneficial to the financials of the fund. Thus, after 2013, in which CO₂ trading auctioning mechanism will be materialized, an appropriate scheme should be designed in order the resulting amounts to be included as income to the RES fund.
- The integration of RES-E electricity market operation in the activities of the Transmission System Operator, under the supervision of Cyprus Energy Regulatory Authority, as is the case for most of European countries, should be investigated.
- Based on the analysis carried out, EAC RES-E purchasing tariff formula provides prices higher by approximately 10% than the actual avoidance costs. This will become more severe with the introduction of natural gas for power generation in which the difference will reach approximately 35%. Thus, the need for revision of EAC RES-E purchasing tariff formula in order to reflect the actual avoidance costs should be investigated.





- In this analysis, the biomass technology capacity factor was assumed to be 80%.
 However, this needs to be investigated further and appropriate measures need to be setup in order to prevent potential RES-E producers to install biomass power generation
 units with a rated capacity much higher than can be provided by the available biomass
 feedstock.
- RES-E technologies such as solar dishes, thin film PVs and CPVs which under the current feed-in tariffs scheme are considered as CSP and PV technologies respectively should be investigated further in order examine the possibility of separate feed-in tariffs.
- The EU structural fund contributions allocated to Cyprus for the installation of RES-E technologies (CSP and PVs) should be allocated and the relevant RES-E installations implemented at priority. With this action, the additional cost for the promotion of RES-E technologies will be further reduced.
- The stability and the security of supply of the power system with increased penetration of RES-E technologies (mainly wind and PVs) should be investigated, in order to provide the relevant information for the estimation of the maximum allowed technical penetration limits of RES-E technologies.
- The available residential, industrial and commercial space available for PV systems installation should be investigated.
- The available Governmental land for the installation of RES-E technologies should be investigated.
- The adoption of various RES-E promotion campaigns should be investigated, such as a target on a number of PV roofs and/or PV factories, inform potential RES-E producers via TV spots and flyers upon the various RES-E technologies, technical and economic characteristics as well as environmental benefits, etc.
- The limit of 150kW PV system installations should be revised in order to allow for the installation of PV parks with capacities at approximately 1-2MW.

In the following graph, the proposal of the committee is presented.



Graph 5.1 – RES-E energy mix with the suggested RES-E promotion scenario





❖ The authorisation procedure and criteria for new generation investments are as follows

- 1. For the purpose of acquiring a License for the Construction and Operation of Electricity Generating Units for the purpose of Supplying Electricity to Eligible Consumers, or for generation for Own Use, a specific Application should be submitted, in accordance with Law No. 112(I)/2003 and the Relevant Regulations. The Application must be accompanied by the prescribed Fees and all necessary supporting documents that would allow CERA to complete a detailed examination of the Application and reach a decision.
- 2. The original "Form of Application of Licence" Part I of the relevant Regulation in accordance to Article 97(2)(d) of the Law of 2003 on Regulating the Electricity Market accompanied with all documents as required by Part II of the same Regulation must be filled in and submitted.
- 3. The Application Fee covers the registration, examination, evaluation and decision taking process regarding the Application and is not refundable.
- 4. In addition to other issues, the following are considered important and integral parts of the application:
 - Designation of the specific proposed erection location (plot of land) which must be accompanied with the written and binding consent of the owner, referring to memos on the title deed, if it is the case.
 - General site planning drawings for the installation of the Units.
 - Environmental Study, carried out by an independent specialist, in which it should be clearly concluded that all criteria for the protection of the Environment will be met and an explicit written undertaking, by the Applicant, of fulfilling these criteria during the Construction and Operation of the Units if the requested licence is granted.

 - Financial and/or other Guarantees for the Completion of the Project.
- 5. Applications are examined according to the order of receipt once they are considered as being **complete** (i.e. all required documents and information have been submitted).
- 6. In its decision regarding the issue of Licences and the size of the new Units that will be licensed, CERA seriously takes into consideration, among other criteria, the following:
 - ☐ The Adequacy, Reliability and Security of Supply for the following years
 - ☑ The Safety of the electricity system, installations and associated equipment
 - ☑ The Protection of the Environment
 - ☑ The Protection of public Health and Safety
 - ☑ Energy Efficiency
 - ☑ The introduction and continuation of a healthy Competition for the best interest of the Consumers
 - ☑ The Viability of the Project
 - ☑ The Fuel to be used.



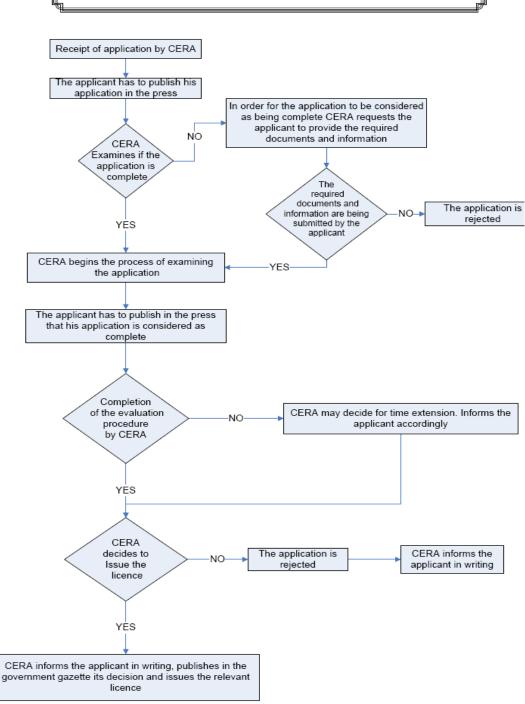


- ☑ The repercussions in the Price of the kilowatt-hour (kWh)
- ☑ The Time Schedule for the completion of the Project
- ☑ Guarantees for the Completion of the Project
- 7. CERA has the right to cancel the issued Licence in case the agreed timetable, for the completion of the Project, is unduly delayed at any stage beyond three (3) months.
- 8. In accordance to Law N.122(I)/2003, Article 34(3), the issue of a Licence for the Construction and Operation of a Power Station does not exempt the holder of such licence from the obligation of obtaining other approvals and authorisations (e.g. a Building Permit and a Planning Permit) as required by any other Law.
- 9. The relevant Law provides, that the Applicant, in the case of an Individual, must be a citizen of the European Union and be resident in a Member State, and in the case of a Legal Entity must be based and have a Registered Company in a Member State of the European Union.





Flowchart process for examination of application towards granting a licence



The flowchart below shows the process for the examination of application towards granting a licence.





Peak Available electricity capacity demand (GW)		Forthcomin	For next three (3) years Forthcoming new plant (GW)		Plant completed minus plant closed in the year (GW)				
	(GW)	(311)	Authorised	Under construction	Coal and Oil	Gas	RES	CHP	Nuclear
2000	0,688	0,988			0,988	0	0	0	0
2001	0,689	0,988			0,988	0	0	0	0
2002	0,775	0,988			0,988	0	0	0	0
2003	0,776	0,988		0,130	0,988	0	0	0	0
2004	0,821	0,988	0,310	0,130	0,988	0	0	0	0
2005	0,856	1,118	0,246	0,180	1,118	0	0	0	0
2006	0,910	1,118	-	-	1,118	0	0.001	0	0
2008	1,010	1,187.68	2,610.6	1,207.647	1,182.2	0	0.005	0	0
2009	1,103	1,421.50	2,424.5		1,388.00	0	0.007	0	0
2010	1,148	1,555 ¹	2,424.5	220	-0,793 ²	0	0.1	0	0

¹ Includes 95,4MW from RES & 21,6MW from own use generation units

Table 5.1 - Security of Supply Evolution

Major Infrastructure Projects – Transmission Network

With regards to major infrastructure projects in the Transmission Network there are no projects for the interconnection with other neighboring systems, however the construction work in national transmission network projects during the last twelve (12) months (July 2009 - July 2010) is described below:

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

Development works respond to the ever-increasing demand for electricity and, at the same time, increase transmission system reliability.

During the year under review, two new Transmission Substations were connected, the 132 kV "Orites" Substation and the 132/11 kV Substation "Vassilikos Cement". The first is the connection point of the "Orites" 82 MW wind farm. The second supplies the new upgraded arrangements at the largest cement factory operating in Cyprus.

In addition, one major and two rural Substations were upgraded, the "Free Industrial Zone" Substation and the "Tembria" and "Pissouri" Substations, named after the villages in their proximity. Part of the general plan of the latter upgrades was the dismantlement of the "Pissouri" and "Kolossi" 66/11 kV Substations.

The underground cable linking two important substations in Nicosia, "Dhasoupolis" and "Strovolos" 132 kV, was commissioned. A new double circuit, 132 kV overhead line, linking the major interconnection Substation at "Anatoliko" near Paphos and "Polis" was put in service. A section of the 132kV lines "Ypsonas"-"Trimiklini" and "Polemidhia"-"Episkopi"-"Pissouri" was completed and put in service. Finally, the underground interconnection to the

² Due to the destruction of the Vassilikos Power Plant





transmission system of the "Vassilikos South" Substation within the Vassilikos Power Station grounds was completed.

Ten-Year Transmission System Development Plan

The TSO, in collaboration with the Electricity Authority of Cyprus, has prepared the annually revised Ten-year Development Plan for the Power Transmission Electrical Grid, which covers the period 2011-2020. The load flow analysis is based on the annually revised load forecast prepared by the TSO as well as the Study for the expansion of the Generation System prepared by the Electricity Authority of Cyprus. The Plan was submitted to CERA which proceeded to its approval after a careful consideration and the deliberations that followed.

Study for the Adoption of a Common and Uniform Policy Regarding the Requests for the Relocation or Undergrounding of High Voltage Overhead Transmission Lines

The TSO co-ordinated a Working Group which was appointed by CERA in order to study the matter of demands for the relocation or undergrounding of High Voltage Overhead Transmission Lines within the boundaries of towns and villages aiming at adopting a common and uniform policy, as well as to cover matters related to the routes and choices offered for new transmission lines. CERA and the Electricity Authority participated. Part of the study process was the conducting of a pan-European survey amongst all European TSOs and Regulators, the results of which influenced the Study recommendations and conclusions. Sixteen detailed replies were received. The final study was submitted to CERA in October 2010 which took action with the responsible Minister for further consideration and decisions.

The Study, after invitation, was presented to the Special Committee of ENTSO-E examining infrastructure issues during one of its meetings. The study's conclusions reinforced the impressions that the Committee had about related issues.

Annual Energy and Maximum Generated Power Forecast

The forecast for the Annual Energy and Maximum Generated Power Forecast for the period 2011-2019 was submitted and was approved by CERA. When compare the recorded energy and power for 2010 to the previously approved forecast it becomes evident that it is accurate.

5.2 Gas [Article 5] and 2004/67/EC [Article 5]

Natural Gas is still not available in Cyprus. In spite of this, Natural Gas was defined by a Ministerial Decision as the basic fuel for the production of electricity by future installations of sizeable capacity.

CERA has already proceeded with harmonisation of the Cyprus legislation with EU Directive 2003/55/EC, relating to the common rules of the internal Natural Gas market. The provisions of the Directive have been incorporated into the Law on Regulating the Natural Gas Market of 2004 as amended in 2007.

After a review of security of supply measures adopted by other EU member states, CERA has identified a number of themes to address the security of supply issue:

 The production of some form of National Emergency Plan to address roles, responsibilities and actions to be taken by participants in the gas market.





- Interruption / curtailment of gas supplies to specific customer groups to protect more vulnerable end-users.
- Requirement, typically on suppliers, to keep a number of days of typical gas demand in gas storage facilities.
- Requirement, typically on large end-users or suppliers to large end-users, to have, or make, available quantities of an alternative fuel to gas, usually gas oil or fuel oil, in the event that gas supply is curtailed.
- Requirement, typically on gas suppliers or a policy for the country as a whole to ensure, through gas contracts, a diversity of supply sources.

The measures adopted by some EU member states will not be applicable to Cyprus, since Cyprus is not connected to the EU gas transmission network. The situation Cyprus is in, therefore, is similar only to some of the outlying EU member states where there is effectively only one source of gas supply. These would include member states such as Finland, the Baltic states of Estonia, Latvia and Lithuania and Ireland.

CERA is currently under an ongoing process of adopting measures to safeguard Natural Gas security of supply and determine corresponding emergency plans and actions. CERA has already prepared and submitted a draft bill amending the basic Law on Regulating the Natural Gas Market in order to incorporate the provisions of the Directive 2004/67/EC into National Law. The said draft bill is under consideration and deliberation is been conducted with other interested bodies taking into account the New Energy Policy and the 3rd Package.

In this respect, it must be noted that the primary parameter to be taken into consideration when assessing security of Natural Gas supply in Cyprus is the fact that Cyprus is an island, isolated from the Natural Gas networks of any other EU or non- EU country.

This unique parameter implies that in Cyprus, both in the long-term and in the short-term, Natural Gas supply issues should always be considered in relation to any other primary energy source utilised in the country (i.e. oil and LPG).

In Cyprus natural gas is envisaged to be used exclusively for power production, at least for the first 10 years from the date it is delivered for the first time to the island. Later, and upon development of the corresponding networks, Natural Gas will become available for use, first by the industrial sector, then the commercial sector, and finally households in case this option is economically feasible.

In view of the above, a condition should be adopted to protect security of electricity supply by providing alternative arrangements for electricity generation in the event of Natural Gas supply interruption in the island. Generators should have the capability and relevant infrastructure on-site, in order to be able to utilise an alternative fuel for power generation, as well as store the required quantities of secondary fuel for that purpose. In the event of a disruption or shortage of supply of the primary fuel, i.e. Natural Gas, the Cyprus TSO can then call on generators to run on the secondary fuel, at short notice, for a specified period of time.

Furthermore, in view of the gas market development in Cyprus for the next decade (2011-2020) a specific number of measures is under consideration taking into account the following important parameters:

 No indigenous gas resources discovered as yet. An exploratory drilling will take place in September 2011 and by December 2011 there could be evidence of natural gas reserves.





- No interconnections with other gas systems.
- No underground or undersea gas storage.
- Supply only by LNG because of Cyprus being an isolated island.
- Brand new and small market which will be based on the power generation (90% of total gas consumption).
- The gas demand growth is expected to reach saturation within 10 years because of the political decision to convert almost all existing oil fired power plants to gas fired.
- The other gas consumption sectors (industrial and residential/commercial) are very small compared to the power generation sector (0,23 bcmy to 2,0 bcmy at the point of saturation) and these will probably be developed much later.
- No big linepack because the main city-capital (Nicosia) is in the center of the island and the Power Generation is in the south.
- Significant diesel oil storage quantities in existing reservoirs which will not be dismantled.
- Gas Market model: A Gas Company is the sole importer and supplier of all natural gas quantities in Cyprus, also undertaking the transmission system operation. A different company will invest for an LNG terminal, possibly undertaking as well the terminal's operation.

The following measures have been identified but not finalised, in view of enhancing security of supply:

- Interruptible contracts.
- Interruption under a priority list.
- Temporary storage kept by the Network Operator.
- Supply sources diversification.
- Long term supply contracts.
- Reserve fuel arrangements for gas fired power plants.
- Elaboration of an Emergency Plan.
- Security of supply being responsibility of the Regulator.
- SoS monitoring performed by the Regulator.
- Monetary penalties (e.g. for cases of non-delivery by the producer or in cases of non-delivery by the shipper or in cases of LNG terminal operator failure).

It was also noted that the measures adopted by some EU member states would not be applicable to Cyprus, since Cyprus is not connected to the EU gas transmission network. The situation Cyprus is, therefore, similar only to some of the outlying EU member states (e.g. Finland, the Baltic states of Estonia, Latvia, Lithuania and Ireland) where there is effectively only one source of gas supply.

In order to ensure an adequate level of security of supply, the measures would fall into the following broad categories:

• The strategy for purchasing LNG for delivery to the Cyprus terminal, including supply sources diversification and long term supply contracts.





- The policy on sales contracts to end users, including the use of interruptible contracts and the requirement for alternative fuel arrangements at key customers such as gas-fried power plants.
- The implementation of a National Emergency Plan incorporating the relevant roles, responsibilities and procedures.

As far as infrastructure development is concerned the Government of the Republic of Cyprus is proposing an Energy Centre at Vasilikos that will include facilities for the importation, storage, pumping and vaporisation of liquefied natural gas (LNG), and the export of that natural gas to power plant users. It's really import to mention that both storage facilities and LNG terminal project are in a preliminary stage; however details are given below in order to provide some indicative information.

Storage Facilities - Loading - Uploading - Regasification:

The LNG Storage Facility will be based around the sizing of commonly available LNG Carriers in order to ensure that Government of Cyprus has flexibility of supply and can cope with future demand growth. It is hence envisaged that initially LNG carriers around 75,000m³ P would supply the facility with carriers increasing to around 135,000m³ P in future years. The vessels would be unloaded through three unloading arms with a vapor return, through a cryogenically insulated unloading line. This is maintained at -160°C by recirculation of product through a smaller recirculation line, except during unloading when it provides additional unloading capacity. The vessel would typically be unloaded in no more than 14 hours to allow a 24 hour turnaround time commonly used in LNG shipping.

Year	Total gas	Production capacity *	Pipeline import	LNG import	Forthcoming new capacity (bcm)		
	(bcm)	(bcm)	capacity (bcm)	capacity (bcm)	Authorised	Under construction	
2007	n/a	n/a	n/a	n/a	n/a	n/a	
2008	n/a	n/a	n/a	n/a	n/a	n/a	
2009	n/a	n/a	n/a	n/a	n/a	n/a	
2010	n/a	n/a	n/a	n/a	n/a	n/a	
2011	n/a	n/a	n/a	n/a	n/a	n/a	
2012	n/a	n/a	n/a	n/a	n/a	n/a	
2013	n/a	n/a	n/a	n/a	n/a	n/a	

^{*} Annual Capability of Supply Gasified and Depressurised Natural Gas under Usual Conditions ISO m3 x 10⁶ Table 5.2 – Security of Supply Evolution (Gas)

In order to estimate the needs in Natural Gas, which at least at first will only be used for the generation of electricity, the EAC's Development Plan was taken into consideration as well as the assumptions that the Independent Producers of Electricity will contribute by 10% at least to the needs of the Electricity Market and that the Natural Gas will be available by the year 2017.

It has to be noted that an appraisal of Cyprus offshore hydrocarbon potential will be performed through an exploratory drilling to take place in September 2011. It is anticipated





that developments in the gas sector in terms of possible discovery of indigenous gas reserves, could lead to a redesign of the gas sector structure in Cyprus and revisions of policies, political decisions and schedules would have to be done, which could convert Cyprus into an natural gas exporting country.

6. PUBLIC SERVICE ISSUES [Article 3(9) for Electricity and 3(6) for Gas]

As already pointed out legislation, both primary and secondary, has been enacted covering all the requirements of the Electricity Directive regarding consumer protection complaints procedure, treatment of vulnerable consumers and performance indices that are intended to safeguard quality of service and supply to all consumers.

All Public Service Obligations (PSOs) that EAC had before liberalisation are still in force such as universal electricity service provider and the supplier of last resort, by virtue of the Law 122(I)/2003 and EAC, the Ministry and CERA are currently discussing the PSO regime that will be applicable in the future. Already a PSO regarding energy produced by RES has been imposed by the Law, L.33(I)/2003 on EAC whereby EAC or any other supplier shall buy from RES Producers all energy produced at a price defined by CERA.

A decree regarding relief from the price of electricity for multimember families over six (6) members and for disadvantaged families has been issued in April 2006.

Further to the above, during September 2008, CERA, in co-operation with the Minister of Commerce, Industry & Tourism, had prepared and placed into effect a new legislation, aiming at assisting in a very satisfactory way the consumers that belong in the above disadvantageous position like multimember families and vulnerable consumers etc. Also, this legislation provides to all consumers incentives in the field of energy saving. These incentives are provided in the form of an overall 20% discount to the consumers' electricity bill, provided that his bimonthly consumption has not exceeded 500 kWh. This incentive has been remained active for the next 12 months, from the day the above legislation was published.

EAC is the only licensed supplier in Cyprus supplying the following categories of consumers (the figures correspond to April 2010):

•	Domestic		415.150
•	Commercial		84.800
•	Industrial		11.391
•	Agricultural		14.209
•	Public lighting		9.500
		TOTAL	535.050





	Electricity				Gas	
	large and very large	medium industrial and commercial	small commercial and household	power plants	large and very large	medium small industrial commercial and and commercial household
Existence of regulated tariff (Y/N)	Y	Υ	Υ		NOT A	APPLICABLE
% customers still on tariff possibility to switch back to regulated tariff (Y/N)	100	100	100		NOT A	APPLICABLE
Number of suppliers covered by the obligation to supply at tariff (could be all suppliers)	1	1	1		NOT A	APPLICABLE

Table 6 – Regulation of end user prices

Due to non-payment 19.554 consumers were disconnected in 2010. Approximately 74% (14.467 consumers) of those disconnected were re-connected after settling their accounts. Performance indicators refer to 24 hours as the time of response.

EAC, as the dominant supplier in the electricity market of Cyprus, has been nominated as the Supplier of Last Resort in line with the requirements of the Electricity Directive.

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