Hungarian Energy Office Annual report to the European Commission

Budapest, October 2012



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List of Abbreviations

CAO: Central Allocation Office GmbH

CEE Region: Central and Eastern European Region

CEER: Council of European Energy Regulators

E.ON Ruhrgas International AG

ERGEG: European Regulators' Group for Electricity and Gas

ERRA: Energy Regulators Regional Association

Offer price decree: Decree No 19/2010. (XII. 3.) NFM on natural gas sources offered for

sale to universal service providers and on the volumes and price of nationally produced natural gas as well as on the range of parties

eligible and obliged to use it

US decree: Decree No 29/2009. (VI. 25.) KHEM on the pricing mechanism of

prices related to the universal service provision on the natural gas

market

CEIR: Council of Energy Interest Representation

Gas Supply Act: Act No XL of 2008 on natural gas supply

GET Imp. Decree: Government Decree No 19/2009. (I. 30.) on the implementation of

the provisions laid down in Act No XL of 2008 on natural gas supply

HCA: Hungarian Competition Authority

Office: Hungarian Energy Office

LTA: long term electric power generation and generator capacity booking

agreements in Hungary

LTA Act: Act No LXX of 2008 on certain issues related to electric power



LTA Decree: Government Decree No 149/2010. (IV. 29.) on the stranded costs

compensation scheme of power plants

Minister: Minister of National Development FIO: power feed-in obligation scheme

FIO quota: amount of electric power to be taken over on the basis of the feed-in

obligation scheme

HUSA: Hungarian Hydrocarbon Stockpiling AssociationNFKP: Daily Natural Gas and Capacity Trading Market

MND: Ministry of National Development

District Heating Act: Act No XVIII of 2005 on district heating services

TVT: Act No LXVII of 2008 on boosting the competitiveness of district

heating services

Competition Act: Act No LVII of 1996 on prohibiting unfair market conduct and the

limitation of competition

Network Code: Operating and Commercial Code

Electricity Act: Act No LXXXVI of 2007 on electric power

the Electricity Act Imp. Decree: Government Decree No 273/2007. (X. 19.) on the

implementation of certain provisions laid down in Act No LXXXVI

of 2007 on electric power



Report on the activity of Hungarian Energy Office and the supervised energy sector in 2011

Budapest, October 2012

Summary

The provisions concerning the establishment, legal status, scope of authority and functions of the Hungarian Energy Office (hereinafter referred to as: the Office) and the regulation of fixed line energy markets have been laid down in Act No XLI of 1994 on gas supply, Act No XLVIII of 1994 on the generation, transmission and supply of electric power and Act No XVIII of 1998 on district heating services. These Acts, specific to the energy sector they cover, have been amended several times during the one and a half decade of operation, taking into account the regulatory experiences of the Office.

Regulation of the fixed line energy markets and the functions of the Office are currently governed by Act No XVIII of 2005 on district heating services (hereinafter referred to as: District Heating Act), Act No LXXXVI of 2007 on electric power (hereinafter referred to as: the Electricity Act), Act No XL of 2008 on natural gas supply (hereinafter referred to as: the Gas Supply Act), and by the respective Government Decrees and Ministerial Decrees issued pursuant to these Acts. The functions of the Office have been extended with effect from 2009 on by Act No LXVII of 2008 on boosting the competitiveness of district heating services (hereinafter referred to as the TVT).

The Office is a central public administration body with independent functions and authority. Pursuant to the provisions of Act No XLIII of 2010 on the central public administration bodies and the legal status of members of the Government and Secretaries of State the Office is a government agency, managed by the Government and supervised – pursuant to Decree of the Prime Minister No 5/2010. (XII. 23.) ME on the appointment of Ministers in charge of the government agencies – by the Minister of National Development.

From the time of its establishment, the main function of the Office was licensing and supervision of power companies in the lined transmission sector, consumer protection and the preparation of regulated prices for natural gas and electricity.

The Office conducted its activities concerning market liberalisation and market supervision with due regard to the Directives No 2003/54/EC and 2003/55/EC as well as to Directives 2009/72/EC and 2009/73/EC of the European Parliament and the Council. Beside this, continuous work for the whole year was provided by the tasks related to the transposition of legislation with the third energy package adopted by the European Parliament and the Council into the Hungarian law.

Following the full liberalisation of the natural gas and electric power markets, a substantial change occurred in the role and activities of the Office. In addition to regulating fixed transmission line licensees in the energy sector, pricing applications and consumer protection, a growing importance is given to supervision of the competitive market, promotion and preservation of fairness of competition, the enforcement thereof, and continuous monitoring of and changing or triggering changes when necessary in the competitive market environment.



Upon the full liberalisation of the market, regulated prices of energy as a 'product' ceased to exist for those who are not entitled to universal service provision. However, system operation and transmission line usage — which can be seen as legal and/or natural monopoly and the prices of which are to be determined by the Office for the first time with effect from 1 January, 2012 in a decision — and universal service provision continue to be subject to regulated pricing. Up to July 2010 the requests for price increases by the universal service providers were approved by the Office in a resolution. Due to the changes in the legal background, the Office carries out only the preparatory work for official pricing now and the pricing authority is assumed by the minister in charge for energy.

Regulation (licensing and price regulation) of fixed line energy markets

Each segment of the fixed line energy markets was fully regulated from 1994 up to the end of 2002. Liberalisation of the electricity market started with effect of 1 January 2003 and that of the natural gas market with effect of 1 January 2004 opening these markets gradually. Initially large industrial customers, and from July 2004 any non-household customer could step out onto the competitive electric power market. From 1 July 2007 retail customers can also purchase electricity and natural gas from generators or traders.¹

Licensing

In line with the provisions of the Electricity Act and the Gas Supply Act, the Office shall establish the conditions for conducting licensee and related operations in the license issued by the Office. Compliance with the requirements laid down therein is monitored continuously and the legal consequences applied as appropriate.

Electricity market

The detailed rules applicable for licensing electricity operations in various market situations are found in Articles 52 to 91 of Government Decree No 273/2007. (X. 19.) on the implementation of certain provisions of Act No LXXXVI of 2007 on electricity (hereinafter referred to as: the Electricity Act Imp. Decree). Licensees are obliged to ensure continuous compliance with the rules. In addition to the general rules, the Electricity Act Imp. Decree contains special rules related to each operation subject to licensing. They define the list of documents to be attached to license applications, the assets applicant must have, furthermore they provide for the contents of each type of license and the mandatory ingredients of license applications. Tables containing in details the documents and data required for the submission of license applications are also included, thus facilitating the work of the applicants.

Up to the end of 2007 a so-called double model was in force on the electricity market, meaning that both the public utility and free market segments operated in parallel. From 2008 on the public utility market segment ceased to exist and was replaced by the competitive market model, where competition can only be limited in order to prevent abuse of monopoly situations and to protect helpless customers. The latter is embodied in the institution of the so-called universal service provision.

Electricity can be procured by users and traders and sold by generators under the conditions of free market. In addition to the Central European Power Exchange (PXE), electric power can be

¹ The applicable provision of the Electricity Act took effect on 1 January, 2008.



traded since Summer 2010- both by next day delivery and long term contracts - on the Hungarian Power Exchange (HUPX). The noted exception is electricity generated with the use of renewable energy resources and not intended for sale on the free market. Such power shall be purchased by the transmission system operator (as the entity responsible for the FIO balance group) under the feed-in obligation scheme (hereinafter referred to as: FIO) at the mandatory purchase price provided for in the Government Decree No 389/2007 (XII.23.) on the feed in obligation and feed-in price of the electric power produced with the use of power obtained from renewable energy resources or from waste and of the electricity produced in cogeneration schemes, to distribute it later on among traders supplying end users, generators directly delivering to end users and end users directly purchasing power from abroad in proportion to the volumes of electric power sold (purchased from abroad) by them. Since significant problems emerged with the operation of this system which caused substantial extra burden to end-users (for instance due to disproportionate advance payment invoices received from generators planning their production unrealistically or to the distorted supply data from traders), the Office proposed amendment of the rules in the scheme. Discussions on the amendment have drawn to a close in December 2010 and a Government Decree and a Decree developed by the Ministry of National Development (hereinafter referred to as: MND) were issued with effect from 1 January, 2011 as a result.

The European Commission concluded its investigation launched in 2005 during the Summer of 2008. The investigation was opened for suspected illegitimate state aids hidden in the Hungarian long term electric power generation and generator capacity booking agreements (hereinafter referred to as: LTA). In the decision closing the proceedings the European Commission ordered the early termination of all LTA-s and reimbursement of illegal state aids by the power plants concerned. Such LTA-s were concluded between seven power plants and the MVM (in its capacity as the exclusive public utility wholesale trader) in the period between 1995 and 2001 and – encompassing more than 60% of all Hungarian electric power generation – effectively prevented competition among generators.

The Parliament adopted Act No LXX of 2008 on certain issues related to electric power on 10 November 2008 (hereinafter referred to as: LTA Act), which provided for the termination of all LTA-s up to 31 December 2008 and the method of determination how reimbursement of illegal state aids should be completed. Pursuant to the authority conveyed by the Act Government Decree No 149/2010. (IV.29.) defined the methodology of calculations used to compute the actual amounts of illegal state subsidies to be reimbursed and a stranded costs compensation scheme due to the termination of the LTA-s. No recoverable aids could be established for any of the power plants and three power plants became eligible to the stranded costs compensation scheme. The methodology determined for calculating compensation amounts for stranded costs in accordance with provisions of the Decree and the figures computed accordingly were approved by the European Commission in its decision 'State Aid N 691/2009 – Hungarian stranded costs compensation scheme' dated 27 April 2010. The Office issued a decision for the affected power plants with the subject 'Establishment of the recoverable amounts of state aid provided under the Agreement'.

In Summer 2009 Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 were published (the so-called third package of internal energy market liberalisation). Provisions of Regulation 714/2009/EC are only applicable from 3 March 2011 on. Directive 2009/72/EC dedicated special attention to effective



and efficient unbundling of market and monopoly operations and enforcement of electricity customer interests.

Natural gas market

The detailed rules applicable for licensing are stipulated in Articles 124 to 130 of Gov. Decree No 19/2009 (I. 30.) on the implementation of the provisions of Act No XL on natural gas supply (hereinafter referred to as: GET Imp. Decree) and Annex No 5 thereof. Licensees are obliged to ensure continuous compliance with the rules and requirements. The implementation decree of the Gas Supply Act contains general rules and – with regard to certain activities subject to licensing – special rules. Under these the documents to be submitted by the applicants to licensing applications and the means to be held by the applicants are defined and the content elements of permits and the mandatory prerequisites for licensing applications are set out in details.

Public utility supply was terminated on the natural gas market with effect from 30 June 2009 and the institution of the universal service provider was created on this market as well for the specific supply of small customers. Users eligible for universal service provision include household customers and any other customers in possession of a gas meter with a capacity of less than 20 m³/hour.

Curtailing the range of customers entitled for universal service provision was implemented from 1 July 2009 gradually, over a two years transition period. In this transition period, eligibility for universal services was granted in addition to household customers to:

- customers holding a district heat generation license specified in a separate law (up to 30 June 2011) and
- customers possessing a gas meter with a capacity of between 20 m³/hours and 100 m³/hour (up to 30 June 2010).

The third energy package of the European Parliament and the Council was published on 13 July 2009. Rules governing the natural gas market are contained in Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (new Gas Directive) and Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (new Gas Regulation). Provisions of the new Gas Directive and Gas Regulation are applicable from 3 March 2011.

District heat generation and district heating services

District heat generation and district heating service provision are activities subject to licensing; the installation of district heat generating facilities above a capacity limit of 5 MW thermal output requires a license. The powers of licensing were shared between local municipalities and the Office up to 15 April 2011. District heat generators also producing electricity were covered by the Office, while local governments issued licenses to thermal generators without electric power generation and to district heating service providers. The Office issued 20 resolutions in 2010 in relation to district heating licenses. Six of these dealt with district heat generation operating licenses, one with the issue of an establishment license, 8 modified existing permits and 5 were decisions related to approvals of mergers or obtaining control. Besides licensing the Office also provided official supervision to licensees.



The District Heating Act was amended by Act No XXIX of 2011 amending Acts on energy and power with effect from 15 April 2011 in the field of licensing and price regulation. Following the amendment entering into force, both the operating license of district heating service providers and the establishment and operating licenses of power generators producing heat in other ways than co-generation are issued by the Office. From 15 April 2011 on the price of heat sold to district heating service providers is set by the authority while residential heat is still priced centrally. It is now supplemented with separately managed institutions and the pricing authority was shifted from the body of representatives in local governments of municipalities to the minister in charge for energy policy. Simultaneously with the activity of the Office to prepare pricing mechanisms taking effect, the system operated from 1 July 2009 under which the Office was charged with the task of evaluating price change initiatives of district heating service providers under a public administration official procedure ceased to exist. Yet price preparation in relation to the regulation was retained within the cope of authority of the Office. The Office issued 14 resolutions in relation to district heat licensing and evaluation of price review proposals.

Preparations for the adoption of smart metering

According to Directives 2009/72/EC and 2009/73/EC Member States shall ensure the adoption of smart metering systems. However, the introduction of the so-called smart metering systems depends very much on the economic assessment of all costs and benefits incurred by the market operators, on the cost efficiency of each smart metering model, and the timing of their installation. Based on the assessment the Government will decide upon the timing of adopting smart metering. The Government will also inform the Commission on this decision. Provided an assessment in favour of the impacts associated with the commissioning of smart metering systems is concluded, at least 80% of all customers need to be involved in smart metering before 2020.

Both the Electricity Act and the Gas Supply Act provide for the Government to stipulate in a Decree the rules governing the installation of electronic consumption meters at the users and continuation of pilot projects as specified in the directives of the European Parliament and of the Council on energy end-use efficiency and energy services. After consulting with the competent ministry the Office started preparations for the necessary Decree. In 2011 the Office – with the involvement of the smart metering task force organised and led by it – prepared the draft of the decree concerning smart metering pilot projects which was sent to the NFM for approval and to the Government for the purposes of forwarding by the end of October, but the technical negotiations between the Ministry and the Office has not drawn to a close as yet. Electricity distributors started designing and implementing smart metering pilot projects with the guidance of the Office on the basis of their own plans.

Price preparation, pricing

Electricity

With regard to electric power supply, from 2008 on any customer which is not entitled to officially priced universal services (a major, non-household or non-public institution user) may only procure electric power (as a product) at a price reflecting the supply and demand of the market from competitive traders whom they chose and who undertook their servicing. (In 2011 4 major and approximately 20 lesser electricity traders were active). Small customers – provided they did not enter the free market – could draw electric power in 2011 under



universal service provision, i.e. at officially controlled (regulated) prices. Prices of the so-called universal service provision applicable to electric power as a product have changed on 1 February, 1 July 2011 and 1 January, 2012.

Changes to power system charges at the beginning of the year 2011 and 2012, respectively, were effectuated in line with the regulatory framework in effect for the 2009 to 2012 pricing cycle, taking into account eventually justified corrections.

The so-called feed-in tariff scheme is governed by Gov. Decree No 389/2007 (XII. 23.) on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in co-generation facilities as the implementation of the provisions laid down in the Electricity Act. The generation of electric power sold under the feed-in tariff scheme was granted substantial aids in 2011 as a result of the officially set feed-in tariffs which were higher than the 'market prices' and due to the feed-in obligation arrangements themselves. Cogenerated electric power was taken out of the feed-in-obligation tariff system with effect of 1 July 2011.

Natural gas

In Q1 to Q3 of 2011 the recognised molecular price of gas was determined for end user tariffs according to the changed formula. The end user prices stagnating because of freezing of the overhead costs required an offer price which was even lower than the rates derived from the formula taking "spot" market prices into account. Decree No 19/2010 (XII. 3.) NFM on the volumes and prices of natural gas sources offered for sale to universal service providers and of nationally produces natural gas, as well as on the scope of parties entitled and obliged to use it ensures for universal service providers by officially priced domestically produced natural gas that their procurement portfolio contained the average price which can be collected from consumers at the regulated end user tariff rates. It provides the condition precedent however that the import procurement prices included in the portfolio be considered with the rates derived from the mixed natural gas formula laid down in Decree No 29/2009. (VI.29.).

The extent of exchange rate increases recognised in pricing regulation shall be determined by the Minister in a Decree, wich exchange rates were published by the Minister on 20 May 2011. Based on the rearrangement of the pricing mechanism in Q2 of 2011 organised market quotations (spot and futures) shall be included in the natural gas pricing formula with a weight of 70% and gas purchased on the basis of long term agreements with a weight of 30% from 1 October 2011 instead of 60 %, and 40 %, respectively.

District heating services

Pursuant to the District Heating Act amended by Act No LXVII of 2008 on making district heating services more competitive (hereinafter referred to as: Competitive District Heating Act) the Office provided the function or price control for residential district heating prices from 1 July 2009 on. Such price control function was carried out by the Office up to 15 April 2011. In 2011 the Office acted upon 7 matters related to this price control activity, arriving at 2 decisions and 5 orders.

Having completed its task defined in the amendment of the District Heating Act in effect from 15 April 2011 the Office made a proposal on 31 August 2011 to the minister in charge of energy on the prices to be charged for district heating services from residential customers and institutions treated separately and on the prices of district heating generators selling district



heat to service providers (98 generators), as well on the as amount of subsidies to be granted to district heating service providers (100 businesses).

Consumer protection

The Office managed 3149 issues concerning the protection of customers/consumers in 2011, representing a 41% growth compared to the number of issues a year earlier. Approximately 84.4% of all cases were direct consumer complaints, and an additional 9.7% accounted for complaints forwarded to the National Consumer Protection Authority to their respective jurisdiction. Sixty-two per cent of all complaints received related to gas supply and 38% to power supply. Complaints were evaluated and necessary actions taken on a continuous basis. Nearly 33% of all complaints on electricity licensees and 54% of complaints on natural gas licensees were found to be well grounded by the Office.

From 2011 on the system of the so called Guaranteed Services was operated both in the electricity sector and the gas industry following uniform guidelines. This requires direct compensation from the licensee to the user in cases when the expected time lines are not met. Licensees in the electricity sector paid a total amount of nearly HUF 247 million to consumers in 2010 for reasons not meeting Guaranteed Services (GS). No such payment was made in the natural gas industry where the Guaranteed Services were not in force. Licensees in the electricity sector paid a total amount of nearly HUF 674 million to consumers in 2011 for reasons not meeting Guaranteed Services (GS), while the same amount in the gas industry was only 1.2 million HUF.

Due to an increasing number of complaints the Office was able to carry out inspections only on the most critical areas. Correspondingly, correctness of the data supply to the Office, management of automatically payable penalties under the Guaranteed Services and the investigation and management procedure of contract violations committed by removing seals were all inspected. Based on compliance with the performance criteria defined for the reliability of electric power supply in 2010 E.ON Észak-dunántúli Áramhálózati Zrt. and E.ON Tiszántúli Áramhálózati Zrt. were forced to reduce their prices by 1% in the period between 1 July, 2011 and 31 December 2011. As a result, approximately HUF 320 million worth saving was experienced by the users concerned by the reduced tariffs.

Customer satisfaction surveys were conducted, findings assessed and action plans for corrective actions completed in 2011. Users continued to focus on voltage spread (ripples), outages (in particular those with a lengthy duration), reception of failure reports and the time required for elimination of faults as well as the accuracy of measurements by distribution licensees. As to universal service provider licensees, low scores were given to quick and competent operation of Customer Service centres, comprehensibility of the bills and complaints management by both residential and non-residential customer cohorts. Beside this – albeit showing an improving tendency in absolute terms – satisfaction with the transparency and comprehensibility of bills were still lower than average.

The Office maintained communication with other public administration bodies having consumer protection functions and carried out its activities in coordination with them. Beside public administration bodies, the Office maintained constant contacts with civic consumer protection organisations as well. As an active participant of the Electricity Quality of Supply and Smart Grids – EQS task force within the Council of European Energy Regulators, CEER – the Office conducted the survey, evaluation and compilation of the Commercial Quality chapter of the benchmarking report assessing electric power supply quality for the fifth time in 2011.



Energy saving and renewable energy resources

The Office contributed to the implementation of the energy saving and energy efficiency enhancement strategy of the Government. In their capacity as expert consultants, Office representatives participated in the work of the interdepartmental committee evaluating energy efficiency enhancement proposals, in the work of the committee evaluating the proposals of the Environment and Energy Operational Programme and in the preparatory works of tender announcements. The Office started to review the renewable incentive scheme and supported the development of the National Action Plan – intended to promote the use of renewables – by background materials and calculations.

International relations, energy information, publicity, disclosure

Staff members of the Office actively participate in the activities of the technical committee of the European Commission, the Agency for the Cooperation of Energy Regulators of the EU (ACER), furthermore in the work of the Council of European Energy Regulators (CEER) and the Energy Regulators Regional Association (ERRA). The Office makes substantial efforts to promote market integration in the region and maintains close bilateral partner relations with other foreign regulators.

Obtaining from and processing of technical and financial data of more than 600 licensees needed by the Office to fulfil its functions and data supply obligations to other authorities and international organisations were carried out on an ongoing basis. According to his obligation provided for in the law, the President of the Office submitted to the Government the Office's Activity Report of 2011 on the activities of the previous year and also prepared the National Report presenting the operation of the electricity and natural gas market to the European Union. The Office continuously met its data supply obligation to international organisations (EUROSTAT, International Energy Agency, etc.), and as part of this obligation the key figures of the Hungarian natural gas and electricity sector were provided to them.

The Annual Report of the Office presenting the previous year's activities and key technical and financial figures of the sector supervised by the Office was also published in 2011 and two additional publications were also issued:

- the Statistical Yearbook of Fixed Line Energy Carriers (VEZESTÉK), an extension of the former VESTÉK publication to include figures on natural gas and district heat and
- a publication presenting the statistical data of the Hungarian electricity system in collaboration with MAVIR.

Office managers regularly disseminated information in 2011 in both the electronic and printed media on issues concerning the power sector and the consumers. Background discussions on current issues were held for specialist journalists dealing with the power sector, where detailed briefing was conducted on each of the topics. The President of the Office delivered interviews to major technical journals several times.

The activity, public resolutions, publications of the Office and the key events concerning the fixed line energy sector can be continuously followed on the website www.eh.gov.hu.

Legal remedies to Office resolutions



In 2011 the Office adopted 1702 resolutions in addition to those published in consumer protection matters. Stakeholders filed a lawsuit in court with regard to 22 resolutions, which proceedings are still in progress. Sixteen submissions were received due to paragraph (5) Article 171 of Act, No LXXXVI of 2007 (hereinafter referred to as the Electricity Act), which stipulated that any Office resolutions adopted pursuant to Article 171 (5) of the Electricity Act were repealed with effect of 1 July 2011 by the force of law. The claimants filed a lawsuit against the Hungarian National Assembly as the principal defendant and the Office as secondary defendant. The court of the first instance turned down these actions without issuing any writ of summons. Five appeals were made and in three of them the court of the second instance affirmed the decision of the court of the first instance.

Following this 9 actions were filed challenging the reply letters of the Office which were written by the Office in response to letters requesting the interpretation of paragraph (5f) Article 171 of the Electricity Act. The court of the first instance turned down these actions without issuing any writ of summons. Five appeals were made and in two of them the court of the second instance affirmed the decision of the court of the first instance. Of the 47 lawsuits launched in 2011 10 was finally concluded with turning the actions down. From earlier years 89 lawsuits were forwarded to 2011, 42 of them were finalised and have become non-appealable (16 actions were turned down, in 11 matters the action at law was abandoned, 13 proceedings ceased to exist, and in one decision the court repealed the resolution adopted by the Office), 3 suits are pending until another case is finished and, 11 proceedings were suspended.

All in all, 136 actions were in progress in 2011 against the resolutions of the Hungarian Energy Office – and against legal provisions deemed to be resolutions by the claimants and letters written by the Office – and 52 of them were ended.

The Office acted upon 826 consumer protection affairs. Clients turned to the court in 86 cases against the resolution of the Office. Of these 9 cases were closed down (7 actions were dismissed by the court, in 1 case the actions was abandoned and in one case the court repealed the decision of the Office), and 79 cases are still in progress. From former years 169 suits were brought over to 2011, 36 of them were closed with legally binding effect in 2011 (25 actions were turned down by the court, in 7 cases the action was dropped and in four cases the court repealed the decision of the Office), 1 suit is pending until another case is finished and 2 proceedings were suspended. In the year of 2011 six labour rights related lawsuit were in progress – all related to one person – and 2 of them ended.



1. Regulation and operation of the electricity market

1.1. Regulation

Licensing and control

In the field of electric power licensing and supervision the Office issued 262 resolutions to power companies in 2011, 27 of these were consolidated licenses for small power plants and 4 resolutions were issued to establish the so-called FIO quota. Ninety three license modification resolutions were issued to licensees. 21 operations were terminated or suspended. The Office issued 20 new trading licenses, and passed 39 resolutions concerning codes of operation or the amendment thereof. Approval was granted to 5 transactions concerning company law and to 53 other issues, in five additional cases an investigation was instigated and two resolutions imposed a fine.

Generator licenses

The Office issued 9 different licenses concerning power plants with a rated capacity of 50 MW or more. Two of them was a generator operating license, one amended the terms of operation, two suspension permits and the rest other amendments.

Two new power stations with a capacity greater than 50 MW started commercial operations in 2011: the combined cycle 433 MW power plant at Gönyű, owned by E.ON Erőművek Ltd. and the 116 MW open cycle gas turbine power plant of BVMT Bakonyi Villamos Művek Termelő Zrt.. With the modification of the production operation license of Dunamenti Erőmű Zrt. commercial operation of the 407.7 MW G3 block was possible.

The three power generators increased the overall installed capacity of the Hungarian electricity system by 956.7 MW in 2011.

Licensing and feed-in obligation scheme of small power plants

In cases provided for by the Electricity Act a simplified licensing procedure should be conducted for small power plants with a rated capacity of 0.5 MW and beyond. Licensing was carried out on an ongoing basis in 2011: the office issued 22 new production licenses, 33 permits were amended, 3 withdrawn, and 5 decisions concerned termination of production.

The validity period of the operating license, the volume of electric power to be taken over on a mandatory basis and the duration of the feed-in obligation are to be specified by the Office. Pursuant to paragraph (4) Article 11 of the Electricity Act sales at other than the market prices can be up to the point of return of the investment costs at most. Pursuant to paragraph (7) Article 6 of Government Decree No 389/2007 the Office shall calculate return on equity (ROE) for each of the energy sources and production technologies by taking into account the domestic and international data of investment projects implemented and operated on the basis of rational selection of sites, least cost principle and best available technology, as well as the prices pursuant to the aforementioned Decree. The methodology framework and results of the rate of return calculations are published on the homepage of the Office. Pursuant to



paragraph (5) Article 11 of the Electricity Act and paragraph (7) Article 6 of Government Decree No 389/2007 the break-even point shall be amended if the project received other subsidies. The Office issued 22 decisions in 2011 establishing new feed-in obligation quotas (FIO-quotas) and for 80 small power plants producing electric power using renewable energy sources and/or co-generation of heat the duration of the feed-in obligation quotas were extended.

Pursuant to paragraph (5f) Article 171 of the Electricity Act electric power co-generated with heat was excluded from the feed-in-obligation scheme with effect from 1 July 2011.

Licensing wind power

No tender was announced for the establishment of wind power capacities in 2011. The Office did not issue any license for wind power in 2011.

Control of power plants

In the course of the 2011 inspections the Office established that fuel stocks required by the law are available in most power plants and several generators possessed stocks in excess of the requirements. Maintenance — albeit on different principles — is conducted according to schedule, thus ensuring reliability and availability. Generators usually have contracts in place to procure fuel for several years.

No objection was made with regard to compliance with environmental requirements of power plants and no power plants had to be shut down for non-compliance.

In review of quality assurance it can be stated that all generators in excess of 50 MW installed capacity operate quality control measures. Quality control systems are reviewed and audited to accommodate changes. Some large power generators operate integrated quality assurance, environmental management, health and safety systems. Several sites operate integrated environmental management and quality assurance systems.

During the inspection of small scale power plants the Office found that in 6 cases the FIO quota was used illegitimately, therefore reimbursement obligations and a fine were imposed in those cases.

Licensing and control of the transmission system operator

According to the provisions laid down in the Electricity Act, the special balance group to balance and account for electric power covered by the feed-in obligation scheme – the FIO balance group – was created on 1 January 2008 with the transmission system operator, MAVIR Zrt. as the responsible entity. In order to solve the problems manifested among others in how to ensure liquidity and handle inaccurate generator schedules the applicable regulations (Gov. Decree No 389/2007 (XII. 23.) on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in cogeneration facilities, and Decree No 109/2007 (XII. 23.) GKM on the distribution of electricity subject to feed-in obligation to the transmission system operator and on the method of determining prices to be applied in the course of distribution) were amended. These changes took effect also on 1 January 2011.

With the amendment of the Electricity Act power plants co-generating heat and electricity were excluded from the balance group with effect of 1 July 2011. Pursuant to the transient



provisions of the Electricity Act certain co-generating plants were given the opportunity to join the balance group (the responsible being MAVIR Zrt. again), and this to sell electricity produced by them on the organised electricity market.

Licensing and control of distribution network companies

No new distribution licenses were issued by the Office in the course of 2011 and no reason emerged to modify the existing ones. No changes occurred in the organisation structure and operation of distribution companies in 2011.

Licensing power traders and universal service providers

During the year 2011 a total of 19 power trading licenses were issued, less than in 2010, when a total of 27 were issued. Both the number and ratio of limited power trading licenses have increased, 10 such permits were issued in 2010, while the same figure in 2011 was 12. Evaluation of two license applications were brought over from 2011 to 2012, which were also intended to obtain limited power trading licenses. No application for universal service provision was received. Like in the year 2010, six trading licenses were withdrawn upon request from the licensees and three procedures are still in progress. One of the reasons for withdrawal was that in addition to the Hungarian subsidiaries registered earlier on, the limited power trading license was obtained by the foreign owners for the parent companies and they only conducted wholesale trading anyway. Another typical reason was that they relocated abroad or discontinued altogether their operations due to the economic situation (recession, the levy of the extra tax).

Licensing and operation of the organised electric power market

HUPX Magyar Szervezett Villamosenergia-piac Zrt. (in English: HUPX Hungarian Power Exchange Company Limited by Shares, HUPX Ltd) started commercial operation of spot (the day after) trading on 20 July 2010 with 10 members. By the end of the year 2011 the number of members grew to 40. The growth of turnover experienced in 2010 continued in 2011 and the average monthly increment of trading on the spot market was 24 076 MWh, thus the volume of dealings in December 2011 reached 430 864 MWh. In 2011 the total volume traded was 3 785 270 MWh, corresponding to approximately 8.9% of all gross domestic electricity consumption. The largest daily peak was seen on 8 July, 2011 when the volume exceeded 17 360 MWh.

One of the most important changes in the operation of the organised electricity market in 2011 was the launch of the long term physically delivered electric power trading (HUPX Physical Futures) on 19 July 2011. Like the next day market, the new market also started operation with 10 members, but by the end of the year 19 traders trades in futures products. Beside this the organised electric power market also provides services supporting OTC trading opportunities to its members. The average monthly increment of the physical futures turnover was 87 875 MWh, while the volume traded in December ranged up to 457 243 MWh. The overall amount of electricity traded on this market in 2011 thus reached 1 100 113 MWh.

It is important to note that the project aiming at the connection of the Czech, Slovak and Hungarian power exchanges was launched successfully on 29 July 2011, scheduled for implementation of the interconnection of the three aforementioned markets by the second quarter of 2012. Beside the organised power markets concerned, the transmission system operators also play an important role in this. A number of technical, financial, administrative



details were developed throughout the year, and the project is in progress according to the pre-arranged schedule.

The Hungarian Power Exchange is a member of the organisation of the European Power Exchanges (EUROPEX).

Allocation of cross border capacities and congestion management

Legal background

Pursuant to item h) paragraph (2) Article 47 of the VET Imp. Decree, the functions specified in Regulation No (EC) 714/2009/EC on conditions for access to the network for cross-border exchanges in electricity (hereinafter referred to as Regulation 714/2009/EC) are set forth in details by the Business Code.

For the purposes of implementing Article 3 of Regulation No (EC) 714/2009 a transmission system operation fee of 0.25 HUF/kWh is payable for imports from countries which are not parties to the voluntary multilateral network usage contract concluded between the European transmission system operators (ITC).

Allocation of cross-border capacities in 2011

MAVIR Zrt. and other cooperating transmission system operators organise cross border capacity auctions at the border crossing points shared with the neighbouring countries since 2003. Compared to the results of the 2010 auction, results of 2011 the following statements can be made: with regard to the available import capacities market players could experience — as opposed to the declining trends of recent years — that published capacities have grown almost without exception. No separate base load and peak capacities were announced from Austria to Hungary like in 2010 (120 MW +120MW), but a total of 300 MW capacity was made available for the interested parties. Transmission from Slovakia to Hungary grew by 200 MW from 300 MW to 500 MW from 2010 to 2011. Croatian import potentials were also increased from the earlier amount of 400 MW to 600 MW. Shipment from Serbia to Hungary was increased substantially from the 50 MW cross border capacity available for market players in 2010 to 200 MW by 2011. No changes were seen in the 200 MW importing opportunity from Romania, and no capacities were announced for deliveries of annual capacities from Ukraine.

Similar changes happened compared to the year 2010 with regard to electricity export. Distinction between base load and peak capacities in terms of deliveries from Austria to Hungary ceased to exist and a total of 300 MW capacity was announced for 2011 (in 2010 there was a base load capacity of 80 MW and peak load of 80 MW export opportunity available). Capacities were increased in terms of deliveries to Croatia, Serbia and Romania from 600 MW to 700 MW, from 50 MW to 200 MW and from 150 MW to 200 MW, respectively. No changes were seen in the capacities available for transmission to Slovakia (500 MW).

The system of unilateral monthly and daily auctions was maintained at the Ukrainian-Hungarian border crossing in 2011. Auction rules changed at the Serbian-Hungarian border crossings, where joint auctions were set up for all periods. According to the agreement, from December 2010 on long term auctions – yearly and monthly for 2011 – are administered by the Serbian partner TSO and daily auctions by MAVIR Zrt., respectively.



An important progress affecting cross border capacity allocation is that in addition to the intraday capacity allocation introduced earlier on at the Romanian-Hungarian and at the Slovak-Hungarian border crossing, intra-day capacity allocation was introduced at the Serbian-Hungarian cross-border section. Although the technical solutions implemented are not the final once in either case, but they definitely contribute in their present forms already to the flexibility of the power market in Hungary.

After the low annual prices of cross border capacities on the prevailing import directions (Austria and Slovakia) in the past few years, annual capacities were more expensive again from 2012. For Austria, a clearing price of 4.52 EUR/MWh (compared to the annual cross border capacity price of 0.45 EUR/MWh in 2010), for Slovakia 4.15 EUR/MWh (in 2011: 0.55 EUR/MWh) for cross border capacities were arrived at by the end of the auctions. As opposed to this the price of the annual cross border capacities associated with the deliveries received from Romania was reduced to 1.64 EUR/MWh at the auctions compared to the last year's price of 3.27 EUR/MWh. For Croatian and Serbian import and for export to all countries' cross border sections the clearing prices set were around or below 0.5 EUR/MWh.

In 2011 like before, congestion management was administered by the Central Allocation Office GmbH (CAO, www.central-ao.com) in the Central and Eastern European Region (hereinafter referred to as: CEE Region) as defined in the Annex of Regulation (EC) 714/2009. Bottleneck border crossing sections were managed on the basis of net transmission capacities (NTC) under a coordinated auction between the following transmission system operators: APG Austrian Power Grid AG (earlier on: VERBUND APG AG); CEPS, a.s.; Elektro-Slovenija, d.o.o.; MAVIR Zrt.; PSE-Operator S.A.; SEPS, a.s.; TenneT TSO GmbH (earlier on: E.on Netz GmbH), 50Hertz Transmission GmbH (earlier on: Vattenfall Europe Transmission GmbH).

The work in progress in the CEE Region since years – fair buffer allocation (FBA) –, aimed at the adoption of a coordinated flow based allocation system, was continued in 2011. At the same time the decision made by the European Council in February 2011 on the introduction of the single European power market by the end of 2014 and the resulting road maps developed during the year and adopted on 5 December 2011 by the Florence Forum had a substantial influence – among others – on the market integration work in the CEE region. The most important consequence of the road map concerning next day markets on the regional work is that regulators in the region must decide at the beginning of 2012 with the involvement of ACER in which sequence the elements according to each of the schedules will be introduced (that is, whether flow rate based capacity calculation should be introduced first followed by the implicit auction or the other was round).



Table 1: Transmission capacity parameters in the Hungarian electricity system (MW) Annual ATC values for 2011

| Rela | ation | ATC annual |
|--------|---------------------------------|------------|
| | Austria - Hungary ¹ | 300 |
| | Croatia - Hungary ² | 600 |
| MPORT | Slovakia - Hungary ³ | 500 |
| MP | Serbia - Hungary ⁴ | 200 |
| | Romania - Hungary ⁵ | 200 |
| | Ukraine - Hungary ⁶ | - |
| | Hungary - Austria ¹ | 300 |
| _ | Hungary – Croatia ² | 700 |
| EXPORT | Hungary - Slovakia ³ | 500 |
| EXP | Hungary - Serbia⁴ | 200 |
| | Hungary Romania ⁵ | 200 |
| | Hungary - Ukraine ⁶ | - |

Source: HEO

Explanation:

ATC values concern actual dates, should be interpreted for each of the relations separately and can not be added up.

- 1. It is allocated by the Central Allocation Office GmbH (hereinafter referred to as: CAO) in the name of MAVIR and APG. The Auction Office can be contacted at: http://www.central-ao.com/
- 2.It is allocated by the HEP-OPS in the name of MAVIR and HEP-OPS. The Auction Office can be contacted at: http://www.hep.hr/ops/en/services/ncapacities.aspx
- 3. It is allocated by the CAO in the name of MAVIR and APG. The Auction Office can be contacted at: http://www.central-ao.com/
- 4.It is allocated by the EMS in the name of MAVIR and EMS. The Auction Office can be contacted at: http://www.ems.rs/eng/stranice/tehnicke informacije/2011 arhiva mesecne-joint.htm#
- 5.It is allocated by the MAVIR in the name of MAVIR and TRANSELECTRICA. The Auction Office can be contacted at: https://kapalk1.mavir.hu/kapar/lt-publication.jsp?locale=hu HU
- 6. Not permitted by the Ukrainian partner due to cooperation limits

Regulation of the functions held by transmission system operator and distribution system operator companies

One transmission system operator (TSO) and six distribution system operator (DSO) operated in Hungary in 2011.

MAVIR Zrt., holding both a system operator license and a transmission network operator license (also owning the transmission network assets as the member of the MVM Group), was granted a single transmission system operator license on 1 January 2008. It was modified once times in the course of the year 2011, in which case for reasons of updating the annexes (Resolution No 779/2011) took place.

The Business Code set up pursuant to item a) Article 67 of the Electricity Act was amended once in 2011 by the Resolution of the Office dated 11 August 2011 with the number 687/2011 (Amendment No 4). This integrated into the Code the references made to the ENTSO-E which replaces the dissolved UCTE organisation. Upon request from MAVIR Zrt. a new Business Code was approved on 22 December 2011 by Resolution No 891/2011 of the Office with effect of a definite period of time up to 31 December 2013, necessary in order to ensure compliance with the relevant legal provisions and international requirements.



With the Resolution of the Office No 53/2011 the Rotational Shut-Down Order regulated by Government Decree No 285/2007 was approved on 20 January, 2011. In this Resolution the Office obliged MAVIR ZRt. to revise and submit for approval the shut-down order before 31 May 2012. Under this the identification of fundamental and essential consumers will be made within the scope of authority of the regionally competent Disaster Relief Directorates.

The contents of the Business Code was amended 6 times in 2011 (by Resolutions No 148/2011 of March 1, 2011, No 619/2011 of 29 June 2011, No 733/2011 of 6 September, 2011, No 798/2011 of 27 October, 2011, No 824/2011 of 15 November 2011 and No 822/2011 of 22 December, 2011). Key changes to the electricity system were as follows:

- start-up of the new schedule management system introduced with effect from 1 September, 2011, allowing for a more advanced and user friendly work flow and making the opening of the domestic intraday power market possible;
- an information technology system related to regulation reserves, also introduced on 1 September 2011;
- amendments making the introduction of the new balancing energy accounting system possible with effect from 1 January, 2012.

Each of the six distribution system operators operated in Hungary at the end of 2011 (E.ON Dél-dunántúli Áramhálózati Zrt., E.ON Észak-dunántúli Áramhálózati Zrt., E.ON Tiszántúli Áramhálózati Zrt., ELMŰ Hálózati Kft., ÉMÁSZ Hálózati Kft., EDF DÉMÁSZ Hálózati Elosztó Kft.) were predominantly owned by foreign investors through their respective parent companies E.ON Hungária Zrt., ELMŰ Nyrt., ÉMÁSZ Nyrt., and EDF DÉMÁSZ Zrt. The MVM Group held a share of 11.66% in ÉMÁSZ Nyrt and 15.67% in ELMŰ Nyrt.

Amendment of the Electricity Act, the Implementation Decree and the associated regulations in 2011 affected the distribution licensees, among others in the following ways:

- clarified the functions of distribution network license holders;
- regulated the establishment and operation of private power lines;
- provided for the development of a compliance programme by the distribution licensee in which measures and conditions ensuring discrimination free and independent operation are presented;
- technical and business conditions for connecting to the grid were changed.

Unbundling of operations

Transmission system operators and distribution network operators in the electricity sector are currently operated in accordance with the rules of unbundling laid down in the Electricity Act which was construed on the basis of Directive 2003/54/EC. Following the transposition of the new unbundling rules in the Third Energy Package of the European Union implementation of the provisions was commenced.

Conditions of unbundling in the Hungarian power sector

The Electricity Act and its implementation decree contain the mandatory requirements of unbundling natural monopolies (transmission system operation and distribution) from other competitive electricity operations (generation, trade, universal services) in Hungary.



The transmission system operator in 2006 was re-integrated into the publicly owned MVM Zrt. which carries out generation and trading operations through its subsidiaries, thus Hungary switched from the earlier model of Independent System Operator (ISO) to the transmission system operator model which is operated as an independent subsidiary within a vertically integrated business organisation. In the course of the transaction the transmission network was acquired by the transmission system operator. MVM Zrt. formed an organisation where the holding company coordinating subsidiaries is not engaged in any power operations subject to licensing. The single transmission system operator in Hungary, MAVIR Zrt. continued to conduct its activity in 2011 as a licensee which is an independent subsidiary controlled by MVM Zrt. Support functions centralised within MVM Zrt. earlier on (such as IT, finances, accounting, etc.) remained in this arrangement in 2011. MAVIR Zrt. auditor is identical with the auditor of the MVM Group. At the same time, in order to implement the provisions of the third energy package among others the termination of the Contract Agreements covering the outsourced activities was started, and MAVIR Zrt. employed an audit company other than that of the MVM Group. Internal services and other outsourcing activities providing the opportunity for crossfinancing were and will be monitored by the Office with special attention.

1.2.Competition

In 2011 more than 180 thousand customers purchased power on the free market. The ratio of universal service provision within the total retail market is about 37%, a remarkable decline compared to last year. Customers on the free market during the year 2011 increased by 66 thousand.

Table 2: Regulated (public utility and universal service provision) and free market consumption ratios within the overall consumption volumes (%)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------------------|------|------|------|------|------|------|------|
| Free market | 32.8 | 36.7 | 21.9 | 64.4 | 60.0 | 60.8 | 62.9 |
| Public utility/universal services | 67.2 | 63.3 | 78.1 | 35.6 | 40.0 | 39.2 | 37.1 |

Source: HEO

(Since the adoption of universal service provision in 2008, the reason why the consumption ratio was increased in 2009 was an amendment of the law in 2008 extending the range of eligible customers in 2009. The amendment adopted on 9 June 2008 increased the eligibility limit to 3x63 A and extended eligibility to publicly financed institutions, local governments, their budgetary institutions providing public functions, entities of the church providing public functions and institutions providing public functions and maintained by foundations.)

Net consumption grew by approximately 1.5% in 2011 compared to the previous year while domestic production fell back by most than 3.5%. Reduction of power generation can be explained by the drop of electric power sent out by small power plants, which decreased by 24% compared to 2010. Increased consumption and declining domestic production was offset by an increase in import balance of 1.5 TWh reaching 17% of gross domestic consumption.

Wholesale trade was still centred around MVM in 2011, as the market share owned by MVM (MVM Trade ZRt. and MVM Partner Energiakereskedelmi ZRt.) is very high (82%) in terms of generators' sales to traders, which resulted in a situation when the majority of the power continued to make its way to universal service providers and traders supplying to consumers.



Wholesale market

The Hungarian market reflected a low level of concentration in 2011 when assessed with conventional means. During the privatisation of the power generating sector between 1995 and 1997 a large part of the power stations owned by the vertically integrated state-owned entity (Magyar Villamos Művek Tröszt, Hungarian Electricity Works Trust) was acquired by strategic investors (Electrabel, RWE, AES). Joint shares of the three largest generator accounted for 64% of installed capacity in 2011 and 59% of output in 2011. The Herfindahl-Hirschman Index (HHI) measuring the concentration level of the market on a scale of 0 to 10 000 would indicate a value around 1400-1800, pending on the calculation method. This means a multiple player, slightly concentrated market under standard conditions.

The Parliament adopted Act No LXX of 2008 on certain issues of electricity on 10 November 2008 (hereinafter referred to as Long Term Agreements Act) which stipulated the termination of long term Power Purchase Agreements before 31 December 2008 and the methodology used to determine the government subsidies to be reimbursed. Pursuant to the authorisation conferred by the Act Government Decree No 149/2010. (IV.29.) defined the methodology to be used for the calculation of reimbursable government subsidies and the transition costs incurred due to the termination of the long term Power Purchase Agreements specifying in a breakdown by power plant the amount of government subsidies and transition costs. No reimbursable government subsidy was generated pursuant to the regulation and three of the plant was eligible to transition cost subsidies. The transition cost subsidies calculation methods and the quantitative values calculated using it have been endorsed by the European Commission in its decision dated on 27 April 2010 with the subject matter of "N 691/2009 government subsidy — Hungary". The Office brought a resolution on 7 May 2010 for the affected power plants stating "the determination of the amount of the reimbursable government subsidies provided under the Agreement".

The Office shall monitor the rate of return of the power plants concerned on an annual basis up to the end of the subsidy programme, i.e. up to the date when the original long term Power Purchase Agreement was to be terminated and shall prepare a consolidated account for each of the generators at the end of the programme. Provided the investments related to the long term power purchase agreements pay off or a transition cost is incurred which was offset without eligibility pursuant to the Long Term Agreements Act, — in other words, if the power generator retains power output without reason, requests the suspension of its power generation license or if its license was withdrawn for whatever reasons —, the Office shall establish an obligation of reimbursement of the government subsidies for the power generator. According to the Long Term Agreement Regulation the Office shall inform the National Development Ministry on the rate of return of the affected generators (Budapesti Power Plant, Dunamenti Power Plant, Pannon Thermal Power Plant) on an annual basis up to the end of the compensation period pursuant to the Long Term Agreements Decree before 30 April of the current year.

MVM concluded a new 5 to 8 years agreement with most of the power plants concerned. Under these new contracts MVM Trade (hereinafter referred to as: MVM) in 2011 disposed of nearly half of the total available capacities owned by domestic power plants, which resulted practically that some 65% of all net power generated by domestic generators was available only through a single market operator, MVM.



Table 3: Market share of domestic power generators (groups) in terms of installed capacities (2011) and actual production (2011) ¹

| | Installed capacity (MW) | Market share (capacity) ¹² | Production (TWh) | Market share (production) ¹³ |
|---|----------------------------|--|---------------------|--|
| MVM ² | 2766 | 29% | 15.6 | 40% |
| GDF Suez ³ | 2143 | 22% | 1.5 | 4% |
| AES ⁴ | 1237 | 13% | 1.2 | 3% |
| RWE ⁵ | 950 | 10% | 5.8 | 15% |
| E.ON ⁶ | 528 | 6% | 1.3 | 3% |
| EdF ⁷ | 410 | 4% | 1.2 | 3% |
| Alpiq ⁸ | 403 | 4% | 1.8 | 5% |
| Other domestic ⁹ | 1165 | 12% | 4.1 | 11% |
| Total domestic | 9602 | 100% | 32.6 | 83% |
| Net import | | | 6.6 | 17% |
| Gross consumption | | | 39.2 | 100% |
| | | | | |
| 3 largest power plant companies ¹⁰ | 6 146 | 64% | 23.2 | 59% |
| HHI-index ¹¹ | | 1658 | | 1862 |

Source: HEO

Explanation:

- 1. Power companies in this table are understood as the investor groups owning the power stations. For reasons of simplicity power generating units active on the system level services market were not tried to be screened out (such as Dunamenti F, or AES Tisza blocks)
- 2. MVM: Paks Atomerőmű Zrt., Vértesi Erőmű Zrt., MVM GTER Zrt. BVMT Bakonyi Villamos Művek Termelő Zrt.
- 3. GDF Suez: Dunamenti Erőmű Zrt.
- 4. AES: AES-Tisza Erőmű Kft, AES Borsod Energetikai Kft.
- 5. RWE: Mátrai Erőmű Zrt.
- 6. E.ON: E.ON Erőművek Kft., Debreceni Kombinált Ciklusú Erőmű Kft.
- 7. EdF: Budapesti Erőmű Zrt.
- 8. Atel (from 1 February 2010 Alpiq): Csepeli Áramtermelő Kft.
- 9. Consolidated share of power plant investors below a market share of 5%
- The three largest companies are different when installed capacity (MVM, GDF Suez, AES) and output (MVM, RWE, Alpiq) are concerned.
- 11. Concentration indices are higher when calculated with available or actually used capacities and lower when import capacities are included.
- 12. Based on gross installed capacity (year 2011 figures).
- 13. Net (sent out) output of the power company concerned divided by gross national consumption (year 2011 figures).

Table 4: Sales patterns of national power plant companies

| | | Electricity sales (TWh) | | | | | | | |
|----------------------|-------------------------------|-------------------------|------|------|------|------|-------|--|--|
| | 2006 2007 2008 2009 2010 2011 | | | | | | | | |
| MVM-HTM ¹ | 23.6 | 26.5 | 26.8 | 19.9 | 19.8 | 21.1 | 64.7% | | |
| Trader ² | 3.2 | 3.6 | 3.2 | 5.0 | 6.0 | 6.5 | 19.9% | | |
| FIO ³ | 4.5 | 5.0 | 6.5 | 7.4 | 7.6 | 4.0 | 12.3% | | |
| Other | 2.0 | 1.9 | 0.2 | 0.3 | 0.4 | 1 | 3.1% | | |

Source: HEO

Explanation:

- Electricity purchase by MVM Rt, MVM Zrt., and MVM Trade Zrt. (public utility wholesale trader up to 2007) through LTA, from 2009 on through 5-8 years term power purchase agreements. The public utility wholesale trading license was discontinued in 2008, MVM Trade Zrt. holds only trading license from this time on. The table does not contain the procurement of MVM Rt, MVM Zrt, and MVM Trade Zrt. outside the LTA scheme (up to 2007 such power included sales of certain large power plants under the feed-in obligation scheme).
- 2. Sales of large generators to traders include procurement of MVM Partner Zrt. from power plants.
- 3. Buyers of the feed-in obligation sales were mainly public utility service providers and to a lesser extent the public utility wholesale trader up to 2007. Since 2008 only MAVIR Zrt. buys them.



The structure of the wholesale power market differs in respect of sales to universal service providers and traders. More than three quarter of all purchases by universal service providers took place through a single sales channel in 2010. In other words, MVM dominance remained unchallenged (72%) in the service segment covered by regulated tariffs (even though its size was a fragment only) (see Table 4). The remaining procurements of universal service providers were mainly accounted for by the power produced by small power plants in co-generation facilities or from renewables and sold to MAVIR at regulated prices under the feed-in obligation scheme, and the ratio of the balancing power of the FIO balance group allocated to the service providers affected. Although exclusion of co-generators from the FIO in 2011 the volume of power covered by FIO was reduced substantially, due to a slight shrinking of universal services (7% reduction from 2010) MVM and other sources did not increase substantially.

Table 5: Procurement patterns of public utility and universal service providers

| | | Power purchase ¹ (TWh) | | | | | | | | |
|------------------|-------------------------------|-----------------------------------|------|------|------|------|-------|--|--|--|
| | 2006 2007 2008 2009 2010 2011 | | | | | | | | | |
| MVM ² | 17.7 | 22.9 | 10.5 | 10.4 | 10.1 | 10.8 | 81.4% | | | |
| FIO | 3.7 | 4.4 | 2.3 | 3.1 | 3.3 | 1.7 | 12.6% | | | |
| Other | 0.9 | 0.8 | 0.0 | 0.5 | 0.7 | 0.8 | 6% | | | |

Source: HEO

Explanation:

- 1. The table only contains power purchased to meet customer demand under public utility or universal services. It does not contain purchases of public utility service providers for the purposes of off-setting distribution network losses (satisfied by MVM Rt./MVM Zrt./MVM Trade Zrt. until 2007).
- It does not contain purchases of public utility service providers for the purposes of off-setting distribution network losses.

Procurement of free market traders – as opposed to public utility service providers – was not restricted by the law. Therefore, the market is more heterogeneous in this segment and MVM dominance was less striking. With the increase of free market consumption MVM free market sales grew quickly up to 2008, and thus it played a gradually more important role in servicing traders delivering to eligible customers. Primary procurements of traders in 2011 (that is, disregarding trading between traders) were fed by four basic sources (Table 6). These included imports, sales by MVM from booked power generating capacities, free capacities of domestic power plants not booked by MVM and, since 2008, reselling of the power purchased by MAVIR under the feed-in obligation scheme and the power originating from the balancing of the FIO balance group. Power from primary sources (once gone through between traders' transactions) is mainly sold on the domestic retail market and a lesser amount is exported.

Table 6: Primary procurement patterns of traders 1

| | | Power purchase (TWh) | | | | | | | |
|---------------------|------|-------------------------------|------|------|------|------|-------|--|--|
| | 2006 | 2006 2007 2008 2009 2010 2011 | | | | | | | |
| Import ² | 7.7 | 9.9 | 11.9 | 15.0 | 14.0 | 21.8 | 52.2% | | |
| MVM | 6.5 | 5.1 | 14.3 | 9.2 | 10.3 | 10.6 | 25.4% | | |
| Domestic generators | 3.2 | 3.6 | 3.2 | 5.0 | 6.0 | 6.5 | 15.6% | | |
| Other ³ | 0.2 | 0.2 | 4.5 | 6.3 | 5.0 | 2.9 | 6.9% | | |

Source: HEO

Explanation:

1. Primary procurement of traders includes electricity purchased directly from domestic power plants or imports, or from MVM as the former public utility wholesale trader. The table does not contain the significant transactions volumes



- between traders. Trader procurements exclude procurements of MVM Trade Zrt. in order to allow comparison between the periods before and after 1 January 2008.
- 2. Trader imports exclude power purchased and sold abroad.
- 3. Includes mainly power procured from the transmission system operator until 2007, from 2008 it also includes power purchased from the transmission system operator under the feed-in obligation scheme.

Though the organised power market (i.e. power exchange) was established in Hungary, power trading still took place in 2011 basically under bilateral power contracts. For reasons of comparison, the trading system of HUPX Hungarian Power Exchange Company Limited by Shares hosted in 2011 an amount of 3.78 TWh spot and 1.1 TWh forward products, while intratraders turnover according to the data received by traders reached 136 TWh in 2011. Electric power sales in 2011 are illustrated on Figure 1 (transactions concerning system level services are not included in the figure).

Domestic power plants sold most of the power generated under the 5 to 8 years long agreements concluded with the former public utility wholesale trader MVM (1.). Nearly 12% of their production (co-generated and renewable power) was taken over from them by MAVIR at the feed-in tariff rate specified in the Decree (9/a.). Some 20% of the power generated was sold directly on the free market under short term (mostly annual) contracts (5.). Contracts of MVM with power plants in place typically have a term of 5 to 8 years. About half of the power purchased from the national power plants was sold by MVM under framework contracts, the so called EPPA-s to the universal service providers supplying power to eligible customers (2., 3.). Thirty-seven per cent of all domestic power consumptions were processed through the officially regulated sales channel of universal services in 2011.

Approximately half of the power available at the generators was sold by MVM to traders either under bilateral contracts or at public capacity auctions (4.). Although traders based their operations primarily on import sources in the first year of market opening, selling power plant capacities booked by MVM has become the most important procurement source – once the initial surplus capacities in import vanished – within a few years for free market traders beside the import (10/b.). Primary purchases of traders were mostly subjected to secondary trading in the trader sector (6.), before sold to users (7), or to the export markets (8.). A special sales category is represented by power generated from renewable sources or through co-generation (9/a., b.). This kind of electric power has to be purchased from generators by the transmission system operator (MAVIR) under the FIO scheme (at a price specified in the respective legislation and in volumes and during a period defined by the Office, in the case of cogeneration only up to 30 June 2011) (9/a.). Electricity sold under the FIO scheme and power originated from FIO balancing shall be purchased by traders and universal service providers from MAVIR proportionally to their respective shares in customer sales (9/b., 9/c.).



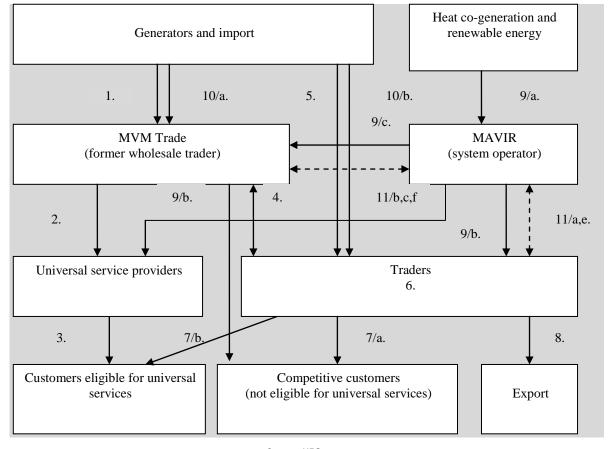


Figure 1: Transactions on the power market

Source: HEO

Market events and regulatory changes

In the year 2011 new and refurbished large power plants and power generating blocks started commercial operation. E.ON Gönyű Power Plant has a gross installed electric capacity of 433 MW, the combined cycle facility is able to achieve a net electric efficiency rate of 59%. One block in Dunamenti Power Plant was converted into a combined cycle unit thus increasing the electric output to 407 MW and net efficiency to 57%. A new open cycle gas fired power plant also started operation in 2011, namely the Ajka Gas Turbine Plant of BVMT Bakonyi Villamos Művek Termelő Zrt. which has an electric output of 2*58 MW and 40% net electric efficiency rate.

The available capacity of the electricity system was adversely influenced by the outage of two plants owned by AES Borsod Energetikai Kft., the Borsodi Power Plant and the Tiszapalkonyai Thermal Power Plant in the second half of the year 2011.

Important regulatory changes occurred on 1 July 2011, from which date co-generation producers were excluded from the FIO scheme. In order to provide assistance to co-generators to sell electricity on the market following 30 June 2011 a "-co-generation balance group" was set up, under which the transmission system operator MAVIR Zrt. sold electric power offered by the power plants joining the balance group on the HUPX, then the sales revenues (after deducting the costs of maintaining the balance group) was forwarded to the producer.



Key features of the retail market

The essential feature of the retail market since market opening in 2003 is the double arrangement: the separation of the regulated and free tariff segments. The relative weight of the two segments in relation to each other was shifted dramatically from 2008. Regulated public utility services available to all customers earlier on were replaced by universal services, available to a much more limited range of eligible customers.

Customers eligible to universal services are still predominantly supplied by former public utility service providers, now holding universal service provider licenses. Universal service providers are bound by power selling and contracting obligations to eligible customers.

Non-eligible customers either purchased power from the free market earlier on (mainly large customers) or were exposed to the free market only upon termination of the public utility scheme (mainly medium and small customers). Small customers exposed to the free market upon termination of the public utility services mostly remained with their former service provider, who supplied energy to these free market customers holding their respective trading licenses.

Companies holding universal service provider and trading licenses –E.ON Energiaszolgáltató Kft., Budapesti Elektromos Művek (ELMŰ) Nyrt., Észak-magyarországi Áramszolgáltató (ÉMÁSZ) Nyrt. and EDF Dél-magyarországi Áramszolgáltató (EDF DÉMÁSZ) Zrt. – are also interested in the operation of the distribution networks through their subsidiaries or affiliates. Universal service providers are owned by three multinationals – E.ON, RWE, EdF –, which provided power to users in the course of the year through some other trading companies as well, beside those referred to above. Total share of these groups of companies on the entire domestic retail market was very significant even seven years after full liberalisation of the market in 2003: 77%, just like in the previous year.

In spite of strong market concentration, the retail market was entered by traders undertaking the supply of consumers upon market liberalisation in addition to their wholesale trading operations. They included multinational companies controlling several subsidiaries in the region and smaller domestic traders alike. Thirty-three traders which had no proprietary relations to domestic distribution system operators were active on the retail market in 2011. Their respective share was – like last year – approximately 22%, but deducting the traders associated with the MVM Group, this value drops to 17%. Some of the traders were organised only to supply a certain range of customers, usually a group of companies.

In the year of 2011, the market share of the three large multinational groups (E.ON, EdF, RWE companies) stagnated compared to 2010. Their market position continued to be very strong as in addition to universal service provision, 80% of the hundred-eighty thousand customers taking power in ways other than universal services (primarily small and medium consumers not entitled to use universal services) was also supplied with power by the traders of these three groups of companies. (Beside them only MVM Partner Zrt., Hungarian Telekom Telecommunication Plc. and Klepierre Trading Energy Trading and Services Ltd. could boast with more than a thousand consumers.)

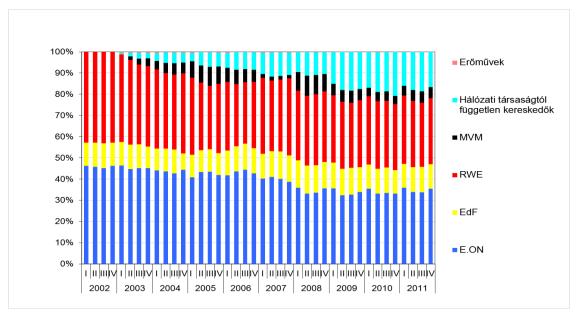
When market shares of service providers and traders is considered by the annual consumption of consumers and not by their share number supplied, the market share is much less



predominant: former public utility service providers and their affiliated companies administered 64% of all free market consumption in 2011, similarly to that in 2010.

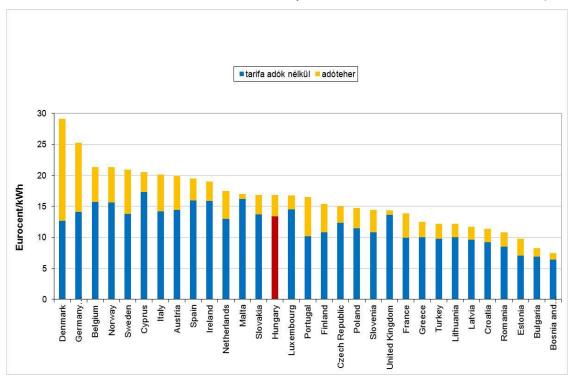
In 2011, domestic end user prices tended to dwell in the middle range in European comparison for both residential customers and industrial users with a consumption rate between 20 and 70 GWh annually (Figures 3 and 4).

Figure 2. Changes in shares of the respective investment groups on the retail market (2002 - 2011)



Source: HEO

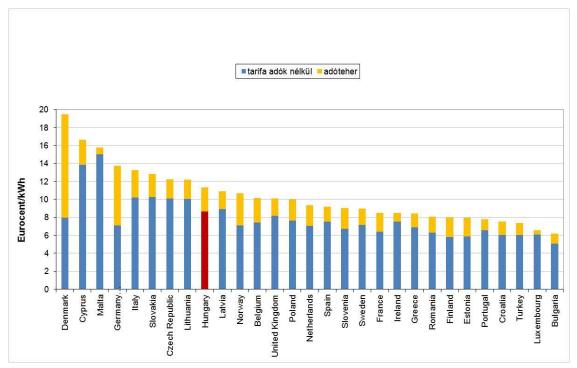
Figure 3: European outlook of electricity tariff rates for household customers (excluding taxes, 2 500 – 5 000 kWh annual consumption; 2011 first semi-annum, eurocent/kWh)



Source: EUROSTAT



Figure 4: European outlook of electricity tariff rates for non-household customers (20 – 70 GWh annual consumption; 2011 first semi-annum, eurocent/kWh)



Source: EUROSTAT



Measures to tackle abuse of market dominance

Official ex-post (competition supervision) functions laid down in Act No LVII of 1996 on the prohibition of unfair trading practices and unfair competition (hereinafter referred to as the Competition Act) concerning the subsequent investigation and sanctioning the abuse of undue economic dominance are performed by the Hungarian Competition Authority (hereinafter referred to as: HCA). However, the jurisdiction of ex-ante intervention stipulated in the Electricity Act intended to prevent abuse of significant market power is exercised by the Office.

The Electricity Act adopted special rules in order to avoid abuse of market dominance: the regulatory practices applicable for licensees with substantial market dominance were introduced which is a new tool in the regulation of the electricity sector but is well known in the electric telecommunication industry. The Act and the associated implementation decree contain detailed provisions for the purposes of identification and management of licensees with substantial market power.

Under this new regulation the Office as a supervisory agency may impose additional special obligations (such as power sales under public capacity auctions, cost based pricing, preparation of sample bids, etc.) to any licensee which is deemed to possess significant market power in a market analysis – whether it is a player on the wholesale or retail market. Imposing obligations serves the prevention of abuse of market dominance and the establishment of a more efficient competition. The Office shall identify the licensees possessing significant market power based on market analyses in collaboration with the HCA and orders special additional obligations adjusted to their respective market positions.

In its resolution No 747/2011 of 2011 the Office identified MVM Trade ZRt. as a license holder possessing significant market power and provided for a sales obligation. MVM Trade ZRt. shall be required to sell as much electricity on the organised market or on auctions that its share in the wholesale business would be reduced below 40%. With the mandatory sell off of power the Office intended to ensure market liquidation and the principle of equal opportunities for power supply, which are important condition precedents for an effective competitive retail trading scheme, since predictable power acquisitions allow more traders to participate in the power supply business.

1.3. Security of supply

Production

The following major ongoing or planned development projects were known for power plants in 2011:

- BVMT Bakonyi Villamos Művek Termelő Zrt. constructed an open cycle gas turbine power plant at Ajka (116 MW). The Office granted commercial operational license in April 2011.
- The Office amended the operational license for Dunamenti Erőmű Zrt., thus commercial operation of the 407.7 MW G3 block become possible.
- The Gönyű Power Plant of E.ON Erőművek Kft. (433 MW) was granted production license in October 2011.



- The Borsod Thermal Power Plant and Tiszapalkonya Thermal Power Plant of AES Borsodi Energetikai Kft. hold effective licenses for suspending electric power production operations. The company is currently in progress of liquidation.
- Based on the licenses issued in 2006 for wind power, the installed capacity of wind generators is 329.7 MW at the end of the year 2011.
- For the purposes of supply security it is reassuring that for the most part of the period supply reserves larger than the 1350 MW expected by the transmission system operator are available.

Winter preparations

The Office evaluated the preparedness of licensees involved in power supply and the expected security of supply by taking into account the following considerations:

- a) implementation of scheduled annual maintenances and developments (budgeted versus actual figures),
- b) securing fuel supply of power plants for winter operation by type of fuel,
- c) availability of stockpiles laid down in Decree No 44/2002. (XII. 28.) GKM,
- d) availability of power capacities, power balance and reserve capacities
- e) availability of cross border capacities.

Winter preparations for 2011 were accomplished by the power plants:

- annual scheduled maintenance was completed by 15 October 2011.
- fuel supplies were secured by the appropriate contracts.

Power plants required to stockpile fuel under the provisions of a decree had such stockpiles.

In the winter period of 2011-2012 – based on the preliminary maintenance plans submitted by power plants – the output balance of the Hungarian electricity system shall apply larger than required reserve levels.

Lőrinci GT, Block G2 of Dunamenti and the black start unit of Gönyű Power Plant which have a so-called black start capacity were all ready to service throughout the period under investigation. MAVIR dispatching officers tested the frequency independent load limiting system (FKA) on a weekly basis which was available and ready to use throughout the period.

Shut down of natural gas supply to gas fired power plants may be necessary in the cold winter season, therefore cooperation of the electric power transmission system operator dispatcher and the natural gas transmission system dispatcher MOL Földgázszállító Zrt. is still needed.

Development of the transmission network

It is the task of the transmission system operator MAVIR Zrt. to ensure long term, safe availability and to maintain a European level security of electric power supply on the national grid. The transmission network constitutes an integral part of the Hungarian electricity system meeting national and international expectations. The development, retrofit, maintenance and operation activities carried out on it include the following:

Extension of the Szolnok 220/120 kV to 400 kV and the split up of the Albertirsa –
 Békéscsaba 400 kV power line ensuring the connections thereto with connection



sections Albertirsa-Szolnok, and Szolnok-Békéscsaba was completed and put into operation.

 Missing sections of the second system (System II) on the Martonvásár–Bicske 400 kV long distance transmission line were completed and geared up thus the line can now be operated in both systems.

1.4. Price preparation, pricing

Electric power as a product under universal service provision

With the elimination of the public utility electric power supply services in 2008 and the launch of the so-called 'universal services' a new era was started. Distinct tariff categories emerged for household and non household retail customers such as electric power as a product, network use (system usage) as a service ensuring that this product is delivered to customers and taxes and other tax type items.

Unlike natural gas, the universal tariff rate in the case of electric power refers only to the product and related margins in its contents, not containing the system charges and various taxes. Retail customers – and from 2009 public institutions –, if they did not enter the free market, could continue to draw electricity in 2011 under the universal service provision at the regulated tariff rate.

Since 1 February 2011 Decree No 4/2011. (I. 31.) NFM provides for the pricing of universal services in electric power supply. The Decree established the universal service rates applicable after 1 February 2011, the recognised national average procurement price of market based electric power purchase for the period between 1 February 2011 and 31 December, and – separately for each of the universal service providers – the recognised margins above the recognised power purchase prices. Determination of the latter was based on the findings of the cost investigation procedure conducted by the Office throughout the year 2010. The rate of recognised margin established per service provider from 1 February 2011 ranged between 1.79 HUF/kWh and 2.02 HUF/kWh, showing an average of 1.94 HUF/kWh. New universal tariff rates established by the Decree – in line with the 7.5% increase of the recognised national average prices for market based electric power procurement – were higher by 6.8 % in average (within this, differently per service provider between 5.8 and 9.8 %) than the universal tariff rates in effect from 1 July 2010.

As the system usage fees for small consumers (including household customers) supplied under the universal service scheme practically did not change in January 2011 as a whole and other payables (financial means, VAT) also stayed at the 2010 level, "full" end user prices containing all pricing component grew only due to the increase in the universal service tariffs with an average rate of 4 % (ranging between 3.4 to 5.7 % per service provider).

Up to 30 June 2011 district heat producers were granted higher than market prices for cogenerated electricity taken under the so-called FIO system. Simultaneously with the exclusion of the power thus generated from the FIO scheme a new 'financial means' was introduced – featured separately on the electricity bill, not part of the VAT base – which serves as the basis for district heat subsidies in an amount of 1.2 HUF/kWh. The aforementioned arrangements mean also that from 1 July 2011 on universal service providers carry a lot less burden from the higher rate FIO scheme thus the reduction of the universal service tariff rates payable for electricity as a product uniformly by 0.96 (including VAT: 1.2) HUF/kWh (an average for each of the service providers between 4.2 and 4.5 %) was justified.



The Office prepared its proposal for the amendment of the Decree concerning universal tariff rates applicable from January 2012 based on the assumption that the estimated annual amount and average price of the power purchased by universal service providers under the FIO scheme in 2012, the annual recognised average procurement price of power purchased outside of the FIO scheme in 2012, and the annual average pricing margin (different for each service provider) specified in the legal provisions are realised.

Specific margins for universal service providers for 2012 shall be the values calculated with the partial (inflation-based) correction of the costs recognised on the basis of the 2011 cost revision, different for each of the service providers (between 1.711 and 1.928 HUF/kWh).

The universal tariff rates in effect for electric power as a product since 1 January 2012 shall be lower in a different rate for each of the service providers (0.4-6.6 %) than those in effect from 1 July 2011. Taking into account the increases in system usage fees and V.A.T. rates (from 25% to 27%) the end user prices payable by household consumers under the universal services shall be increased by an average of 2.7% in average, in different rates per service provider (0.6-4.2 %).

The Office is required to revise the trading margin of universal electric power service providers established in the Decree before 31 March of the year following the current year. Based on the revision carried out in March 2012 the Office found that the annual average margin calculated according to the pricing requirements and based on the 2011 actual figures exceeded the rate laid down in the legal provisions for each of the four service providers.

Table 7: Revision findings of the 2011 margin of universal service providers

| Universal service provider | Extra margin of the service provider (excluding V.A.T.), HUF/kWh | Extra margin of the service provider, the amount due to consumers (excl. V.A.T.), HUF million | Amount due to a consumer with average consumption (excl. V.A.T.) (HUF/month) |
|---------------------------------|---|---|--|
| ÉMÁSZ Nyrt. | 1.06 | 1 664 | app. 215 |
| E.ON Energiaszolgáltató Kft. | 0.71 | 4 042 | арр. 140 |
| ELMŰ Nyrt. | 0.55 | 2 155 | арр. 110 |
| EDF DÉMÁSZ Zrt. | 0.06 | 105 | арр. 10 |

Source: HEO

The extra margin was mainly due to the differences between the FIO related estimates of amounts and margins and the actual results, reflecting the uncertainties of the system in 2011 referred to above, in particular with regard to the radically changing legislative environment of since the middle of the year. Resolutions No 172-175/2012 adopted by the Office on the extra margin of certain service providers, the amounts to be reimbursed and the accounting method of reimbursements provide mainly for the incorporation of the above into the universal service tariff rates in 2012. Actual money transactions or automatic price changes would not happen as a result, but the permitted margin level according to the 2012 pricing shall be lower by the HUF/kWh values included in the table above than the level otherwise applicable in 2012 for the service provider concerned for. Extra margins were already partially considered by the Office in its proposal made in November 2011 for the 2012 universal service tariff rates on the basis of the preliminary data.



System charges

The fourth four years (2009 to 2012) pricing cycle of the electricity system started on 1 January 2009. Actual regulated prices for system usage (transmission system operation, system level services and distribution) up to the end of 2011 were determined by Decree No 119/2007 (XII. 29.) GKM on the system charges of the electricity system. Taking into consideration the diverse European practices, the domestic regulation provided for system charges to be paid directly by parties withdrawing power from the electricity system only, not those feeding onto it (i.e. generators).

The Office published the methodology guidelines concerning the pricing mechanism of the pricing cycle 2009 to 2012 pursuant to paragraph (5) Article 142 of the Electricity Act on 31 October 2008. This was then amended by the Office acting within its own scope of authority on 22 October 2009 in response to the recession (in excess of 5%) which occurred in the electric power sector as a consequence of the economic crisis in 2009 and to a few practical corrections which proved to be unavoidable in the meantime; then it was repeatedly modified the Methodology guidelines referred to above on 19 November 2010 to adjust the recognised justified costs of distribution network losses to the changed market conditions. In 2011 – as opposed to the experiences of former years – no further amendment was necessary to the methodology guidelines.

System charges in effect from 1 January 2011 were published by Decree No 32/2010. (XII. 23.) NFM on the amendment of Decree No 119/2007. (XII. 29.) GKM on the electric power system charges.

The sum of the transmission system operator charges and the system level service charges increased by 24.4% on 1 January 2011 (compared to the value of 1.535 HUF/kWh in 2010). This increase was the result of basically three main factors:

- revenues of MAVIR Zrt. from capacity auctions fell substantially short in 2010 from that in 2009 (having a price increasing impact);
- the so-called FIO fund remains related to the former feed-in-obligation scheme ran put in 2010, thus it could not exert its price mitigation role (price increasing impact);
- the correction made to the budgeted figures taken into account in 2009 year tariffs on the basis of the actual figures (all in all, a price mitigation effect).

Distribution fees were reduced with an average of 2.9% on 1 January 2011 compared to 2010, deviating as a function of voltage levels between 0.1% and 6%. The reduction of charges was made possible by the reduced recognised procurement costs of the network losses on the electricity network.

The legal environment changes substantially during 2011. Pursuant to paragraph (2) Article 140 of the Electricity Act taking effect on 1 July 2011 "charges payable for the use of the electricity system shall be determined by the Office pursuant to this Act and within the framework of the ministerial decree published under the authorisation provided by it."

The Office prepared the new Decree laying down the framework rules for the determination and regulation of system charges and the general rules of fee application [earlier on: published under No 64/2011. (XI. 30.) NFM], and then created (and published on its website) its Resolution No 858/2011 on the determination of system charges of the electricity system



effective from 1 January 2012 by taking into account it and the effective Methodology guidelines on the pricing cycle.

The sum of the transmission system operator charges and the system level service charges increased by 16.3% on 1 January 2011 (compared to the value of 1.909 HUF/kWh in 2010) to 2.221 HUF/kWh. This increase was the result of basically four main factors:

- inflation index predicted by the Hungarian National Bank for the year 2012 (almost 3 % price increasing effect);
- lack of price reducing items imputed in the 2011 annual tariffs all in all ranging up to an amount of HUF 5.5 billion (transfer back of MVM Trade provisions and the remainder of transition costs) (price increasing impact of 13.8 %);
- transmission network loss and the increased costs of system level services from 2011 to 2012 (slight price increasing effect);
- taking into account of the corrections made to budgeted figures in 2010 tariffs based on actual figures (slight price decreasing effect, which more or less balances the slight price increasing effect in the previous indent).

Distribution fees were increased by an average of 6.5% from 2011 to 2012 with a different extent ranging from 4.8 % and 7 % as a function of voltage level. Increased were caused to a lesser extent by the indexing related to the expected inflation rate for fixed costs and to a larger extent by the growing procurement costs of recognised distribution network losses of electric power.

Table 8: Consolidated trends in electricity prices for system usage (excluding V.A.T. ¹) from 2010 a) Charges for transmission system dispatching and system level services (HUF/kWh) and their changes

| For customers (users) connecting | | Charges | Changes compared to previous year | | | |
|--|---------|----------------|-----------------------------------|---------|---------|--|
| to the distribution network | 2010 | 2010 2011 2012 | | 2011 | 2012 | |
| | January | January | January | January | January | |
| Transmission system dispatching charge | 0.823 | 1.272 | 1.519 | 54.6% | 19.4% | |
| System level services charges | 0.712 | 0.637 | 0.702 | -10.5% | 10.2% | |
| Total | 1.535 | 1.909 | 2.221 | 24.4% | 16.3% | |

b) Average distribution charges ² and their average changes³

| | | Charges | Changes compared to previous year | | |
|---|---------|----------------|-----------------------------------|---------|---------|
| | 2010 | 2010 2011 2012 | | | 2012 |
| | January | January | January | January | January |
| High voltage connection | 0.672 | 0.651 | 0.691 | -3.1% | 6.1% |
| Connection to high/medium voltage transformer | 2.176 | 2.174 | 2.278 | -0.1% | 4.8% |
| Medium voltage connection | 4.158 | 4.049 | 4.312 | -2.6% | 6.5% |
| Connection to medium/low voltage transformer | 6.141 | 5.909 | 6.315 | -3.9% | 6.9% |
| Low voltage connection I ⁴ | 13.889 | 13.520 | 14.372 | -2.7% | 6.3% |
| Low voltage connection II (controlled) | 6.134 | 5.764 | 6.214 | -6.0% | 7.8% |



| Low voltage connection III ⁵ | 12.566 | 12.274 | 13.088 | -2.3% | 6.6% |
|---|--------|--------|--------|-------|------|
| Average | 7.967 | 7.739 | 8.239 | -2.9% | 6.5% |

c) Consolidated electric power system charges from 2010

| | | Cha | rges (HUF/k | Wh) | Average | changes |
|---|---|---------|-------------|---------|---------|---------|
| | | 2009 | 2010 | 2011 | 2010 | 2011 |
| | | January | January | January | January | January |
| Connection to the transmission network ⁴ | | 1.00 | 1.54 | 1.91 | 53.5% | 24.4% |
| | High voltage connection | 2.02 | 2.21 | 2.56 | 9.4% | 16.0% |
| | Connection to high/medium voltage transformer | 3.65 | 3.71 | 4.08 | 1.7% | 10.0% |
| | Medium voltage connection | 5.23 | 5.69 | 5.96 | 8.9% | 4.6% |
| Connection to distribution networks | Connection to medium/low voltage transformer | 7.34 | 7.68 | 7.82 | 4.7% | 1.7% |
| (average) ^{2,3,5} | Low voltage connection (profile based) | 14.65 | 15.42 | 15.43 | 4.9% | 0.0% |
| | Low voltage connection (controlled) | 7.32 | 7.67 | 7.67 | 5.3% | 0.1% |
| | Low voltage connection (non-profile based) | 12.71 | 14.10 | 14.18 | 4.7% | 0.6% |
| | Average | 9.00 | 9.50 | 9.65 | 2.9% | 1.5% |

Notes:

- 1. 25% until 31 December 2011 and 27% from 1 January 2011.
- 2. Excluding the charges for balancing distribution schedules, calculated with average volumes for each of the categories.
- 3. Calculated with identical weighing factors.
- 4. Sum of transmission system operator and system level service charges.
- 5. Sum of transmission system operator and system level service charges plus the average value of distribution service fees.

The case of power covered by feed-in obligation

Producers sold 4012 GWh electric power under the FIO scheme in 2011 (the ratio of renewables: 1841, waste: 13, co-generated: 2154, feed-in-obligation for the fossil part of mixed fired plants: 4 GWh), as opposed to 7177 GWh in 2010. The reason for this substantial reduction was mainly that due to the fact that feed-in obligation of power co-generated with heat was terminated with effect from July 1 2011 pursuant to paragraph (5f) of Article 171 of the Electricity Act taking effect on 30 March.

Changes to the tariff rates of power covered by the feed-in obligation scheme on 1 January 2011 reflected substantial deviations (-11.2 % to +4.9%). Transfer prices of gas fired cogeneration from before 2008 were reduced significantly as a cumulative effect of

- the relatively moderate increase of gas tariff rates (5.5%),
- inflation forecasts of the Hungarian National Bank for 2011 (4.0%), and



• the 15% price reduction applied pursuant to paragraph (5c) of Article 171 in the Electricity Act as amended by Articles 6 to 9 of Act No CLXXXI of 2010.

In the case of co-generation plants after 2008, waste and renewables the same rates were increased according to the different recognition of the inflation rate.

In the case of wind power which received great attention due to the intensive interest and controllability of the system a total of 325 MW such capacity operated in the feed-in obligation scheme at the end of 2011 as opposed to 292 at the end of 2010.

Power covered by the FIO scheme is allocated by MAVIR Zrt. – in line with the provisions laid down in the respective law – to FIO receivers (primarily power traders, universal service providers), who pass this on to their respective customers. Finally it is the consumers who pay for the subsidies provided by the producers under the feed-in obligation scheme. In relation to this approximately an amount of HUF 41 billion can be quantified for the year of 2011 (calculated up to 30 June for co-generators). Of this, HUF 23 billion is covered by power obtained from renewables and waste for the whole year (in 2010: HUF 29 billion), and HUF 18 billion accounted for the power co-generated with heat in the first half year. The substantial decline of the amount for supporting renewables basically can be accounted for the significant reduction (1480 to 912 GWh) of biomass. At the same time, wind power sales grew by 20% from 508 to 601 GWh in accordance with the growth of capacities put into operation.

Evaluation of price change requests

Pursuant to the amendment of the Electricity Act, the right to set universal service providers' tariff rates was transferred into the powers of the Minister with effect from July 2010 and the Office is required to make a proposal for pricing to the Minister. Preparations of the tariff rates and pricing regulation of universal services to take effect from 2012 were completed in the second half of 2011 in the spirit of the new provision.

Pricing incentive of distribution service quality

Under the regulated distribution service quality incentive system laid down in the Methodology guidelines published by the Office, the development trends of the service quality parameters have an effect on the inflation correction factor applied to the annual price corrections. Distribution service providers achieving better service quality under the nationally uniform distribution charges will be granted extra income through the reimbursement percentage value correction of the revenue balancing mechanism adopted in August 2006, while those showing poorer performance may receive less funds then otherwise justified. After the official data became available and processed, the Office conducted the evaluation of the 2010 service quality parameters by May 2011. When the official regulated prices for 2012 were set, the inflation correction factor which is part of the indexing mechanism of recognised costs was taken into account so that it could reflect the cumulative trends of the parameters referred to above for each of the distributors separately. In line with this the Office imputed with a lower value for the recognised justified costs for the distributor company E.ON Észak-dunántúli Áramhálózati Zrt. (ÉDÁSZ) ("penalty"), while the other distributors were granted a higher level ("benefit").

Upon the initiative of the Office, the regulation sanctioning impaired distribution service quality parameters was again included in the Decree on the determination of establishing system usage charges [Decree No 119/2007 (XII. 29.) GKM and later on Decree No 64/2011



(XI.30.) NFM laying down the framework rules for the determination and regulation of system charges and the general rules of fee application] as a second pricing element of the service quality incentive system in the pricing cycle started in 2009. This regulation provides for the distribution service provider to provide a specified amount of discount on the distribution fees charged from users for the next second half year, if the impairment of any service quality indicator was established by the Office in a resolution. Under this arrangement E.ON Északdunántúli Áramhálózati Zrt. (ÉDÁSZ) and E.ON Tiszántúli Áramhálózati Zrt. (TITÁSZ) granted a 1% discount (except – in line with the Decree – the fees charged for distributor losses) to customers in the second half year of 2011.

1.5. Public service obligation and customer protection

Approval of Codes

License holders submitted ten applications for the amendment of their respective Business Codes in 2011. The purpose of such amendments was invariably to adapt the Codes to the currently effective legal provisions. Six of such Business Code amendment applications were submitted by universal service providers, and four by distributing licensees. The Office arrived at a negative resolution in case of 6 applications. The reason for this was that the implementation decree of the substantially amended Electricity Act was not yet published at the time, therefore the licensees could not take into account the requirements of the new Implementation Decree setting forth the details of such amendments. Of the remaining four applications two were approved by the Office in 2011 and approval of the last two was postponed to 2012. Approval of the Business Code amendment applications was made in all cases following the obtaining of the opinion of the National Consumer Protection Authority. In accordance with this nine resolutions were issued in 2011 relating to Business Codes one of which acted upon the modification of another resolution issued by the Office earlier on.

Service quality

Service quality control consists of four parts in the practice established by the Office. The four pillars vary considerably in terms of the area controlled, the method of regulation, and the consequences of non-compliance. Accordingly, separate regulation applies to service continuity, customer relations, Guarantee Services and voltage quality.

In order to learn about the results achieved by controlling service quality, the Office completed the satisfaction survey of distribution licensee and universal service provider licensee customers for the sixteenth time in 2011. During the survey the opinion of 7600 household customers and 2600 industrial users were polled nationally. The survey methodology was identical with the procedure used in 2010, thus the results can be directly compared.

On the basis of the consolidated figures it can be stated that 2011 was no different from earlier years. Voltage level fluctuations, outages (in particular the long ones), responses to failure reports and the duration of failure elimination by distributor licensees are still in the forefront of customer interest. User satisfaction moved to a clearly positive direction in terms of failure reporting, troubleshooting speed, information on scheduled outages, environmental disturbances, capacity variability, readability of meters and public lighting activities. Low scores were given to complaints and claims management plus the written administration of matters at the universal service providers both in the household and non-household customer cohorts. In addition to this – although improved in absolute terms – satisfaction level is still lower than average with regard to comprehensibility and transparency of the bills. Positive changes in this



range of licensees included accounting methods, the variability of partial invoices, arrival date of bills, telephone and internet based customer service and providing information on the homepage.

The level of awareness concerning the possibility to switch traders reached 72% of the household customers and 82% of the non-household customers. Imminent plans to switch traders were envisaged by only 3.3% of household and 7.6% of non-household customers, a clear decline compared to last year's intentions. Payment willingness for 'greener' energy is still very low just like in the former years.

Continuity, reliability of services and operating troubles

Financial incentives on continuous improvement of supply service quality to be provided by the electricity industry distribution licensees are based on the minimum quality requirements concerning the failure indicators related to frequency and duration of non-scheduled breakdown of services and the rate of non-supplied power.

Based on the Electricity Act, the Office has the opportunity to specify the minimum quality requirements and the expected quality level which were established on the basis of three years averages in order to offset the impacts of extreme weather events, thus providing the possibility to tackle exceptions beyond the control of the licensees. In its resolution the Office imposed a percentage value of improvement for each year with regard to three further quality indicators in addition to the minimum quality requirements specified for the internationally recognised indicators which constitute the basis of the financial incentives for the service quality to be provided by the licensees.

The Office evaluated electric power supply reliability levels of 2010 in June 2011. In the evaluation posted on its website the Office stated with regard to national figures that the years-long improving tendency of all three indicators used to survey continuity of power supply was stalled in 2010. On an annual basis an average of 1.45 outages were experienced by each of the users, and as a consequence an average user had to go without electricity due to operating troubles for a period of 102 minutes. The so-called outage indicator characterising non-supplied power is a ratio of supplied and non-supplied power and as such it is one of the longest monitored feature of the electricity industry. The 2010 values are basically identical with the 2008 and 2009 values.

Although distributor licensees commenced improvement of supply security, but due to the relatively moderate performance in previous years, the extremely high rainfall between May and August and the stormy weather these actions did not result in such level of improvement that the minimum quality requirements provided for by the Office could be complied with.

Worst performances were provided in terms of average length of power supply outages by the distributor licensees E.ON Tiszántúli Áramhálózati Zrt. (131 minutes/user), E.ON Északdunántúli Áramhálózati Zrt. (119 minutes/user) and ÉMÁSZ Hálózati Kft. (115.5 minutes/user). This – considered in conjunction with the figures of the two previous years – means that E.ON Tiszántúli Áramhálózati Zrt. and E.ON Észak-dunántúli Áramhálózati Zrt. failed to meet the three years average minimum quality requirement. Thus, pursuant to Article 5/A of Decree No 119/2007. (XII. 29.) GKM on electricity system charges both distributors shall be obliged to provide a 1 percent discount on the distribution fees – except the charges for distribution network losses – from 1 July 2011 to 31 December to all system users served by them. As a



result of the reduced fee the full price – including universal service rates – for household consumers living in the area concerned and having an average consumption level (2400 kWh/year, "A1" tariff rate) was lower by approximately 0.3 % (i.e. 0.14 HUF/kWh). As a consequence, users affected by the reduced fee saved a total amount of approximately HUF 320 million.

According to its resolution, the Office will take no notice of a part of operating trouble incidents caused by extreme weather conditions. Evaluation of such exemptions shall take place by observing the rules of procedures provided for the cases qualified as 'other network troubles'. As a result, the Office granted exemptions in 2011 following considerate analyses considering all aspects of the cases. In summary it can be stated that distribution licensees make great efforts each year to meet the ever better levels included in the resolutions of the Office.

Customer relations service quality

The second pillar of service level, customer relations service quality was re-regulated in 2008, accommodating the provisions of the Electricity Act taking effect at this time. No legal changes took place in 2011 which would have required the passing of new resolutions. Negotiations were carried out to interpret and correct already issued resolutions between the Office and the licensees.

The system of indicators created to regulate customer relations service quality was set up in a pyramid-like structure using building blocks put onto each other. In this triangle the lowest level is made up by the monitoring type indicators which are not associated with either minimum quality requirements or expected service levels. These parameters serve the survey and compare of licensees and their operations, or may constitute the basis for an eventual regulation in the future.

The middle level for the regulatory pyramid is built of parameters for which the Office established an expected service level partly based on legal provisions. Non-compliance with these requirements may result in the application of sanctions subsequently, after an official inspection. The tip of the regulatory mechanism is taken by indicators which are associated with both a minimum quality requirement and an expected service level. Non-compliance with the former may – pending on the extent of failure – result in two steps the imposing of a fine not more than HUF 100 million per indicator. Evaluation of customer relations service quality in 2010 will be evaluated in conjunction with the 2011 figures in 2012.

Guaranteed services

Based on the annual data supply concerning the quality requirements for individual users/customers, the system of the so-called Guaranteed Services (GS) the evaluation of the licensees' activities in respect of the resolution for the previous year was completed in October 2011 and can be viewed at the homepage of the office. The GS resolutions of the Office issued in 2003 were renewed in line with the new legislation of 2008 for electric power distribution, universal service provider and trader licensees.

In response to the increasing number of operating troubles occurring as a consequence of the extreme weather conditions the Office laid down the detailed rules in November 2009 – following several months long negotiations – of the requirement defined for licensees under the title GS II 'Elimination of electric power outages at multiple user locations'. Here the



duration of periods after which users are entitled to financial compensation after long term outages due to extreme weather conditions were defined.

Taking into account the time needed for preparing the distribution licensee information technology systems the requirement concerning automatic payments — which do not require a request from the user — is to be introduced gradually starting in 2009. As a last step, penalty payment from 1 January 2011 for all non-performed requirements of power distributor, universal service provider and trader licensees has become automatic. Pursuant to the GS resolution distributor licensees have 13, universal service providers 5 and traders 4 minimum requirements non-compliance of which entails the automatic payment obligation of penalties to the benefit of all users affected by non-performance. Consolidated 2010 GS figures can be seen in the table below.

Table 9: Consolidated figures of Guaranteed Services

| Licensee | Number of issues total | Number of non- performed issues | Rate of non- performed issues (%) | Rate of automatic penalty payment (%) | Amount of penalty paid (HUF) |
|--|------------------------|--|--|---|------------------------------|
| DÉMÁSZ Hálózati Elosztó Kft. | 1 682 368 | 6 440 | 0.38% | 100.00% | 41 944 160 |
| ELMŰ Hálózati Kft. | 3 030 087 | 3 037 | 0.10% | 99.62% | 9 408 654 |
| ÉMÁSZ Hálózati Kft. | 2 091 103 | 6 491 | 0.31% | 98.65% | 1 097 134 |
| E.ON Dél-dunántúli Áramhálózati Kft. | 1 497 439 | 20 236 | 1.35% | 99.33% | 35 925 000 |
| E.ON Észak-dunántúli Áramhálózati Kft. | 2 483 747 | 36 101 | 1.45% | 98.97% | 53 413 000 |
| E.ON Tiszántúli Áramhálózati Kft. | 1 817 492 | 14 350 | 0.79% | 97.92% | 36 646 000 |
| DSO total | 12 602 236 | 86 655 | 0.69% | 99.08% | 178 433 948 |
| DÉMÁSZ Nyrt. | 160 504 | 5 760 | 3.59% | 100.00% | 34 115 000 |
| ELMŰ Nyrt. | 651 489 | 2 570 | 0.39% | 97.55% | 10 860 000 |
| ÉMÁSZ Nyrt. | 171 459 | 703 | 0.41% | 99.41% | 3 030 000 |
| E.ON Energiaszolgáltató Kft. | 637 024 | 2 376 | 0.37% | 95.69% | 13 805 000 |
| US total | 1 620 476 | 11 409 | 0.70% | 98.54% | 61 810 000 |
| Traders total | 127 527 | 782 | 0.61% | 99.23% | 7 150 000 |
| Grand total | 14 350 239 | 98 846 | 0.69% | 99.02% | 247 393 948 |

Source: HEO

The distribution licensee DÉMÁSZ Hálózati Elosztó Kft. – similarly to the practices followed for several years – did pay penalties automatically in each non-fulfilled cases in 2010 that is the payment rate was 100%. The universal service provider EDF DÉMÁSZ Zrt. paid penalties in all non-performed cases, i.e. both the payment rate and the automatically paid rate were 100%. Of the other five distribution licensees the rate of automatic penalty payment was between 97.92% and 99.62%. Payment rate for universal service providers was 100 % and automatic payments were made between 95.69% and 99.41% of all cases. Due to non-performance of GS the three owners paid a total of HUF 247 million to users.

Voltage quality

Earlier on the Office initiated the adoption of measurements with 400 voltage quality meters in a rotational arrangement by the distribution licensees. The initiative launched a uniform voltage quality monitoring culture in this country. Based on the experiences gained on 7 April 2008 the Office issued a 'Professional recommendation to set up a uniform voltage quality



monitoring system' intending to maintain and continuously develop the forming voltage quality measurement culture. Reporting obligations and annual evaluation intend to promote continuous monitoring of measurements and the development of the network.

Another form of voltage quality testing is reporting the number of users per ten thousand supplied with out-of-specification voltage levels for a period longer than 12 months. The Office monitors this requirement according to the resolution issued in 2005 entitled 'Determination of expected reliability level and minimum requirements for electric power supply'.

Under the voltage quality monitoring scheme 973 metering equipment were involved in the measurements in 2010 at low voltage levels with an average utilisation rate of three month per year. The number and utilisation rate of metering instruments is in progress. Low voltage measurements showed that 3% of a total of 4151 metering points nationwide were supplied with out-of-specification voltage power on the long term. Considering that many of the distributors carried out measurements at locations deemed to be problematic, this value characterises not only the distribution network quality but the efficient positioning of the metering equipment. During a mere 0.57% of the metering period was characterised by out-of-specifications voltage levels deviating from the standard (± 10%) tolerances, practically the same way as in 2009.

The annual utilisation rate of the medium level voltage metering network consisting of 190 devices is 10 months in average, an acceptable figure. Medium level voltage measurements account for nearly 40% of all metering duration nationally. As a result of the metering operations exceeding 1.3 million hours the duration of OOS measurements exceeding the standard ±10% tolerance levels was 124.7 hours, representing a total of 0.009%.

Table 10: National voltage level quality metering data in 2010 (medium voltage)

| Denomination | 2010 |
|--|-----------------|
| Number of meters involved in the measurements: | 190 |
| Number of voltage quality measurement points: | 190 |
| Duration of voltage quality measurements, total: | 1 377 930 hours |
| Duration of exceeding the \pm 10% tolerance range in 100% of all measurements based on average voltage levels: | 124.7 hours |
| Number of metering locations supplied with out-of-specification voltages for a long term: | 0 |
| Total duration of exceeding voltage THD limits: | 0 |
| Total duration of exceeding voltage asymmetry limits: | 1.2 hours |

Source: HEO

Table 11: National voltage level quality metering data in 2010 (low voltage)

| Denomination | 2010 |
|--|-----------------|
| Number of meters involved in the measurements: | 973 |
| Number of voltage quality measurement points: | 4 151 |
| Duration of voltage quality measurements, total: | 2 349 555 hours |
| Duration of exceeding the \pm 10% tolerance range in 100% of all measurements based on average voltage levels: | 13 466.43 hours |
| Number of metering locations supplied with out-of-specification voltages for a long term: | 115 |
| Total duration of exceeding voltage THD limits: | 84.67 hours |
| Total duration of exceeding voltage asymmetry limits: | 72 261.67 hours |



Source: HEO

Based on the operating licenses and resolutions issued by the Office the distributor licensees reported the following particulars with regard to the users supplied with out-of-specification voltage levels for the long term in 2010:

Table 12: Users supplied with out-of-specification voltages for a longer term 2006-2010

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2006-08 annual average | 2007-09 annual average | 2008-2010 annual average |
|----------------|------|------|------|-------|------|------------------------------|------------------------------|--------------------------------|
| E.ON DÉDÁSZ | 0.00 | 0.00 | 0.00 | 0.00 | 1.14 | 0.00 | 0.00 | 0.38 |
| EDF DÉMÁSZ | 1.57 | 2.94 | 7.11 | 12.09 | 1.96 | 3.88 | 7.37 | 7.05 |
| ELMŰ | 4.17 | 0.00 | 0.79 | 1.18 | 1.11 | 1.65 | 0.66 | 1.21 |
| E.ON ÉDÁSZ | 0.48 | 0.24 | 0.19 | 3.45 | 5.13 | 0.31 | 1.29 | 2.92 |
| ÉMÁSZ | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.01 |
| E.ON TITÁSZ | na. | 0.00 | 2.78 | 2.56 | 1.85 | 1.39 | 1.78 | 2.40 |

Source: HEO

Based on the table above it can be stated that the ratio of users supplied with out-of-specification voltage levels for the long term was increased substantially between 2008 and 2010 within the North-Transdanubian area of E.ON. In the South Transdanubian area of E.ON and within the ÉMÁSZ Hálózati Kft. area users supplied with out-of-specification voltage levels for the long term were found again after several years.

Inspections

In spite of the 40% increase of complaints concerning licensees in the electric power industry, the Office conducted controlling activities in a number of fields. Controlled fields included in 2011 the correctness of data supplied to the Office, and the management of penalties to be paid automatically to beneficiaries according to the Guaranteed Services. During these inspections the Office found that the data supplied by the licensees complied with the provisions laid down in the relevant resolutions and the data records of the licensees is suitable for meeting the Guaranteed Services.

In relation of an actual complaint received from a user community of significant numbers the Office reviewed the investigation and management procedure of contract violations carried out by removing the closing seals. During this process the workflow of meter readers and inspectors was analysed in details, and the determination method of the surcharge rates imposed as a result of contract violation. The Office has not found any such deficiency in the course of the inspections – closed by a resolution – which would have justified imposing a fine, but found such a solution together with the licensee concerned which is able to reduce the charges to be paid by the users in such cases in a substantial extent, and a proposal was made to rearrange work flows to a certain extent.



User complaints

Due to sharing authorities, a part of household consumer complaints was shifted to the jurisdiction of the National Consumer Protection Authority (NCPA) from 1 January 2008. In terms of contents claims are related more and more to contract violations since 2007. Investigation of these issues is still within the authority of the Office and not the NCPA. Additionally, the number of complaints from public (non-private person) users – still covered by the Office after sharing the authorities – was also increased. The latter usually concern several sites and the accounting takes place using a more complicated algorithm, thus investigation requires more time compared to simpler recurrent problems of household customer complaints.

An increasing ratio of complaints is related to failure of switching traders. Since such issues affect 3 licensees most of the time, their investigation was more complex and lengthy, requiring a deeper knowledge of the system. Complaints related to the status of consumer to be protected are ever more frequent and must be considered especially sensitive issues, in the case of which more considerate proceedings should be conducted due to their nature. More recently, new types of complaints were also encountered, related to switching off of drawing points taking electricity without contracting and the invoicing of power taken without a contract.

Following the dramatic increase in 2007, customer complaints covered by the Office was temporarily reduced in the past five years due to the sharing of authority with the NCPA, but it reflects a continuously increasing trend again since.

Complaints total Other issues Managed by the Office Transferred to NCPA **Grand total**

Table 13: User complaints

Source: HEO

Beside written complaints, the number of claims, requests for information or to take position received electronically through the website keeps growing as well. Beside written contacts a considerable number of telephone calls and personal visits to the ground floor reception room of the Office are recorded. The Office receives approximately 150 personal contacts and 3-4 thousand telephone calls annually.

Of the 2657 written complaints in mentioned above, 1007 concerned licensees in the electric sector. This figure was 40% higher than the one in 2010. The Office instigated the official public administration proceedings in each case and passed a resolution for the completed issues. According to these resolutions, 34% of claims concerning most frequently contract violations of distribution licensees and 34% of complaints concerning mainly billing issues of universal service providers proved to be well grounded.



2. Regulation and operation of the natural gas market

2.1. Regulation

Licensing

In line with the Gas Supply Act, the Office shall establish the conditions for the operation and the related activities of the licensees in a resolution issued by the Office. The Implementation Decree of the Gas Supply Act defines detailed rules of licensing in the changing market environment. An important requirement is that compliance with these conditions must be ensured by the licensee on a continuous basis. The Office controls compliance with the license conditions and applies legal consequences if appropriate.

Under the licensing procedure the Implementation Decree contains general rules and for activities subject to licensing special rules specifying the documents which need to be submitted by the applicants and the means they must possess. In addition to the special and general rules, the Implementation Decree also provides for the contents of each permit, and the mandatory accessories of all applications for licenses, contained in the Annexes to the Decree.

The Gas Licensing and Supervision Unit of the Office adopted 163 resolutions and issued 16 orders in 2011. One permit for organised gas market activities and 8 natural gas trading licenses were issued during the year. Six trading licenses were withdrawn, four upon request and two under a public administration procedure. The public administration procedures were instigated for reasons of violating the legal provisions in case of one of the permits and due to financial failure in the other. Thus in 2011 there were 42 live trading licensees on the natural gas market.

EMFESZ Kft. failed to perform the bank guarantee securing the system user contract concluded with the shipper, therefore – pursuant to Government Decree No 48/2010. (II. 26.) on the procedure to be applied in case the operation of the natural gas trader becomes impossible and a situation endangering the natural gas supply of the users occurs – the Office suspended the natural gas trading license of the company in the beginning of January 2011 and designated universal service providers and a trader to supply to the 300 000 consumers served by it. During the year the permit of EMFESZ Kft. was withdrawn as the company failed to furnish evidence of the financial conditions necessary for conducting the operation.

Regulations transposing Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (Third Energy Package of the European Union)took effect in several steps in 2011 together with Act No XL of 2008 on natural gas supply and its implementation decree [19/2009. (I. 30.)].

Office experts assisted in the legislative preparatory activities of the National Development Ministry carried out in relation to the implementation of the Third Energy Package in 2011 by continuous, coordinated work. As a result, Act No XXIX of 2011 amending the Gas Supply Act and transposing the Third Energy Package of the EU took effect on 25 March 2011.



According to the new regulations the Office started the certification procedure of the transmission system operator, resulting in the creation of a draft certification resolution, which was acknowledged by the European Commission in December 2011.

Upon request from the FGSZ Natural Gas Transportation Private Limited Company as the transmission system operator license holder the Office conducted a public administration official procedure in 2011 on two occasions in relation to the approval of the Operational and Commercial Code (hereinafter referred to as: the Network Code). The Office finds that it was important to make a Network Code containing clear requirements and complying with the regulations in effect from time to time available to market operators as soon as possible. In order to achieve this the Office reviewed and in several times took into account when providing for the modifications the documents attached to the draft containing the contrary opinion of the Regulatory Committee members. Submitted Network Code chapters were reviewed by the Office by keeping in mind the enforcement of supply security, quality requirements, equal opportunities for competition and free access to the cooperating natural gas system, effective competition and pricing principles, and the prohibition of unjustified discrimination against certain users. As a result the Network Code was approved but obligations, corrections or revision of objected part were provided for. When determining the time limits for the modifications, the labour and time requirements of completing the modifications were also considered.

The ten years system development plan submitted by the transmission system operator was reviewed by the Office but not accepted. It was returned to the licensee for re-drafting. The revised development plan was submitted to the Office by the transmission system operator before 31 December 2011.

Allocation of cross border capacities and congestion management

Border crossing point capacities:

- Western entry point (from Austria) Mosonmagyaróvár: 14.4 million m³/day
- Eastern entry point (from Ukraine) Beregdaróc: 56.3 million m³/day
- Southern exit point (towards Serbia) Kiskundorozsma 13.2 million m³/day (used only for transit)
- South-eastern bidirectional border crossing point (Romania) Csanádpalota: 4.8 million m³/day
- Southern bidirectional border crossing point (Croatia) Drávaszerdahely: 19.1 million m³/day.

Long term natural gas import contracts and their respective effective dates:

| Panrusgas | 9000 | million m³/year | until 2015 |
|-----------------------------------|------|-----------------|------------|
| E.ON Ruhrgas | 500 | million m³/year | until 2015 |
| Gaz de France | 400 | million m³/year | until 2012 |

The long term transit contract concluded with Serbia will expire in 2012 and engages a transmission capacity of 12 million m³/day permanently.

Contractual congestions occurred at the Western border crossing point at Mosonmagyaróvár in 2010. The main reason for this was the large volumes of liquefied natural gas (LNG) made



available in Western Europe from 2009 on, which could be purchased by traders on the spot markets cheaper than the Russian gas. Due to its large volumes of non-conventional gas production the United States has become self sufficient in terms of natural gas by 2009, therefore LNG exporters (Trinidad, Qatar, Egypt) were forced to sell their stocks in Western Europe. This is the cause behind the cheaper gas on the spot market and that and the fact that due to the protracting economic crisis industrial gas consumption in Western Europe dropped. Thus contractual congestion in 2010 occurred not at the eastern border crossing like before, but rather on the Western HAG line (the crossing point at Mosonmagyaróvár).

In order to improve this situation FGSZ Zrt. transferred a compressor from Hajdúszoboszló to Mosonmagyaróvár in October 2011 thus increasing the capacity at the Western import entry point from 12.1 million m³/day to 14.4 million m³/day.

Regulating the functions of the transmission and distribution companies

General rules of natural gas are laid down and the conditions to be met for issuing natural gas transmission licenses are listed in detail in the Gas Supply Act. Beside transporting gas, the most important task of the natural gas transmission company is daily balancing. Pursuant to the law the activity related to securing balancing gas is not deemed to be a commercial activity. The transmission company – to fulfil its tasks – operates an Internet based system ensuring data flows necessary for maintaining the hydraulic balance of the natural gas system and for administering nominations and accounting.

The national high pressure transmission pipeline is operated by FGSZ Földgázszállító Zrt., holding two gas market licenses issued by the Office: one for natural gas shipment and one for system dispatching.

Another natural gas shipment (transmission) permit was issued by the Office in 2011 for Magyar Gáz Tranzit Zrt. (MGT Zrt.), the main function of which shall be the implementation and operation of the new Slovak interconnection pipeline.

The Gas Supply Act provides for the general rules of operation for natural gas distribution companies including licensing and cooperation obligation of the licensee to ensure development and operation of the cooperating natural gas system. The law lists in details the cases when the distribution service provider may refuse connection of a customer and commencement of distribution or continuation of services to an already connected user. The distribution company will maintain records on the user points withdrawing gas from the distribution network, their typical and mandatory particulars, and shall transfer such data upon request to the customer withdrawing gas at the user point or to the trader supplying gas to him. The detailed rules on natural gas distribution services are contained in the Gas Distribution Code constituting the Annex to the GET Imp. Decree.

Natural gas distribution systems are operated by 10 regional distributors five of them being predominant and dividing up the entire territory of the country among themselves.

Unbundling of operations

Pursuant to the provisions of the Gas Supply Act unbundling of accounting is a mandatory act to all businesses in the natural gas sector, no exemption can be granted. If natural gas transmission, distribution and storage is conducted by a single vertically integrated company, licensed operations shall be provided through a legally unbundled organisation with



independent organisational chart and decision making, separated from other operations not directly related to them, except

- a) the transmission company holding system operation license,
- b) gas traders with less than 100 000 customers,
- c) piped PB-gas service providers.

Under Article 6 of the Imp. Decree transmission operations should be carried out in an unbundled, separate organisation and by independent decision making process. System operation managers shall not participate in any other licensed gas sector activities directly or indirectly. The system operator is required to provide the same information flow to affiliates as to any other player on the market.

In this sense FGSZ Földgázszállító Zrt. is a legally separated company of MOL Plc. which is physically separated (registered seat, office building) from any other business organisation conducting natural gas operations. The same applies to MGT Zrt. which is legally separated company of MVM Zrt. (Hungarian Electricity Trust Private Limited Company).

Among the ten natural gas distribution system operator licensees there are five major regional companies with more than 100 000 customers each. The five large companies completed legal unbundling in 2007, i.e. distribution and trading takes place in separate companies. Nine of the former public utility service providers applied for and was granted by the Office universal service provider licenses. Each of them holds competitive market trader licenses as well, operated under unbundled accounting arrangements. The vertically integrated company of the E.ON Ruhrgas International GmbH subsidiary registered in Hungary (E.ON Hungária Zrt.) is the former public utility wholesale trader E.ON Földgáz Trade Zrt., which is legally completely unbundled from the gas storage licensee E.ON Földgáz Storage Zrt. Distribution system operators E.ON KÖGÁZ Zrt. and E.ON DDGÁZ Zrt. are also legally unbundled companies.

2.2. Competition

Wholesale market

National consumption of natural gas and source composition in 2010 are illustrated by the data of the following table [billion m³/year]:

Table 14: Composition of national natural gas consumption patterns in 2010 (billion m³/year)

| Annual national gas consumption: | 10.659 |
|------------------------------------|--------|
| Domestic production | 2.640 |
| Import: | 8.019 |
| -of this, from Eastern direction: | 3.606 |
| - of this, from Western direction: | 4.414 |

Source: HEO

Import resources are predominantly of Russian origin, even a large part of the natural gas purchased from Gaz de France and E.ON Ruhrgas and delivered from Baumgarten, Austria through the HAG pipeline is of Russian origin in terms of its molecular composition. Domestic production and import in 2011 was distributed in a 21.2 - 78.8 % ratio, respectively. The



volume of Western import on the HAG pipeline exceeded the amount of gas imported from the East due to large volume purchases of spot market LNG which was cheaper than the Russian gas.

In its Decision passed on 21 December 2005 the Directorate General for Competition in the European Commission (Case No. COMP/M.3696-E.ON/MOL) approved full acquisition of MOL Földgázellátó Rt. and MOL Földgáztároló Rt. (national gas distribution and storage companies) by E.ON Ruhrgas International AG only conditionally. One important condition was the implementation of a 'Gas Release' programme. This means that E.ON Ruhrgas is obliged to offer an annual amount of 1 billion m³ for sale on the gas market throughout a period of 8 years (2006-2013). In the course of programme implementation auctions are to be held in the said years, where the annual 1 billion m³ volumes are to be broken down to selling lots as follows:

- 5 x 100 million m³ lot,
- 5 x 50 million m³ lot,
- 10 x 25 million m³ lot.

In addition, E.ON affiliates are not allowed to participate at the auctions directly or indirectly which are administered by an international information technology service provider. Successful bidders may conclude contracts with ERI under the following terms and conditions:

- Contracted amounts of gas can be delivered during two years in two equal parts at the import entry points Beregdaróc 80%, Mosonmagyaróvár 20%.
- Supply contracts to customers shall provide the same flexibility as the upstream contracts of MOL Földgázellátó Rt. do.

In March 2011 E.ON Földgáz Trade Zrt. concluded its sixth natural gas auction as required.

Retail market

The Gas Supply Act introduced and regulates daily natural gas and capacity trading. The purpose of this provision is to ensure commercial transactions necessary for daily balancing of the cooperating natural gas system be made on a market basis. Capacity booking on the cooperating natural gas system and rules of access are set forth in details by the Implementation Decree. On this basis the Daily Natural Gas and Capacity Trading Market (NFKP) was continuously operated in 2011 and all market operators have become a part of it.

2.3. Security of supply

In order to secure safe supply of natural gas, the Office continuously monitors the situation on the Hungarian gas market, activities and operations of individual players, and prepares a weekly forecast in the heating season for the cases when unexpected outages of gas deliveries from the Ukrainian border occur or extreme weather conditions are experiences. The forecast provides the opportunity for timely and appropriate interventions in order to secure undisturbed supply of natural gas in the country.

Table 15: Maximum technical capacity of the national natural gas supply system (million m³/day):

| Domestic production | 10.5 |
|--|------|
| Import Mosonmagyaróvár (western direction) | 14.4 |
| Import Beregszász (eastern direction) | 56.3 |
| Import Csanádpalota (south- eastern direction) | 4.8 |
| Import Drávaszerdahely (southern direction) | 19.1 |



| Commercial gas storages | 60.1 |
|-------------------------|-------|
| Strategic storage | 20.0 |
| TOTAL | 185.2 |

Source: HEO

The greatest measured national natural gas consumption level ever occurred on 8 February 2005 with 89.5 million m³/day. Compared to the figures above it can be seen that the current capacity of the domestic natural gas supply system is more than twice of that and thus the technical background to security of supply was appropriate.

Natural gas transmission

As a result of the long distance transmission pipeline development projects of the transmission system operator FGSZ Földgázszállító Zrt., two new cross border gas transmission lines were installed in 2010 thus contributing to the diversification of the import possibilities and increasing the security of supply. The transmission lines built to Romania and Croatia allow not only gas flows to the neighbouring countries, but they are also part of the North-South gas corridor which from 2011 on is considered to be a priority project by the European Commission. Just like the new northern cross border pipeline the planning and execution works of which have been commenced. The capacity of the Slovak interconnection line shall be 6 million m³/day, which can be increased up to 14.4 million m³/day once the compressors in the second stage of the investment are installed.

Strategic storage of natural gas

Act No XXVI of 2006 on strategic stockpiling of natural gas adopted by the Parliament in March 2006 provided for the storage of 1.2 billion m³ natural gas and the establishment of the necessary underground storage facility up to 2010. Strategic natural gas reserves should be placed in storages with a withdrawal capacity of 20 million m³/day for a period of at least 45 days. The strategic stockpiles provided for in the law serve exclusively the safe supply of household and communal consumers.

Up to 31 December 2009 strategic natural gas volumes were determined by the free available capacity of the commercial storages, which could not be less – provided the appropriate amount of free capacity was available – than:

- a) 150 million m³ between 1 October 2006 and 30 September 2007,
- b) 300 million m³ between 1 October 2007 and 31 December 2009.

In the event such amount could not be ensured using the remaining and unbooked storage reserves, pursuant to the Act it could be replaced by an equivalent amount of petroleum products, i.e. heating oil.

The Hungarian Hydrocarbon Stockpiling Association (hereinafter referred to as: HUSA) announced and granted to MOL Nyrt. a tender according to the law to implement a strategic storage facility. HUSA and MOL created MMBF Zrt. to build and operate the strategic storage. Execution works started in 2007 at the Szőreg-I site, part of the Algyő gas field. The project was continued in 2008-2009 by the drilling of 44 new bifunctional (production and injection) wells. The project progressed as scheduled and with the completion of the compressor technology commercial injection started from 1 October 2009. By the end of the year the required volume of 1.2 billion m³ was injected. Thus the strategic natural gas reserves stipulated in a separate



piece of law were stockpiled at the Szőreg-I site by 1 January 2010 in compliance with the law. The reserves were not needed during the year 2011.

Decree No 13/2011. (IV. 7.) NFM modified the working gas stocks of the strategic storage temporarily to 916 million m³. The 284 million m³ gas thus released was sold by HUSA to two gas traders under the provisions of the Decree, thus increasing security of household gas supply.

Commercial natural gas storage

Of the five Hungarian commercial gas storage sites four are operated by E.ON földgáz Storage Zrt., the fifth is situated at the Szőreg I site, as MMBF Zrt. applied for and obtained a commercial natural gas storage license from the Office as well. Under this in addition to the strategic stockpiles referred to above a further 700 million m³ working gas can be stored in the Szőreg-I field. This is associated with a 5 million m³/day commercial withdrawal capacity according to the license. It is important and reassuring for the purposes of supply security that two thirds of the national daily peak demand can be provided by the system from commercial storages.

Table 16: Capacity of the Hungarian commercial natural gas storage facilities

| Name of underground gas storage | Working gas stock available for storage (million m³) | Withdrawal capacity (million m³/day) | | |
|---------------------------------|--|---|--|--|
| HAJDÚSZOBOSZLÓ | 1440 | 20.8 | | |
| KARDOSKÚT | 280 | 3.2 | | |
| PUSZTAEDERICS | 340 | 3.1 | | |
| ZSANA | 2170 | 28.0 | | |
| SZŐREG | 700 | 5.0 | | |
| Total: | 4930 | 60.1 | | |

Source: HEO

Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC was published on 12 November 2010. Provisions of the Regulation were implemented on 22 December 2011 by Act No CLXXXII of 2011 amending the Gas Supply Act.

Specification of the gas limitation sequence

The Office specifies a succession of limitations in September each year to be applied in case of supply disturbances by which continuity of gas supply to certain high priority consumers can be secured. The Office would consistently qualify any power generating unit which are covered by legal requirements to stockpile liquid fuel reserves as alternative energy sources sufficient to operate for 16 days continuously as consumers to be limited in the first place.

The 2011 limitation sequence has been prepared pursuant to Government Decree No 265/2009. (XII. 1.) in eight categories on the limitation of natural gas withdrawal. The needs of those industrial users were also settled whose gas supply limitation within the time limits laid down in the legal provisions earlier on since their too quick shut-down would have caused large scale damages to the process technology. The situation of these consumers is facilitated by the amendment of Government Decree No 268/2009. (Government Decree No 293/2011. (XII. 22.),



which allows for them to submit an application to increase the time frame available for complying with the limitation requirements from 8 hours to 72 hours.



2.4. Price preparation, pricing

The price moratorium in effect from July 2010 fixed the universal service tariff rates of April 2010, exerting a significant pressure on the subsequent quarters. The average universal service tariff rate was increased by 4.9% in average — as a function of consumption — on 1 January 2011. The base fee however was not increased and the gas fee did not change for users consuming up to 1200 m^3 a year. Gas charges grew by 15% in average above the annual consumption level of 1200 m^3 .

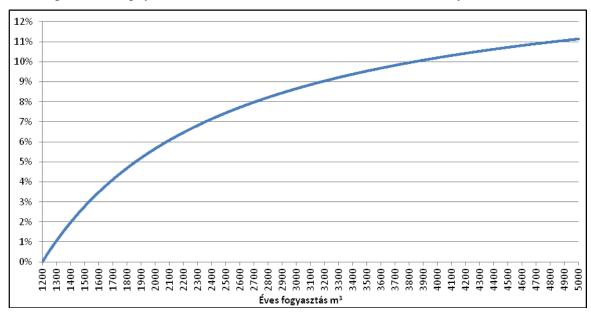


Figure 5: Average price increase for household consumers above a consumption rate of 1200 m³

Source: HEO

Simultaneously, the allowance for large families was introduced which provided volumes at discounted price for families raising at least three children. A family with three children is entitled to take 1800 m³ gas at discount rates instead of 1200 m³, while families with four or more children can draw an additional 300 m³ discounted gas volume per children above the 1800 m³. For consumers in consumption communities (such as those living in owner occupied blocks) these discounts are enforced by the representative of the community converted into Hungarian forints.

Household tariffs were increased next time on 1 January 2012, when both base rates and gas charges were increased for each consumer in the universal services by 2.6%, which resulted in a 4.2% overall price increase when the higher rates of value added taxes were added.

Neutral gas price, offer price

Decree No 18/2010. (XII. 3.) NFM amending certain ministerial decrees related to the pricing mechanisms of natural gas amending the natural gas formula included in Decree No 29/2009. (VI.29.) KHEM on the pricing of universal services on the natural gas market took effect on 4 December 2010. According to the amendment quotations from the organised natural gas markets in Western Europe (TTF Holland Gas HUB and Central European Gas HUB) were considered in the recognised specific price of natural gas with a weight of 40% (mixed formula), i.e. spot market and futures market prices. According to the formula 60 % of the price is still



derived from the long term oil based indexed contracts. In Q1 to Q3 of 2011 the recognised molecular price of gas was determined for end user tariffs according to the changed formula.

The end user prices stagnating because of freezing of the overhead costs required an offer price which was even lower than the rates derived from the formula taking "spot" market prices into account. Decree No 19/2010 (XII. 3.) NFM on the volumes and prices of natural gas sources offered for sale to universal service providers and of nationally produces natural gas, as well as on the scope of parties entitled and obliged to use it ensures for universal service providers by officially priced domestically produced natural gas that their procurement portfolio contained the average price which can be collected from consumers at the regulated end user tariff rates. It provides the condition precedent however that the import procurement prices included in the portfolio be considered with the rates derived from the mixed natural gas formula laid down in Decree No 29/2009. (VI.29.).

The extent of exchange rate increases recognised in pricing regulation shall be determined by the Minister in a Decree. According to this for Q1 to Q3 of 2011 the exchange rates recognised for the purposes of pricing were 207.2 Ft/USD, and 282.5 HUF/EUR, for Q4 2011 188 HUF/USD, and 271.1 HUF/EUR (such rates were published by the Minister on 20 May 2011). Published rates for Q1 2012 were 210 HUF/USD and 279.1 HUF/EUR.

Based on the rearrangement of the pricing mechanism in Q2 of 2011 organised market quotations (spot and futures) shall be included in the natural gas pricing formula with a weight of 70% and gas purchased on the basis of long term agreements with a weight of 30% from 1 October 2011 instead of 60 %, and 40 %, respectively. Provided the rearrangement of the pricing formula referred to above would not have taken place, official prices of domestic production would have been reduced below production costs entailing shut down of production.

As a result of considering spot market prices in the formula, the approximately 40% price increase pursuant to the long term agreements was represented only as about 30% in the recognised molecular gas price calculated with the formula, as a result of the price increase in oil products. Nevertheless this 30% molecular gas price increase was seen only as 7-8% due to the official offer price of domestic production, where exchange rate fluctuations were already included.



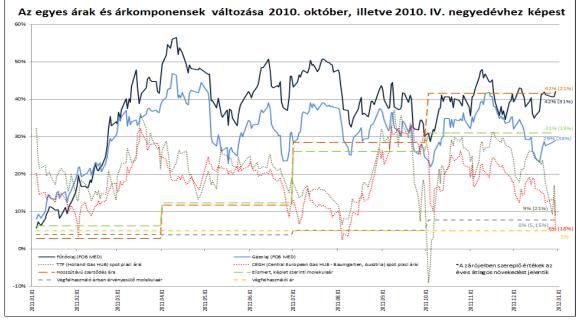


Figure 6: Gas market price changes in 2011

Source: HEO

Balancing mechanism

Resolutions on the preliminary division of revenues originating from distribution fees for the year 2011 were issued in February 2011, on final division for the year 2010 in June 2011. According to the resolutions on the preliminary division of revenues originating from distribution fees for the year 2011 three distribution system operators incurred payment obligations (HUF 2453 million on an annual basis) to the separated account (due to the a regional distribution fees adopted with effect of July 2011 the final resolutions for the year 2011 were specified only for a half year). On the basis of the resolutions on final division of revenues originating from distribution fees for the year 2010 – taking into account payments made pursuant to the previous resolutions – four distributors paid up HUF 511 million to the separated account. Magyar Gázszolgáltató Kft. and FŐGÁZ Zrt. challenged both the resolution on the preliminary division for 2011 and the final division of revenues originating from distribution fees for the year 2010, the court proceedings are currently in progress.

System charges

From 4 December 2010 a double system charge scheme is applied in the natural gas network. User fees of universal services use a rate of return of 4.5 %, while user fees for users not entitled to universal services include a return rate of 8.78 % for transmission, 10.05 % for storage and 8.29 % for distribution.

The Hungarian Energy Office adopted two resolutions on 3 May 2011 and 18 July 2011 on the division of booked gas transmission capacities and booked gas storage capacities, according to the extent necessary for supplying consumers entitled and not entitled to universal services, respectively.

System charges were increased in 2011 twice. On 1 January only transmission fees were increased, because the costs of the transmission line constructed towards Croatia were recognised in the system charges. This represented an average growth rate of 7 %. On 13 July



storage prices were increased by 0.24 HUF/m³ due to accounting of cushion gas – a process due annually –, representing 7.2 % increment for competitive consumers and 8.9 % for those entitled to universal services, yet for the latter this change did not entail changes in the final end user price. Reduced capacity booking was taken into account in transmission charges at this time, the effect of which was partly compensated by the profit cap, absorption of surpluses originating from surcharges and auction fees. Thus – albeit certain capacity fees and turnover fees were increased – no substantial changes were seen in the average price of transmission as a function of the transported volume.

From July 2011 nationally uniform distribution fees were replaced by regional charges varying across distribution system operators. In November and December 2011 the Office determined system usage fees and connection fees for each of the licensees which took effect on 1 January 2012.

Profit limitation, profit reimbursement

From July 2011 the regulation on profit limitation was supplemented for distribution system operators by taking into account eventual in-payment obligations incurred during the application of the balancing mechanism.

2.5. Public service obligation and customer protection

Approval of Codes

The Gas Supply Act was amended 10 times, the GET Imp. Decree 5 times in 2011. These changes required continuous adaptation of the Business Codes of licensees to the current legislation. Business Codes were amended under a broad, multiple round negotiation procedure. The Office issued no resolution in 2011 to universal service providers and distribution licensees approving new Business Codes and issued 9 resolutions amending existing ones. One application for amendment was cancelled by the licensee, and in one case the procedure was terminated due to failure of submitting missing information.

Service quality

Service quality control consists of three parts in the practice established by the Office in the gas industry. The three pillars vary considerably in terms of the area controlled, the method of regulation, and the consequences of non-compliance. Consequently, separate regulation applied to service continuity, customer relations and Guaranteed Services.

In order to learn about the results achieved by controlling service quality, the Office completed the satisfaction survey of distribution licensee and universal service provider licensee customers for the sixteenth time in 2011. During the survey the opinion of 7200 household customers and 2400 industrial users were polled nationally. The survey methodology was identical with the procedure used in 2010, thus the results can be directly compared quantitatively. On the basis of the consolidated figures it can be stated that 2010 was no different from earlier years, yet satisfaction indicators were increased in certain areas significantly, while no area showed any loss of satisfaction levels.



Distribution licensee activities like service continuity and exact metering practices are still in the forefront of customer interest. User satisfaction moved to a clearly positive direction in terms of consistency in natural gas quality, ensuring supply of natural gas to users, calorific value, consumption metering, environmental protection, information on maintenance obligations and continuous gas supply. Users were most interested in quick and competent operation of customer services, comprehensibility of the bills and ensuring the opportunities to complaints when asked about universal service providers. Positive changes were reflected in billing processes (comprehensibility, scheduling), a better view on the operation of customer services and call centres, and improvement in certain elements of providing information.

A new tendency is the need for Internet based administration, but experiences gained on this did not improve over the last year. The level of awareness concerning the possibility to switch traders reached 87% for household customers and 92% for non-household customers. Imminent plans to switch traders were envisaged by only 3% of household and 9% of non-household customers, a clear decline from 9 and 12%, respectively, measured in 2010.

Customer relations service quality

The Office issued resolutions concerning the expected service quality standards and minimum quality requirements of customer relations in 2009. No legal changes took place in 2011 which would have required the passing of new resolutions. Negotiations were carried out to interpret and correct already issued resolutions between the Office and the licensees.

The system of indicators created to regulate customer relations service quality was set up in a pyramid-like structure using building blocks put onto each other. In this triangle the lowest level is made up by the monitoring type indicators which are not associated with either minimum quality requirements or expected service levels. These parameters serve the survey and compare of licensees and their operations, or may constitute the basis for an eventual regulation in the future. The middle level for the regulatory pyramid is built of parameters for which the Office established an expected service level partly based on legal provisions. Noncompliance with these requirements may result in the application of sanctions subsequently, after an official inspection. The tip of the regulatory mechanism is taken by indicators which are associated with both a minimum quality requirement and an expected service level. Noncompliance with the former may – pending on the extent of failure – result in two steps the imposing of a fine not more than HUF 100 million per indicator. Evaluation of customer relations service quality in 2010 will be evaluated in conjunction with the 2011 figures in 2012.

Guaranteed Services

The second pillar of service quality management was introduced in the natural gas industry in 2010. Considering the novelty of such rules the Office paid special attention and care to establish the directions of regulation and control and negotiations with licensees and consumer protection organisations. Issue of the resolutions was preceded by discussions in three rounds. As a last step of the regulatory process the Office issued 16 resolutions to the licensees in the gas sector related to the Guaranteed Services. Licensees are required to supply data on Guaranteed Services performance in 2011 for the first time, thus valuable data will be first available from 2012.



Continuity and reliability of services, operating troubles

Service outages in the 2000-2011 period

Consumers need continuous supply of services, i.e. uninterrupted availability of natural gas. However, various accidental or scheduled service disruptions or disruptions experienced due to other causes are naturally pertaining to piped natural gas supply. Disruptions may be caused by operating troubles or by other activities such as maintenance and reconstruction works etc. Some of the causes have direct connections to the service providers, others are independent from them. The quality of physical flows in fixed line natural gas supply can be illustrated with the causes, times and durations of service disruptions.

The number of service disruption incidents is illustrated on Figure 7 on the basis of data in the table above. It can be seen on the figure that service outages grew to a small extent in 2011 due to mainly causes outside of the direct scope of responsibility of distribution system operators. The rate and absolute value of service disruptions within the direct scope of responsibility of the service providers grew over the first half of the investigated period, then was reduced again, with an additional 10% in 2011 alone. The figure also shows the frequencies of operating troubles resulting in service disruptions which are permanently lower than the total number of service disruptions.

Table 17: Number of incidents causing outages in natural gas supply (incident/year)

| Denomination/year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of incidents causing disruption of services | 2862 | 3138 | 3924 | 2802 | 2103 | 2049 | 2368 | 1666 | 1424 | 1368 | 1371 | 1505 |
| Of this: Disruption of services due to operating troubles | 2532 | 2604 | 2988 | 2424 | 1786 | 1848 | 1953 | 1440 | 1178 | 1164 | 1221 | 1166 |
| Disruption of services within the direct scope of responsibility of the service providers | | 1312 | 1607 | 1090 | 989 | 853 | 847 | 705 | 766 | 680 | 685 | 615 |
| Of this: Operating troubles within the direct scope of responsibility of the service providers | | 894 | 933 | 731 | 743 | 738 | 707 | 574 | 614 | 560 | 619 | 511 |

Source: HEO



Szolgáltatási szüneteket okozó események száma ■ Ebből üzemzavar miatti szolgáltatási szünetek száma ■ A szolgáltatók közvetlen felelősségi körébe tartozó szolgáltatási szünetek száma ■ Ebből a szolgáltatók közvetlen felelősségi körébe tartozó üzemzavarok száma

Figure 7: Quantitative data related to incidents causing outages in natural gas supply services, event/year

Blue: The number of incidents causing service disruption, Red: Of this: Disruption of services due to operating troubles, Green: Disruption of services within the direct scope of responsibility of the service providers, Lilac: Of this: Operating troubles within the direct scope of responsibility of the service providers

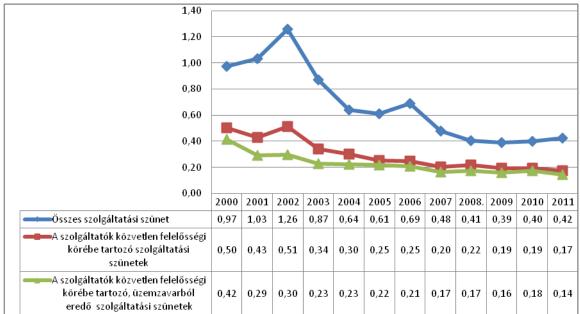
Source: HEO

The physical process of piped natural gas supply services are qualified by the specific parameters per 1000 consumer of the number of incidents and the duration of service disruptions caused by them.

The frequency and duration at national level at which consumers are deprived of the service are illustrated on Figures 8 and 9 for informative purposes. Specific number and duration of service disruptions varied for the total number of service disruptions across the investigated period, yet incidents within the direct scope of responsibility of service providers were lower in numbers and showed a continuously improving tendency in 2011 as well.



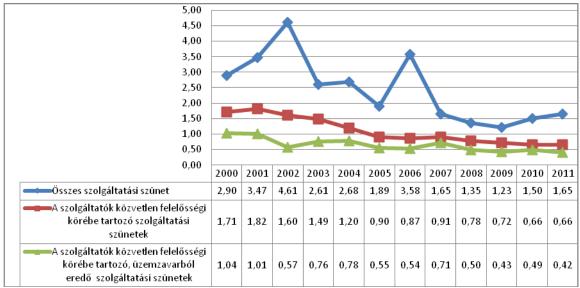
Figure 8: Trends in the number of incidents causing outages in natural gas supply services per 1000 customers (incident/1000 customers/year)



(Blue: total number of outages, Red: Disruption of services within the direct scope of responsibility of the service providers, Green: Operating troubles within the direct scope of responsibility of the service providers)

Source: HEO

Figure 9: Trends in the duration of incidents causing outages in natural gas supply services per 1000 customers (hours/1000 customers/year)



(Blue: total number of outages, Red: Disruption of services within the direct scope of responsibility of the service providers, Green: Operating troubles within the direct scope of responsibility of the service providers)

Source: HEO

Inspections

Considering that complaints concerning gas industry licensees reflect a growing trend for years – from 2010 to 2011 the number of such complaints grew by 172% –, and due to the limited resources available, the Office could conduct any inspection activities in the conventional sense



in this sector. However, a number of negotiations were carried out with licensees aiming at the regulation of the management procedure of issues related to contract violations and illegitimate off take, accounting for four fifth of all complaints and at the setup of a uniform rules of procedure. Part of the tasks to be accomplished in the future include organisation of regular checks on industry licensees, conducting inspection visits, application of sanctions as appropriate, and ensuring the resources necessary for the inspection activities.

User complaints

Due to sharing authorities, a part of household consumer complaints was shifted to the jurisdiction of the National Consumer Protection Authority (NCPA) from 1 January 2008. In terms of contents claims are related more and more to contract violations since 2007. Investigation of these issues is still within the authority of the Office and not the NCPA. Additionally, the number of complaints from public (non-private person) users – still covered by the Office after sharing the authorities – was also increased. The latter usually concern several sites and the accounting takes place using a more complicated algorithm, thus investigation requires more time compared to simpler recurrent problems of household customer complaints.

An increasing ratio of complaints is related to failure of switching traders. Since such issues affect 3 licensees most of the time, their investigation was more complex and lengthy, requiring a deeper knowledge of the system. Complaints related to the status of consumer to be protected are ever more frequent and must be considered especially sensitive issues, in the case of which more considerate proceedings should be conducted due to their nature.

Table 18: Consumer complaints

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|------|------|------|------|------|
| Complaints total | 2197 | 865 | 894 | 1320 | 2657 |
| Other issues | 942 | 647 | 655 | 493 | 185 |
| Managed by the Office | 3139 | 1512 | 1549 | 1813 | 2842 |
| Transferred to NCPA | - | 329 | 328 | 420 | 307 |
| Grand total | 3139 | 1841 | 1877 | 2233 | 3149 |

Source: HEO

Beside written complaints, the number of claims, requests for information or to take position received electronically through the website keeps growing as well. Beside written contacts a considerable number of telephone calls and personal visits to the ground floor reception room of the Office are recorded. The Office receives approximately 150 personal contacts and 3-4 thousand telephone calls annually.

Of the 2657 written complaints in mentioned above, 1650 concerned licensees in the gas sector. This figure was nearly three times (272%) higher than the one in 2010. The Office instigated the official public administration proceedings in each case and passed a resolution for the completed issues. According to these resolutions, 57% of claims concerning distribution licensees – in 82% related to contract violations – and 37% of complaints concerning universal service providers proved to be well grounded.



3. Regulation of the district heating sector

3.1. Regulation

Licensing

District heat generation and district heating services are operations subject to licensing; however, the establishment of district heat generating equipment is also subject to licensing above a thermal output of 5 MW. The powers of licensing were shared up to 15 April 2011 between local municipalities and the Office. Any district heat generator also producing electricity was covered by the Office, while local governments issued licenses to thermal generators without electric power generation and to district heating service providers.

Licensing and supervision of district heat service providers belonged entirely to the scope of authority of municipality notaries up to 15 April 2011. District Heating Act was amended by Act No XXIX of 2011 amending Acts on energy and power with effect from 15 April 2011 in the field of licensing and price regulation. Following the amendment entering into force both the operating license of district heating service providers and the establishment and operating licenses of power generators producing heat in other ways than co-generation are issued by the Office.

Specification of consumer tariffs was the competence of the body of representatives in the municipalities and in the Council of the Capital in the case of Budapest up to 15 April 2011. Initiatives to change district heating tariffs were approved by the Office from 1 July 2009 up to 15 April 2011.

From 15 April 2011 on the price of heat sold to district heating service providers is set by the authority while residential heat is still priced centrally. It is now supplemented with separately managed institutions and the pricing authority was shifted from the body of representatives in local governments of municipalities by the minister in charge for energy policy. However, prices are still prepared by the Office. Simultaneously with the activity of the Office to prepare pricing mechanisms taking effect the system operated from 1 July 2009 under which the Office was charged with the task of evaluating price change initiatives of district heating service providers under a public administration official procedure ceased to exists, yet price preparation in relation to the regulation was retained within the cope of authority of the Office.

Licensing procedure of power plants for district heating and power below 50 MW

The licensing procedure of small power plants co-generating thermal and electric energy (below 50 MW rated electric output) differs in terms of heat and power.

District heat licensing procedure

Upon the establishment of co-generating power equipment with 5 MW thermal output and above, an establishment license should be applied for at the Office (below 5 MW the establishment of heat generating plants is not subject to licensing). After commissioning and the successful trial run of the equipment operating licenses should be applied for irrespective of the output limit.



Power licensing

For electric power generating equipment (including plants co-generating heat and power) a combined small power plant establishment license should be applied for at the Office between 0.5 MW and 50 MW rated electric output (an electric power production permit above 50MW electrical output). Such small scale combined approvals apply to the establishment and electric power generation of the power generating equipment.

In the case of an installed electric capacity between 0.5 MW and 50 MW and the establishment of a co-generation plant with 5 MW or higher rated thermal output the applications need to be submitted to the Office in the following time sequence:

Before establishment:

- application for combined small power plant license (pursuant to the Electricity Act),
- application for establishment license to district heating equipment (pursuant to the District Heating Act) (only above 5 MW thermal output).

Following commissioning:

- application for district heat operating license (pursuant to the District Heating Act).
- application for the modification of the combined small power plant license if appropriate (pursuant to the Electricity Act).

Pursuant to the amendment of Act No LXXXVI of 2007 on electric power in force since 1 July 2011, if the Client intends to carry operations subject to licensing from the Office pursuant to the District Heating Act, he shall submit an application for a district heating operating license as provided for in the District Heating Act together with the submission of the application for operating license. In this case the Office shall issue the electric power generator, and the combines small power plant as well as the district heating production permits in a common procedure and a single resolution.

Resolutions related to licensing

The Office issued 14 resolutions related to district heat licensing in 2011. Seven of these dealt with licenses, and seven with the approval of price changes. Of the seven resolutions related to licensing one issued an establishment license, 2 terminated operations, 3 amended existing operating licenses and one approved a transformation process, all of which were published.

3.2. Competition

District heating services are local public utility services. One service provider operates in each supply area, therefore no competition for customers is possible. A limited competition can be envisaged mainly be the introduction of co-generation or the consumer may decide to switch to another type of heating, with very limited room to move.

District heating service providers supplied thermal energy to household customers at the regulated prices — established by the municipalities — in 2011. Up to 31 March 2011 tariff rates for household district heating were established by the body of representatives in the regionally competent municipality. The amendment entering into force on 15 April 2011 transferred the pricing authority from the body of representatives in local governments of municipalities by



the minister in charge for energy policy, while tariff rates were frozen at the level in place on 31 March 2011.

Service providers purchase thermal energy from the generator (power plants) and/or produce it themselves in boilers, or more and more in heat and power co-generating equipment (gas engines). Thermal energy supplied originated at least partially from heat and power co-generation plants in more than 60 communities. District heat generation exploited the economic benefits originating from co-generation to a growing extent, further enhanced by the feed-in obligation scheme and the related higher than market feed-in tariffs. From 15 April 2011 on the heat sold to district heating service providers is also priced officially with a level applied on 31 March 2011.

With effect from 1 July 2011 feed-in obligation of co-generated power and the associated regulated acceptance price was terminated. All this caused tensions in the district heating sector which was dissolved by the Government through the revision of the subsidy system. A new regulation took effect on 1 October 2011. In the case of co-generation electricity is sold at market prices while the price of heat sold to district heating service providers is regulated and higher than before due to the missing feed-in obligation subsidies. At the same time, due to the higher production prices the district heating service provider may apply for subsidies.

Competitiveness of district heating was substantially improved compared to individual or central heating schemes when general sales taxes associated with district heating were reduced to 5% in 2010.

3.3. Security of supply, public service obligation and customer protection

Heat supply to facilities included in the district heating supply system shall be secured by the regionally cognisant community municipality and in the capital by the Municipality of Budapest through the licensee or licensees.

District heating service providers are mostly owned by community municipalities, and in certain places the district heat generator (power plant subject to power license) also acquired a share in the service provider. There are some communities where operation of the district heating service provider is accomplished by private companies through concession agreements.

In the cases where the service provider purchases the majority of the heat from a power plant owned privately or indirectly by the state, disputes between the service provider and the power plant may endanger the security of supply. In these cases the Office occasionally acts as a mediator. In recent years efforts were made by local governments of municipalities to arrange district heat generation by the municipality through its own business or service provider.

The licensing authority up to 15 April 2011 was the notary of the local government and consumer heat tariff rates, charges were established by the local council. From 15 April 2011 on the licensing authority is the Office and pricing authority is the minister in charge of energy policy.



In order to ensure transparency of district heating service tariffs the Implementation Decree of the District Heating Services Act stipulated the range of financial data to be disclosed by district heating service providers and related technical information.

Consumer protection functions are provided by the regional consumer protection inspectorates of the National Consumer Protection Authority.



3.4. Price preparation, pricing

Heat sold by district heating service providers was not regulated up to 15 April 2011. Based on the legal regulation, connection charges and district heating service tariffs were specified by the local councils of municipalities in a decree of the local government. Before this decree was effectuated, the Minister in charge for the energy issues was entitled to review new tariffs of district heating. The arrangement was amended from 1 July 2009 to oblige service providers to submit their proposed tariff increase applications to the Office for approval. Local councils were empowered to adopt the tariff increase proposal pending on the resolution of the Office. In 2011 the Office acted upon 7 such issues issuing 5 resolutions and 2 orders.

Although the price approval authority of the Office with regard to household district heating tariff rates ceased to exist with effect from 16 April 2011, a new activity was imposed on it in the form of preparation of regulation of tariff rates for district heat sold to service providers, and the services provided to household consumers and separately handled institutions. This was formulated in the wording of Article 57/D of the District Heating Act in force from 15 April 2011 as a function to make proposals. According to the current District Heating Act this proposal shall be sent to the Minister of National Development by the Office before 31 August each year, which obligation was duly met. In the proposal the Office made actual recommendations for district heat sellers (producers and mediators) using a single tariff structure, while the tariffs of district heat service providers were suggested to be frozen at the 31 March 2011 level. For the municipalities the conditions of pricing not regulated in the ministerial decree were left as an authority of pricing.

The Minister of National Development published district heat seller and service provider tariffs to be applied from 1 October 2011 in Decree No 50/2011. (IX. 30.) NFM (hereinafter referred to as: Pricing Decree), and in Decree No 51/2011. (IX. 30.) NFM on district heating subsidies (hereinafter referred to as the Subsidy Decree) (closely related to the Pricing Decree) the specific amounts due to the service providers. The regulation entering into force on 1 October 2011 was amended by the minister several times, in each case based on the proposal developed by the Office upon request from the Minister taking advantage of the cost revision procedures carried on continuously by the Office from 1 October. In the course of this the itemised values set forth in the Annexes to the Pricing Decree and the Subsidy Decree were amended with effect from 1 December 2011, and for district heat service providers a moderate 4.2% price increase could be effectuated from 1 January 2012, which again resulted in the itemised subsidy rates of the Subsidy Decree.



4. Energy saving, environmental protection

4.1. Energy saving

Pursuant to Directive 2006/32/EC our country prepared the National Energy Efficiency Action Programme setting energy saving targets and recommendations of measures for the 2008-2016 period. Under this directive Hungary's final energy use must be reduced with an amount of 15 955 GWh/year (57.4 PJ/year) by 2016, compared to the average of the five years preceding the programme period. This target corresponds to an annual saving of 1 773 GWh (5.38 PJ) meaning a reduction of 1% of overall national energy use within 9 years.

The Office contributes to the implementation of the Government energy saving and energy efficiency strategy, facilitating making important committee decisions related to the support programmes (such as the Green Investment System). The Office provides professional assistance to the interpretation of any legislative proposals initiated by the European Commission and related to energy efficiency directly or indirectly in order to formulate the Member State position. It is important to note the tasks accompanying the drawing up of the EU Energy Roadmap 2050 and the new draft directive on energy efficiency.

Actual conditions and requirements were laid down for smart metering and smart networks in directives 2009/72/EC and 2009/73/EC formulated on the basis of Directive 2006/32/EC on energy end-use efficiency and energy services, on better information of consumers (ESD). These oblige Member States to prepare evaluations on the reasonable and cost effective scheduling and type of smart metering.

With the involvement of the stakeholders affected by smart metering, the Office started the preparation of smart metering pilot projects and related Government Decrees. In conjunction with this a Smart Metering Task Force was set up, with the function to process technical, accounting, financing and data security issues requiring investigation or decision making, and to clarify the requirements of the system, to support cost-benefit analyses and to analyse the expected consumer behaviour and influencing. A short term task is to set up the requirements, criteria and evaluation system of pilot projects and to prepare the launch of the pilot projects. Following the completion of the pilot projects the results are processed and a proposal for introduction on a wider scale is made. The task force is operated as a consultative reviewing and negotiating forum. The purpose of the Office is to aim pilot projects mainly to change consumer behaviour and not only technology implementation.



4.2. Environmental protection

Use of renewables

Power generation on renewable energy base in 2011 was 2689 GWh², representing a decrease of more than 10% compared to that in the previous year. The reason behind this was the decline of the mixed fuel firing based on biomass and the suspension of production in purely biomass based power plants.

Table 19: Development trends of electricity generated from renewable energy resources in Hungary (GWh) 3

| GWh | 2008 | 2009 | 2010 | 2011 |
|--|--------|--------|--------|--------|
| Biomass | 1786.2 | 2083.4 | 2050.8 | 1539.1 |
| Biogas | 29.5 | 33.1 | 55.9 | 92.0 |
| Landfill gas | 10.0 | 10.5 | 22.2 | 35.8 |
| Waste water gas | 18.6 | 27.1 | 34.4 | 55.0 |
| Wind power | 207.1 | 298.2 | 533.8 | 626.2 |
| Hydro | 213.1 | 227.3 | 187.0 | 221.6 |
| Renewable waste | 112.7 | 112.5 | 141.9 | 118.6 |
| Renewable total: | 2377.2 | 2792.0 | 3026.1 | 2689.2 |
| Ratio of renewable based power generation compared to total use of electricity (%) | 5.41% | 6.74% | 7.12% | 6.27% |

Source: HEO

Biomass accounts for the overwhelming majority of electric power generation based on renewables. Even though the ratio of biomass generated power declined continuously within the renewable power it still accounted for 57% of overall renewable based electricity. Compared to the absolute growth in previous years electricity generated from biomass dropped almost by a quarter within a single year from 2051 GWh to 1539 GWh. The reason for this is that mixed fuel fired blocks were excluded from the feed-in obligation scheme (Bakonyi Power Plant and partly the Mátrai Power Plant), and that two purely biomass based generators (Szakolyi Power Plant, Borsodi Thermal Power Plant) suspended production last year.

Power generation based on biogas, landfill gas and waste water gas reflected a significant increase in the recent years, including 2011. Biogas and landfill gas derived power grew by almost the half of the production in the previous year, reaching 92 and 36 GWh (with a ratio of 3.4 and 1.3% within the green power mix), respectively. Electricity produced on the basis of gas obtained from waste water increased even more intensively by 60 % to 55 GWh (accounting for 2% of all power derived from renewable resources). In the background of the expansion of production the underlying causes are basically the growing number of producers and the amount of installed capacity.

² Including half of the power produced in the waste recovery plant of the Budapest Public Area Maintenance Private Limited Company and in the Mátrai Power Plant using solid waste, because half of the communal waste used for energy production is deemed to be renewable.

3 Data published.

Data published on the basis of data supply from licensees.



Wind power based electricity generation showed a continuously growing tendency, increasing the respective ratio within green power from 18% in the previous year to 23% in 2011. Wind power accounted for more than 625 GWh, 17% higher than a year before. By the end of 2011 installed capacity of wind power generation reached 328 MW.

Hydro power plants produced and amount of 221.6 GWh electric power last year, representing more than 18% increment as opposed to the back fall in 2010. Reduced generation earlier on could be attributed to flood control reasons. Hydro power ratio within the domestic green electricity mix accounted 8.2% in 2011.

Electricity derived from municipal solid waste can be accounted for renewable base power in a ratio of 50%. In the past period, power from the Budapest waste recycling plant owned by Fővárosi Közterület-fenntartó Zrt. and Mátrai Power Plant using waste which could be accounted for as a renewable source, reduced from 142 GWh in 2010 to 119 GWh as a result of the lower performance of Mátrai Power Plant. Electricity generated from municipal solid waste as a renewable source accounted for 4.4% of all green power in 2011, a declining trend compared to the previous year.

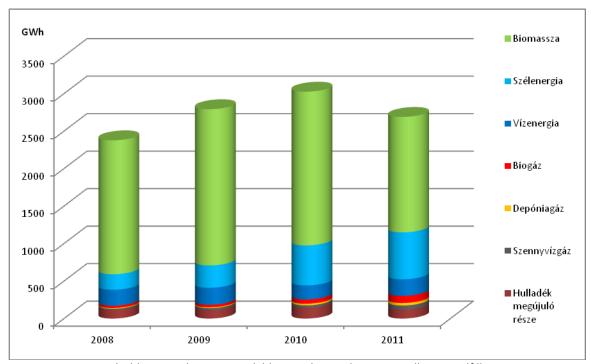


Figure 10: Electric power generated from renewable energy resources in Hungary 2008-2011

Green: Biomass; Light blue: Wind power; Dark blue: Hydro; Red: Biogas; Yellow: Landfill gas; Grey: Waste water gas; Brown: Renewable part of municipal solid waste

Source: HEO

The ratio of electricity production derived from renewable energy sources within the total power generation was 6.27% in 2011, reflecting a slight decline compared to the 7.12% ratio in the previous year.

Greenhouse gas emission allowance trading scheme

Pursuant to Directive No 2003/87/EC facilities with a power generating equipment greater than 20 MW input capacity may conduct carbon emitting activities only when holding a permit to do so. The EU allowance trading scheme (ETS) covers electric power, district heating, oil refinery,



coking, iron smelting and steel producing, cement, lime, glass, construction material manufacturing, paper and various chemical starting material producing industrial facilities.

Directive 2009/29/EC amended Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community. Further categories of mandatory operations were added and the detailed list is contained in Annex No I to Directive 2009/29/EC.

The Office contributed to the determination of the total permitted sulphur-dioxide and nitrogen-oxide emission quotas of power plants, and provides assistance to the determination of quotas for new entrants in the Allocation Plan pursuant to Act No XV of 2005 on the greenhouse gas emission allowance trading scheme. The Office takes only a position in respect of the power generating and the co-generated power and heat generating licensees, the allocation authority is the National Development Ministry.



5. Operation of the Office

5.1. Institutional and international relations

Bilateral institutional relations

Beside the Office, other bodies of the public administration also provide partly or wholly customer protection functions. The Office maintained regular contact with these agencies (Hungarian Competition Authority, Office of the Ombudsmen, Parliamentary Commissioner for Data Security, National Consumer Protection Authority, Hungarian Trade Licensing Office) as a customary practice from the previous years and conducted its work in coordination with them. The Office conducted negotiations with these government bodies, the Ministry supervising the Office and the various parliamentary committees in consumer protection issues several times. Beside public administration bodies, the Office maintained constant contacts with civic consumer protection organisations as well. As part of these contacts civil organisations participated in reviewing draft legal provisions, amendments of Business Codes and regulatory concepts of service quality control as well as in the work of the CEIR.

International relations

The Office carried international activities both in international organisations and through bilateral cooperations even more actively in 2011 than in the years before.

National energy regulators of Member States in the European Union operate two cooperation organisations. The Council of European Energy Regulators - CEER is organised on a voluntary basis with the aim to exchange regulatory experiences and to develop common European regulatory positions in energy issues. The Agency for the Cooperation of Energy Regulators -ACER is an official body of the EU (established by Regulation (EC) No 713/2009), with the function to develop – among others – the set of rules assisting the establishment of the single internal European energy market envisaged for 2014 through the coordination of close cooperation of the national regulatory bodies. The Office participates actively in the work of both organisations, taking part in drawing up of legal provisions, position papers, publications in the pipeline, or assisting the common work by comments. One of the four major chapters in the manual presenting a comparative analysis of the electric power supply quality control systems, the one on metering and regulating commercial quality was written by the experts of the Office. Another example for out active contribution includes the preparation of Regulation (EU) No 1227/2011 on the integrity and transparency of wholesale energy markets, whereby proposals for wording were provided to both CEER, the Commission and finally the Members of the European Parliament which were finally incorporated in the text.

Beside CEER the Office is an active member of another voluntary organisation, the Energy Regulators Regional Association - ERRA. This organisation encompasses the regulators of several Member States of the European Union and of some third countries (primarily in Eastern Europe and Asia), with an objective to exchange experiences and provide coordinated preparations for new regulatory challenges, including the training of the expert staff. Through this network of relations Hungarian investors are given the opportunity to get acquainted with the regulatory environment of the energy market in a number of countries while preparing for



their intended investments. The ERRA Secretariat is based in the building of the Office. The position of the Chairman at ERRA is filled in since 2008 by an executive manager of the Office, and several staff members are delegated to various working groups in the organisation.

We played an active role in particular in the field of electric power in coordinating the cross border trading arrangements of the seven Central and Eastern European countries concerned by the set of rules facilitating the realistic establishment of geographic electricity and gas market regions created with the Regulation of the European Commission.

The Office focused on the support of connecting next day markets of the Czech, Slovak and Hungarian power industry, thus promoting security of supply, price stability and liquidity of the national markets participating in the interconnected market arrangements. Success of this project is a condition precedent for connecting our region with the Central-Western European electricity markets as soon as possible.

As an active participant of the CEER EQS working group the Office conducted the survey, evaluation and compilation of the Commercial Quality chapter of the benchmarking report assessing electric power supply quality for the fifth time in 2011.

A number of bilateral consultations were held in 2011 between the experts of the Office and representatives of foreign energy regulators in order to discuss key regulatory issues and to share experiences with among others Polish, Serbian, Romanian, Italian, American, Chinese and Russian specialists.

In Fall 2011 the Office launched the preparatory and consultation process related to the integration of the energy markets in the EU. The aim of the forum is to inform domestic market and government players concerned and in particular experts from the industry about the development process of the mandatory new set of rules in the European Union (Framework Guidelines, Network Codes) and the possibilities by which it can be influenced, and to reconcile the operation of the single European target models, already set up for certain partial markets and procedures for the most part as well as the necessary administrative and market related steps involved in the preparations thereto.

The Office participates in the Twinning Programme created for the purposes of strengthening the natural gas regulatory and legal capacities of the Ukrainian National Regulatory Committee (NERC). The first phase of the programme was closed in September 2011, and encompassed several areas, including a number of issues in consumer protection and gas tariff rates. Upon request from the Ukrainian partner the European Union endorsed and funded the continuation of the programme in November 2011. Management and coordination of its third component in the topic "Methodology for the calculation of connection fees" is carried out by the accredited specialists of the Office.

In addition to direct international relations the Office conducted substantial work for the National Development Ministry by assisting the professional substantiation of the participation of the Ministry in the European legislative process.

During the period of the Hungarian EU presidency a greater than average need was seen to learn about the domestic energy system, the legal and regulatory environment and the Hungarian professional positions related to the European legislation currently in progress. The Office provided full scale information to interested parties.



Council of Energy Interest Representation

Re-engineering of CEIR operations started in 2011. Unlike the practices applied in former years the pre-announced plenary sessions were gradually replaced by the operative and cooperative joint working with the participation of the user and licensee side incorporated into the processes of the Office. Standing representatives of the user side include the Alliance of Hungarian Energy Consumers, Forum of Industrial Energy Consumers and the National Consumer Protection Association. Under this framework these organisations were involved in the current regulation preparation processes during which useful recommendations worth considering and implementation were received from them.

5.2. Information on energy

The Energy Information and Information Technology Unit collected and processed in 2011 under continuous coordination the data supplied by the nearly 700 license holders as stipulated in the resolutions containing the technical and financial information necessary for the proper functioning of the technical departments of the Hungarian Energy Office. All this meant the receipt, verification and registration of more than 30000 data sheets annually in electronic format on the data reception interface named Energy Information Data Store found on the website of the office. Since both data and the suppliers of data fluctuate constantly, the unit issued exactly 285 new or modified resolutions in 2011 in order to accommodate official price preparation activities, to comply with obligations to provide information and supply data.

Using these incoming data the Energy Information and Information Technology Unit prepared regular or occasional data supplies to both domestic fellow authorities and international organisations.

Additionally, staff members of the unit provided data in relation to international commitments to various bodies of the European Union, such as the Council of European Energy Regulators, hereinafter referred to as: CEER and EUROSTAT, as well as the other international organisations such as the International Energy Agency, hereinafter referred to as: IEA; the professional association uniting energy regulators of a number of countries in Central and Eastern Europe, Asia and the Middle-East, Energy Regulators Regional Association (ERRA), the International Energy Regulation Network (IERN) and the Organisation for Economic Co-operation and Development (OECD).

Several official publications can also be associated with the work of the unit in the last year, such as the monthly reports on the organised energy industry regulated by the Hungarian Energy Office, the publication entitled "Report on the trends in the feed-in obligation scheme in 2010", the Government Memorandum and Activity Report of 2011 presenting the activities of the Office, Statistical Yearbook of Fixed Line Energy Carriers (VEZESTÉK) concerning the electricity, natural gas and district heating industry and the paper entitled "Statistical Data of the Hungarian Electricity System for the year 2010" prepared in close cooperation with the Hungarian Electricity Industry Transmission System Operator Zrt.

During the past year staff members of the unit jointed the working groups formed in order to achieve coordinated implementation of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources



and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC: the Concerted Action on the Renewable Energy Sources Directive, hereinafter referred to as: CA-RES and the working group REMIT aiming at the implementation of Regulation (EU) No 1227/2011 of the European Parliament and the Council on the integrity and transparency of wholesale energy markets.

The responsibilities of the unit were further expanded with effect from 1 January 2010 as a result of the amendment made to Government Decree No 288/2009. (XII. 15.) on the data collection and data transfers in the National Statistical Data Collection Programme. The energy statistical system operated earlier on by Energia Központ Nonprofit Kft. was now put entirely into the hands of the Hungarian Energy Office, therefore the Energy Information and Information Technology Unit got continuously prepared in the second half of the year to take over nearly 5700 data suppliers and to manage effectively the more than 100 new type of data supply obligations.

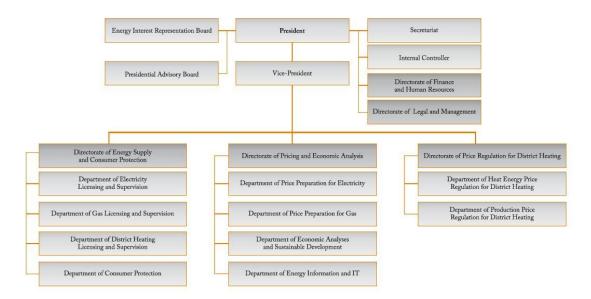


Figure 11: Organisational chart of the Hungarian Energy Office (up to 15 December)