# **Hungarian Energy Office**



# **Annual Report to the European Commission**

Budapest, July 2008.

#### Table of contents

# Summary

companies

activities

- 1. Legal background, institutions
- 1.1. Changes in the regulation of the energy market
- 1.2. Legal status, scope of authority, vision and mission of the Hungarian Energy Office
- 2. Regulation and operation of the energy market
  - 2.1. Regulatory issues
    - 2.1.1. Licensing and supervision
    - 2.1.2. Cross-border capacity allocation and congestion management
    - 2.1.3. Regulation of the responsibilities of transmission and distribution
    - 2.1.4. Unbundling of activities
- 2.2.Competition issues
  - 2.2.1. Wholesale market
  - 2.2.2. Retail market
  - 2.2.3. Measures aimed at preventing the abuse of market power
- 2.3. Security of supply
- 2.4. Price preparation, price regulation
  - 2.4.1. Characteristics of the present price system and price regulation
  - 2.4.2. Tasks in connection with the price regulation, price preparation
- 2.5. Public utility obligation, consumer protection
  - 2.5.1. Approval of codes
  - 2.5.2. Quality of supply
  - 2.5.3. Breakdowns
  - 2.5.4. Consumer complaints
- 3. Regulation of the natural gas market and its implementation
  - 3.1. Regulatory issues
    - 3.1.1. Licensing
    - 3.1.2. Cross-border capacity allocation and congestion management
    - 3.1.3. Regulation of companies performing transmission and distribution
      - 3.1.4. Unbundling of activities
  - 3.2. Competition issues
    - 3.2.1. Wholesale market
    - 3.2.2.Retail market
  - 3.3. Security of supply
  - 3.4. Price preparation, price regulation
    - 3.4.1. Characteristics of the present price system and price regulation
    - 3.4.2. Work in connection with the price regulation, price preparation
- 3.5. Public service obligation, consumer protection
  - 3.5.1.Approval of codes
  - 3.5.2. Quality of supply
  - 3.5.3. Breakdowns
  - 3.5.4. Consumer complaints
- 4. Regulation of district heat production
  - 4.1. Regulation
  - 4.2. Competition

- 4.3. Price preparation, price regulation
- 4.4. Public service obligation, consumer protection
- 5. Energy efficiency, environmental protection
  - 5.1. Energy efficiency, energy saving
  - 5.2. Environmental protection
    - 5.2.1. Use of the renewable energy sources
    - 5.2.2. Greenhouse gas emission allowance trading
- 6. Operation of the Hungarian Energy Office, institutional relations, publicity
  - 6.1. Institutional and International relations, publicity
    - 6.1.1. Bilateral institutional relations
    - 6.1.2. International relations
    - 6.1.3. The Energy Interest Representation Board (EIRB)
    - 6.1.4. Publicity
- 6.2. Conditions of operation
  - 6.2.1. Budget of the Office
  - 6.2.2. Information system, information processing

## **Summary**

The report includes information on the fulfilment of the tasks that are specified by Section (9) of Article 3, Article 4 and Section (8) of Article 23 of the Directive 2003/54/EC and by Section (6) of Article 3, Article 5 and Section (1) of Article 33 of the Directive 2003/55/EC. The Act 110 of 2001 on electricity (hereinafter the former Electricity Act), the Act 86 of 2007on electricity (hereinafter the new Electricity Act), the Act 42 of 2003 on natural gas supply (hereinafter the Gas Act), the Act 40 of 2008 on natural gas supply (the new Gas Act) and the secondary legislation on their enforcement provide for the establishment of the electricity and natural gas market in Hungary. The amendments of the mentioned laws are in accordance with the requirements of the relevant EU Directives.

# Legal status, scope of authority, vision and mission of the Hungarian Energy Office

The foundation of the Office was ordered by the Act 41 of 1994 on natural gas supply. The Act 57 of 2006 on the central administrative bodies, and the legal status of the members of the government, and of the secretaries of state defined that the Office is a governmental office, controlled by the Government and supervised by the Minister responsible for the energy sector who is appointed by the Prime Minister.

In addition to the responsibilities of the Office, also the basis of the regulation of the liberalised energy market is determined by the former Electricity Act of 2001, the new Electricity Act of 2007, the Gas Act, the Act 18 of 2005 on district heat supply (hereinafter: the District Heat Act) and the secondary legislation on their enforcement.

The new model of the energy market is described by the new Electricity Act. The new bill on natural gas supply was submitted by the Government to the Parliament in December 2007. The Act was passed by the Parliament on 9 June 2008.

The significant tasks of the Office are the regulation of natural gas and electricity companies (licensing, approval, price preparation, price reviews), supervision, consumer protection and information. Under the conditions of free market, the responsibilities of the Office have grown. The Office has retained most of its former tasks and beside them got new ones in connection with the regulation of the competitive market and universal supply. Legal remedy against the resolution of the Office may exclusively sought in front of a court of law.

As of 1 January 2007, based on the provisions of Section (5) of Article 71 of Act 57 of 2006, the Office reported to the Government through the competent minister, and informed the competent Committee of the Parliament about its activities. This publication, issued for the thirteenth time, presents to our Readers the annual activities of the Office.

#### Regulation of the energy market, licensing

The energy market was a regulated market from 1994 till the end of 2002. On 1 January 2003, the gradual opening of the markets, first the liberalization of the electricity market, then on 1 January 2004, the liberalization of the natural gas market started. In the first step, only the large industrial customers, and from 1 July 2004 all non-residential customers may enter the competitive market.

The electricity market was characterized by a hybrid model till the end of 2007. This means that a public utility and a free market segment were working parallel. Since 2008, the hybrid model has ceased to exist and a competitive market model has taken its place. In the latter model, the competition can be restricted only in the interest of the protection of vulnerable consumers, or with a view to prevent the abuse of market power. Customers and traders can purchase, and producers can sell electricity under free market conditions.

On the natural gas market, all customers but the household customers were eligible in the first half of 2007. This amounted to approximately 180 000 customers. In accordance with the 2003/55/EC Directive of Europen Parliament and Council concerning common rules for the internal market in natural gas and the Section (1) of Article 32 of the Act 63 of 2005 on the amendment of the Gas Act, all customers are eligible from 1 July 2007, thus the opening of the natural gas market has been completed. The number of registered eligible customers entering the competitive market was 786 by the end of the year 2007. The share of competitive market in the annual total natural gas consumption amounted to 20,6%. The number of traders having license for trading on the competitive market was 21. From among the traders on the competitive market, there were only 3 or 4 who actually supplied natural gas to customers. Their number amounted to 9 in 2007.

Following the full market opening, all residential consumers may choose freely from whom they want to buy energy. Household consumers and small users who are not able to take part in competition may take advantage of the universal supply, if they want, which is very similar to the present public utility supply. Simultaneously with the full market opening, the administrative price ceased to exist on the energy market, however universal supply will be settled at regulated price. With regard to the services of companies that are legal or natural monopolies, the services related to system operation or network use still fall under the force of administrative tariff setting.

The District Heat Act has brought significant changes in the regulation. Both the production and the supply of district heat remained activities subject to license, and the installation of a district heat equipment is subject to license only over a heat output of 5 MW. However, licensing competence is divided between the municipalities of settlements and the Office. By virtue of the new regulation, all district heat producers which also generate electricity must apply for a license to the Office, while the licensing of district heat production without electricity generation falls under the competence of the municipalities.

In 2007, the Office issued 614 resolutions. From amongst these, 426 pertained to the electricity industry, 163 to the natural gas industry and 25 to the district heat production falling under the competence of the Office.

## **Consumer protection**

In 2007, the Office dealt with 3139 cases related to consumer protection. This case number is more than double in comparison to the previous year. More than 60% of the cases were direct consumer complaints. From among the received complaints, the number of the cases in relation with natural gas supply increased by 100%, and the number of cases related to electricity supply increased by approximately 50%. Complaints were evaluated and measures were taken continuously. During the process of consumer complaint management, the Office

used its right to apply sanctions in a number of cases. The Office imposed on the licensees not meeting the obligations a fine of 38 million HUF in total.

In 2007, the Office conducted a consumer satisfaction survey for the twelvth time. The evaluation of 7200 household and the 2400 non-household customers who were asked about the performance of the licensees of the electricity industry improved by 1-2% in comparison with 2006. The most critical fields were the restoration of breakdowns, uninterrupted supply, complaint management and the quality of Call Centres ion both sectors, and the accuracy of bill in the natural gas sector.

The Office maintained active relations with other administrative bodies working in the field of consumer protection. In 2007, an especially intensive dialogue developed between the Office and the Nemzeti Fogyasztóvédelmi Hatóság (the Hungarian Consumer Protection Authority). The aim of the dialogue was to construe the details of distribution of powers between the two authorities, which entered into force on 1 January 2008. The Office operated the Energy Interest Representation Board (EIRB) also in 2007 with a view to ensure the continuity of the dialogue between customers and licensees.

Price preparation, price regulation (electricity, natural gas, district heat, electricity subject to feed-in obligation)

In 2007, both the electricity market and the natural gas market were characterized by the so called 'hybrid market' mode of operation (a public utility segment and a competitive market). Accordingly, public utility customers were able to purchase natural gas and electricity by paying administrative prices (public utility prices) for complex services including both the price of the energy and the price of system use, while eligible customers entering the competitive market were able to buy the energy at a non-regulated price, while also paying administrative charges for system use.

As an accompaniment of the process of the electricity and the natural gas market opening, the price preparation activity of the Office – beside the preparation of the public utility prices and the handling of the incidental problems of price regulation – focused on monopolistic activities, which are expected to remain for a long time within the framework of administrative price setting.

The full liberalization of the electricity market, which has been in force since 1 January 2008, required the development of a new operational model, a new act and the secondary rules to ensure its enforcement. All of these requirements were fulfilled in 2007.

The working out of the chapters on price regulation, price supervision and connection fees of the new natural gas act started in 2007. This new act serving as a regulatory basis of the full opening of the natural gas market, is developed on the basis of the new natural gas model.

In 2007, the Office received 4 requests on price revision. The requests of the public utility wholesaler, the MVM Zrt., the system operation licensee, the MAVIR, the distribution licensee, the TIGÁZ Zrt., and the MOL Natural Gas Supplier Zrt. were evaluated within deadline.

Though the district heat generation prices of 2007 that fall under the price authority of the minister were prepared in accordance with the then effective rules and regulations, the

minister's authority to set these prices ceased in 2008 by virtue of the provisions of the relavant act.

The administrative price of the so called electricity falling under feed-in obligation encouraged the generation of electricity from renewable sources as well as the installation and operation of co-generation equipment also in 2007. As a result of the implementation of the provisions of the new Electricity Act, the system of feed-in obligation was transformed, as well. These changes are effective from 2008.

# Energy saving, environmental protection

The Office cooperated in the implementation of the energy saving and improved energy efficiency strategy of the Government. As an expert, it participated in the work of the interministerial commission evaluating tenders aiming at the improvement of energy efficiency, as well as in the work of the Commission of the Environmental Protection and Infrastructure Operational Programme selecting the projects. It also assisted in the preparatory work of issuing calls for tenders.

## Publicity, provision of information

The President of the Office, in compliance with his task specified by the relevant law, submitted a report on the activities of the Office in 2006 to the Government in 2007. The Office prepared its annual national report presenting the operation of the electricity and natural gas markets in accordance with the Directive 2003/796/EC.

The Office continuously supplied information to consumer representative organizations on the issues of licensing, price preparation, market analysis and market regulation through the Energy Interest Representation Board.

On its homepage, the Office regularly publishes its resolutions of public interest, provides information on current issues related to its work and publishes a summary, with a content specified by a number of background legislation, on the public technical and economic data of the electricity and natural gas sectors.

The Office performs its data supply obligations towards international organizations (EUROSTAT, International Energy Agency, etc.) regularly, including, among others, the supply of data on average consumer prices of electricity and natural gas.

Experts of the Office played an active role in the various organizations of the European Commission, as well as in its professional committees, in the working groups of the Council of Europen Energy Regulators (CEER), and of the Europen Regulators Group for Electricity and Gas (ERGEG).

Traditionally, the Office issued its publication presenting the activity of the Office and the key technical and economic data of the supervised sector, and the Electricity Statistical Yearbook containing the data of the electricity system. The senior management of the Office regularly informed the written and electronic press on issues related to consumers.

On its homepage at <a href="www.eh.gov.hu">www.eh.gov.hu</a>, the Office provides information on its activities, its resolutions of public interest, its announcements, and the main events concerning the energy market.

# Claims against the resolutions of the Office

In 2007, in addition to the cases of consumer protection, the Office made 614 resolutions. From among them, 45 were challenged at law court. The claim was withdrawn in 2 cases, 3 cases are let up, 40 cases are still in progress. 70 lawsuits were carried over to 2007 from earlier years, and from among these cases 30 were tried in 2007, 4 cases were let up, and 36 cases are still in progress.

The Office proceeded in 3139 cases associated with consumer protection. Stakeholders submitted claims to courts of law in 59 cases against the resolution of the Office. From among these, 11 cases were tried (the claim was withdrawn in 4 cases, the proceeding was terminated in 6 cases, and the Court judged the Office to start a new proceeding in1 case), 2 lawsuits are let up, and 46 cases are still in progress. 54 lawsuits were carried over from 2006 to 2007. From among these cases, 31 lawsuits were tried, 1 case is let up and 1 case is suspended.

### 1. Legal background, institutions

# 1.1. Changes in the regulation of the energy market

The foundation, legal status, scope and tasks of the Office and the regulation of the energy markets were specified in the Act 41 of 1994 on natural gas supply, the Act 48 of 1994 on generation, transmission and supply of electric power, and the Act 18 of 1998 on district heat supply.

The basis of the regulation of the liberalized energy market was set forth by the former Electricity Act, the Gas Act and the associating governmental and ministerial decrees.

The District Heat Act has brought significant changes in the regulation of the district heat supply. In the new regulation, all district heat producers that co-generate electricity must apply for a license to the Office, while district heat production without generating electricity falls under the competence of the municipalities.

The new model of the electricity market is specified by the new Electricity Act. The new bill on natural gas supply was submitted by the Government to the Parliament in December 2007. The Act was passed by the Parliament on 9 June 2008.

# 1.2. Legal status, scope, vision and mission of the Office

In accordance with the provision of the Act 57 of 2006 on the central administrative bodies and the legal status of the members of the government and the secretaries of state, the Office operated as a governmental office, it was controlled by the Government, and was supervised by the Minister of Economy and Transport in 2007 (currently by the Minister of Transport, Communication of Information and Energetic). The core tasks of the Office are regulation and licensing of the natural gas and electricity companies, consumer protection, and price preparation of the administrative prices of natural gas and electricity.

The Office – to act upon the strategy of the Ministry of Economy and Transport – elaborated its own strategy for the period 2007-2010, which is based on the issues within the competence of the Office, like the objectives of energy market competition, security of supply, quality of supply, energy efficiency and renewable energy sources, taking into account its regulatory feature as well as its possibilities determined by its legal status. The Office submitted its Action Plan for 2008 built upon its strategy for the 2007 -2010 period to the GKM.

With regard to the 2229/2006 (20.12) Government Resolution on the review of public tasks, the Office has prepared its list of activities, in which it gave a detailed review of its tasks and the legal background thereof.

## Vision of the Office

The Hungarian Energy Office is one of the influential, acknowledged and independent energy authorities of the Middle East European region, which is highly respected both nationally and internationally due to its efforts exerted in the fields of regulation, supervision, consumer protection and reconciliation of interests, as well as the flexible and successful promotion of the effective market operation.

## Mission of the Office

The Hungarian Energy Office as regulatory authority acting upon the efforts of the European single energy market,

Promotes the development of the national and regional energy markets,

**Encourages** competition

Protects the interests of customers

Supervises the operation of markets

with a view to ensure that every consumer in Hungary be supplied with electricity, natural gas and district heat continuously at reasonable prices and at an expected standard.

# 2. Regulation and operation of the electricity market

## 2.1. Regulatory issues

#### 2.1.1. Licensing and supervision

The Act 67 of 2007 (the new Electricity Act) was issued at the middle of the year, but it came into force only on 1 January 2008. In the first half of 2007, the Office conducted its licensing procedures in accordance with the provisions of the Act 79 of 2005 on the amendment of the Act 110 of 2001 (the former Electricity Act), and in the second half in accordance with the provisions of the new Electricity Act. Although the new Electricity Act did not change the principles of the licensing proceedings, it has introduced several modifications.

#### Generation licences

The licensing procedures of power plants have not been changed significantly by the provisions of the new Electricity Act. This means that only power plants of a capacity of 50 MW or over that have an operational licence for generation, or small power plants of a capacity of 0.5 MW or over that have a simplified licence for small power plants have the right to generate electricity.

On the other hand, however, there was a remarkable modification, according to which the establishment of wind power plants has been possible only by tendering since 1 January 2008. Another new element in licensing is that the amount of electricity to be fed in under feed-in obligation and the duration of the obligatory feed-in for the small power plants having simplified license have to be determined by the Office since 1 January 2008.

# Licensing procedure of small power plants

The Act 79 of 2005 on the amendment of the former Electricity Act ordered that power plants of a capacity of 0.5 MW or over, connecting to the public network but operating without the licence of the Office have to submit an application to the Office for a simplified license for the selection of primary energy sources, establishment and operation until 1 September 2006.

Whereas not each of the applications for licenses arrived in the Office until the above deadline, the issuing of these licenses continued even in 2007.

The quota of power subject to feed-in obligation, the duration of the feed-in obligation and the expiration date of the operational licenses must be determined by the Office, taking into account the international commitments of Hungary on the generation of renewable electricity, the competitiveness of power generated from renewable sources, the impact of the given technology on the balanced operation of the electricity system, the ability of consumers to pay, the position of the system operator, the extent of obligatory public utility electricity supply, and the extent of other approved supports. The co-generated electricity has also fallen under the scope of feed-in obligation since 1 January 2008. The new regulation prescribed feed-in obligation also for small power plants (e.g. gas motors) based on combined cycle electricity generation (co-generation), but did not contain any special licensing conditions. The Office also specified the amount of power subject to feed-in obligation (quota) for another 22 small power plants not subject to license (power plants under a capacity of 0.5 MW).

# Licensing procedure of wind power plants

In Hungary, the feeding-in of wind generated power is limited depending on the time of the day and the season, which influences the electricity system in an unpredictable way. Taking into account the presumed development of the electricity system and the required reserve limits, the integration of wind power plants into the system will exhaust the regulation reserves of the system. Therefore, in harmony with the existing regulations and in accordance with the opinion of and in agreement with the system operator, the Office specified the maximum capacity limit of wind power plants, to be interpreted as a system limit (330 MW).

#### Inspection of power plants

In the course of the official inspections performed at power plants, the Office concluded that the required fuel reserves specified in legal regulations were available in all power plants, and in several places, reserves exceeded the required quantity. Maintenance is carried out according to the schedule on all locations thus ensuring reliability and availability.

Power plants observed the regulations of environmental protection, so the developments and reconstructions carried out earlier made the power plants suitable for complying with the strict norms, and no power plant had to be closed.

With regard to environmental protection, by virtue of the law, power plants must comply with the provisions of the joint license for the use of environment by 31 October 2007. All licensees have already started the licensing procedure and most of them have already received the joint license for the use of environment.

#### Licensing and supervision of transmission and distribution companies

The licenses of the MAVIR Zrt. as the system operator, and on the other hand as a holder of an operational license for transmission network, were modified once in the year of 2007 in order to up-date the annexes.

In accordance with the regulations of the new Electricity Act coming into force in November, the MAVIR Zrt. submitted its application for the operational license for system operation

within the deadline. The application was approved by the Office on 1 January 2008 in its resolution 84/2208.

With a view to the relevant directive of the European Union, the unbundling of the distribution and the network activities took place in the case of three distribution network licensees for the first time in 2006. This process continued in 2007 and was closed with the legal unbundling of another three electricity supply companies. Licensees applied two solutions to implement unbundling in practice. Three of the distribution network licensees kept the network activity in the parent company, and outsourced the electricity supply in a subsidiary company, while the other three distribution network licensees kept the electricity supply in the parent company and outsourced the network activity in a subsidiary company. Consequently, the unbundling of network companies as business associations providing regulated services as a natural monopoly, and supply and trade licensees who are business associations supplying electricity under free market conditions has been completed on the Hungarian energy market.

With regard to the above mentioned legal unbundling in the field of public utility supply, three public utility supply licenses were withdrawn and a new one was issued on the integration of the three supply areas on the claim of three public utility suppliers.

# Licensing procedure of electricity traders and universal suppliers

The new Electricity Act significantly simplified the licensing process of electricity traders. The applicants have to submit fewer documents to start the licensing process than before. If the applicant sells electricity exclusively to one licensee or user, it has a possibility to request exemption from the preparation of Business Conduct Rules. The obligation to submit a financial guarantee equal to the annual electricity sales also ceased to exist, and every kind of financial guarantees has been managed by the system operator MAVIR Zrt since 1 January 2008. In addition to this, the obligation of entry in the commercial register of Hungary, and the former requirement of an initial capital (a minimum of 50 million HUF) were cancelled, as well. The new Electricity Act introduced restricted electricity trading licence and a simplified electricity trading license. The first one can be exclusively applied for on the basis of wholesale kind of activities, and the second one can be exclusively applied for by the operator of the private electricity line subject to license, to supply the customers connecting to the private electricity line.

# 2.1.2. Allocation of cross-border capacities and congestion management

#### Legal background

The Governmental Decree 182/2002 (23.08) on the cross-border transmission of electricity provides that the capacities required to comply with the long-term import contracts concluded in order to meet the requirements of the contracts specified in Section 23 of the Article 3 of the former Electricity Act have to be regarded as preliminarily contracted capacity. The Government issued the Governmental Decree 37/2007 (07.03) on the amendment of the Governmental Decree 182/2002, which provides that the cross-border transmission capacities required for the fulfillment in 2008 of the long-term import contracts providing the electricity quantity equal to the electricity quantities specified in the contracts referred to in the former Electricity Act are not qualified any more as preliminarily contracted capacities. Soon afterwards, the Government issued the Governmental Decree 313/2007 (17.11) on the amendment of the Governmental Decree 182/2002 which says that 'in the course of the

allocation of cross-border capacities from 2007 to 2008, the capacities required to the comply with the long-term import contracts concluded in order to meet the requirements of the contracts concluded in accordance with Section 23 of the Article 3 of the former Electricity Act before the coming into force of this Decree shall be regarded as preliminarily contracted capacity'.

The Decree of the Minister of Economy and Transport issued on 21 October 2007 (Decree of the Minister of Economy and Transport 85/2007 (21.10)) amended the Decree of the Minister of Economy and Transport 57/2002 (29.12) on the setting of the general charges for system use applied in the electricity supply. This decree imposed an export charge of about 17 EUR/MWh on the Hungarian electricity export. A particularity of this decree is that it was in force only for one day (on the 31 December 2007), because the Decree of the Minister of Economy and Transport 119/2007 (29.12) on the charges for electricity system use published on 29 December 2007, repealed it.

# Allocation of cross-border capacities in 2007

The MAVIR Zrt. and the cooperating system operators have performed cross-border capacity auctions since 2003 at the common intersections. When analyzing the results of the annual auction in 2007 it can be found, that there was not any significant change in the trend of the auctions. This means that the import direction was from Slovakia, Austria, and Romania. On the monthly auctions, however significant changes appeared, especially from the second half of the year. Due to the effect of the increasing electricity price in South East Europe, the importance of the export into Croatia and Serbia grew increasingly. The same tendency could be experienced in the course of the annual auction in November 2007 concerning the year 2008.

The TSOs of the Central Eastern European Region as defined in the Annex to Directive 1228/2003/EC, also including MAVIR Zrt., are planning to establish a Central Allocation Office in Freising (Germany) in order to operate a coordinated market based capacity allocation mechanism. The founders of the CAO are the Czech (CEPS), the Slovenian (ELES), two German (E.ON and VE-T), the Polish (PSE-O), the Slovakian (SEPS), the Austrian (APG) and the Hungarian (MAVIR) TSOs with equal shares. The main objectives of the CAO are:

- development and implementation of concepts to provide an optimized solution for congested capacity allocation,
- coordination and calculation of available physical capacity congestions, and the analysis
  of factors that indicate the extent of the load on network congestions caused by
  electricity transmission,
- provision and operation of the necessary support services (e.g. support for scheduling, billing, risk management, secondary market of congested capacities).

This is a significant step forward towards the compliance with Regulation 1228/2003/EC, according to which the TSOs of the EU Member States must apply a coordinated, market based, transparent and non-discriminative mechanism in the allocation of congested cross-border transmission capacities among market players.

# 2.1.3. Regulation of responsibilities of transmission and distribution companies

In Hungary, one TSO (MAVIR Zrt.) and six distribution companies (DSOs) were in operation based on the license of the Office in 2007. Until 31 December 2005, the MAVIR Zrt. was owned by the state, and had purely a system operation license. From 1 January 2006 to 30 December 2007, the MAVIR Zrt. had a license for system operation and transmission network operation (and was also the owner of transmission network assets as a part of the MVM Holding), but since 1 January 2008, the MAVIR has had only one license for system operation. Distribution companies are in private ownership.

From 1 January 2008 (on the basis of the new Electricity Act), the MAVIR Zrt. is responsible for operating and balancing the balance circle established for the settlement of the electricity falling under feed-in obligation. The rules required to perform these activities are specified in the Governmental Decree 389/2007 (23.12) on feed-in obligation and price of the electricity generated from renewable sources or waste, or co-generated electricity, the Governmental Decree 109/2007 (23.12) on the distribution of the electricity falling under feed-in obligation to be conducted by the system operator and the determination of prices of distribution and the Business Conduct Rules of the MAVIR Zrt. The last one was approved by the Office in its resolution 86/2208 on 1 January 2008.

#### 2.1.4. Unbundling of activities

## 2.1.4.1. Requirements of unbundling in the Hungarian electricity industry

In Hungary, the obligatory provisions on the unbundling of natural monopolistic activities (system operation, transmission, distribution) from other, competitive electricity sector activities (generation and supply) are defined in the new Electricity Act and its enforcement decree.

In 2006, the system operator was reintegrated into the state owned MVM Zrt, which also performed generation and commercial activities, and therefore Hungary switched from the previous ISO (Independent System Operator) model to the TSO (Transmission System Operator) model, which is in line with the Directive. As a result of the transaction, the transmission network became the property of the system operator, which functions as a separate subsidiary but still a part of the MVM Zrt. Holding. The MVM Zrt. created a corporate structure, in which the holding company coordinating the subsidiaries does not perform any licensed electricity market activities. In 2007, the single system operator in Hungary, the MAVIR Zrt. performed its licensed activity as an independent subsidiary of the MVM Zrt., in accordance with the structural changes that took place in 2006. In 2007, many of the support functions were integrated within the MVM Zrt. e.g. IT, finance, accounting etc. The Office drew and will draw a special attention to the supply of services within the company group, and the outsourcings - allowing for cross-financing.

In the operation of the six vertically integrated distribution licensees, 2007 was the year of legal unbundling. The companies belonging to different owner groups solved the problem of legal unbundling in various ways: some outsourced the distribution activity (and assets) in a new subsidiary while others outsourced the non-distribution activities in a new, legally independent organization. In the case of the former, the moving of the assets from one company to another was based on a market-based reevaluation, while in the case of the latter;

the book value of the network assets remained unchanged. Every legally unbundled distribution licensee possesses the assets associated with their network activity.

# *Implementation*

By virtue of the Electricity Act, the Office approves the Compliance Codes of network companies and verifies the compliance with rules on the unbundling of accounting. At the same time, the auditors of the companies must certify in their annual audit report that the unbundling rules of accounting ensure that the possibility for cross-financing between business units is excluded. Since the provisions on the unbundling of activities are defined at a legislative level, any tool of sanctioning can be applied (warning, penalty, withdrawal of license) if they are breached.

# 2.1.4.2. Compliance with unbundling rules – practical experiences

## Transmission system operator

The present transmission system operator (similarly to the independent system operator before) is physically unbundled from other activities of the vertically integrated company (separate headquarters and office buildings). The previous ownership unbundling has led to a strong and independent corporate culture at the system operator, which meant that not only professional, but also financial and business decisions were made independently from other electricity sector activities. The wave of outsourcing, which is also increasingly characteristic of the energy sector, had an impact also on the system operator. Outsourcings took place at the system operator in 2007.

#### Distribution companies

There are six distribution companies in Hungary. All of them are owned by international strategic investors (3 E.ON, 2 RWE-EnBW, 1 EdF). Until 2007, all of the distribution activities were performed in a vertically integrated company without legal unbundling. Hungarian electricity regulation does not use (cannot use) the exemption rule relating to 100,000 consumers, since currently all distributors have more than 100,000 connected consumers. Network assets are owned by the network companies.

The communication of distribution licensees towards third parties is not independent yet, however legal unbundling induced improvements in this field. The legal unbundling makes possible a much more clear separation both in the structure and the management. It still often occurs that the same person represents both the distribution and trade licensee at sectored events, although licensees lay more stress on personal unbundling than before.

The legal unbundling decreases the importance of the unbundling of accounting, because the distribution licensees perform non-network activities only at an insignificant rate. In its evaluation of revenues and expenditures, the Office will focus on the transactions carried out within the company group from now on.

### 2.2. Competition issues

## 2.2.1. Wholesale market

The changes that took place on the Hungarian electricity market at the end of 2006 led to decreasing consumption on the free market. The purchase prices paid by the traders in 2007 increased because of the increasing regional market prices. As a consequence, traders could offer electricity for many of the free market customers at a price much higher than the former price. Due to the increasing prices of the free market, several customers decided to return the public utility segment (a distinctive feature of which was the maximum administrative prices). By the first half of 2007, the consumption of the free market diminished by almost half of the consumption of the previous year (to 62% of the previous year).

Table 2 Figure 1

The switchbacks to the public utility segment had only a moderate influence on the wholesale market. Due to the long term power purchase agreements concluded with the domestic power plants (PPAs) and import contracts, as much as 80% of the electricity required to satisfy the domestic demand got to the suppliers and traders supplying the customers through the MVM group. The increasing demand of the public utility segment resulted from the switchbacks to the public utility segment induced certain structural changes. The share of sales to free market participants within the total sales of the MVM fell below 20%, while the share of the import sources within the purchases of the traders supplying the customers of the free market exceeded 50% again.

Meanwhile, the relative market positions of the power plant investors changed only a little bit, though the importance of the domestic producers increased in satisfying the domestic demand (within the gross consumption). The share of net import within the gross consumption decreased to 10% in 2007 from the 15 to 20% level of the years subsequent to the market opening.

The export activity of the competitive market strengthened simultaneously with the growing domestic generation. (Certainly, the causal relation can hardly be stated, since the growing domestic generation can be the consequence of the increased export possibilities just like the cause of the increasing share of import shifting to foreign markets.) The high wholesale prices in South East Europe, and the approaching of the free market (import) price to the domestic wholesale price resulted in free market customers switching back to the public utility segment, the shift of the traders' sales structure towards export direction and consequently the levelling out of the import-export balance. While the export of traders was hardy one third of the sales to eligible consumers in 2006, the export exceeded the sales to eligible customers by 30% in 2007. The consumption on the free market decreased (by 5 TWh) simultaneously with the increase in the export in nearly the same degree (by 6 TWh).

The shrinking circle of customers purchasing on the free market nevertheless did not induce any fallback in the activity of the competitive market. The electricity trade conducted by the traders on the free market rose nearly by 30% (which included the doubling of the trade among traders). At the same time, the power relations of traders were rearranged on the market of eligible customers. The share of certain traders decreased by half, while the share of others doubled. Although the whole retail market (including also the public utility segment,

the consumption of which is far bigger than that of the free market,) witnessed much more moderate shifts, it can be said that the fee market activity of traders was strengthening continuously from the beginning of the market opening, even including the wave of switchbacks at the end of 2006.

#### 2.2.1.1. Market structure

The Hungarian generation market showed a low concentration also in 2007, using conventional tools of analysis. In the course of the privatization of the power plant sector between 1995 and 1997, the majority of power plants belonging to the vertically integrated state corporation (Magyar Villamos Művek Tröszt) was acquired by foreign strategic investors (Electrabel, RWE, AES) - *Table 3*.

The market share of the three largest generators was 61 % measured on the basis of installed capacity and 59 % on the basis of generation, while the Herfindahl-Hirshman Index (HHI) would be somewhere between 1400 and 1800, depending on the calculation method, which indicates a less concentrated, multi-participant market in ordinary circumstances.

Table 3 Figure 2

While the concentration is low in terms of power plant capacity, the concentration is higher in the wholesale market. The reason for this is that the capacity required for supplying end-customers was contracted by the public utility wholesaler (MVM) in the years of the privatization of the power plant sector (1995 to 1997) through long term power purchase agreements. Through the long term PPAs, the MVM disposed over approximately 60 to 80 % of the total available capacity of domestic power plants, which practically means that 73 to 77 % of the generation of domestic power plants is transferred to the customers through a single company, the MVM - *Table 4*.

Table 4
Figure 3
Table 5
Figure 4

In addition to the PPAs contracted for domestic capacity, the MVM also has long term import contracts, as a result of which MVM disposed over nearly half of the cross-border capacity. 80% of the primary (purchased from import sources and domestic power plant sources) electricity purchases required for satisfying gross domestic consumption was carried out through the MVM group, which was therefore a dominant player of the wholesale market also in 2007. The structure of the electricity wholesale market strongly differs in the public utility segment and in the free market segment. Public utility suppliers supplying electricity to public utility customers purchase electricity from fixed source(s) and at administrative price(s) i.e. public utility suppliers are basically obliged to satisfy the electricity demand through the MVM, who has a supply obligation towards the public utility segment. The MVM basically satisfies the public utility demands through PPAs contracted with domestic power plants, and to a smaller extent through long term import contracts. As a result, the dominance of the MVM in the administratively priced public utility segment (where 78 % of the total consumption was realized in 2007) was more than 80 % in 2007 (*Table 5*). The remaining purchases of public utility suppliers were primarily covered by co-generated electricity or

electricity produced from renewable energy sources by small power plants, which were fed in under the scope of feed-in obligation at administrative prices.

The purchases of free market traders were not limited by law contrary to that of public utility suppliers, therefore the market structure was much more heterogeneous in this segment, which is much smaller than the public utility segment, and the dominance of MVM prevailed purely to a limited extent. The primary purchases of the traders (excluding trade between traders) basically came from three sources (*Table 6*): (i) import sources; (ii) the sale of capacity contracted by MVM but becoming redundant due to the decreasing public utility demand; (iii) the spare capacity of domestic power plants not contracted by the MVM. A significant part of the purchases (17 TWh) coming from the above sources went through further transactions within the trade sector before reaching the final customers or the export market. The majority of electricity (the significant part of which passes several traders) went to Hungarian eligible customers, and only a smaller part was sold in abroad until the end of 2007. In 2007, the switchbacks to the public utility segment resulted in a significant shift in the sales structure of traders towards foreign markets.

Table 6 Figure 5

In Hungary, there is not any organized energy market; therefore electricity trade is basically conducted within the framework of bilateral contracts. The process of transactions in 2007 is shown by *Figure 6*.

Domestic power plants sold the majority of their generation (74 %) through long term PPAs concluded with the public utility wholesaler (the MVM) (1), 14 % of their production (cogeneration and generation from renewable sources) was sold to suppliers in the framework of feed-in obligation (9) and at prices set in a decree. Hardly 10 % of power plant generation was sold directly on the free market through short term (typically one year) contracts (5). Typically, PPAs cover a period of 15 to 20 years, but the parties can adjust the price and quantity of the electricity to sell annually within the framework of the so-called annual trade contracts. The MVM sold the electricity bought for public utility purposes within the framework of annual, so-called VEASZ contracts (long term electricity sales contracts) to the suppliers supplying public utility customers, also at administrative prices (2-3). In 2007, the majority of domestic electricity sales were realized through this channel (1-3).

## Figure 6

The MVM sold the excess electricity, which is a part of the contracted electricity beyond the public utility demand, through bilateral contracts or through public capacity auctions (row 4 – Table 7). Although traders primarily based their activity on import sources in the first year of the market opening, the sale of public utility excess capacity contracted by the MVM became another key source of purchases for the free market traders in addition to import in a few years' time (after the initial excess import capacities had been absorbed). Power plants sold their spare capacity (not contracted by the MVM) mostly through annual contracts directly to the traders (row 5). However, these direct free market sales by power plants seldom exceeded 20 % of the primary purchases of traders.

As much as 90% of primary trader purchases went through secondary trade within the trade sector (*row 6*), before its selling to end customers (*row 7*) or on export markets (*row 8*). The demand of free market customers was satisfied through traders practically completely.

The sales of small power plants using renewable energy sources or co-generation (row 9) falls under a special sale category. The public utility wholesaler and the territorially competent public utility suppliers are obliged to buy this electricity under given condition set in a decree (period, quantity, and price). With the approval of the public utility wholesaler, public utility suppliers could also conclude PPAs directly with specific power plants (row 10), but it was not typical (actually there was only one such case, where the amount of the electric energy sold did not reach even 0.5 TWh). Traders' import and export data exclude the traders' transit activities, i.e. the sale of imported electricity on export markets.

Table 7

## 2.2.1.2. Market events and changes in the regulation

The new Electricity Act has changed also the rules on the operation of the wholesale market. The most important changes are the following:

The administrative price setting ceased to exist in each segment of the wholesale market (the selling prices of power plants to be paid by the MVM, and the (further) selling prices of the MVM to be paid by the suppliers are agreed by the parties concerned),

the number of laws restricting the freedom of the certain (wholesale) market participants in sales and purchases decreased (the contracting obligation between the MVM and the suppliers ceased, but the feed-in obligation on the electricity generated from renewable energy sources or co-generation remained effective at the same time).

The given structural features of the wholesale market (one single participant contracts the majority of the power plant capacities through long term contracts), which determine the possibilities of the participants (and restricting the market) remained unchanged, thus the system of relations of market players went through only small changes, which basically resulted in the enhanced freedom of sales (and contracting) of the MVM:

The amount of electricity sold through the long term electricity sales contracts (VEASZ) concluded between the MVM and the incumbent suppliers (former public utility suppliers) decreased significantly (by more than 35%), while the administrative regulation of the contract prices ceased to exist.

The amount of electricity sold in auctions and therefore equally accessible for all market players, increased. (This, however, failed to result in the expansion of the competitors of the incumbent suppliers and the increased intensity of the competition on the retail market.

One of the features of the electricity wholesale market is the fact, that most of the contracts on the selling of the energy are concluded in the year before the actual delivery. The most important events fundamentally influencing the structure of the wholesale market in 2008, took place in the second half of 2007:

On 18 June 2007, the incumbent Slovakian electricity industry company, the Slevenské Elektrárne (SE) held its public auction for the year 2008, in the course of which it sold 400 MW base load capacities. The price evolving on the auction (62 EUR/MWh) meant a 50% price increase in comparison with the similar auction held in the previous year. This price

increase reflects primarily the capacity shortage in Slovakia, and at the same time gives a vigorous signal on the price relations of the regional market.

On 4 July 2007, (shortly after the promulgation of the new Electricity Act), a decree issued by the Slovakian Government imposed an approximately 10 EUR/MWh charge component for system use effective from 2008 on the export deriving from Slovakia. Taking into account that the majority of electricity import required to satisfy the domestic demand arrives from the direction of Slovakia, this decree forecasted an additional increase in import prices.

On 20 July 2007, the MVM held its first public auction announced for the year 2008, on which only a small amount of electricity was sold (hardly 3% of the domestic demand) at a price 30 to 40% higher than the wholesale prices in 2007. The importance of the auction (despite the small amount of electricity sold) was still high, since this was the first public price signal on the possible domestic wholesale prices in 2008 after the promulgation of the new Electricity Act.

On 25 October 2007, the MVM held the last auction announced for the year 2008, on which a more significant amount of electricity was sold, approximately 8TWh (Table 8). The price evolving on the auction significantly exceeded, by 20 to 50% depending on the type of the product, the public utility wholesale prices of 2007. A few days before the auction, on 21 October the Decree of the Minister of Economy and Transport 85/2007 on the amendment of the Decree of the Minister of Economy and Transport 57/2002 (29.12) on the setting of general charges for system use applied in electricity supply, which, similarly to the Slovakian decree, imposed a charge for system use on the export of the domestic electricity, and its rate was 17 EUR/MWh. The decree, which levied a tax indirectly on the export of electricity generated from domestic sources, was practically in force only on the last day of the year Despite, the promulgation of this decree that took place only a few days before the auction, made traders more cautious, since the possibility of another export charge decree, which may be effective also for 2008 could not have been excluded in aware of the 'one-day decree'.

The new Electricity Act did not include any provision on an obligation to be imposed on the Office to approve the rules of the auction.

#### Table 8

In November 2007, the cross-border capacity auction took place under similar circumstances, which facilitated the export and import of electricity. By virtue of the amendment of the decree promulgated only a few days before the auction, the MVM obtained again the right for a priority access to the Slovakian import capacities conducting the majority of the domestic import transmissions. (Earlier, this right had been ceased in accordance with the regulation of the European Union, in March 2007).

The electricity required for the supply of customers entitled for universal supply in 2008 was sold not on the above mentioned auctions, but was provided by the prolonging/modification of the bilateral long term electricity sale contracts (VEASZs) concluded between the MVM and the public utility suppliers for 4 more years. In these contracts, the parties agreed in lower prices than the prices evolved on the auctions.

The last months of the year revealed that the public institutions entering the free market (those not entitled for universal supply) have to face significant rise in prices (in certain cases, price

increases may exceed 30% due to the rising prices of the MVM auctions) with the cease of the public utility segment. In order to avoid the possibility of a price shock, the MVM and the suppliers who are active in the supply of the relevant circle of customers held discussions – on the initiation of public administration bodies. As a result of these discussions, the MVM undertook that it would sell the amount of electricity equal to the estimated consumption of the public institutions to the suppliers within the framework of individual contracts (so called VEASZ+) at a price lower than the prices evolved in the auctions. Nevertheless, the VEASZ+ contracts applied in the case of public institutions significantly differ from the VEASZ contracts, which ensure the supply to household customers with regard both to the level of prices and to the duration of the contracts.

The above mentioned events showed that the concentration of the wholesale market and the system of relations of market players did not change much along with the development of the liberalization. Despite of the pressure of the European Commission (in the Commission's opinion, these contracts include forbidden state aids), the system of the long term PPAs, which fundamentally determines the market structure remained unchanged – despite of all the results achieved in the re-negotiations of the PPAs. The concerns because of the price increases in the region and the administrative price regulation being forced back implied a number of measures which were aimed to prevent the changes considered unfavorable by restoring the former system of relations.

#### 2.2.2. Retail market

On the retail market, non-residential customers were eligible to switch supplier in the whole year of 2007, while for the residential consumers, the market opened only on 1 July 2007. Only a few customers could take advantage of the possibility of switching suppliers, since traders mainly competed for the large customers. The majority of these customers are energy intensive customers, who use timeline metering i.e. they have metering equipment that is capable for the real time metering, storage and transmission of consumption data. The number of customers buying electricity not within the framework of the public utility segment was approximately 3000 at the end of the year.

The companies having public utility supply license, which are the E.ON Dél-dunántúli Áramszolgáltató Zrt., the E.ON Észak-dunántúli Áramszolgáltató Zrt., the E.ON Tiszántúli Áramszolgáltató Zrt., the Budapesti Elektromos Művek Nyrt., the Észak-magyarországi Áramszolgáltató Nyrt. and the Dél-magyarországi Áramszolgáltató Nyrt., owned also the distribution networks directly or through a subsidiary. The public utility suppliers were owned by three multinational companies, the E.ON, the RWE and the EdF, which supplied customers not only through the public utility suppliers, but also through their trading subsidiaries established with a view to perform free market activities. Thus, the market share of these companies within the total domestic retail market was very significant, approximately 85%.

Despite of the strong market concentration, there were traders entering the market, who also undertook to supply customers in addition to their domestic wholesale activity parallel to the market opening. The circle of these traders included both multinational companies possessing several subsidiaries in the region and small domestic traders. In 2007, there were 9 traders operating on the retail market, whose owners were fully independent from any of the distribution network companies. Their market share was approximately 15%.

The changes of the wholesale prices in 2007 fundamentally determined also the trade on the retail market. Since regional wholesale prices rose, the public utility prices became more competitive relative to the free market prices that had been lower until then. Therefore, the three leading companies, the E.ON, the RWE and the EdF witnessed free market consumers' leaving their free market traders and returning the public utility supplier owned by the same company.

# Figure 7

Retail market prices were basically determined by the regulated public utility prices. Since a customer could switch back to the public utility supplier any time after its free market contract had expired, public utility customer tariffs practically meant an upper limit to free market prices (Figure 8).

In line with the EUROSTAT, the average tariff structure of the following customers was specified based on administrative prices:

- household customers, with 3500 KWh annual consumption, from which 1330 KWh is consumed during evening hours
- small industrial (commercial) customers, with 50 MWh annual consumption and a maximum load of 50 kW
- large industrial customers, with 24 GWh annual consumption and a maximum load of 4000 kW

# Figure 8

The domestic prices in comparison with the prices of the European Union fell in the middle range both in the residential and in the industrial customer segments in 2007 (*Figures 9 and 10*).

Figure 9 Figure 10

## 2.2.3. Measures aimed at preventing the abuse of market power

The Office supervises the congestion management mechanisms within the electricity system, and the activities of the transmission and distribution licensees aimed at the restoration of breakdowns. It controls the information published by the system operator on the use of interconnections, system use and the network capacity allocated for stakeholders as well as the effective unbundling of settlements by activities and the conditions of the connection to network for new generators. With regard to the system operator, it monitors compliance with the provisions of rules and regulations, codes and licenses. In addition to this supervision competence, it performs among others licensing activity in the electricity, gas and district heating sectors, approves the Electricity Supply Codes, the Business Conduct Codes of licensees, prepares the administrative prices and charges, may call for tenders for the establishment of power plants and performs consumer protection tasks. Non-discrimination in the procedures of the Office is ensured by several statutory provisions.

The ex post authority tasks of competition surveillance are performed by the Hungarian Competition Authority (Gazdasági Versenyhivatal, hereinafter: the GVH). In 2004, the GVH

carried out a sector level investigation in the field of electricity. The relevant report was published in February 2006. The report revealed that the present legal background, which is the basis of the hybrid model, shows significant structural deficiencies, which hinder the further development of competition. 'In the currently valid model, competition has reached the limits of its possibilities... a real competition can evolve once the model is changed.'

In relation with the sector level analysis, the GKM requested the Office to prepare a proposal on the fundamental operational issues of the new market structure. In 2005, following a wide scale public debate, the Office finalized its proposal. The proposal introduced the legal definition of significant market power, which, although new in the regulation of the electricity industry, was already known in the telecommunications sector. In June 2007, the Parliament passed the new Electricity Act, which already includes rules on the designation and treating of licensees having significant market power.

Within the framework of the new regulation, the Office as a supervisory authority can impose special additional obligations (e.g. public capacity auction, cost-based pricing, supply obligation for the universal supplier, etc.) on all licensees who turn out to have significant market power, even if it is a wholesale or a retail market player, in order to prevent the abuse of market power and enhance the efficiency of competition. The Office, in cooperation with the GVH and relying on market analyses, would designate the licensees who have significant market power and would impose special additional obligations adjusted to their market position.

In November 2005, the Directorate General of Competition of the European Commission (DG Competition) initiated an investigation on the compensation system associating with stranded costs. In its first observations, the DG Competition found that the long term PPAs signed by the MVM and generators contain state aids for the generators. In the course of its investigation, the DG Competition expressed serious concerns on the compliance of the PPAs with the common market principles. In 2007, upon the initiative of the Government of Hungary, the MVM started negotiations with generators in order to harmonize PPAs with EU regulations.

Despite of the results achieved during the re-negotiations of the PPAs, the existing PPAs were not terminated either in 2007 (neither the possible compensation system associating with the termination of were the PPAs accepted).

#### 2.3. Security of supply

# **Security of electricity supply**

## Generation

In 2007, the following important developments were in process or were planned at the power plants:

The AES Borsod CFB Kft. Received a license for the selection of the primary energy source in 2006 with regard to the construction of a 260 MW CFB power plant, and the preparations of the project were continued in 2007;

The AES Borsodi Energetikai Kft. increased the capacity of the boiler number 5 from 60 t/h to 80 t/h. By 2007, they planned to build an oil collector on the river Sajó.

The AES Borsodi Energtikai Kft.ceased biomass firing at the Tiszapalkonya Hőerőmű. Hereafter, they will fire import coal, and sell electricity on the market;

The Bakonyi Erőmű Zrt. planned to build a combined cycle power plant in Ajka, which is still a case at issue

The Csepeli Áramtermelő Kft.completed the construction of a 0.4 kV standby-cell and the waste condensation (not biohazard waste) of a hydro retrieving works, which were aimed to increase the security of operation;

The Debreceni Kombinált Ciklusú Erőmű Kft.planned the following tasks to be carried out in 2007: change of the regulation siphons, he strengthening of the LUKO supporting structure, covering with concrete the area under the LUKO, the renewal of the VIBROCAM system;

The Dunamenti Ermű Zrt.continued the demolition of the old ABDE boilers, the turbogenerator and the systems belonging to them, continued repowering development under the name 'G3 project'. The aim of the G3 project is to keep the present level of the capacity of the power plant, which requires increased efficiency. It is a long term plan to convert 2 blocks (with 400 MW capacities each) into combined cycle blocks. The planned deadline of the project is 2010.

The ISD Power Kft.is building a new combined cycle power plant unit with 150 MW capacity, the commissioning is expected by the end of 2009;

The GTER Kft.had a long term plan to shift the control from the substation, the modernization of the technical units of the control, and installation of a black start system;

At the Mátrai Erőmű Zrt., the gas-turbine project has been completed. The capacity of the installed gas-turbines is higher than it was planned originally, but their efficiency is a bit lower. The power plan expects the constructor to eliminate this deficiency. In the industrial park established in the neighborhood of the power plant, the construction of a biodiesel plant, a bio-ethanol plant and a plasterboard plant is in process. The area of the power plant has been rented by other firms. The biodiesel and bio-ethanol plants transmit a remarkable amount of biomass to the power plant;

The Paksi Atomerőmű Zrt.continued the accomplishment of its capacity increasing program in 2007, conducted a keep up program appropriate for the requirements of the operation time prolonging, and based on a conscious lifespan management, and also the planning and licensing procedures of the operation time prolonging were running. The nuclear power plant operated at full capacity, in a four blocks mode in 2007;

The Pannon Hőerőmű Zrt.planned to build a biomass fired block of 38 MW capacity based on herbaceous plants, and a biomass fired block of 49.9 MW capacity based on arboreal plants. The plan is to commission the first block in the second half of 2010 and the second block in the second half of 2012. The Office issued the simplified license for both small power plants.

At the Vértesi Erőmű Zrt., the transformation of the block number 1 to operate as a biomass fired block, has been completed, alike the retrofit works, in the course of which, the boilers were converted into fluid firing. The logistics of biomass supply is under development, as well.

# Preparations for winter

The Office examined and evaluated the preparations of licensees for the winter period, and drew the following conclusions:

the power plants accomplished their annual maintenance programs till 31 October 2007.

the supply of power plants with fuel is ensured by contracts.

All of the power plants, the fuel stockpiles of whose are determined by a decree, possess the required stock.

In the winter period, the capacity balance of the Hungarian electricity system can be regarded as reassuring if the import capacities do not decrease significantly on the northern and eastern borders, and the export capacities do not increase significantly on the southern borders. In this case, the available capacity is sufficient to satisfy the demand, and also the reserve capacity, which is sufficient according to the plans, is available. In the cold winter period, however, natural gas retirement may occur in the case of the hydrocarbon fired power plants, therefore the cooperation between the MAVIR dispatch centre and the MOL dispatch centre is a requirement. Though measures were taken in order to prevent the coal from being winter-killed, such an event cannot be fully excluded. A case like this could hinder the generation of the Mátrai Erőmű and a quick measurement would be necessary to involve reserves.

# 2.4. Price preparation, price regulation

# 2.4.1. Characteristics of the present price system and price regulation

In 2006, the electricity market were characterized by the so-called 'hybrid market model' (co-existence of a public utility segment and a competitive market). Accordingly, public utility customers were able to purchase natural gas and electricity by paying administrative prices (public utility prices) including both the price of the energy and the price of system use ('complex services'), while eligible consumers entering the competitive market were able to buy energy at a non-regulated price, but paid the administrative price for system use.

Price regulation was carried out in accordance with the decrees coming into effect on February 1 2005. The charges for system use effective as of 1 January 2006, and of August 1 2006, respectively (similarly to the prices of public utility electricity) were determined on the basis of the price adjustment mechanisms to be applied within the price regulation cycle of the period from 2005 to 2008.

The structure of the public utility tariff system remained basically the same also in 2007 as it has been since July 1999. In 2007, the administrative public utility electricity prices for end users were modified only once, on 1 February.

The average 0.1% rise in the charges for system use hid significant movements of charge components. The system operation charge decreased by 16,8%. The decrease was caused by

the decrease of the various system operation charge components of tax nature (including the "coal penny" introduced to support coal industry restructuring and the stranded charge) on one hand, and the decrease of the component aimed to cover the costs of the system operator to zero, on the other hand. This was allowed by the increase in certain incomes of the system operator. The price of the component that is aimed to support the generation of electricity falling under feed-in obligation remained unchanged. The charge for ancillary services increased by 6.5%, the average level of distribution charge increased by 8.2%, and the transmission charge increased by 11%. A so-called income redistribution mechanism introduced on 1 August 2006 in order to level out the income disparities of distributors followed the changes of the distribution charges.

The average rate of the price increase in the public utility end-user electricity prices was 4.9%. Within this, the non-residential prices increased by 4.8% on average, while increase of the residential prices was 5.1%. There was an average 9% rise in the public utility wholesale prices, which served the covering of the costs justified by legally binding decrees in addition to the 'regular' compensation of the inflation.

The change of the administrative prices of electricity sold by electricity generation licensees and contracted for public utility purpose (charges for availability and energy) varied between minus 12% and 8%. The prices determined at the end of 2006 were changed by taking into account the long term power purchase agreements and the annual trading contracts.

In the case of electricity falling under feed-in obligation, the feed-in prices increased by 0 to 9.1%. The significant scattering derived from the application of different price regulation formulas relating to the different energy carriers.

#### 2.4.2. Tasks in connection with price regulation, price preparation

After the Parliament passed the new Electricity Act, which established a legal basis for the full market opening, the preparation of the secondary legislation (at government and ministerial level) started. From among the decrees relating to price regulation and pricing, the drafts describing the support system of the renewable and co-generated electricity and the price regulation of the universal supply were completed by August 2007. The draft decree on network connections was completed and the amendment of the decree on charges for the system use started by the end of September. After long discussions, these decrees came into force on 1 January 2008, starting a new era, in certain respects, in the history of the domestic electricity supply.

## System use

The specific administrative prices for natural monopole activities (transmission system operation, ancillary services, distribution) are determined by the Decree of the Minister of Economy and Transport 119/2007 (29.12) on charges for electricity system use. By virtue of domestic regulation taking into account also the international practices, only those who receive electricity from the network have to pay a charge for system use, and those who feed electricity in the network (power plants) are excluded from this obligation. In the preparation of the proposal on the amendments in 2007, it was an important view that every user who use the network for receiving electricity should pay for the use of the system in the proportion of their use.

In 2007, the relevant decree was amended. The amendment introduced a five-level distribution tariff (instead of the former three- then four-level tariffs). The structural changes of the charges was followed by the increase of the distribution balancing charge with regard to the so called low voltage customers with profiles from 0.05 HUF/kWh to 0.5 HUF/kWh. In the case of the smallest consumption places (this means that the annual consumption is approximately 3000 HUF), the distribution basic charge was not introduced. However, the public lighting distribution charge was introduced in order to cover the maintenance costs of the so-called passive public lighting devices.

Distribution charges (excluding the above mentioned balancing charge) increased by 8.6% on average.

Since 2008, the former transmission charge and the system operation charge have been merged. The new transmission system operation charge excludes the various components of tax nature, which were part of the former system operation charge (coal penny, stranded cost, support for electricity generated from renewable sources or co-generation). Taking this into account, the new charge, however with a different content, is still lower by 76% than the sum of the transmission and the system operation charges before 2008 (only 1 HUF/kWh instead of 4.2 HUF/kWh). The decrease excluding the mentioned items is approximately 7%. The charges for ancillary services remained unchanged.

The aggregated system use charges on 1 January 2008, depending on the voltage level, decreased by 14 to 56%, which is approximately 23% on average (in total), which includes the effect of the cessation of the components of tax nature of the former system operation charge before 2008. Excluding these items, the price increased by approximately 0.6 to 10.2% depending on the voltage level (6% on average).

Table 9 Figure 11

# Electricity as a product

From 2008, every electricity consumer (according to the definition of the new Electricity Act: user) is eligible to buy the demanded electricity from the trader giving the most favorable offer. The public utility segment, that is the system of administrative prices including the charge for system use and price of energy, ceased.

In the new system, the larger non-residential customers could buy electricity as energy exclusively at a price evolving as a result of negotiations with the traders. Generally one can say, that customers who use a large amount of electricity continuously (as base load) or those who use the electricity in the night time have more chance to realize favorable prices, however it will also require the continuous gathering of information.

For the residential (and small entrepreneur) customers, the public utility supply that ceased because of the full market opening was replaced by the so called universal supply, or better to say, the universal supply completes the market based supply. Its main characteristic is that the customers at a disadvantage in competition can buy electricity at a price controlled by the authority in addition to paying the administrative charge for the system use, which is equally effective on all customers. By virtue of the decision of the authority, the increase of the price to be paid by these customers was 9.8% in total in January 2008.

## Price regulation of electricity falling under feed-in obligation

The conditions of the feeding-in of electricity sold in the framework of feed-in obligation at supported price basically remained unchanged in 2007. Feed-in obligation was guaranteed for cogeneration facilities depending on their capacity, and the preferred purpose of use of cogenerated energy (district heat) and energy efficiency [based on the provisions of the Ministerial Decree 56/2002 (29.12)]. Based on the formula specified in the decree, the feed-in price changed by 1 percentile less than the inflation in the case of non-natural gas fired generation, and according to an index, which takes into account the change of natural gas price in 60% and the inflation 1 percentile lower than the percentage value of the forecasted inflation in 40%, in the case of natural gas based firing.

With regard to electricity generated from renewable energy sources for the purpose of sale, the new Electricity Act did not create a new situation, and maintained the feed-in obligation. It prefers the electricity generated from renewable energy sources, thus the average price of feed-in obligation increased to 26.46 HUF/kWh (in accordance with the obligatory adjustment to inflation) by 1 January 2008. With regard to wind power plants, which got special attention because of the keen interest and the difficulties in the regulation of the system, the Office issued operational licenses (and quotas for annual obligatory feed-in) representing a total capacity of 330 MW, from which 64 MW was in operation by the end of 2007. On the basis of the new Act and the secondary legislation on its enforcement, further similar capacities can obtain a license and connect to the system of feed-in obligation only by tendering.

By the end of 2007, the total capacity of gas motors generating and supplying electricity based on feed-in obligation increased to approximately 510 MW. At the same time, since the market of district heat was close to its saturation point, there was an apparent intent on behalf of investors to target the market of energy generation for non-district heat purposes, mainly by establishing small cogeneration units of a capacity under 6 MW. However, after 30 June 2006, the higher feed-in price could only be guaranteed for specific institutions (publicly financed bodies of central administration, local municipalities and their publicly financed organizations, other institutions performing public tasks) in the case of electricity cogenerated with heat for non-district heating purposes.

Thanks to feed-in obligation and the associated favorable feed-in prices, 2007 was also characterized by a keen interest of investors and the willingness to generate. Despite of the increasing natural gas prices, the extending capacity and the increasing generation, the amount paid from the KÁP (a subsidiary relative to the public utility wholesale price) fund practically hardly increased.

The manager of the fund for subsidies is the MAVIR Zrt, while the funds are allocated from the annual costs of the MAVIR Zrt (through the system operation charge) which are found justified by the Office (as well as by the price authority) for providing incentives for (supporting) electricity generation and purchase, explicitly for this purpose. In 2007 (in contrast with the amount of HUF 47 billion in 2006), approximately HUF 48 billion was paid under the above title. From this amount, HUF 14 billion was related to electricity generated from renewable energy sources, HUF 33 billion was in relation with electricity generated in combined cycle units and HUF 1 billion is related to electricity generated from waste.

## Profit cap

The Office was responsible for examining the profitability of the licensed electricity and natural gas distributors and public utility suppliers in every year, taking into account the profit cap (depending on the justified capital cost for the reference year. The evaluation of the profitability of the above mentioned licensees and based on the provisions of the law was performed by the Office for 2006, who made a decision on a profit reimbursement for the distribution licensee ELMÜ Nyrt. After negotiations proceeded with the Office, in the second half of 2007, the ELMÜ reimbursed 0.6% of the annual distribution charge paid by the customers in 2006, which amounted to a total of HUF 32 million. The fact that the ELMÜ Nyrt. Had to return a much lower extra profit than in 2005 (620 million HUF) can be explained by the operation of the income redistribution mechanism.

With regard to the E.ON TITÁSZ Zrt. distribution licensee, the Office made a decision in accordance with the relevant law, on an obligatory 0.5% price decrease in distribution charges for a calendar year, because of the deterioration of the indices of quality of supply in 2006. (The decision was challenged at law court, but the claim was dismissed.). By virtue of the decision, eligible customers paid decreased distribution charges from 1 August 2007 till 31 July 2008. The account of public utility customers (from 2008 subject to universal supply) was credited in two installments, in November 2007 and in spring 2008 by an approximately 91 million HUF in total.

The shaping of the new system of incentives for quality of supply of distribution is in process. The Office initiated the amendment of the decree on charges for electricity system use, particularly, with regard to the obligatory decrease of price related to the quality of supply. Since this sanction was excluded from the decree in force from 1 January 2008 to the detriment of customers, therefore the Office cannot use reliable financial incentives in the case of the distribution licensees, like in the case of the E.ON TITASZ Zrt.. The Office suggested to extend the inspection also to the transmission system operator.

## Judgments on claims for price review

In 2007, the Office evaluated 2 claims on price review (in addition to the disbursing of advance payment for the support for the coal industry restructuring, which was handled technically as a claim for price review). The claim for price review of the public utility wholesale licensee on the urging of compensation of the former rise in the natural gas prices, submitted to the MVM was dismissed due to the lack of sufficient grounding, while the claim of the transmission system operator on the inclusion of the depreciation of the capitalized investments and the costs of the capital into the price basis, was partly approved.

## 2.5 Public service obligation, consumer protection

## 2.5.1. Approval of codes

The Business Conduct Rules approved by the Office have an outstanding importance with regard to the protection of consumers. These rules specify the 'General terms of contact', which fundamentally determines the relation between the consumer and the licensee.

The first half of 2007, all of the licensees were preparing for the market opening. In the course of this, several organizational changes took place. The companies dealing with network operation and sales were unbundled legally into separate companies. Certain foreign owners, who possess more companies in Hungary, integrated the sales departments of their companies operating in different industries. These changes necessarily required the modification of the Business Conduct Rules of the licensees. Every unbundling, name modification, transformation of the organization required new Business Conduct Rules. In 2007, the Office issued 27 resolutions to electricity industry licensees on the approval or modification of Business Conduct Rules.

# 2.5.2. Quality of supply

As a consequence of the above mentioned organizational changes and the unbundling of activities, not only new Business Conduct Rules but also the amendment of resolutions on the expected quality of and the determination of the minimum quality requirements of electricity supply as well as resolutions on the expected level and the minimal requirement of quality of client services had to be issued. The Office issued 11 resolutions in relation with this.

The determination of the frequency of the sort term potential outage appeared as a new field in regulation in 2007. The primary aim of the relevant resolutions was to create consonance, uniformity and to provide for a single procedure method in the quality of services ensured by the distribution licensees at national level in order to serve the interests of both consumers and licensees. The increasing number of complaints on the short term potential outages made the issue of this regulation necessary. In this subject, the Office issued 3 resolutions. The other 3 distribution licensees included the new regulation in their Business Conduct Rules without being ordered by resolutions, and undertook to pay a single penalty to the customer if exceeds the frequency of outages allowed.

In 2007 the Office conducted a consumer satisfaction survey giving a comprehensive picture on the satisfaction of customers with the activity of distributors and public utility suppliers for the twelfth time. All reports are available on the homepage of the Office. 7200 household customers and 1800 non-household customers participated in the survey. Participants gave their opinion on the given service elements, its perceived significance and the extent of their satisfaction. One can talk about underperformance or over fulfilment in the case of a negative or a positive difference between the significance and satisfaction of customers.

The satisfaction index of the distribution licensees shows a developing tendency for years, the score was 82.2 measured on a scale ranging from 1 to 100 in 2007. In the case of the distribution licensees, the most important areas were the uninterrupted supply and the quick restoration of breakdowns. Deriving from the outstandingly high consumer expectations, the areas that can be characterised by the highest underperformance were found within these two areas (from 14.7 points to 33.8 points). On the contrary, a moderate over fulfilment can be observed in the field of satisfaction with the employees of the licensees. The satisfaction index of the public utility supply licensees increased by 2 points after stagnating for three years. In 2007, it reached 76.4 points on a scale ranging from 1 to 100 points. In the case of the public utility suppliers, the three most important areas were the understandable bill, the accuracy of billing and the complaint management. Deriving from the outstandingly high consumer expectations, areas that can be characterised by the highest underperformance (complaint management) were found within these two areas, ranging from 42.7 points to 49.9 points. The second highest underperformance can be observed in the case of call centres (15.3 to 25.1

points). On the contrary, an over fulfilment exceeding 10 points can be observed in the areas of communication and information.

Table 10 Figure 13 Figure 14

#### 2.5.3. Breakdowns

The reports on breakdowns in 2007 arrived in the Office till the 31 March 2008. On the basis of these reports it can be stated, that in case of the power plants, the number of breakdowns decreased to a low extent, from 481 to 471, in comparison to the previous year. However, the duration of breakdowns increased by more than 20% compared to 2006. The duration of breakdowns increased by 3735 hours in total in comparison to the duration of breakdowns in the previous year.

# Reliability of the electricity supply

The Office has evaluated regularly the continuity of supply and other features of the quality of supply for more than ten years. On the basis of the Electricity Act, the Office may determine minimum quality requirements and the expected level since 2003. The minimum requirement in 2006 was to keep up with the average of the years 2002-2004 with regard to the average frequency of interruptions in electricity supply, the average duration of interruptions in electricity supply and the outage index.

In addition to the above listed issues, the Office evaluated the performance of other indices (restoration of breakdowns in the case of planned and not planned interruption, causing more than 3-minute outage), as well. The Office stated that one of the internationally used indices applied for the measurement of the continuity of the supply of customers, was the frequency of interruptions, which showed a continuous improvement since 2000, dropped a little bit (to 1.79 interruptions per customer) in 2006 compared to the previous year. Another internationally used index for the measurement of the continuity of supply was the average duration of interruptions. In the case of this index, the improvement experienced in the previous year stopped in 2006. The duration of interruptions per customer was 127.7 minutes in 2006, which matches the values of the international middle range. The Office published the detailed data and its evaluation on its webpage.

#### 2.5.4. Consumer complaints

In 2007, the number of consumer protection cases, including both electricity and natural gas, was higher by 155% than in 2005. Within this number, the number of cases not treated as complaints represent 40%.compared to 10% in the year before. Regarding the total number of cases, the increase was a consequence of the problems in the billing of the licensee companies. The increasing number of the cases not regarded as complaints also resulted from this problem. The majority of these issues derived from the customer complaints which referred to a system level problem at the licensee, but by the time of the submission of the complaint, the licensee solved the problem. In such cases, there was no need to start administrative procedures; therefore these cases were not registered as complaints.

In every case of the 1178 complaints received – related to the participants of the electricity industry – there started the administrative procedure based on the Act on administrative procedures. The number of complaints was 50% higher in 2007 than in the year before. However, the rise in the various complaint categories was far from being the same. While the number of complaints on network development and on other issues did not change at all, or to a very low extent, the number of complaints on metering and billing increased by 52%. The number of customer who was unsatisfied with the activity of the licensees in relation to irregular receipt of electricity was 40% lower than a year before.

In 2007, the share of the justified complaints changed differently in each licensee category. While it decreased by 2.5%, in the case of distribution licensees, it was 30% higher than a year before in the case of public utility supply licensees, resulting from the high number of complaints on billing.

In 2007, the Office regularly performed inspections similarly to the previous years. A special stress was laid on target inspections conducted in the case of serious harming of the interests of a large mass of customers. As a consequence of the target inspections conducted in the electricity industry, the Office imposed a fine of 18 million HUF on the ELMÚ Nyrt. for not complying with the requirements of service quality.

# 3. Regulation of natural gas market and its implementation

# 3.1. Regulatory issues

# 3.1.1. Licensing

In 2007, the Office passed 134 resolutions related to operational licences. The resolutions permitted 5 new natural gas traders to operate on the competitive market, thus the number of natural gas trade licensees increased to 21.

## 3.1.2. Allocation of cross-border capacity and congestion management

Natural gas turnover at the cross-border points:

- Western entry point Mosonmagyaróvár: 6 million m³/day imported gas for domestic use;
- Eastern entry point Beregdaróc: 27 million m³/day imported gas for domestic use + 12 million m³/day transits towards Serbia and Bosnia-Herzegovina.

More than 50 % of cross-border capacities are already booked through long term contracts. The expiry date of the long term contracts is the following:

•	Panrusgas	9 billion m3/year		2015
•	E.ON Ruhrgas	500 million m3/year		2015
•	Gaz de France	600	million m <sup>3</sup> /year	2012
•	O&G, Eurobridge	900	million m <sup>3</sup> /year	2008
•	Bothli Trade AG	900	million m <sup>3</sup> /year	2014

The long term transit contract concluded with Serbia, which includes a 12 million m<sup>3</sup>/day continuously contracted pipeline capacity, will expire in 2012.

Contractual congestions can be found at the Eastern Beregdaróc cross-border point. With a view to manage the contractual congestions, the Office approved a development project of the transmission licensee in June 2007, which practically doubles the import capacity in Eastern direction.

# 3.1.3. Regulation of transmission and distribution companies

The national high pressure transmission pipeline system was operated by one single company (MOL Földgázszállító Zrt.). The relevant provisions of the Directive 1775/2005/EC of the European Parliament and Council on conditions for access to the natural gas transmission networks were adopted to the Act on Natural Gas Supply by the Act 63 of 2005 on its amendment, and in the Governmental. Decree 111/2003 (29.07) on the enforcement of certain provisions of Act on Natural Gas Supply (the enforcement decree of the Gas Act.) by the Governmental Decree 49/2006 (10.03) on its amendment.

The transmission system operator submitted the modification of the Grid and Commercial Code to the Office for approval on the basis of the above mentioned provisions in August 2006. The process of conciliation was postponed to 2007 because of the numerous complaints. The Office finally approved the Grid and Commercial Code in August 2007 conditionally to 156 modifications. The system operator submitted the Code modified on the basis of the resolution of the Office again in October 2007. The approval of the changes was postponed to 2008.

The natural gas distribution system is operated by 10 regional distribution companies. The detailed regulation of the distribution activities can be found in the relevant chapters of the Act on Natural Gas Supply, the enforcement decree of the Act and the Grid and Commercial Code.

# 3.1.4. Unbundling of activities

The gas transmission licensee company has been legally unbundled from its owner, the MOL Nyrt. The company, from the point of view of licensing, performs two activities: natural gas transmission and system operation.

In accordance with the Article 6 of the enforcement decree of the Gas Act, the transmission activity has to be performed in a separate organizational unit and an independent decision making process must be ensured. The senior management of system operation may not take part in any other natural gas activities (subject to a license), either directly or indirectly. With regard to the flow of information, the system operator must perform its natural gas activities concerning to affiliate companies in the same manner as with regard to other market players.

The natural gas transmission company has been physically unbundled (headquarters, office building) from all other business organizations active in the natural gas industry.

In Hungary, 10 distribution companies carry out the operation of the distribution systems. From among them, 5 are large, regional companies supplying more than 100 000 customers.

The Act 63 of 2005 on the amendment of the Act on Natural Gas Supply allowed the companies supplying more than 100 000 consumers to own also operation licences other than the distribution licence until 1 July 2007. The 5 big public utility supply and natural gas distribution companies completed the legal unbundling in the first half of 2007. Accordingly, they perform the natural gas distribution and the public utility supply activities in separated companies. The relevant operational licences were issued by the Office in the framework of administrative procedures.

## 3.2. Competition issues

#### 3.2.1. Wholesale market

The import sources of natural gas are primarily of Russian origin. Even the natural gas bought from Gaz de France and from E.ON Ruhrgas and transported through the HAG pipeline is of Russian origin. 18 % of the import from the East comes from Turkmenistan.

*Table 11*. The total natural gas consumption and the structure of sources in 2007 (billion m3/year)

The traders of the competitive market segment supplied 2.709 billion m<sup>3</sup> natural gas for eligible consumers and thus the share of the competitive segment of the market increased by 20,6% in 2007. Nine of the gas trading license holders on the competitive market (from among the 21 licenses issued until the end of 2007) were already supplying natural gas to the eligible consumers in the last year. The largest of all those was the EMFESZ Kft.

The DG Competition of the European Commission in its resolution issued on 21 December 2005 (Case No COMP/M.3696-E.ON/MOL) approved the acquisition of influence by the E.ON Ruhrgas International AG in MOL Földgázellátó Zrt. (MOL Natural Gas Supply Plc.) and in MOL Földgáztároló Zrt. (MOL Natural Gas Storage Plc.) as subject of specific stipulations. Two of the above mentioned stipulations significantly influence the competition of the wholesale market. One of them is the implementation of the Contract Release Program, which encourages the selling of the domestically produced natural gas on the free market, by forcing the E.ON Földgáz Trade Zrt. to sell 50% of its supply contracts in relation with domestically produced natural gas to third party traders. Within the framework of the program, the TIGÁZ Zrt. and the Fővárosi Gázművek Zrt. won the total contracted quantity of natural gas (7.5 billion m3). This quantity of natural gas will be delivered gradually between 2007 and 2015. As a result, the two natural gas supplying companies having the highest market share in gas supply can dispose over the domestic sources provided by the Contract Release Program.

The TIGÁZ Zrt., in the possession of a license for public utility wholesale, may sell a limited quantity of the natural gas won within the framework of the Contract Release Program with the approval of the European Commission. The Office issued the operational license for public utility wholesale to the TIGÁZ Zrt. on 28 June in 2007.

The other important stipulations is the implementation of the Gas Release program, which means that the E.ON Ruhrgas must offer 1 billion m<sup>3</sup> gas for sale on the natural gas market annually for a period of 8 years (from 2006 to 2013). The program is to be implemented in the

form of auctions during the given years, where the annual 1 billion m<sup>3</sup> quantity must be divided into the following sales units:

5 lots of 100 million m<sup>3</sup> units,

5 lots of 50 million m<sup>3</sup> units,

10 lots of 25 million m<sup>3</sup> units.

E.ON's affiliates are excluded from participating, directly or indirectly, in the auctions.

The successful bidders may enter into gas supply contracts with E.ON under the following terms and conditions:

- The contracted gas will be equally split over two years and delivered at the two Hungarian entry points 80% at Beregdaróc and 20% at Mosonmagyaróvár.
- The gas supply contracts will provide for the same flexibility as MOL WMT's upstream gas supply contracts

The auctions will be carried out by an international IT service provider.

The E.ON Földgáz Trade Zrt. hold its second natural gas auction on 1 March 2007. Four of the 7 participating eligible customers and natural gas traders bought a total of 1.175 billion m<sup>3</sup> of natural gas in the course of the online auction. The starting price for the auction was 95% of the weighted average cost of gas of MOL WMT ("WACOG"). The contracts have come into force for two gas years, with effect from 1 July in 2007.

#### 3.2.2. Retail market

In the retail market, the share of the public utility segment was 83%, and the share of the competitive market was 17%. The public utility market is bound to the place of the trading, which means that public utility suppliers can supply gas only on the settlements specified in their licenses. In general, these settlements can be found in a contiguous region, and the regions are bordered by the frontier. The public utility wholesaler also supplies gas to customers directly through transmission pipelines. Consequently, the retail market cannot be described as a competitive market for the time being. The share of participants reflects a traditional regional distribution, a state like before the opening of the market, rather than a competitive situation with regard to the supply of each customer groups. The opening of the market on 1 July in 2007 failed to result in a big breakthrough on the retail market, the switching of small consumers is expected in 2008.

# 3.3. Security of supply

Maintenance and reconstruction works improving the availability and the security of the transmission capacity as well as the repairs or replacement of the malfunctioning sections of the transmission pipelines revealed with the help of advanced technological solutions (intelligent pig) took place on the natural gas transmission system during the year 2007. With regard to the security of supply, it is an important condition that the dispatching center of the natural gas system operator and the dispatching service of the MAVIR Zrt. (the Hungarian electricity system operator) are maintaining a continuous operative connection. Table 12

In line with the provisions of Article 3 and 4 of Directive 2004/67/EC, Hungary has also put the issue of security gas storage in the foreground (Table 13). The Act 26 of 2006 on the security storage of natural gas prescribes the storage of 1.2 billion m<sup>3</sup> gas, and the construction of an underground storage required for this by 2010. The natural gas security storage must be placed in a UGS facility that has a daily withdrawal capacity of 20 million m<sup>3</sup> for at least 45

days. The security storage of natural gas prescribed by the Act primarily serves the secure supply of natural gas to household and communal customers, as well as the supply of those consumers who cannot replace their gas consumption with other energy sources.

Until 31 December 2009, the spare capacity of the present natural gas storage facilities determines the degree of the security storage, which – if an adequate quantity of spare capacity is available – cannot be less than

- a) 150 million m<sup>3</sup> from 1 October 2006 to 30 September 2007,
- b) 300 million m<sup>3</sup> from 1 October 2007 to 31 December 2009.

If the determined degree of the security storage cannot be ensured from the remaining and not contracted reserves, it can be replaced with a crude oil product, i.e. fuel oil of an adequate quantity.

Use of the spare capacity of natural gas storage facilities for security storage may be approved and ordered by the President of the Office within its own jurisdiction.

The Hungarian Hydrocarbon Stockpiling Association has announced a call for tender for the construction of the security storage facility, which was awarded to MOL Plc. Construction, started in 2007 in the Algyő gas-field, at the Szőreg-I layer in Southern Hungary.

The unusually mild winter of 2006/2007 and its impact on the natural gas production helped in enhancing the security of supply improving role of the underground gas storage. Because of the extraordinary weather conditions, the system users left unusually large quantity of reserves in the storages, 1.696 million m<sup>3</sup> in total.

The expansion of capacity of the Zsana UGS came to an end by finishing of the test operation. Hereby the peak withdrawal capacity in Zsana grew to 24 million m³/day, and the total withdrawal capacity of Hungarian underground gas storage amounted to 51 million m3. With regard to the security of supply, it is another important condition that the system is able to meet more than half of the daily peak demand from the storages.

The storable working gas reserves of natural gas in the commercial underground storages is 3.72 billion m<sup>3</sup>, the total injection capacity is 25.87 million m<sup>3</sup>/day, and the withdrawal capacity is 51 million m<sup>3</sup> per day.

The Office determined a restriction order for the case of supply disturbances by 30 September 2007. The restriction order is to provide for the continuity of gas supply to the certain circles of customers. In the present restriction order, the Office ranks into the category of primarily restrictable customers all the gas fuelled power plant units that are able to switch to alternative fuelling and governed by a statutory provision, which requires them to keep a liquid fuel stock sufficient to ensure a 16-day continuous operation.

# 3.4. Price preparation, price regulation

# 3.4.1. Characteristics of the present price system and price regulation

The Decree 105/2205 (19.12) of the Minister of Economy and Transport on the frameworks of natural gas price regulation orders the application of a so-called regular price adjustment:

- with regard to 1 July (on the basis of the price formulas of the decree, the difference between the import price used to calculate tariffs and the effective import price (Ik), and the factors influencing the purchase costs of natural gas);
- with regard to 1 January, April and October (on the basis of the factors influencing the purchase costs of natural gas).

Public utility end-user prices remained unchanged, in other words, the prices determined on 1 August 2006 were in effect in 2007.

The Decree 70/2003 (28.10) of the Minister of Economy and Transport on setting the system use price of natural gas (hereinafter: the decree on natural gas system use) was modified regarding the prices in April and July 2007. The price increase in April – concerning only a determined part of distribution prices – was necessary because of the posterior correction of the quantity data used for the former calculations. In relation with this, the distribution prices did not change in the category of customers having 20 to100 m3/h meters, but rose by 0.2 – 2.6% on average – depending on the tariffs – in the other categories. In July, the transmission and storage prices increased in compliance with the inflation (7.96%) to be taken into account on the basis of price regulation. The average growth in the distribution charges – reflecting also the inner distortions in connection with the frozen level of the public utility end-user prices in August 2006 – was between 0.4 and 21.4% according to tariff categories.

## 3.4.2. Works in relation with price regulation, price preparation

The preparation of public utility prices and charges for system use, which came into effect on 1 January 2008 – took place in autumn 2007. The public utility end-user prices have increased by 4.2 to 5.2% depending on the certain tariff categories since 1 January 2008. The distribution prices – due to the correction of the above mentioned distortion – increased by 3% in the small customer category (fewer than 20 m³/h) and decreased by 12 to 19% in the category less than 20 m3/h.

# Contracting of interruptible capacities

Since 1 January 2008, the public utility wholesaler has applied the same rules as specified in the decree on system use with regard to the contracting of annual and monthly interruptible capacities, when signing a public utility contract with its customer who is connected to the transmission pipeline or with a public utility supplier, who submit a claim (also) for interruptible capacity.

Accordingly, public utility customers buying natural gas on the basis of an interruptible contract fall under the same regulation as the competitive market (i.e. governed by the decree on natural gas system use). These customers may buy natural gas under competitive market conditions even in the temporary period, which lasts until the full market opening.

#### Profit cap and profit reimbursement

The Office evaluated the profitability position of the licensees assigned by the law for 2006. Only one company - the EMA-POWER Kft., which is the legal successor of the Dunaferr Energiaszolgáltató Kft. – produced excess profit to divide. As a result of an agreement with the Office in 2007, the customers of the above mentioned company obtained 147 million HUF reimbursements by a credit transfer in the proportion of their consumption in 2006.

Distribution licensees accounted a huge amount of extraordinary income due to the unblocking of certain accrued assets resulting from legal unbundling. Since this extraordinary income derives from the changes of the legal background and does not mean any effective increase in income, it is not justified to take it into account in the calculation of the 2007 profit reimbursement obligation. Therefore the price regulation decree was modified so that the content of the regulation on the profit reimbursement obligation of the parties concerned be not changed due to the legal unbundling.

#### 3.5. Public service obligation, consumer protection

## 3.5.1. Approval of codes

The codes approved by the Office are of high priority from the viewpoint of consumer protection. These codes determine the 'General conditions of contracts', which are the basis of the relation between the licensee and the customer. Legal unbundling took place in the course of the year 2007 also in the natural gas industry. Organizations engaged in the operation of networks and those engaged in marketing were legally unbundled into separate companies. Accordingly, new Business Conduct Rules had to be issued for the distribution licensees. In the case of certain foreign owners, who have more subsidiaries in Hungary the sales departments of their companies pertaining to different industries were integrated. These changes certainly had impact on the Business Conduct Rules of the licensees. Each unbundling, name modification, restructuring required a new Business Conduct Rules. In 2007, the Office issued 9 resolutions for natural gas industry licensees in relation with the approval or modification of the Business Conduct Rules.

#### 3.5.2. Quality of supply

The resolutions issued for the distribution and public utility supply licensees by the Office on 1 January 2004 and modified in April 2005 on the 'Definition of Minimum Quality Requirements and Expected Standard of the Distribution of Natural Gas' and the 'Definition of Minimum Quality Requirements and Expected Standard of Public Utility Supply of Natural Gas' remained in force also in 2007. In 2007, the Office worked on the preparation of the resolutions concerning the quality of the customer relations and Guaranteed Service to be issued in 2008.

In 2007, the Office conducted a consumer satisfaction survey giving an overview of the satisfaction of customers with the activities of distribution and public utility supply for the twelfth time. All reports are available on the homepage of the Office. 7200 household customers and 1800 non-household customers participated in the survey. Participants gave their opinion on the given service elements, the perceived significance of these elements and the level of their satisfaction. We can talk about underperformance or over performance in the case of a negative or a positive difference between the significance perceived by and the satisfaction of the customers. With regard to distribution licensees, the most important areas are the continuous supply, quick restoration of breakdowns, quick and easy access to the call centre and information on outages. Due to the outstandingly high consumer expectations, the two areas that can be characterised by the highest underperformance are among these four areas. These are the quick and easy access to the call centre (20.7 to 28.5 points) and the quick restoration of breakdown (24.6 to 27.4 points). A lower level of over performance can be observed in the area of satisfaction with the customer service (7.5 to 8.3 points). The over

performance is substantially higher with regard to the possibility of the consumption increasing (13.6 to 43.4 points). With regard to public utility supply licensees, the most important areas are the understandable invoice, response to problems in a reasonable time, complaint management within the deadline. An inevitable consequence of the outstandingly high expectations is that the underperformance is very high in all of these areas (33.8 to 40.3 points). In the opinion of non-residential customers, there is much room for improvement with regard to the quality of telephone customer service. The underperformance in this case is 35.9 points. A lower level of over performance can be observed in the area of satisfaction with the customer service (1.1 to 6.5 points). Compared to this, the over performance in the area of information on outages is a bit higher (13.4 to 15.2 points).

#### 3.5.3. Breakdowns

The quality of supply of natural gas through pipelines can be characterised by the cause, time and duration of interruptions. The number of the interruptions is depicted by Figure 15 on the basis of the data of Table 14. The figure shows that the interruptions concerned the consumers altogether at an increasing and decreasing extent. The share and the absolute sum of the interruptions falling under the direct authority of the suppliers were increasing in the first half of the examined period, and then were decreasing continuously. Figure 15 shows also the frequency of breakdowns resulting in interruptions, which is stably lower than the frequency of all interruptions.

Table 14 Figure 15

The physical process of the natural gas supply through pipelines is labelled by the specific indices of the number of events causing interruptions, and duration of the caused interruptions per 1000 consumers. Figure 16 and Figure 17 show the frequency and the duration of interruptions at a national level. The specific number and the duration of interruptions compared to the total number of interruptions are fluctuating in the examined period, the indices related to the events falling under the direct authority of suppliers; however, show a continuous improvement at a lower rate.

Figure 16 Figure 17

#### 3.5.4. Customer complaints

The Office received 766 complaints related to participants of the natural gas industry and the administrative procedure has started in every case in accordance with the Act on administrative procedures. The number of complaints increased by 130% in 2007 compared to the previous year. The increase within the certain complaint categories was far from being the same. While the number of complaints related to network development rose to a smaller extent, purely by 15%, the number of complaints related to metering and billing increased by 112%, and the number of complaints related to other activities increased by 117% at the same time. The increasing number of complaints related to unlawful consumption is a consequence of the modification of the calculation method on one hand, but basically derives from the efforts of the Office trying to scout out the cases of unlawful consumption.

In 2007, the proportion of complaints deemed justified changed to a different extent in the case of the certain types of licensees. While the proportion of complaints increased by 12% in the case of distribution licensees, the rise did not exceed 8% in the case of public utility supply licensees.

In 2007, the Office regularly performed inspections just like in the previous years. Target inspections conducted in the case of serious harming of the interests of a large number of customers were of outstanding importance. As a consequence of the target inspection conducted in the natural gas industry, the Office imposed a fine of 2 x 10 million HUF because of the non-regular use of the connection charge paid by the customers and the non-compliance with the requirements of supply quality.

## 4. Regulation of district heat production

### 4.1. Regulation

The district heat supply is regulated by the Act 18 of 1998 on district heat supply. Within the framework of the regulation, the heat production of power plants exceeding 20 MW nominal electric capacity, and their supply activity - if these district heat producers also perform supply activity at the same time – fall under the authority of the Office. The Office issued establishment, operational, and commissioning licenses pertaining to the field of district heat production and operational licenses pertaining to the field of district heat supply.

The District Heat Act has brought significant changes in the regulation. The activities of district heat production and supply are still subject to license. The establishment of district heat production facilities is subject to license only over a heat output of 5 MW.

Licensing competence is distributed between the municipalities of the settlements and the Office. According to the new regulation, all district heat generators that also generate electricity must apply for a license to the Office, while district heat generating activity without electricity generation falls under the authority of the municipalities. This means that in 2006/2007, the Office – in addition to the 15 district heat production and 5 district heat supply licenses issued between 1999 and 2005 – issued further 60 district heat production licenses for 120 sites of the 60 companies.

The licensing and supervision of district heat suppliers has been transferred as a whole to the chief administrator of municipalities, while the tasks of consumer protection are provided for by the inspectorates for consumer protection. The setting of consumer tariffs remained within the authority of the municipalities of settlements, and in the case of Budapest, the metropolitan municipality. Before setting the tariffs, the Minister of Economy and Transport gives its opinion on the prices of district heat supply.

It follows from the regulation of the District Heat Act that the Office does not have any competence, responsibility, or any means of influence in connection with district heat supply, quality of district heat supply, district heat prices and charges.

# Process of district heat and electricity production licensing for power plants below 50 MW nominal electric capacities

The licensing process of small power plants co-generating heat and electricity (power plants below 50 MW nominal electric capacities) is different from the viewpoint of district heat production and electricity generation.

Licensing process of district heat production: in the case of the establishment of a cogeneration equipment if the heat output is 5 MW or over, the applicant has to apply to the Office for a license for the establishment of a district heat production equipment (below 5 MW heat output, the establishment of a district heat production equipment is not subject to license). After the establishment of the equipment and following a successful test loading, the applicant has to apply for an operational license for district heat production irrespectively of the output.

Licensing process of electricity generation: in the case of the establishment of an electricity generation equipment (including the establishment of a cogeneration equipment), if the nominal electric capacity falls between 0.5 and 50 MW, the applicant has to apply to the Office for simplified licence for small power plants. The simplified electricity generation license relates to the selection of the primary energy source of small power plants and to the electric energy generation.

In the case of the establishment of power plants with installed electric capacity between 0.5 and 50 MW and in the case of the establishment of power plants based on combined cycle electricity generation (cogeneration) with a nominal heat output of 5 MW or over, the power plants have to submit the following applications to the Office in the following chronological order:

In the period of selecting the primary energy source:

Simplified license for small power plants (on basis of the new Electricity Act) Before establishment:

License for the establishment of district heat production equipment (on basis of the District Heat Act)

After commissioning:

Operational license for district heat production

#### Licensing activity of the Office in 2007

In 2007, the Office issued 24 resolutions pertaining to district heat licensing. From among these resolutions, 11 were licenses issued (5 operational and 6 establishment licenses), 12 modified the existing licenses (11 operational and 1 establishment licenses), and 1 approved the right to dispose. The Office published the resolutions on the issue of a license in all cases.

# 4.2. Competition

District heat supply is a local public utility service bound to the pipeline system. One supplier operates on one area; therefore competition among suppliers for the customers is not possible. Only a limited competition can be imagined in district heat production primarily by the introduction of cogeneration, or in the case of customer switching, when a customer switches to another heating method, but it is still a limited possibility.

In Hungary, there are 230 district heating systems in operation in 94 settlements, and the number of apartments supplied with district heat amounts to 650,000. This is approximately 16 % of the total number of apartments in the country.

District heat suppliers supply thermal energy to household customers at administrative prices. Thermal energy is purchased from district heat producers (power plants) and/or produced in boilers by the suppliers themselves, more and more frequently using cogeneration equipment (gas engines). In 2007, the number of settlements where the supplied thermal energy derived at least partly from power plants co-generating heat and electricity was more than 60. District heat production increasingly uses the economic advantages of cogeneration, which is further enhanced by the feed-in obligation of electricity and the associating subsidy to the administrative price.

## 4.3. Security of supply

Municipalities - in the capital, the metropolitan municipality - are obliged to ensure the district heat supply of facilities that are supplied by district heat through a licensee or licensees.

Most of the district heat supply companies are owned by local municipalities and there are some places, where the district heat producer (a power plant subject to electricity license) has also acquired some shares of the district heat suppliers. In some settlements, however, the district heat supply company is operated by private companies based on a concession contract.

In those cases, when a district heat supplier buys the majority of the district heat from a power plant, and the power plant is privately owned or indirectly state-owned, the possible debates between the supplier and the power plant may jeopardize supply. In these debates, the Office may act as a mediator, but the debates can only be solved by the cooperation of the producer, the supplier and the municipality. The recent years witnessed an effort evolving, where the municipalities tried to take measures to solve the problem of district heating through the municipality's own company or own supplier.

## 4.4. Price preparation, price regulation

In 2005, there was a change in the administrative price setting of the heat production prices (price of thermal energy sold to the supplier). The relevant obligation imposed on the municipalities was ceased, and the price control was partially released. The administrative price setting is valid only with regard to the heat producers who also have a license for electricity generation, and have a heat capacity contracted for residential district heating purposes over 50 MW.

Charges to be applied by the district heat suppliers are defined by the representatives of the municipalities in municipal decrees. Before setting the tariffs, the Minister responsible for the energy sector gives its opinion on the prices of district heat supply.

The charges applied in various settlements differ significantly from case to case both in their structure and rate. Considering an average size apartment the annual charge of district heat ranges between 80% and 120 % with respect to the national average. In the tariff system of some suppliers, the basic charge is 30 to 50% of the annual charge. These differences may be justified only in part by the different conditions of service.

Natural gas plays a key role in the fuel consumption of district heat supply (75 to 80%). The increase of the number of gas engines in the cogeneration of heat and electricity - beside its environmental protection advantages - also increases the dependence of district heat supply on natural gas as energy carrier.

## 4.5. Public service obligation, consumer protection

Municipalities are obliged to ensure the district heat supply of facilities supplied by district heat. Most of the district heat supply companies are owned by the municipalities. The licensing of district heat suppliers has been transferred as a whole to the chief administrator of the municipalities. The setting of consumer tariffs remained within the competence of the municipalities of settlements. All in all, the whole district heat chain but the district heat production is in the hands of the municipalities.

In order to ensure the transparency of district heat supply prices, the enforcement decree of the District Heat Act defined the scope of economic data and associated technical information to be made public by district heat suppliers. In order to improve the information supply to household customers, district heat suppliers supplying 1,000 or more households had to establish an electronic information system (homepage).

The tasks related to consumer protection are performed by the inspectorates for consumer protection.

## 5. Energy efficiency, environmental protection

#### 5.1. Energy efficiency, energy saving

The Governmental Decree 1107/1999 (8.11) determines the energy saving and energy efficiency strategy of the Government till 2010. Based on this strategy, the National Energy Saving Program started in 2000. This program helped the implementation of energy saving projects of consumers and the district heat sector with direct subsidies and soft loans. The Energia Központ Kht. (Energy Centre Public Company) was founded with an aim to implement the Energy Saving Programs announced year by year.

Within the framework of the National Energy Saving Program of 2007 and of the residential programs of energy saving and use of renewable energy sources (for individuals and communities), a total of 3600 tenderers won a support of 821 million HUF and a soft loan of 2.2 billion HUF in total. The program allowed the successful tenderers to modernize a total of eleven thousand homes at a total cost of approximately 6 billion HUF.

The Operational Programme for Environment and Energy associating with the New Hungary Development Program for the period 2007 to 2013 and approved also by the European Commission indicates a close relation of energy saving, energy efficiency enhancing, and

environmental protection. The two main goals of the program in accordance with the Hungarian and EU energy policies are the following:

- Increased use of renewable energy sources, which will affect the structure of energy sources in a favourable way, i.e. to shift from the traditional energy sources towards renewable energy sources.
- Enhancing energy efficiency, this will contribute to the improved security of supply, to soften the strong import dependence of energy carriers and the mitigation of environmental damages.
- -The implementation of the objectives will help Hungary to comply with its international undertakings. With this view, the National Development Agency initiated 3 calls for tenders for the period between 2007 and 2008 in order to promote energy efficiency and the use of renewable energy sources.
- The project 'Subsidies for the production of thermal energy or electricity using renewable energy sources' (Code number KEOP-2007-4.1.0) provides a 13.6 billion HUF support for these two years, co-financed by the Cohesion Fund and the budget of the Hungarian Republic.
- The allocated fund for the support of the project 'Enhancing energy efficiency" (Code number KEOP-2007-5.1.0) is 8.76 billion HUF for the years 2007 to 2008, which is cofinanced by the Cohesion Fund and the Hungarian Republic.
- The allocated fund for the support of the project 'Third party financing' (Code number KEOP-2007-5.2.0) is 1.84 billion HUF, which is co-financed by the Cohesion Fund and the Hungarian Republic.

Additional tenders of the planning period will be invited on the basis of the experience of the tendering system and the results of the supported projects.

## 5.2. Environmental protection

## **5.2.1.** Use of the renewable energy sources

In 2007, the generation of electricity based on renewable sources increased in comparison with the former year, but on the other hand, it did not reach the 1852 GWh maximum output like in the year 2005 (before the regulation by allowances). The amount of power generated from biomass increased to a low extent, by approximately 50 GWh in comparison with the former year. During the year 2007, the biomass co-firing ceased in the Tiszapalkonya Power Plant because of economic and technical difficulties. Meanwhile, the Vértes Power Plant increased significantly the use of biomass and reached its maximum of allowances (125 GWh per year), which compensated the deficiency of the Tiszapalkonya Power Plant. There was a considerable increase also in the amount of electricity generated by small biomass power plants. Their installed capacity exceeded 11 MW (this is more than double of the value of the former year).

The generation of wind power plants nearly tripled, while their installed capacity doubled, and at the end of 2007 exceeded 60 MW (by the end of the first quarter in 2008, it reached 112

MW). The share of electricity generated from renewable energy sources represents nearly 3.9 % of the total electricity consumption of the country, which exceeds Hungary's undertaking towards the EU to be achieved by 2010, which is 3.6%. A rapid increase in the installed capacity of wind power plants as well as green-field biomass and biogas power plants is expected also in the following years.

The operation of biomass and biogas power plants is a profitable and attractive investment option at the present feed-in prices. However, the spread of these kinds of power plants is hindered mainly due to problems occurring in raw material supply. The quick expansion of power grass and woods, as well as the enhancement (by incentives) of the gathering of agricultural wastes and by-products are definitely required for the expansion of this way of production..

The Hungarian feed-in price of electricity generated by wind is by far the best even in comparison with the prices of other countries in the European Union, however the modification of the 330 MW capacity limit is not expected within a short period of time because of system operation problems of the electricity system.

The figures of electricity generation from renewable energy sources can be seen in Table 15. Table 15

## 5.2.2. Greenhouse gas emission allowance trading

On 13 October 2003, the European Parliament and the Council adopted Directive 2003/87/EC on greenhouse gas emission allowance trading, which has also become mandatory for Hungary since its accession to the EU. According to the Directive, facilities with a firing equipment of over 20 MW capacities may perform an activity including carbon dioxide emission only in possession of an allowance. In Hungary, 229 companies (power plants, oil refineries, coking plants, iron metallurgy and steel production, cement-, lime-, glass- and construction material production, as well as paper mills) are participating in the emission trading system of the EU.

The National Allocation Plan and List (Government Decree 66/2006 (27.03)) containing sectored limits and the allocations for institutions was issued in the spring of 2006, with a delay of almost one year. The Ministry of Environment and Water (KvVM) allocated a total of 30.2 million allowances for 2005, about 17 million of them in the electricity sector. With full knowledge of the data, it can be found that the participants of the market were over-allocated by the State. The over-allocation of the allowances was due to the lack of emission data at the authorities. Before starting the system, the Government had to rely on the self-assessment of relevant companies when calculating the allowances, and the companies, being afraid of a lack of allowances in the future, tried to have the Government approve the highest possible amount of allowances. In most of the Member States of the European Union, a very similar situation evolved, so the price of allowances – because of the over-allocation – fell from 30 Euro to 0.5 to 1 Euro.

The preparation of the National Allocation Plan and List for the period of 2008 to 2012 started in 2006. The European Commission decided in its decree on 16 April 2007 that the National Allocation Plan failed to meet the criteria of the Directive 2003/87/EC on greenhouse gas emission allowance trading, particularly from the viewpoint of the total amount of allowances to be allocated. Therefore the Commission ordered to decrease the allowances allocated to

Hungary by 4 million tons of CO2. The Hungarian Government challenged the resolution at the European Court of Justice (the case is still in progress). According to the EU law in force, the appeal does not have delaying force on the implementation of the resolution, thus the National Allocation Plan 2 must be compiled again taking into account the amount of CO2 to be allocated on the basis of the decision of the Commission. As a result, Hungary must probably expect a shortage of allowances in the second trading period.

## 6. Operation of the Office, institutional relations, publicity

# 6.1. Institutional and international relations, publicity

#### **6.1.1.** Bilateral institutional relations

In 2007, the Office maintained continuous and active relations, similarly to the previous years, with the ministries, the Parliamentary Commissioners' Office, the Hungarian Competition Authority and the Hungarian Consumer Protection Authority. In the course of this interaction, an agreement was reached on several questions of principle and certain specific matters. The Office regularly met the Hungarian Consumer Protection Authority in the second half of 2007. During these meetings, in addition to the discussion of the experience of recent period, they also worked on the elaboration of the details of the distribution of powers between the two authorities in force from 1 January 2008 and the determination of the framework of a future cooperation. The Office also has an active and continuous relationship with non-governmental organizations of customer protection. For example, the Magyar Energiafogyasztók Szövetsége (Association of Hungarian Energy Customers) regularly received the Business Conducts Rules and resolutions relating to the quality of supply before their approval to give its opinion on them, and participated in the work of the Energy Interest Representation Board on every occasion.

#### **6.1.2 International relations**

Since 4 May 2004, the Office has been a member of the Council of European Energy Regulators (CEER) as well as of the European Regulators Group for Electricity and Gas (ERGEG). At the general assembly of the CEER and the ERGEG, which took place on 5 December 2005, a new President and five new Vice-Presidents were elected. The Vice-President of the Hungarian Energy Office was elected as one of the Vice-Presidents of these organizations. The representatives of the Office took part in the work of the Working Groups and the Task Forces of the CEER and the ERGEG.

The preparation of opening of the electric energy markets continued also in 2007 within the framework of the ERGEG Regional Initiatives (ERI) in the region determined in the Annex to the Regulation 1228/2003/EC. Hungary belongs to the Central and Eastern European region (CEE) together with the Czech Republic, Slovakia, Poland, Germany, Slovenia and Austria. The leading regulator of this region is the Austrian E-Control. The actual work is performed by the Implementation Groups (IG), which develop various professional studies and analyses. Their members are primarily the representatives of the regulatory authorities and system operators. Finally, the largest consultation forum is the Stakeholder Group (SG), participants

of which are the representatives of all market players, regulatory authorities and governments. During 2007, four RCC meetings, five IG meetings, and one SG meeting were organized at various locations in the CEE region. The Office took an active part in the work of the meetings, and represented Hungarian interests.

In the previous years, the discussions of the CEE region were basically focused on the introduction of the coordinated cross-border capacity allocation process. Until now, the system operators did not manage to work out a process that would meet the expectations of market players on one hand, and be acceptable from legal aspects, on the other hand. Simultaneously, a work of high priority started in the field of data publication in 2007. The regulatory authorities developed a proposal, which includes the data to be made public by the system operator within a certain deadline. The public debate of this document took place in 2007, and its finalization is due to happen in the first quarter of 2008.

The role of Hungary is expected to strengthen also in South-East Europe, since the European Commission decided to establish an 8th region (within the framework of the Regulation 1228/2003/EC), and Hungary would be a member of it.

The Office played an active role also in the establishment of the professional association gathering the energy regulators of the 'Eastern Bloc' countries, the Energy Regulators Regional Association (ERRA) in 2000. The Secretary of ERRA resides and works in the building of the Office. The Office was an active member of the Working Committees of the ERRA also in 2007. As a recognition of this role, one of the directors of the Office was elected to be Vice-President and at the end of 2007 to be President of the ERRA.

# 6.1.3. The Energy Interest Representation Board

In 2007, the Energy Interest Representing Board held quarterly meetings with the participation of customers and licensees. The Ipari Energiafogyasztók Fóruma (Forum of Industrial Energy Customers) and the Országos Fogyasztóvédelmi Egyesület (Association for Consumer Protection of Hungary), beside the Association of the Hungarian Energy Customers, were the representatives of the customer's side.

In the first quarter, the meeting of the EIRB dealt with the bill of the new Electricity Act, the views on the new natural gas operational model, the experiences of the inspections of call centers and the issues discussed by the Energy Subcommittee of the Economic Committee of the Parliament.

In the second quarter, the meeting of the EIRB dealt with the changes in the tariff structure of natural gas, the expected changes of the allocation of cross-border capacities and the introduction of the enforcement decree of the new Electricity Act.

In the third quarter, the meeting of EIRB dealt with the issue of the information of the Hungarian Customer Protection Authority about its new tasks determined by the new Electricity Act, the bill of the new Gas Act, the new rules on universal supply and vulnerable customers and the answers given to the frequently asked questions on market opening.

In the fourth quarter, the meeting of EIRB dealt with the preparation of the decrees on the electricity market opening, the new accounting framework of feed-in-obligation and the report of the public utility suppliers on their preparation for the market opening.

#### **6.1.4.** Information supply

In 2007, the President of the Office – in accordance with his tasks ordered by law – submitted the annual report on the 2006 activity of the Office to the Government. The Office issued its publication on the activities of the Office and the key technical and economic data of the supervised sector, and also the Electricity Statistical Yearbook providing a summary on the technical and economic activities of the electricity industry.

The Office compiles and submits its national report created in accordance with the instructions of the CEER ???and according to the Directives of the EU to the competent organ of the EU every year. The report covers the evaluation of the electricity and natural gas markets. The evaluation of the reports including data of the year 2006 and prepared by the regulatory authorities of the individual countries contain the data on 2006 is performed by the CEER, and its findings are published on its website. The evaluation document makes a comparison among the Member States possibly by the publication of indicators characteristic of the operation of their electricity and natural gas markets. By presenting the electricity and natural gas markets, the report provides information on the level of market opening, the number of market players, the share of the largest market players, and the indicators characteristic of the structure of consumer prices. The institutional system of the security of supply and the regulation were analyzed separately.

After full market opening, since the beginning of 2008, the responsibilities of the Office and the circle and content of the relevant rights have been modified with regard to the electricity market. The number of data suppliers has increased, the types of licenses have changed, and the circle of data suppliers has modified. The changes of the regulation induced also a modification of the data demand of the Office. The Office determined the data to be submitted and effective from the beginning of 2008 in its resolutions issued for the licensees.

The Office regularly provided information to various international organizations (EUROSTAT, International Energy Agency etc.).

The senior management of the Office regularly informed the written and electronic press on the issues related to the customers.

On its homepage at <a href="www.eh.gov.hu">www.eh.gov.hu</a>, the Office regularly published its resolutions of public interest, provided information on actual issues related to its work and published a summary, with a content specified by a number of background legislation, on the public technical and economic data of the electricity and natural gas sectors. The most important events of the energy market can be tracked on the website, as well.

#### 6.2. Conditions of operation

#### **6.2.1.** Conditions of operation

The own income of the Office is determined in the Joint Decree of the Minister of Economy and Transport and the Minister of Finance 19/2002 (November 5) modified by the Joint Decree of the Minister of Economy and Transport and the Minister of Finance 68/2005 (September 13). The budget of the Office is an individual item in the budget of the Ministry of Economy and Transport, has a full competence over its spending, and operates as an

independent budgetary organization. The Office has been a governmental office by virtue of the Act 57 of 2006 since 1 July 2006.

The approved headcount as well as the effective staff number of the Office was 94 in 2007. Its experts have a comprehensive technical, economic, financial and legal knowledge; most of them have language skills and broad experience in the industry. The Office is well-equipped and duly provided with devices of information technology and telecommunication, as well as office appliances.

#### 6.2.2. Information system, information processing

## Information system

In February 2007, the Office received the whole office building under the number 7 of Köztársaság Square started moving from the building under the number 3 of Köztársaság square on 30 June 2007. As a result, the information connection between the two buildings was ceased. Simultaneously, the reconstruction and the enhancement of the LAN system took place. For the purpose of discharging the sporadically installed interruptible power supply units, the experts of the Office developed an interruptible system covering the whole building, with a total capacity of 80 kVA. In accordance with the Section 2 of Article 9 of the Act 66 of 1995 and with regard to electronic document management, bodies performing public tasks can apply for softwares that meet the requirements determined by a specific law and have a certificate. For this reason, the Office chose the appropriate software on the basis of a feasibility study and through public tendering.

# Information processing

The Office continuously processed and evaluated the regularly received information on the operation and activity of licensed companies. The scope of information includes the daily, monthly, quarterly and annual data on the generation, supply, distribution and transmission of electricity and natural gas, and the production of district heat.

The majority of data arrives to the Office directly, in an electronic format. In addition to the data demand of the Office required for the daily work, the information system also satisfies the demand for information requested by the interested stakeholders, both from Hungary and abroad. The professional and confidential handling of information has an utmost importance in order to keep the confidence of the licensees supplying the necessary data. Data is managed in accordance with the Information Safety Regulation created and audited by external experts, as well as with the provisions of the internal regulation on data management. The requirements of data security are met by the continuous monitoring of compliance with the regulations, as well as the operation and development of the appropriate information safety systems.

The Office regularly provides information to various international organizations. Data on the average prices of Hungarian electricity and natural gas, broken down by consumer groups, is submitted to the International Energy Agency (IEA) quarterly. From 2002, the average consumer price data of electricity and natural gas is sent to EUROSTAT every half years. The processing of the electricity and natural gas prices of the member states of the ERRA was also performed continuously in 2007. The supply of data organized by the Office provides data on

the ERRA member states and the whole region, which are suitable for comparison since the beginning of 2000. The figures are published on the homepage of ERRA.