

The Czech Republic's National Report on the Electricity and Gas Industries for 2005

July 2006

Table of Contents

1	Foreword.....	4
2	Summary information about regulation in the electricity and gas industries in 2005 ...	5
2.1	Basic information about regulatory authorities' position on the Czech energy market	5
2.2	Major developments in the electricity and gas markets	6
2.2.1	The electricity market.....	6
2.2.2	The gas market.....	7
2.3	Major issues dealt with by the Energy Regulatory Office in 2005	7
2.3.1	Gas market price controls.....	7
2.3.2	The costs of unbundling in the electricity and gas industries.....	9
2.3.3	ITC.....	10
2.3.4	Long-term contracts for cross-border interconnection sites	11
3	Regulation and structure of the electricity market.....	12
3.1	Regulatory issues.....	12
3.1.1	Key information.....	12
3.1.2	Management and allocation of interconnection capacity and mechanisms to deal with congestion management.....	12
3.1.3	Transmission and distribution companies	12
3.1.4	Unbundling	16
3.2	Competition issues.....	18
3.2.1	Structure of the wholesale market	18
3.2.2	Structure of the retail market	19
3.2.3	Measures to avoid abuse of the dominant position	21
4	Regulation and structure of the natural gas market.....	23
4.1	Regulatory issues.....	23
4.1.1	Key information.....	23
4.1.2	Management and allocation of interconnection capacity and mechanisms to deal with congestion	23
4.1.3	The regulation of the tasks of transmission and distribution companies....	23
4.1.4	Unbundling	27
4.2	Competition issues.....	30
4.2.1	Structure of the wholesale market	30
4.2.2	Structure of the retail market	32
5	Security of supply.....	34
5.1	The electricity market in 2005.....	34
5.1.1	Levels of peak demand and electricity consumption in 2005	34
5.1.2	Installed capacity	34
5.1.3	Authorisation criteria for new generation investments.....	35
5.1.4	Implicit and explicit incentives to build new capacity	35
5.1.5	Investment in transmission	35
5.2	The gas market in 2005	36
5.2.1	Natural gas consumption levels in 2005.....	36
5.2.2	Production and import capacity	36
5.2.3	UGS facilities	37
5.2.4	Natural gas consumption expected from 2006 to 2010.....	38
5.2.5	Supply safety standards	39

5.2.6	Production and import investment and the role of the regulatory authority	39
6	Public service issues	41
6.1.1	Key information.....	41
6.1.2	Obligations over and above the licence.....	41
6.1.3	Supplier of last resort.....	41
6.1.4	Labelling of primary energy sources/guarantees of origin.....	42
6.1.5	Disconnection of final customers	42
6.1.6	Protection of final customers under contract.....	42
6.1.7	Pricing for final customers on the electricity market	43
6.1.8	Pricing for protected customers on the gas market	43
6.1.9	Public administration and terms of supply contracts.....	43

1 Foreword

For the second time, the Czech Republic is presenting a report on the implementation of the requirements of Directives 2003/54/EC and 2003/55/EC, which set out the rules for the internal electricity and gas markets, and also Directive 2004/67/EC concerning measures to safeguard security of natural gas supply, to the European Commission, thereby meeting its reporting and notification obligation as set out in the Directives.

This National Report describes the progress achieved in the development of a competitive environment in the electricity and gas markets between the first National Report and July 2006. In this period the Czech Republic fully liberalised its electricity market and partly opened its gas market. This period saw improvements in the Czech Republic's relevant legislative environment, which is based on Act No. 458/2000 on the Conditions for Business and Discharge of State Administration in the Energy Industries (hereinafter "the Energy Act"), as amended in Act No. 670/2004, which transposes the applicable EC directives and regulations into Czech law. Moreover, major organisational changes in the positions held by the key market players in the Czech Republic took place in the period under review.

2 Summary information about regulation in the electricity and gas industries in 2005

2.1 Basic information about regulatory authorities' position on the Czech energy market

Administrative authorities' competencies within the structure of state administration in the energy industries are set out in the Energy Act, and also in Act No. 143/2001 on the Protection of Competition and Changes to Certain Laws.

The Energy Regulatory Office

The Energy Regulatory Office (hereinafter also referred to as 'the ERO' or 'the Office') was set up on 1 January 2001 by Act No. 458/2000, the Energy Act, as amended, as an administrative authority in charge of regulation in the energy sector. Its functions and responsibilities were described in detail in last year's National Report.

Secondary legislation issued by the Energy Regulatory Office

In connection with the entry into force of Act No. 180/2005, on support for electricity generation from renewable energy sources (1 August 2005), the Energy Regulatory Office was authorised to issue public notices No. 475/2005, which implements certain provisions of the law on support for the use of renewable sources (in force since 7 December 2005), and No. 502/2005, which lays down the method for reporting the quantity of electricity from biomass and fossil fuel co-firing (in force since 23 December 2005).

In addition to the above public notices issued by the Energy Regulatory Office under the law on support for electricity generation from renewable sources, 1 January 2006 saw the entry into force of a number of legal regulations promulgated in relation to the amendment to the Energy Act (public notices no. 404/2005 on the essentials and structure of regulatory reports, including model forms thereof, and rules for preparing regulatory reports; no. 426/2005 on the details of licensing business in the energy industries; no. 540/2005 on the quality of electricity supplies and related services in the electricity industry; no. 541/2005 on the Electricity Market Rules, principles of pricing the electricity market operator's activities, and the implementation of certain other provisions of the Energy Act; no. 542/2005, which amends no. 673/2004, which lays down the rules for gas market organisation; and no. 51/2006 on the conditions for connection to the electricity grid).

The Energy Regulatory Office does not carry out any activities overlapping with those of the other state administration authorities; i.e. in terms of jurisdictions, there exist no duplicities.

The Ministry of Industry and Trade

The powers and responsibilities of the **Ministry of Industry and Trade** ('MIT') are laid down in the Competency Act, No. 2/1969, as amended. Moreover, the Ministry is responsible for developing the National Energy Concept, observing international commitments and treaties, and granting the State's consent to the building of new capacities in the electricity industry and the State's consent to the building of direct lines and selected gas facilities in the gas industry.

The MIT's secondary legislation

In addition to another amendment to Act No. 458/2000, the Energy Act, as amended, by Act No. 91/2005, a number of public notices falling within the MIT's jurisdiction were promulgated or updated in the period under review.

In the electricity industry, these included specifically public notice no. 439/2005, which lays down the details of the method for calculating the quantity of electricity from combined heat & power generation and from secondary energy resources. There were amendments to public notices no. 151/2001, which lays down the minimum efficiency of energy use in electric and thermal energy generation, as amended in no. 478/2005, and no. 218/2001, which lays down the details of electricity metering and technical data transmission, as amended in no. 450/2003 and no. 326/2005. In the gas industry, there were public notices no. 481/2005 on the gas dispatch control rules in the Czech gas system; no. 114/2005 on the details of the Balancing Centre's activities; no. 245/2001 on the details of granting the State's authorisation for the building of selected gas facilities and on changing, extending and revoking such authorisations, as amended in no. 118/2005; and finally no. 375/2005 on states of emergency in the gas industry.

The Office for the Protection of Competition

The Office for the Protection of Competition ('ÚOHS') was set up by Act No. 272/1996, which implements certain measures in the Czech Republic's system of central state administration authorities and which amends Czech National Council Act No. 2/1969 on the setting up of ministries and other central authorities of the Czech Republic's state administration, as amended, and which amends Act No. 97/1993 on the powers and responsibilities of the Strategic Reserves Administration; the scope of its powers and responsibilities is contained in Act No. 273/1996 on the competencies of ÚOHS. In respect of the protection of competition, Act No. 143/2001 on the protection of competition and changes to certain laws, as amended, is the fundamental piece of legislation under which ÚOHS proceeds.

2.2 Major developments in the electricity and gas markets

2.2.1 The electricity market

On 1 January 2006 the Czech electricity market was fully liberalised; the last customer category, households, became eligible customers and won the right to select their supplier. Typical of the Czech Republic's open electricity market is the fact that there is no more regulation of activities in which competition is feasible. Only activities of a monopoly nature continue to be regulated. That same day saw the completion of the restructuring of major electricity market players, commenced in 2003 – the merging of distribution companies, and the outsourcing of certain services and the splitting off of assets related to these services into separate companies. Since 1 January 2006 three major entities have been operating in the Czech Republic: the ČEZ Group, formerly Středočeská energetická, a.s. (STE), Západočeská energetika, a.s. (ZČE), Severočeská energetika, a.s. (SČE), Východočeská energetika, a.s. (VČE), and Severomoravská energetika, a.s. (SME); the E.ON Group, formerly Jihomoravská energetika, a.s. (JME) and Jihočeská energetika, a.s. (JČE); and the PRE Holding Group.

Effective also from 1 January 2006, distribution system operators with more than 90,000 customers unbundled distribution from their other licensed activities, thereby meeting the Energy Act's requirement that implements the relevant provisions of Directive 2003/54/EC on unbundling into Czech legislation.

In the period under review intensive talks took place between regulatory authorities, transmission system operators and other market participants (traders, pools) at the so-called mini forums of central and eastern European countries, on the coordinated allocation of

capacities for cross-border transmission of electrical energy in the respective regions. The pilot project of coordinated explicit auctions, started in 2004 between ČEPS, PSE-O and VE-T, was extended, in November 2005, to include another two transmission system operators, namely E.ON and SEPS. ČEPS, a.s. is the auction office for 2006. The ultimate objective continues to be the development of a transparent auction mechanism for the whole central and eastern European region, whereby transmission capacities will be sold together with energy.

2.2.2 The gas market

The liberalisation of the Czech gas market, started in 2005, formally progressed in the period under review. Under the Energy Act, on 1 January 2006 all natural gas customers with the exception of households became eligible customers.

The process of unbundling in the Czech Republic was commenced on 1 January 2006, when RWE Transgas, a.s. split into RWE Transgas, a.s., which stores and trades in gas, and its subsidiary RWE Transgas Net, s.r.o., which transports gas. The unbundling of the distribution system operator (hereinafter “DSO with more than 90,000 customers”) continues in line with the timetable approved for 2006, and in accordance with the Energy Act will be completed by the end of 2006.

Five eligible customers found, or switched, their gas suppliers. Lovochemie, a.s. switched, because of contract termination by its existing supplier, to Severočeská plynárenská, a.s. from 1 October 2005; Vetropak Moravia Glass, a.s. switched to Wingas GmbH from 1 January 2006; and Moravské naftové doly, a.s., MND Servisní, a.s. and MND Stavotrans, a.s. switched to the domestic supplier, Moravské naftové doly, a.s. from 1 April 2006. Supplier switching in the case of eligible customer Vetropack Moravia Glass, a.s. was made possible primarily by the fact that this company is a final customer which has a completely even gas offtake throughout the year and which does not need storage capacity (for more details please see chapter 2.3, paragraph 2.3.1, Gas market price controls). Moravské naftové doly, a.s., MND Servisní, a.s. and MND Stavotrans, a.s. switched suppliers to receive gas from the output of Moravske naftove doly, a.s.

In the second quarter of 2006 the Energy Regulatory Office adopted a number of measures related to the entry into force of Regulation 1775/2005/EC.

The Energy Regulatory Office issued a price decision effective from 1 July 2006, in which it set the price for booking one-day firm capacity. It also provided for a non-discriminatory and transparent approach to gas transmission by repealing the part of the price decision which meant unequal conditions for calculating the balancing tolerances, and also abolished payments for renominations.

On the basis of the proposal put forward by the TSO, the Energy Regulatory Office discussed and adopted the TSO’s proposals for amendments to the TSO Code in line with Regulation 1775/2005/EC, incorporating primarily the conditions for executing gas transmission agreements based on one-day capacity. The TSO also submitted to the Energy Regulatory Office its code for transit transmission across the Czech Republic. The Energy Regulatory Office also requested the TSO to present its methodology for pricing transit services; it is now subject to thorough analysis.

2.3 Major issues dealt with by the Energy Regulatory Office in 2005

2.3.1 Gas market price controls

On 1 January 2005 the largest thirty-five final customers for natural gas, and also electricity generators using cogeneration, became eligible customers. In 2005 approximately one-half of these eligible customers started, on their own initiative, to look for a new natural gas supplier by means of tendering processes.

The outcomes of these tendering processes indicated that in most cases, only consolidated distribution companies were able to submit comprehensive proposals covering both the supply of the commodity and gas transmission and storage. Since they quoted a high commodity charge, but also because according to the eligible customers the charge was not transparent and the other commercial terms and conditions were unreasonable (commitments to make weekly and daily nominations, unreasonable penalties for failure to keep the contracted or nominated quantities, etc.), the eligible customers (with the exception of the two above-mentioned companies, see point 2.2.2) did not accept the consolidated companies' proposals. On the basis of complaints by these eligible customers, who felt to be damaged by their exposure to the effects of a malfunctioning competitive environment, at the end of 2005 the Energy Regulatory Office analysed the situation then prevailing on the Czech gas market, the degree to which it had been liberalised, the level of competition, and the consequences to be expected of the next phase of this market's liberalisation from 1 January 2006.

Having considered all the circumstances the Energy Regulatory Office decided to apply its powers under Section 1, subsection 6 of Act No. 526/1990 on prices, and proceeded to impose price controls taking the form of setting the maximum prices to eligible customers effective from 1 January 2006. These maximum prices apply to the service of natural gas supply and the service of natural gas storage provided by RWE Transgas, a.s., and to the service of gas supply by gas suppliers who buy natural gas from this company.

At the beginning of October 2005 the Energy Regulatory Office decided to impose restrictions on prices for reasons that existed at that time:

- 1) Natural gas continued to be imported to the Czech Republic by a single importer, i.e. RWE Transgas, a.s., which at the same time held, and continues to hold, majority control over six of the eight large distribution and supplier companies.
- 2) By the beginning of the gas year, i.e. 1 October 2005, no transmission capacity had been allocated to new entrants – gas traders, making it evident that in the following period only RWE Transgas, a.s. would supply the Czech market.
- 3) No new supplier was expected to enter the Czech gas market for the whole 2005/2006 heating season, because RWE Transgas, a.s. owned all the gas stored in underground gas storage facilities for supplies to the Czech market. Nobody else than RWE Transgas, a.s. was, and still is, able to offer sufficient flexibility and safety of supplies.
- 4) In the Czech Republic the gas market is organised on the basis of third-party access to underground gas storage facilities. Since almost all storage capacities are only available from RWE Transgas, a.s., this company has, and will have in the foreseeable future, a *de facto* monopoly over the provision of gas storage in underground gas storage facilities. On the other hand, actual access to such facilities is a prerequisite for a competitive environment to emerge in the gas market.
- 5) Of the total number of 35 largest eligible customers, 13 lodged petitions with the Energy Regulatory Office to deal with the disputes over gas supplies, in particular as regarded the dramatic rise in the price of gas supply to them in comparison with the price of gas supply to protected customers.

Over time, since 1 January 2006, the situation has changed somewhat, because a new natural gas supplier has entered the Czech market – Wingas GmbH, as mentioned in point 2.2.2. In spite of this, the new player's share of the Czech gas supply market is negligible.

The main purpose of imposing maximum prices was to prevent a potential collapse of gas supplies to final customers in the Czech Republic when it was not possible to expect the entry of a different competitive supplier to the 130,000 low-offtake customers who were to become eligible customers in the next phase of the liberalisation process after 1 January 2006. On the one hand, the Czech gas market is being formally liberalised under the Energy Act, due to which the various categories of final customers are being deprived of the protection accorded by price controls, while on the other hand no genuine competition currently exists on the Czech gas market, and it is not likely to emerge in the foreseeable future as the results of the analysis indicate.

Nevertheless, the ERO's measures do not prevent competition from emerging in the Czech gas market; nor do they restrict eligible customers' right to select their gas supplier or negotiate a different product for agreed prices. At the same time, the Energy Regulatory Office conducted two reviews of the practices of each of the gas distribution companies and RWE Transgas, a.s. The first review took place after the end of the first half of 2005, the other after the end of the second half of 2005. On 26 May 2006 the Energy Regulatory Office issued a first-instance decision imposing fines on four gas companies in the RWE Group, totalling CZK 14.7 million. These are fines for violations of the price law by these companies in 2005. At present the disputes between customers and their suppliers are being settled and the arrangements respect the conclusions of the price-related reviews conducted by the Energy Regulatory Office.

In the light of the gravity of its findings, and also on the basis of the eligible customers' complaints, the Energy Regulatory Office notified ÚOHS of this issue, requesting it to examine whether or not RWE Transgas, a.s. and/or the companies under its control were violating the law on the protection of competition.

ÚOHS commenced an administrative proceeding on the potential violation of Section 11, subsection 1 of Act No. 143/2001 on the protection of competition and on changes to certain laws, as amended, and of Article 82 of the EC Treaty. The party to this proceeding is RWE Transgas, a.s. ÚOHS sees potential violations in the fact that RWE Transgas, a.s. has set out different terms and conditions in contracts proposed to consolidated and unconsolidated distribution companies and erected barriers to the entry of the market of gas supplies to eligible customers, and in the procedures followed by RWE Transgas, a.s. in setting its prices to eligible customers. The administrative proceeding commenced by ÚOHS is still pending.

Since in the past period the process of creating a competitive environment in the gas market failed to take place in line with the requirements and expectations of a considerable number of market participants, the Energy Regulatory Office initiated the drafting of a new public notice on the rules for gas market organisation; its provisions pursue the objective of ensuring, as much as possible, an open gas market by simplifying the principles and eliminating the technical and administrative barriers to the entry of the market. It is expected to enter into force on 1 January 2007.

2.3.2 The costs of unbundling in the electricity and gas industries

In connection with their legal unbundling, electricity distribution system operators and the natural gas transmission system operator requested the inclusion of the justifiable and demonstrable minimum costs of unbundling, which the Energy Regulatory Office has the

remit to recognise under the Energy Act, into the prices of regulated activities. In the period under review the Office made a great effort to determine the above unbundling costs and to develop a methodology for their inclusion in prices.

The methodology for calculating and quantifying the minimum costs was developed *ex ante*. During the course of preparing detailed analyses, which helped to eliminate unjustifiable costs and set the minimum level of justifiable costs, the following cost categories were identified:

- a) One-off operating costs of unbundling – these costs will be incurred in the period directly including the legal unbundling exercise as such;
- b) Capital costs of unbundling – one-off expenses related to the acquisition of the assets necessary for carrying out the unbundling are understood to be capital costs;
- c) Ongoing operating costs of unbundling – these costs will be incurred on a regular basis, for the first time in the year of the unbundling itself and then in the following years because of the new nature of the unbundled companies' functioning.

With regard to the resulting level of the unbundling costs the Office decided to spread the recognition thereof over several years, which means that only a certain part of unbundling costs has been recognised in the electricity distribution prices for 2006. For the sake of illustration, this part of the unbundling costs accounts for 4.2% of the total costs allowable for 2006.

- a) One-off operating costs of unbundling will be spread over four years.
- b) Capital costs of unbundling will not be reflected in the regulatory base of assets and will be regarded similarly as outsourced assets (i.e., transfer of the respective depreciation and amortisation to costs – see below). Four-year life has been set for these assets for the purpose of depreciation.
- c) Ongoing operating costs have been added, in nominal terms, to the allowed revenues set for 2006 (i.e., to already indexed values of allowed revenues); and in the following years they will be indexed as costs in the basic regulatory formula.

2.3.3 ITC

Within the Council of European Energy Regulators (CEER) and the European Regulators Group for Electricity and Gas (ERGEG), the European Commission's advisory group, the Energy Regulatory Office was actively participating in the drafting of the Guidelines on Inter TSO Compensation for almost two years. In January 2006 the respective CEER/ERGEG groups outlined the two basic methods, WWT and AP, for inclusion in the Guidelines. However, upon a proposal by the European Transmission System Operators organisation (ETSO) work on these methodologies was discontinued at the meetings that followed, because ETSO representatives proposed a new methodology, called IMICA.

An analysis was carried out, and it made it apparent that the IMICA methodology, and the parameters set under this methodology, would emit inappropriate localisation signals, whereby the Czech Republic as a country with sufficient cross-border transmission capacities in the central and eastern European region would be used by the other countries for electricity transit, for which, however, it would not be compensated. On the contrary, under this methodology major exporters in the European Union post the lowest burden

caused by payments for exports and, moreover, the methodology is advantageous for the countries that have insufficient capacity (congestion) in their national grids.

For the Czech Republic the compensations, tentatively quantified at CZK 2 billion, would bring about the need of a dramatic increase in the regulated prices of electricity transmission and distribution; for customers at higher voltage levels the rise in end prices would be more than 20% and for final customers in households the price would go up by as much as 5%. The Energy Regulatory Office therefore did not support the approval of the Guidelines in the CEER/ERGEG approval process, and its Chairman also communicated the Office's dissenting position in a letter to the European Commission.

An MIT official expressed criticism of the IMICA methodology at the April meeting of the European Commission's Electricity Cross-border Committee. In his address he underlined (similarly as Italy's representatives) that the IMICA methodology was at variance with certain fundamental provisions of Regulation 1228/2003/EC, in particular because it failed to reflect the actual conditions in transmission networks and failed to set a fair compensation for the use of the grid. For the above reasons, he described the IMICA methodology as unacceptable for the Czech Republic.

Since four CEER and ERGEG member states repeatedly stood up against the IMICA methodology, the regulators' final voting on the Guidelines was adjourned. At present, intensive talks are under way between CEER/ERGEG and ETSO experts.

2.3.4 Long-term contracts for cross-border interconnection sites

Certain cross-border interconnection sites in the Czech transmission system provide priority access to historical transit contracts, which prevents the allocation of the whole interconnection capacity in a non-discriminatory manner. This results in preference for certain companies in the allocation of the cross-border capacities, in particular in the event of congestion, rather than in the application of non-discriminatory congestion management tools. This situation applies to all long-term contracts. On the basis of a trader's suggestion, the Energy Regulatory Office is currently examining, in an administrative proceeding, the 'agreement on electrical energy transmission from Poland to Austria over the Czech transmission system'. The Office pursues the objective of making the allocation of all transmission capacities on all cross-border sites compliant with the EC legislation. While the Austrian regulator, E-Control GmbH, is tackling a similar dispute in Austria and deals with the situation intensively, the Polish regulator has refused to deal with the matter.

3 Regulation and structure of the electricity market

3.1 Regulatory issues

3.1.1 Key information

The Czech electricity market had undergone a gradual opening from 2002, and on 1 January 2006 the market opened to the last customer category, households. All final customers now have the opportunity to select their electricity supplier, and the electricity market is completely open.

3.1.2 Management and allocation of interconnection capacity and mechanisms to deal with congestion management

There exist no bottlenecks in the Czech transmission grid; the grid is capable of transmitting the required volumes of electricity and there is no need to adopt any measures vis-à-vis the electricity market participants (with the exception of extraordinary situations in the grid, which are covered by the relevant legislation).

As regards electricity exports/imports, and, as the case may be, transit, the quantity of traded volumes is limited by the limited capacities of the lines on cross-border interconnections. The size of the available cross-border capacities depends on the physical electricity flows themselves and also on the contracted load at the respective border interconnection. The TSO offers all available cross-border line capacities using non-discriminatory market mechanisms, i.e., annual, monthly and daily explicit auctions are organised for all interconnections. In the case of the Polish, Slovak and both German interconnections, coordinated explicit auctions are also organised in co-operation with the neighbouring TSOs. In 2006 preparations are under way for extending the joint coordinated auctions to include also the remaining interconnection with Austria.

In accordance with Regulation 1228/2003 of the European Parliament and the Council, all proceeds from these auctions are used for network investments to maintain or increase the interconnection capacity; they are reflected in the calculation of the charges for using the transmission network or used for CBT compensation payments between TSOs in cross-border trading.

3.1.3 Transmission and distribution companies

One transmission system operator is active in the Czech Republic; the TSO is responsible for electricity transmission at the level of the transmission system (400 kV, 220 kV and selected 110 kV lines), for the development of the transmission system, and for providing the system services that help to ensure safe and reliable operation. At lower voltage levels (110 kV and lower), electricity distribution is now provided by only three distribution system operators (DSO) with more than 90,000 customers, whose facilities are connected directly to the transmission system. Besides these regional distributors there are also 312 operators of other distribution systems, connected only to DSOs with more than 90,000 customers, who distribute electricity within areas specified in their electricity distribution licences.

Network tariffs

To calculate average charges for electricity transmission and distribution the Energy Regulatory Office uses the revenue cap regulation method. It will be applied throughout the second regulatory period, i.e. from 1 January 2005 to 31 December 2009. The pricing principles were described in the first National Report (see point 3.1.3.1, Network tariffs).

The structure of prices is defined in ERO Public Notice No. 438/2001, which lays down the content of the financial information and procedures for price control in the energy sector. The electricity price to eligible (final) customers, including households, is composed of regulated and unregulated items. The regulated items, which are set by the Energy Regulatory Office every year, include all charges for the monopoly activities related to electricity transport from the generator over the transmission and distribution systems to the final consumers, i.e., transmission and distribution services, system services, and contribution to support for renewable resources and combined heat and power generation, and, effective since the beginning of 2006, secondary resources. They also include the charges for the market operator's service of imbalance clearing. Electricity generation and imports and commercial activities related to electricity supply to final customers are not regulated and are fully subject to market mechanisms.

The regulator sets the parameters for the calculation of average prices of regulated activities for each of the licence holders and sends them to the regulated entities. On the basis of these parameters the regulated entities propose prices for customers by categories and bands. The Energy Regulatory Office reviews the proposals, approves the prices, and issues its price decision setting these prices, every year in November with effect for the following calendar year. The complete wording of price decisions is published in the ERO's *Gazette*, and also on its website and the websites of the respective DSOs with more than 90,000 customers, and the TSO.

The structure of payments for distribution, or transmission if the customer's equipment is connected to the transmission/distribution system, is also composed of a fixed component and a variable component. For customers connected to the extra high voltage and high voltage levels the fixed component is a standing monthly charge for booked capacity, depending on the respective voltage level, in CZK/MW, while for small [low-demand] business and household customers connected to the low voltage level the standing monthly charge depends on the size of the circuit breaker (CZK/A). The variable component, in CZK/MWh, covers the cost of losses; bills to eligible customers also show the following separate items: the system service charge, contribution to support for renewable resources, CHP and secondary resources, and the charge for the market operator's service of imbalance clearing.

The Energy Regulatory Office sets the prices of regulated activities on the basis of voltage levels (see Table 1), and the specific prices as defined by Eurostat are therefore not available to it. For this reason it requested the Czech Statistical Office to provide it with data (prices) that match the categorisation of consumers in line with Eurostat definitions (see Table 2).

In respect of category I_b customers it is to be noted that the resulting price of electricity for this consumer category is markedly influenced by the voltage level to which the electricity supply (demand take) point is connected; i.e., the degree of transformation (the required voltage level) has a significant impact on the overall payment for regulated activities (see Table 1).

High-demand customers

In the case of large [high-demand] customers connected to the extra high voltage and high voltage levels, suppliers usually do not publish their energy quotes; the customers receive offers quoting personalised prices based on their load profile and the prices of energy in each of the time bands on the wholesale market. These prices range from CZK 980 to CZK 1,780 per MWh depending on the time band and the terms and conditions of the supply.

Low-demand business customers and households

For low-demand business customers and households connected to the LV level the structure of the energy price quoted by most of the suppliers corresponds with the structure of distribution rates; i.e., on the basis of the selected distribution rate, the customer receives an offer of the respective energy product quoted usually at CZK 860 to 1,200 per MWh for households, and at CZK 1,000 to 1,270 per MWh for businesses in the low tariff rate period, and CZK 1,300 to 1,700 per MWh for households and CZK 1,420 to 1,760 per MWh for businesses in the high tariff rate period.

Table 1 Regulated components of the price of electricity for eligible customers based on the voltage level (without 19% VAT) set for 2006

Customer category		Households	Low-demand business customers		High-demand industrial customers	
Annual electricity consumption	MWh/year	3.5	50	50	24,000	24,000
Maximum capacity	kW	-	50	50	4,000	4,000
Connected to voltage level	-	LV	LV	HV	HV	VHV
Average price for network services (transmission, distribution) w/o VAT	CZK/MWh	1,058.00	1,199.00	165.35	81.94	43.13
Capacity booking / standing charge	CZK/MW	-	-	100,086	100,086	44,444
Network use / energy	CZK/MWh	-	-	65.26	65.26	35.72
Other regulated electricity price items for services related to electricity supply, w/o VAT	CZK/MWh	189.17	189.17	189.17	189.17	189.17
Electricity market operator's clearing activity	CZK/MWh	4.63	4.63	4.63	4.63	4.63
Contribution to renewable sources and cogeneration	CZK/MWh	28.26	28.26	28.26	28.26	28.26
System services	CZK/MWh	156.28	156.28	156.28	156.28	156.28
Total regulated electricity price	CZK/MWh	1,247.17	1,388.17	354.52	271.11	232.30

Table 2 Average electricity prices to final customers based on Eurostat categories for 2005¹

Customer	Annual electricity consumption (kWh)	Electricity price w/o VAT (CZK/kWh)	Electricity price with VAT and other charges (CZK/kWh)
D_c	3,500	2.21	2.63
I_b	50,000	2.38	2.83
I_g	24,000,000	1.50	1.78

Supply quality indicators

The Energy Act provides for the TSO's and DSOs' obligation to connect customers and continuously supply them with electricity at a high level of quality; detailed connection conditions and the various quality standards are laid down in secondary legislation: ERO Public Notice No. 540/2005 on the quality of electricity supplies and related services in the electricity industry. It lays down the general standards that serve for benchmarking distribution system operators in terms of their performance, and the guaranteed standards

¹ Average prices to customer categories as defined by Eurostat for the first half of 2006 will be available in early September 2006. ERO will transmit them to the Commission through the CEER database.

that the DSOs must keep in each individual case. In the event the DSO fails to observe them, the customer has the right to demand compensation, specified in the public notice, for breaching a particular standard.

SAIDI and SAIFI in 2005 for DSOs with more than 90,000 customers are shown in Tables 3 and 4.

Table 3 SAIDI values

SAIDI [minutes/year/customer]	ČEZ	E.ON	PRE
Up to 1 kV	46	104	5.518
From 1 kV to 100 kV	235	87	27.939
110 kV	3	2	3.993

Table 4 SAIFI values

SAIFI [interruption/year/customer]	ČEZ	E.ON	PRE
Up to 1 kV	0.308	1.014	0.063
From 1 kV to 100 kV	2.43	0.843	0.505
110 kV	0.306	0.094	0.038

Connection conditions

The conditions for connecting a new customer/generator to the distribution or transmission system, including the method for calculating the applicant's share of the costs incurred in the connection and in bringing the required power, are described in ERO Public Notice No. 51/2006. The technical conditions for connection are stipulated in the rules of the transmission/distribution system operation (the Grid Code). All of these documents are available on the respective companies' websites.

The balancing market

In this area basically no changes have taken place in comparison with the preceding period. State-owned Operátor trhu s elektřinou, a.s. [*Electricity Market Operator, plc, 'OTE'*] evaluates the contracted and actual electricity supply and take, and subsequently clears the imbalances. It also organises the day-ahead, intra-day and balancing electricity markets and also the market of electricity from combined heat and power generation. Most electricity trades take place under bilateral contracts, the gate closure of which is at 1 pm on the day before. Another option is using the day-ahead market, organised by OTE. This market is based on supply and demand prices in each trading hour, generating a resulting marginal price of electricity and the quantity traded (reconciled). The gate closure is at 11.30 am on the day before. Market participants can also adjust their trading position on the intra-day and balancing markets, also organised by OTE. The system of intra-day and balancing markets, which was described in detail in last year's report, continues to work on the principle of an offer/bid bulletin board. Unlike the day-ahead market, no marginal price is generated here; rather, each of the buying/selling bidders specifies their price. The prices at which trades take place on the balancing market serve as input to the calculation of the marginal price of the balancing energy. Both markets are operated round the clock yearlong.

3.1.4 Unbundling

In the Czech Republic there is currently one TSO (ČEPS, a.s.), three DSOs with more than 90,000 customers (PREdistribuce, a.s., ČEZ Distribuce, a.s., and E.ON Distribuce, a.s.), which cover the largest part of the market, and 312 operators of other distribution systems.

Ownership unbundling

In respect of ownership neither the TSO nor the DSO with more than 90,000 customers have been unbundled.

Legal unbundling

Legal unbundling has been carried out in all electricity companies.

The TSO, ČEPS, a.s., has been in existence as an independent juristic person since 1998.

Under the Energy Act DSOs with more than 90,000 customers are to effect the legal unbundling of their activities by 31 December 2006. Nevertheless, all operators carried out this obligation earlier. E.ON Distribuce, a.s. has been legally unbundled since 1 January 2005 and the other two companies, PREdistribuce, a.s. and ČEZ Distribuce, a.s., have been unbundled since 1 January 2006.

“The 100,000 customer rule”

The Czech Republic has made use of the opportunity to unbundle only the companies that have large numbers of customers. The legislation provides for this opportunity, known as “the 100,000 customers rule”, in Section 25a, subsection 9 of the Energy Act. “The separation of activities under this law shall be effected no later than by 31 December 2006, with the exception of the vertically integrated undertakings that provide services for less than 90,000 connected final customers.”

None of the three large operators has less than 100,000 customers. From this point of view, there are the above 312 operators of other distribution systems, which, therefore, are not obligated to effect unbundling under this rule.

Ownership structure

TSO - **ČEPS, a.s.**

On 15 May 2006 the ownership structure of this company was as follows:

- 51% Osinek, a.s.
- 34% Ministry of Finance
- 15% Ministry of Labour and Social Affairs

This suggests that ČEPS, a.s. is fully under the Czech Republic’s control, 49% direct control and 51% indirect control through a public limited company whose sole shareholder is the Czech Republic.

DSO - **PREdistribuce, a.s.**

On 15 May 2006 the ownership structure of this company was as follows:

- 100% Pražská energetika, a.s.

ČEZ Distribuce, a.s.

On 15 May 2006 the ownership structure of this company was as follows:

- 100% ČEZ a.s.

E.ON Distribuce, a.s.

On 15 May 2006 the ownership structure of this company was as follows:

- 100% E.ON Czech Holding Verwaltungs-GmbH

Asset ownership

All distribution companies own assets.

Employees of the companies

The Energy Regulatory Office has currently no information about the number of employees of the various distribution companies, and it does not know the proportion of shared employees within the holding structure of the companies.

Shared services

Distribution companies use shared services in logistics, human resource and personnel management, information technologies, and customer services (call centres). All of these services are provided under contracts within the companies' holding structures and are jointly used by their subsidiaries.

The Energy Regulatory Office currently does not know the exact share of shared services; however, in the future it will require the information under this criterion as part of regulatory reporting.

Location of companies

Distribution and trading companies are currently located in the same buildings. Employees' access is monitored by security services or allowed with the help of access chip cards. Two companies plan to move their distribution to separate buildings next year.

Presentation of companies

Even after the legal unbundling the companies present themselves to customers in a standardised format in shared domains and employing uniform brands, logos and design.

Unbundled accounts

Accounts for unbundled activities will not be published in general; they will be available solely for the ERO's purposes as part of regulatory reporting. Separate accounts might be published in the event of a particular system operator pursuing no other activity than electricity transmission or electricity distribution, which is unlikely.

The Energy Regulatory Office puts in place general principles and detailed rules for the compilation of unbundled accounts solely for the purpose of regulatory reporting, i.e. purely for the regulator's own needs. However, these do not include any allocation rules (such as cost allocation), but more typically individual accounts and items each of the operators must specifically report in more detail.

Unbundled accounts are not subject to a separate audit by certified accountants.

The role of the compliance officer

Under the Energy Act, distribution companies must set up a position of compliance officer, whose tasks include, in particular, supervision over adherence to the compliance programme, employee training, complaint handling, and the preparation of a report on adherence to the compliance programme.

Inspections and sanctions

Based on the allocation of competencies within the Czech Republic's state administration concerned with the energy sector, the Energy Regulatory Office is conceived as an administrative authority that carries out regulation through the competencies vested in it; however, these competencies do not include penalisation competencies, and it only has marginal inspection competencies. The State Energy Inspectorate is the inspection and

penalising authority. In the event of detecting certain irregularities or breach of obligations by market participants, the Ministry of Industry and Trade or the Energy Regulatory Office may send a suggestion to the State Energy Inspectorate to start inspection; should it identify a violation of law, this institution may impose a fine pursuant to Section 95 of the Energy Act. Should there be a violation of material obligations related to licensed activities, the Energy Regulatory Office may, under Section 10, subsection 2 of the Energy Act, revoke the company's authorisation to carry on business, i.e. its licence.

3.2 Competition issues

3.2.1 Structure of the wholesale market

Electricity consumption, installed capacity and the peak demand in the grid

In 2005 total domestic net electricity consumption amounted to about 57.7 TWh, of which 33.4 TWh (57.9%) was taken by high-demand customers connected to the high voltage and extra high voltage levels, 7.9 TWh (13.7%) by low-demand business customers connected to the low voltage level, and 14.7 TWh (25.5%) by households. The balance of the demand, amounting to 1.7 TWh (2.9%), was taken by the energy sector itself, i.e. it was power stations' 'other load'. Total domestic electricity consumption, including network losses, amounted to 69.9 TWh.

The system registered the annual maximum, peak demand, on 28 November 2005 at 5 pm, with a total load of 10,881 MW. The system registered the annual minimum on 6 August 2005 at 6 am, with a total load of 4,544 MW.

On 1 January 2006 the total installed capacity of power stations in the Czech Republic was 17,412 MW, with approximately 58% of the power stations' output connected directly to the transmission system and 42% to the distribution system.

The HHI index

Information pertaining to HHI (the Herfindahl-Hirschman Index) is not monitored in the Czech Republic's electricity or gas markets on an ongoing basis. The Office for the Protection of Competition evaluates such information solely as part of the specific proceedings it conducts.

The market for ancillary services

The TSO procures ancillary services of all categories using market mechanisms – primary, secondary and tertiary control, fast start, and replacement reserve, which are procured via long-term and medium-term tendering processes based on the providers' bid prices. In this way some 90% of the volume of balancing power is procured. The remaining balancing reserves are bought on the day-ahead ancillary service market. A precondition for participating in the tendering processes and the day-ahead market is valid certification for the provision of the respective service, issued by an independent certification authority. At present thirteen entities, which participate in the ancillary service market depending on their technical capabilities and business strategies, hold valid certifications for the provision of a particular ancillary service. The dominant generator's share in the provision of ancillary services dropped by about 5% year-on-year, and is similar to its energy production, i.e. it accounts for approximately 65% of the volume of all ancillary services procured. The other providers' share is several per cent, depending on the ancillary service category and the ability of the various plants to provide such services.

In the case of certain ancillary services such as black start, island operation capability, and U/Q (reactive power) control, and in the case of newly procured ancillary services such as load change and generation shedding, talks are usually held directly with the service provider and the price of the service bought usually reflects the cost of providing such service. The extent to which these services are provided and their costs are not important in comparison with the main balancing reserves.

Electricity trading – long-term bilateral contracts, short-term market

Most of electricity trades (more than 99% of the volume of electricity) take place under bilateral contracts. The term of such contracts generally varies; one-year contracts are usually executed between generators and traders. The remaining volume of electricity is traded on the short-term market (day-ahead and intra-day markets), which accounts for less than one per cent of the total electricity traded in the Czech Republic. All cleared entities, i.e. not only traders and generators but also the eligible customers who are responsible for imbalances (so-called entities subject to clearing), can go to the short-term markets to procure electricity.

The degree of integration with neighbouring Member States

The national legislative framework for electricity exports/imports from/into the Czech Republic was described in detail in the previous National Report. A potential electricity exporter/importer from/into the Czech Republic over the transmission system must buy the respective capacity at the cross-border link at auctions organised by the TSO. In 2005, 21.0 TWh were exported from the Czech Republic, while imports totalled 8.3 TWh. The Energy Regulatory Office does not have data on the prices or comparisons of the prices of the electricity traded with the neighbouring countries.

Mergers and acquisitions in the electricity industry in 2005

In addition to the March 2005 decision of the Office for the Protection of Competition, whereby it replaced the obligation of ČEZ, a.s. to sell its majority interest in one of the five distribution companies in the ČEZ Group by an obligation to launch the virtual power station project (see the section on the virtual power plant), in 2005 ÚOHS issued only one decision in the electricity industry; it concerned the merger of undertakings J&T Finance Group, a.s. (J&T) and První energetická a.s. (PEAS).

The acquisition of shares making up a 100% equity interest in PEAS by J&T was permitted at the beginning of December 2005. Because of the low market share held by PEAS (as an electricity trader, in 2004 that company had traded, in terms of quantity, less than 1% of the electrical energy generated or consumed in the Czech Republic) this merger of undertakings was, however, rather insignificant and has not brought about any marked changes on the electricity market from the perspective of competition on the electricity market.

3.2.2 Structure of the retail market

Companies with a market share of above 5%

Only three vertically integrated companies that hold both a licence for electricity distribution (DSOs with more than 90,000 customers) and for electricity trading on the electricity market are currently operating on the Czech electricity market. So far, most of eligible customers have been selecting the above companies as their electricity suppliers; the reasons are the relatively small number of active independent traders on the Czech market and the negligible differences in the supply prices offered. In the case of customers

connected to the LV level (low-demand business customers and households), these three companies are the only electricity suppliers who regularly offer energy, as a product, to these low-demand categories. These three suppliers' electricity market share is more than 95% of final customers' total consumption in the Czech Republic; in the case of customers connected to the LV level their share is more than 99%.

Independent electricity traders

Several (about ten) more important traders independent of regional distributors also operate on the market; their total market share is currently only up to a few per cent of eligible customers' total consumption. So far, these suppliers have been offering electricity bought from smaller generators or imported from other countries mainly to large industrial customers. The reason has been the gradual opening of the Czech electricity market. Going forward, these suppliers' share in the low-demand customers and households segment can be expected to grow. As at 31 May 2006 the total number of electricity trading licences issued in the Czech Republic was 273; however, most of the licensed traders are not active, or their share of the domestic market is negligible.

Other electricity generators

In addition to ČEZ a.s., some other major generators operate on the Czech electricity market: International Power Opatovice, a.s. (until 30 September 2005 Elektrárny Opatovice, a.s.); Dalkia Česká republika, a.s.; Sokolovská uhelná, právní nástupce, a.s.; ECK Generating, s.r.o.; Energotrans, a.s.; and United Energy, a.s. These companies are usually parts of larger holdings, frequently multinational energy groups, which cover the whole range of activities from generation to trading. Direct connection through these ties, where the generator and trader operating in the Czech Republic are part of the same group, can be seen in the case of, for example, ECK Generating (Atel Energy GmbH.).

Number of customers who have switched suppliers

3,517 customers switched their suppliers in 2005. In connection with the market opening to another customer category (households) on 1 January 2006, as many as 3,164 entities switched their suppliers over the first quarter of 2006 (business and household customers). According to Operátor trhu s elektřinou, a.s. approximately 0.25% customers connected to LV and 3.3% of customers connected to HV and EHV switched their energy supplier in 2005. A more detailed allocation of these customers to the various categories by consumption is not monitored at present.

Supplier switching procedure

As regards the option of electricity supplier switching, eligible customers may choose their suppliers of energy, and the choice is free of charge. However, the physical transport of electricity takes place through the distribution or, as applicable, transmission system to which the customer is connected. For this reason an eligible customer usually has two contracts in place, i.e. one agreement on distribution/transmission and one agreement on electricity supply. The distribution agreement is executed between the final customer and the respective operator of the distribution/transmission system to which the customer is connected. These agreements are usually signed in perpetuity (they apply for as long as the taking of electricity lasts), and supplier switching does not affect them. The supply agreement is executed between the final customer and his electricity supplier, i.e. an entity holding an electricity generation licence or an electricity trading licence. Electricity customers can also enter into a single aggregate agreement with their electricity suppliers (referred to as agreement on bundled services), which contains the supplier's obligation to

arrange for electricity transport to the customer in addition to electricity supply. The terms and conditions governing the supply and billing of electricity, as well as the terms and conditions governing contract termination (including the relevant time limits and potential penalisation) are subject to a contractual relationship entered into under the Commercial Code.

Public Notice No. 541/2005 on the electricity market rules, principles of pricing the electricity market operator's activities and the implementation of certain other provisions of the Energy Act, lays down the rules and obligations for the various market participants (final customers, electricity suppliers, DSOs, TSO, market operator); for supplier switching, the sequence of the steps to be taken and the applicable time limits are set out. The overall supplier switching process has been shortened and currently may not be longer than 17 business days (i.e. 23 calendar days) from the moment the customer files an application for supplier change. No fees are charged to the customer for such supplier switching.

3.2.3 Measures to avoid abuse of the dominant position

The virtual power plant

Evaluation of the first year from launch - ÚOHS

The circumstances under which the virtual power plant was introduced, which was one of the ÚOHS's requirements when it permitted the merger of ČEZ, a.s. with five DSOs having more than 90,000 customers, were described in detail in last year's National Report. The idea of the project is to make that part of the generating capacity owned by the dominant electricity generator, ČEZ a.s., which corresponds to the quantity of electricity supplied by ČEZ a.s. to the various DSOs with more than 90,000 customers, available to independent undertakings competing on the market, who then compete with this electricity. The objective was to create the preconditions for the emergence of genuine competitors to the ČEZ Group on the electrical energy supply market. The auction for 2006 was declared on 31 May 2005 and its first round took place at the beginning of August 2005. The demand exceeded the offered capacity more than five times (5.5 times): 16 bidders presented 44 valid bids. Representatives of local and foreign traders and eligible customers took part in the auction. Four companies placed the best bids for the 400 MW capacity of the virtual power plant: two entities won one unit each, another company won two units, and another competitor to ČEZ a.s. won a full half of the eight 50 MW units offered. The winning bid prices for the individual units were 14.6% to 15.1% higher than the wholesale electricity price for 2005. The resulting average price of electricity bought in the virtual power plant auction for 2006 was therefore 14.82% higher than electrical energy prices for 2005.

The main reason for this strong demand, which helped to push the prices of the electrical energy bought in the virtual power plant auction upwards, was the long-lasting growth in electricity prices on commodity markets in central and eastern Europe. The increasing demand for electricity, and in turn the increasing prices on these markets, are attributable to the growth of multinational energy companies in central Europe and also the need to close down certain capacities in Slovakia, Poland and Hungary. In the last few months, international prices have been rising also due to generators' increased uncertainty concerning the environmental protection conditions under which the development and replacement of capacities will be permitted.

The purpose of the virtual power plant project was to create a functional and competitive market that would help to ensure, in a transparent and non-discriminatory way,

independent traders' access to available electric power. Since the prices of electrical energy in the various EU member states are converging (in the Czech Republic wholesale electricity prices are ten and more per cent lower than those in the neighbouring countries), the requirement placed on ČEZ a.s. is only a short-term measure and its purpose is to serve as a tool for speeding up the development of the wholesale market. The increase in the wholesale prices of electrical energy, which occurred due to the working of the above mechanisms, was also reflected in rising prices to final customers.

Evaluation of the first year from launch - ERO

The Energy Regulatory Office believes that the capacity offered in the virtual power plant auction was too low to have a favourable influence on the situation prevailing on the Czech electricity market. Another negative aspect was the timetable of the auction, when the bulk of ČEZ's output for the Czech market was sold only after the conclusion of the auction. The auction could therefore serve more as an alibi for across-the-board wholesale electricity price hikes on the Czech market.

4 Regulation and structure of the natural gas market

4.1 Regulatory issues

4.1.1 Key information

All final customers taking more than 15 million cubic metres [mcm] of gas annually and producers generating electricity in CHP plants became eligible customers on 1 January 2005. The next step on the way to market liberalisation was 1 January 2006 when all customers, with the exception of households, became eligible customers. On 1 January 2007 all final customers will become eligible customers and the gas market will be fully opened up. Eligible customers' consumption currently accounts for about 70% of total annual natural gas consumption.

4.1.2 Management and allocation of interconnection capacity and mechanisms to deal with congestion

RWE Transgas Net, s.r.o., which holds the exclusive gas transmission licence in the Czech Republic, provided for natural gas transmission across the Czech Republic under long-term agreements in place with Gazexport Moscow, Verbundnetz Gas AG Leipzig, and Wintershall AG Kassel. The current capacity of the transmission system is such that neither physical nor commercial congestions occur. In the period under review the respective provisions of Public Notice No. 673/2004 on the TSO's obligation to publish information on the operation of the transmission system did not change.

Looking at the capacity of cross-border links it is to be noted that since the TSO applies the entry/exit principle, commercial congestions occur rather than technical congestions. RWE Transgas Net, s.r.o. provides information about the technical capacity available at its three border transfer stations in Lanžhot, Hora sv. Kateřiny and Waidhaus on its website.

From the perspective of the national level there are only certain local congestions; nevertheless, this is not currently precipitating any need for limiting customers' capacity requirements or for pipeline reinforcement.

As regards the priorities in capacity allocation (national or cross-border) in the event of a commercial shortage of capacity and the issues of gas transit, the same rules as in the previous period stayed in place in the period under review.

4.1.3 The regulation of the tasks of transmission and distribution companies

The transmission system operator

Since 1 January 2006 RWE Transgas Net, s.r.o. has been the transmission system operator in the Czech Republic. Connected to the transmission system are the eight gas distribution companies, each of which has more than 90,000 final customers. In addition, approximately 105 smaller natural gas distribution licence holders operate on the Czech market. The legislative framework for the operation of the TSO and DSOs did not change in the period under review.

The Balancing Centre

For the purposes of monitoring gas planning, production, supplies and consumption, the capacities and performance of the transmission system, distribution systems and underground gas storage facilities, and line pack, and the processing of this data into summary overviews of the gas system, a Balancing Centre was set up under Section 64 of

the Energy Act. It brings together the TSO, DSOs with more than 90,000 customers, and SSOs.

On the basis of the overviews prepared throughout the gas chain, i.e. by the TSO, DSOs, SSOs and gas traders, and on the basis of its own analyses, the Balancing Centre prepares overall overviews of the gas system. To this end, the Balancing Centre has certain rights specified in the Energy Act. At the same time, under the law it has the obligation to provide the MIT and ERO, upon their request, with information required by the two institutions to exercise their powers and perform their obligations.

Also eligible customers have certain duties to the Balancing Centre under the legislation in place; these include provision of monthly data on gas supplies in cases where the eligible customers arrange for such supplies on their own, including imports. Further, where eligible customers exercise their right to switch suppliers, they must notify the Balancing Centre of such change.

Network tariffs

The key principles of the pricing of gas transmission and distribution for final customers in the Czech Republic were explained in the National Report for 2004 in the section on the electricity industry (see 3.1.3); they are the same for both industries.

Transmission

The transmission rate is comprised of one component only, and it relates to the contracted transmission capacity. For annual agreements, the Energy Regulatory Office set the transmission rate for inland transmission at CZK 23,953.80/1,000 cu m/day/year for 2006. Transmission agreements may also be executed for shorter periods of time, starting from one-month periods, but for no more than twelve months. Setting prices for shorter periods than one year is based on the fact that in different months of the year the transmission system is used to a different extent, and therefore the efforts to provide transmission capacity for a shorter period depend on the specific month and the length of the period. The Office has set factors for each of the calendar months. The values of these factors make it possible to derive transmission charges from the annual transmission rate for the purpose of monthly transmission agreements.

Distribution

The distribution rates are double-component rates. For the large, medium and low offtake categories and household customers with larger consumption (over 63 MWh/year), the fixed component relates to the distribution capacity booked at the customer's gas supply [offtake] point; this capacity is either calculated or agreed, depending on the type of metering. For the low-offtake category and households with lower consumption (up to 63 MWh/year) the fixed component has the form of the monthly standing charge. For all customer categories, the variable component of the distribution rate relates to the total quantity taken.

The distribution price is also set on an annual and monthly basis. In line with the ERO price decision, the monthly distribution price is derived from the annual rate, similarly as the transmission price. To make sure that the respective operators take a non-discriminatory approach, distribution and transmission charges are set as fixed prices, i.e. no discounts may be granted, and the prices may not be increased. Thanks to the sufficient capacity in the distribution systems and the transmission system the interruptible capacity charge was set at the same level as the charge for firm capacity, but discounts are granted upon interruption in accordance with the TSO's and the DSOs' Codes. The interruptible

capacity charges were set as the maximum prices because of the option to grant a discount for supply interruptions. The average price to final customers for the use of the system includes the transmission charge and the distribution charge.

Since the Energy Regulatory Office does not keep statistical data on prices to final customers corresponding to consumer categorisation by Eurostat's definition, it asked the Czech Statistical Office for such data (see Table 5). These prices include all services, i.e. distribution, transmission, storage, commodity and other commercial services. Column A shows prices without VAT, column B shows the same prices with VAT.

The table also documents that the considerable increase in the purchase prices of natural gas supplied by foreign suppliers in 2005 and 2006, caused by the surging gas oil and heavy fuel oil prices, was reflected in the prices to final customers.

Table 5 Gas prices to final customers by Eurostat categories for all quarters of 2005 and the first quarter of 2006.

Period	Standard consumer, Eurostat					
	D3		I1		I4-1	
	A	B	A	B	A	B
1/1/2005	687.00	817.53	602.92	717.47	531.68	632.70
1/4/2005	687.00	817.53	586.61	698.07	517.50	615.82
1/7/2005	702.83	836.37	616.59	733.74	547.61	651.66
1/10/2005	828.65	986.09	742.49	883.56	673.52	801.49
1/1/2006	871.18	1,036.71	786.45	935.88	720.56	857.46

Based on the data available for 2006, the Energy Regulatory Office has converted the categories of Czech consumers into categories matching Eurostat's definitions for the purpose of drawing up this National Report. Table 6 shows the distribution prices for 2006, ranging from the least expensive to the most expensive DSO with more than 90,000 customers.

Table 6 Average distribution prices in 2006

Eurostat category	Distribution price	
	Minimum, CZK (w/o VAT)	Maximum, CZK (w/o VAT)
I4-1	34.39	73.88
I1	95.89	174.18
D3	132.54	233.41

Under the Energy Act, the Czech Republic uses negotiated TPA to gas storage facilities. This is why the Energy Regulatory Office does not regulate gas storage prices, although in actual fact a single entity controls almost all storage capacities in the Czech Republic. Nor does the Office have the competencies to influence the SSO's activities in any way through its approval of the SSO's Code.

Public Notice No. 673/2004, which lays down the gas market rules, as amended, imposes on the operators of virtual storage facilities to offer "bundles" of services (SBU) for the whole virtual facility, to which the required injection/withdrawal capacity, and the interruptibility and non-interruptibility thereof, and, in turn, capacity transferability, are tied.

Charges for access to UGS facilities

Two SSOs operating in the Czech Republic, namely RWE Transgas, a.s. and Moravské naftové doly, a.s., set the charges for access to UGS facilities. On its website RWE Transgas, a.s. publishes indicative levels of the storage charges in relation to the storage agreement term. In May 2006 the withdrawal capacity charge under one-year agreements was CZK 161.30/cu m/day/year (CZK 2.54 per cubic metre of working volume); and under 20-year agreements CZK 100.00/cu m/day/year (CZK 1.54 per cubic metre of working volume). There are another two UGS facilities in the Czech Republic, at Uhřice and Dolní Bojanovice (for details please see point 4.2.1, under ‘Companies having at least a 5% market share’). The entire current capacity in the Uhřice UGS facility is leased out to RWE Transgas, a.s. The Dolní Bojanovice UGS facility is used as a bonded warehouse for the Slovak Republic, and therefore is not used for the needs of customers in the Czech Republic.

However, the Energy Regulatory Office regulates the cost of storage included in the regulated price of supplies to protected customers. It is a capacity-related component of the price of gas supplied by RWE Transgas, a.s. traders. This component includes the costs related to the UGS facilities owned by RWE Transgas, a.s. and this company’s costs incurred in leasing UGS facilities for the needs of customers in the Czech Republic from the other SSO in the Czech Republic and from companies outside the Czech Republic. This price therefore fails to accurately reflect the individual SSOs’ storage charge, and does not make it possible to discern the withdrawal capacity price as such. As an indicative value we would note that on average, the storage charge amounts to CZK 0.81/cu m of the working volume.

Service quality

Once a year, the TSO, DSOs and SSOs are obligated to submit a report on the quality and maintenance of the transmission and distribution systems and UGS facilities pursuant to Section 58, subsection 9(y), Section 59, subsection 8(z), and Section 60, subsection 7(p) of the Energy Act. The content of these reports is specified in the MIT’s and ERO’s Common Methodological Guidelines (on the content of reports to be submitted by the TSOs, DSOs and SSOs on the quality and maintenance of the installations they operate), which are publicly available on the respective websites. No serious problems with service quality have been reported to date.

An ERO public notice is being drafted for the legislative process; it will focus in detail on the monitoring, assessment and publication of the quality standards prescribed, and on the penalisation of failures to keep such standards. It will contain similar quality-related provisions as the one on quality standards in the electricity industry currently in place.

The balancing market

The character of the gas market model’s functioning did not change in any material respects in the period under review. A new feature is the introduction of charges for renomination, related to the quantity of the gas supplied by each of the suppliers. To reflect the needs of small balancing entities the Energy Regulatory Office has set a charge of CZK 800 for entities with a total booked transmission capacity of more than 2 mcm/day. It has also introduced a charge for every renomination amounting to more than 4,200 MWh on any given gas day, at CZK 0.20 per MWh of the difference between the value of the renomination and the value of the nomination accepted and registered by the TSO, or the last revised nomination accepted and registered by the TSO, or the last renomination accepted and registered by the TSO. The nomination and renomination conditions are applied in accordance with the EASEE-gas rules.

The TSO is responsible for the physical balancing of the system; in addition to the line pack, UGS withdrawal/injection capacities and a limited quantity of gas in UGS facilities are available to the TSO.

As regards commercial balancing, the principle of calculating the balancing tolerance using a formula has been preserved. However, the Energy Regulatory Office has reflected small balancing entities' needs; the balancing tolerance for balancing entities with a booked transmission capacity of less than or equal to 2 mcm/day has been set at 5% of the sum of all daily booked firm or interruptible capacities of the respective balancing entity agreed in contract(s) at each of the exit points.

When this tolerance is exceeded, the so-called off-tolerance balancing imbalance arises, which is subject to a charge set by the Energy Regulatory Office in its price decision.

Balancing entities must also keep the values nominated to the TSO within a gas day. A failure to keep the nominated gas quantity at the exit from the transmission system gives rise to a nomination imbalance. Nevertheless, there is a nomination tolerance based on a formula for these cases too.

The Energy Regulatory Office has determined the coefficients for calculating the balancing and nomination tolerances on the basis of an analysis of the line pack in the transmission system.

Because of the non-existence of a sufficiently liquid market, imbalances are balanced by means of payments in kind, with the help of a daily reference price resulting from the effective match between supply and demand (perfect competition). On the basis of preliminary results of metering, the individual entities balance the imbalances for day D, or for the immediately preceding non-working days, on day D+2. Once the TSO has evaluated a whole calendar month, these entities settle the sum of the actual imbalances for that calendar month on the 15th day of the following month.

If a balancing entity does not opt for payment in kind, it will pay for the missing balancing gas at a price that the Energy Regulatory Office has, because of the non-existence of a daily market price of natural gas, set at 1.6 times the maximum price of the gas from RWE Transgas, a.s., and the price for excess balancing gas is 0.4 times the above maximum price. The TSO pays for the excess balancing gas.

4.1.4 Unbundling

In the Czech Republic, there is currently one TSO (RWE Transgas Net, s.r.o.). There are eight DSOs (Pražská plynárenská, a.s., Jihomoravská plynárenská, a.s., Západočeská plynárenská, a.s., Středočeská plynárenská, a.s., Severomoravská plynárenská, a.s., Východočeská plynárenská, a.s., Severočeská plynárenská, a.s., and Jihočeská plynárenská, a.s.), each of them having more than 90,000 customers, which between them cover the largest part of the market. There are 105 operators of other distribution systems.

Ownership unbundling

From the perspective of ownership neither the TSO nor the DSOs have been unbundled.

Legal unbundling

The TSO, RWE Transgas, a.s., has effected legal unbundling. Since 1 January 2006 the TSO has been operating under a new name, RWE Transgas Net, s.r.o.

Under the Energy Act, DSOs with more than 90,000 customers should effect their unbundling by 31 December 2006; this year therefore sees intensive preparations for their legal unbundling.

“The 100,000 customers” rule

The Czech Republic has made use of the option to effect unbundling solely in respect of companies that have a large number of customers. In the legislation, this option is known as “the 100,000 customers” rule, and it is provided for in Section 59a, subsection 9 of the Energy Act, which reads as follows: “The separation of activities hereunder shall be effected by 31 December 2006, with the exception of vertically integrated undertakings that provide services to less than 90,000 final customers connected.”

None of the eight DSOs has less than 90,000 customers. From this perspective, it is the above 105 operators of other distribution systems who are not obligated to effect unbundling under the rule.

Ownership structure

TSO - **RWE Transgas Net, s.r.o.**

On 15 May 2006 the ownership structure of this company was as follows:

- 100% RWE Gas International B.V.

DSO - **Pražská plynárenská, a.s. (PP)**

On 15 May 2006 the ownership structure of this company was as follows:

- 50.05% Pražská plynárenská Holding a.s.
- 49.17% RWE Gas International B.V.
- 0.78% other shareholders

Jihomoravská plynárenská, a.s. (JMP)

On 15 May 2006 the ownership structure of this company was as follows:

- 47.65% RWE Gas International B.V.
- 43.73% E.ON Czech Holding AG
- 2.46% RWE Transgas, a.s.
- 2.33% SPP Bohemia a.s.
- 3.83% other shareholders

Západočeská plynárenská, a.s. (ZČP)

On 15 May 2006 the ownership structure of this company was as follows:

- 47.87% RWE Gas International B.V.
- 45.81% E.ON Czech Holding AG
- 4.28% RWE Transgas, a.s.
- 0.9% GDF International
- 1.14% other shareholders

Středočeská plynárenská, a.s. (SČP)

On 15 May 2006 the ownership structure of this company was as follows:

- 80.55 % RWE Gas International B.V.
- 14.27% E.ON Czech Holding AG
- 1.6% RWE Transgas, a.s.
- 3.58% other shareholders.

Severomoravská plynárenská, a.s. (SMP)

On 15 May 2006 the ownership structure of this company was as follows:

- 40.05% RWE Gas International B.V.
- 20.46% SPP Bohemia a.s.
- 18.09% RWE Transgas, a.s.

- 9.49% E.ON Czech Holding AG
- 8.51% Slovenský plynárenský priemysel, akciová spoločnosť
- 2.6% GDF International
- 0.8% other shareholders

Východočeská plynárenská, a.s. (VČP)

On 15 May 2006 the ownership structure of this company was as follows:

- 47.09% RWE Gas International B.V.
- 18.83% SPP Bohemia a.s.
- 16.52% E.ON Czech Holding AG
- 9.99% Slovenský plynárenský priemysel, akciová spoločnosť
- 3.17% GDF International
- 2.95% RWE Transgas, a.s.
- 1,45 % other shareholders

Severočeská plynárenská, a.s. (SČP)

On 15 May 2006 the ownership structure of this company was as follows:

- 97.66% RWE Gas International B.V.
- 1.14% GDF International
- 0.82% RWE Transgas, a.s.
- 0.38% other shareholders

Jihočeská plynárenská, a.s. (JČP)

On 15 May 2006 the ownership structure of this company was as follows:

- 46.66% RWE Gas International B.V.
- 30.15% KVINTA podílnická plyn spol. s r.o.
- 12.87% E.ON Czech Holding AG
- 5.64% Oberösterreichische Ferngas AG
- 3.29% BUDERIO a.s.
- 1.39% other shareholders

Companies' employees

Gas companies have provided the Energy Regulatory Office with information about the share of shared employees within their holding structure; the figures are approximately 15% in gas distribution and 5% in gas transmission.

Shared services

Transmission and distribution companies use shared services in logistics, human resource and personnel management, information technologies, and customer services (call centres). All of these services are provided under agreements within the holding structure of the companies, and are jointly used by the subsidiaries.

The Energy Regulatory Office has currently no information about the exact share of shared services, but in the future it will require that such information be submitted as part of regulatory reporting.

Location of companies

The TSO, RWE Transgas Net s.r.o., has physically moved to a separate building and employees' access is monitored by a security service.

DSOs with more than 90,000 customers have not yet addressed this issue, since they are only obligated to effect legal unbundling by 31 December 2006.

Presentation of companies

After its legal unbundling the TSO has set up its own domain, at which it presents its activities using the holding company's uniform brands, logo and design.

DSOs with more than 90,000 customers have not yet addressed this issue, since they are only obligated to effect legal unbundling by 31 December 2006. They present their activities at a shared domain using uniform brands, logos, and design.

Unbundled accounts

In general, accounts for unbundled activities will not be published; they will be available only for the ERO's purposes as part of regulatory reporting. Unbundled accounts might be published in the event of the respective system operator carrying on exclusively gas transmission, which is not likely.

The Energy Regulatory Office sets forth the general principles and detailed rules for the preparation of unbundled accounts only for the purpose of regulatory reporting, i.e. purely for the regulator's needs. However, this does not involve allocation rules (such as cost allocation), but individual accounts and items that the various operators have to report in a specific and detailed manner.

Unbundled accounts are not the subject of a separate audit from a certified accountant.

The role of the compliance officer

Under the Energy Act, DSOs with more than 90,000 customers and the TSO must set up the position of compliance officer, who is responsible, in particular, for supervising the performance of the compliance programme, employee training, complaint handling, and for producing a report on performance under the compliance programme.

Inspections and sanctions

On the basis of the allocation of competencies within state administration in the Czech energy sector, the Energy Regulatory Office is conceived as an administrative authority that carries out regulation through the competencies vested in it. However, these competencies do not include penalisation powers, and the Office only has marginal inspection competencies. The State Energy Inspectorate is the inspection and penalising authority. Should certain irregularities or breach of obligations be found on the part of companies, the Energy Regulatory Office may suggest to the State Energy Inspectorate to conduct inspections; if the latter finds a violation of law, it may impose a fine pursuant to Section 95 of the Energy Act. In the event of a serious violation of obligations attendant on licensed activities the Energy Regulatory Office may, under Section 10, subsection 2 of the Energy Act, revoke that company's authorisation to carry on business, i.e. its licence.

4.2 Competition issues

4.2.1 Structure of the wholesale market

Gas consumption

Natural gas consumption in the Czech Republic has been stable in the past few years, at around 9,500 mcm/year, with slight variations. Similarly, in the past few years the calorific value of the natural gas supplied to final customers has been around 9.50 kWh/cu m (34.2 MJ/cu m) – for more details please see point 5.2.2. The gross calorific value is 10.55 kWh/cu m (37.98 MJ/cu m).

Indigenous resources and imports

The Czech Republic's indigenous natural gas resources account for less than 1% of the country's domestic consumption. These resources include natural gas produced in southern Moravia, mainly for local consumption, and also the so-called drainage gas exhausted from hard coal mines in northern Moravia. Since domestic gas production is almost negligible the Czech Republic has to import almost all of the natural gas it needs. In 2005 natural gas imports were therefore secured by long-term take-or-pay gas supply agreements. These agreements are owned in the Czech Republic by RWE Transgas, a.s. Three-quarters of the country's annual consumption are covered by gas supplied by Russian producers; Norwegian producers supply the balance.

New gas market players

New entrants more or less just monitor the current situation on the market. The companies that actually do supply gas are Wingas GmbH and Moravské naftové doly, a.s, whose market share has been rather negligible so far as they supply only four final customers (see point 2.2).

Contractual relationships

In 2005 the gas purchase agreements of DSOs with more than 90,000 customers, intended for gas supplies to eligible customers, were long-term take-or-pay agreements. Because of the limitations on the maximum prices allowed on the wholesale market, which are described in more detail in point 2.3, the wholesale customers' selling prices (the maximum level of such prices) are derived from the ERO's price decision.

Companies having at least a 5% market share

RWE Transgas, a.s. is one of the most important companies on the markets of gas transmission, distribution, storage, and trading (on the wholesale market it is the only player having a market share of more than 5%). Since 10 July 2003 RWE Gas International B.V. has been the sole shareholder of this company. Its core business includes natural gas transmission, storage, and trading under the Energy Act. RWE Transgas a.s. holds exclusive control over its subsidiary RWE Transgas Net, s.r.o., which has been operating as the TSO since 1 January 2006. The ownership structure (see point 4.1.4) suggests that the RWE international energy group also controls natural gas trading and distribution in six DSOs with more than 90,000 customers. Thus, the RWE Group is a vertically integrated group that provides comprehensive services in the gas industry.

The other major DSOs with more than 90,000 customers include Pražská plynárenská, a.s. (PP) and Jihočeská plynárenská, a.s. (JČP), in which the E.ON energy group is acquiring, step-by-step, majority stakes. E.ON Czech Holding AG has executed agreements on swapping equity interests in the Czech gas industry with companies in the RWE Group, under which it will strengthen its position in JČP (its 13% interest will increase to 60%) and in PP (it will acquire a 49% interest in PP and, at the same time, a 25% interest in Pražská plynárenská Holding a.s., which holds a 51% interest in PP). Once this agreement is carried out, E.ON Czech Holding AG will become another major undertaking on the Czech market.

On the Czech gas storage market, in addition to RWE Transgas, a.s., which owns six of the eight UGS facilities located in the Czech Republic, there is also Moravské naftové doly, a.s., in which SPP Bohemia, a.s. holds more than 50%. The Dolní Bojanovice UGS facility, operated by SPP Bohemia, a.s., is fully used for the needs of the Slovak gas

industry, and is operated as a bonded warehouse. It is therefore not included in the above data on quantities.

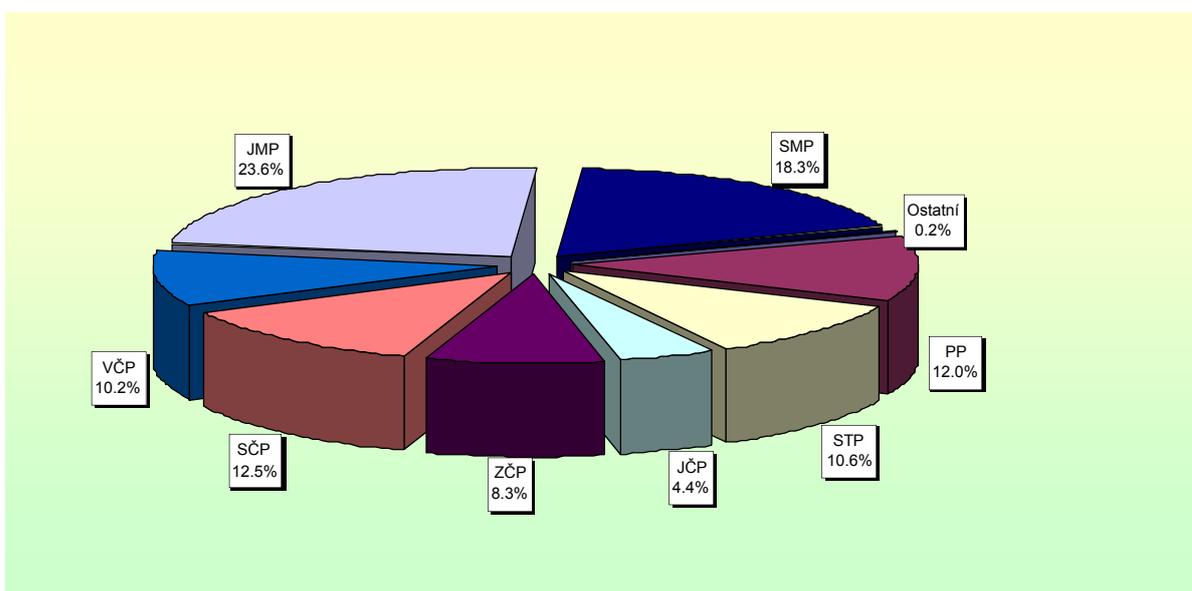
Other traders

By June 2006 the Energy Regulatory Office had issued 74 gas trading licences. However, it currently does not monitor the extent to which these traders are active on the gas market.

4.2.2 Structure of the retail market

In the Czech Republic there are eight vertically integrated DSOs with more than 90,000 customers; historically, they have been supplying gas within their regional franchises. The shares held by each of the DSOs with more than 90,000 customers in the total natural gas consumption in the Czech Republic can be seen in Chart 1.

Chart 1 Shares held by each of the companies on the Czech natural gas market



However, the fact that a large number of companies operate on the retail gas market does not mean any effective competition on the retail market, for the following reasons:

- As mentioned above, six of the eight DSOs with more than 90,000 customers are controlled by the RWE Group, accounting for 83.6% of gas sales in the Czech Republic;
- The various companies usually limit their supplies to the regional franchise delineated for them and do not compete with one another; there are *de facto* eight monopoly markets; and,
- There is only one wholesale gas supplier.

Structure of DSOs' customers

Table 7 lists the shares held by each of the DSOs with more than 90,000 customers on the natural gas market to offer a more detailed picture of the structure of customers served by the distribution companies. In the Czech Republic, gas-fired power stations are used to only a very limited extent, mainly as peak-shaving capacities or heat & power plants. Due to a different segmentation and for the sake of clarity, the following are customer segments:

- Households and low-offtake customers (annual consumption up to 630 MWh/year)
- Medium-sized offtake customers (annual consumption from 630 to 4,200 MWh/year)
- Large offtake customers (annual consumption over 4,200 MWh/year)

Table 7 Segmentation of the natural gas market and companies' market shares

Market segment	The company's share of the segment (%)							
	VCP	JCP	JMP	PP	SCP	SMP	STP	ZCP
Households and low offtake	11.88%	4.18%	27.70%	12.94%	8.88%	17.57%	9.27%	7.57%
Medium offtake	10.98%	5.30%	24.35%	18.94%	8.91%	14.06%	9.22%	8.23%
High offtake	9.14%	4.38%	20.25%	9.41%	16.31%	19.11%	12.52%	8.87%
Total CR	10.51%	4.39%	23.88%	11.91%	12.35%	17.94%	10.78%	8.25%

Number of customers who have switched suppliers

Only five eligible customers have switched suppliers: Lovochemie, a.s., Vetropak Moravia Glass, a.s., Moravské naftové doly, a.s., MND Servisní, a.s. and MND Stavotrans, a.s. (for details please see point 2.2.2, Gas market).

The gas supplier switching procedure

The procedure to be followed in gas supplier switching is described in Section 23 of Public Notice No. 673/2004, which lays down the rules for gas market organisation, as amended. Eligible customers switch suppliers free of charge, and the switch is possible as from the first day of a month and is subject to registration with the administrator of the respective balancing zone.

In the regime of delegated responsibility for imbalances, the eligible customer and the new gas supplier enter into a gas supply agreement first of all. The next step is the allocation of the eligible customer's supply point to the new gas supplier by the administrator of the respective balancing zone. Finally, the new gas supplier informs the eligible customer's old gas supplier of the execution of the above agreement.

The new gas supplier shall apply with the balancing zone administrator for the registration of the switch no later than 15 calendar days before the beginning of the month from which the change is to take place. The balancing zone administrator shall inform the old and new gas suppliers whether it has accepted or rejected the application for registration no later than 10 calendar days before the beginning of the month from which the change is to take place.

The ERO's discussions with eligible final customers indicate that the actual non-existence of competitive offers, the agreements currently in place, mainly their periods of notice of termination, and potential shortage of gas in UGS facilities for the new supplier are an obstacle hindering gas supplier switching.

5 Security of supply

5.1 The electricity market in 2005

5.1.1 Levels of peak demand and electricity consumption in 2005

The grid experienced the annual peak demand on 28 November 2005, when gross consumption amounted to 10,881 MW. The country's total electricity consumption in 2005, including network losses, was 69.9 TWh, which implies an increase of 1.9% in comparison with 2004. The trend of a slight growth in the country's electricity consumption continued in 2005. Electricity imports contributed to meeting domestic demand more than in the previous year. On the generation side, the influence of preferring renewable sources in electricity generation under the respective EU Directive and Czech legislation could be felt throughout the year.

No marked increase in consumption or peak demand can be expected in the next few years; retail customers' rising electricity consumption is compensated by savings and energy intensity reductions in industry. Annual increases in consumption up to 2010 are estimated at 1.0 – 2.1%.

5.1.2 Installed capacity

On 1 January 2006 the total installed capacity of power stations in the Czech Republic was 17,412 MW, with approximately 58% of the power stations' output connected directly to the transmission system and 42% to the distribution system.

The current structure of generation capacity by the size of installed capacities is as follows:

- 10,664 MW thermal power stations (61.2%),
- 3,760 MW nuclear power plants (21.6%),
- 2,166 MW hydroelectric power stations, including pumped storage (12.5%),
- 780 MW gas-fired and combined cycle power stations (4.5%),
- 42 MW alternative capacities – wind, photovoltaic, etc. (0.2%).

In comparison with 2004, the installed capacity of thermal power stations, including cogeneration, decreased by 41 MW. The installed capacity of gas-fired and combined cycle power stations decreased by 10 MW. On the other hand, the installed capacity of hydroelectric power stations increased by 6 MW and that of the other renewable sources (mainly wind farms) by 23 MW. The total annual decrease in the installed generation capacity in the electrical grid amounted to 22 MW.

Extensive organisational changes took place in the electricity industry in 2005. They were due to the fact that ČEZ, a.s. and E.ON assumed control over distribution companies. These changes also involved preparations for meeting the preconditions for the opening of the electricity market. New companies were established, respecting Directive 2003/54/EC, which sets out the rules for the internal electricity market, and also new companies in which the services that had earlier been carried out in each of the individual distribution companies were concentrated.

There are no expectations of the commissioning of a new large plant having an installed capacity of over 50 MW and firing fossil fuels or using nuclear energy in the next three years. However, in connection with the new law on renewable sources, which entered into force in August 2005, the development of a larger number of plants using renewable sources and having smaller unit capacities can be expected. Under the conditions prevailing in the Czech Republic the development of biomass firing in local heat & power

plants has the most promising prospects; to a limited extent, new small hydroelectric power stations and wind power stations can also be expected. The Czech Republic does not have suitable conditions (potential) for the other renewable sources (photovoltaic, or geothermal energy). On the whole, the construction of up to several hundreds of MW of capacity to generate electricity from renewable sources can be expected in the next few years.

5.1.3 Authorisation criteria for new generation investments

The building of a new electricity generating plant may be started upon obtaining a construction permit issued by the planning office having the relevant local jurisdiction. One of the main preconditions for issuing a construction permit is the submittal of an expert study proving that the new plant will not have negative environmental impacts. In the case of electricity generating plants having a total installed capacity of 30 MW and more, there is also the need to obtain an authorisation for the construction, which is issued by the Ministry of Industry and Trade in line with the National Energy Policy. An electrical energy generator has the right to connect its plant to the grid subject to the connection conditions defined in the relevant energy legislation; upon obtaining an electricity generation licence from the Energy Regulatory Office, it has the right to supply electricity in line with the rules for the operation of distribution systems or, as applicable, the transmission system (the Grid Code). A precondition for obtaining an electricity generation licence is, in particular, obtaining the permit to commission the plant and proving the professional competence and financial standing to operate the energy generating plant.

In general, the national budget does not provide support for investment in new generating capacity; however, certain subsidies can be obtained from governmental and non-governmental agencies and funds, subject to the required conditions. For plants having an installed capacity of up to 1 MW the generator may benefit from tax holidays for the first five years of operation.

5.1.4 Implicit and explicit incentives to build new capacity

In respect of all renewable sources, with the exception of biomass and fossil fuel co-firing, and also for up to 5 MW CHP, support exists in the form of the minimum purchase prices for which the distribution system operator serving the respective area, or the transmission system operator, must buy the electricity generated. In respect of biomass and fossil fuel co-firing and also over 1 MW CHP units the operator can ask the distribution system operator serving the respective area, or the transmission system operator, for a premium to the market price of the electricity it has sold directly to an eligible customer or trader (1 to 5 MW CHP operators can choose between support in the form of minimum purchase prices or in the form of the premium to the electricity market price). The new law on support for renewable sources makes it possible, from 2006, also for operators of renewable sources to opt between minimum purchase prices and the premium.

5.1.5 Investment in transmission

The TSO is primarily reinforcing the existing lines as a precaution; for example, by replacing single-circuit lines with double-circuit lines or with high transmission capacity conductors. There are currently plans to build a 400 kV line on the Krasíkov – Horní Životice route and to replace the 400 kV Prosenice – Nošovice single-circuit line by a double-circuit line.

However, the building of lines for connecting new generating capacities, mainly at the distribution system level, can be expected in the future. An illustrative example is

renewable sources, for example wind farms, the development of which is planned for areas currently having a relatively low density of networks.

The Czech TSO is not planning to build any new cross-border lines in the next few years; the reason is the neighbouring TSOs' insufficient domestic transmission capacities. ČEPS, a.s. plans to upgrade the Slavětice – Dürnrohr 400 kV cross-border single-circuit line to a double-circuit line.

5.2 The gas market in 2005

5.2.1 Natural gas consumption levels in 2005

In 2005 the actual natural gas consumption amounted to 9.562 bcm (i.e. 100,828 GWh), which is 1.3% (129 mcm) less than in 2004. Consumption adjusted to normal monthly temperatures and temperature gradients of consumption amounted to 9,607 bcm (in 2004 it was 9.822 bcm), which implies a decline by 2.2% (215 mcm) year-on-year. Overall, natural gas consumption was influenced primarily by ambient temperatures during the heating season, which in 2005 covered the periods from 1 January to 30 April and from 20 September to 31 December.

Table 8 shows actual gas consumption from 1995 to 2005 (the heating season is understood to be January to April and October to December):

Table 8 Actual gas consumption from 1995 to 2005

Year	Average temperature in the heating season (°C)	Average annual temperature (°C)	Annual consumption (mcm)	Year on year change	
				(mcm)	(%)
1995	3.1	8.3	8,075	+1,141	+16.4
1996	1.0	6.6	9,306	+1,231	+15.2
1997	2.3	7.9	9,441	+135	+1.5
1998	3.3	8.5	9,390	-51	-0.5
1999	3.2	8.7	9,427	+37	+0.4
2000	4.8	9.5	9,148	-279	-2.9
2001	2.9	8.2	9,773	+625	+6.8
2002	3.6	9.0	9,542	-231	-2.4
2003	3.6	8.6	9,739	+197	+2.1
2004	3.1	8.2	9,691	-48	-0.5
2005	2.5	8.0	9,562	-129	-1.3

5.2.2 Production and import capacity

In 2005 domestic production (MND Hodonín is the producer) and supplies of drainage gas exhausted by OKD Paskov totalled 60.8 mcm.

The transit system's transmission capacity is currently 53.5 bcm of natural gas per year. In 2005 the total quantity of the natural gas at points of entry to the Czech transmission system amounted to 40.5894 bcm at 15 °C. The quantity of gas at the points of exit from the Czech transmission system, flowing to foreign customers, amounted to 30.9025 bcm at 15 °C. Natural gas consumption in the Czech Republic has continuously been less than 10 bcm a year since 1996, and there is therefore a considerable margin in the country's import capacity.

Natural gas intended for supplying the Czech Republic was imported from Russia and Norway. Total purchases (imports) of natural gas for the country's needs amounted to 9.358 bcm at 15 °C. In comparison with 2004 the imports were 344 mcm higher.

Only a low volume of domestic production supplemented the imports. Domestic production included mine surface drainage gas, which is of local importance for the north Moravian region only, and the gas lifted by Hodonín-based Moravské naftové doly, a.s. from fields located in south Moravia. Indigenous gas supplies amounted to 60.8 mcm/year, i.e. 0.6% of total supplies, and the Czech natural gas system was therefore almost fully dependent on imports. Of MND Hodonín's total output of 98.8 mcm/year, 48.9 mcm were supplied to JMP, another 28.8 mcm was re-injected into the company's own Uhřice 2 field, and 21 mcm was MND's own consumption.

5.2.3 UGS facilities

The summer/winter supply and consumption swings were covered by underground gas storage facilities (UGS), which serve for gas storage in summer and gas production in winter when daily consumption exceeds the daily contract quantities imported from abroad (see Charts 2 and 3).

Chart 2 Natural gas imports and consumption in 2005

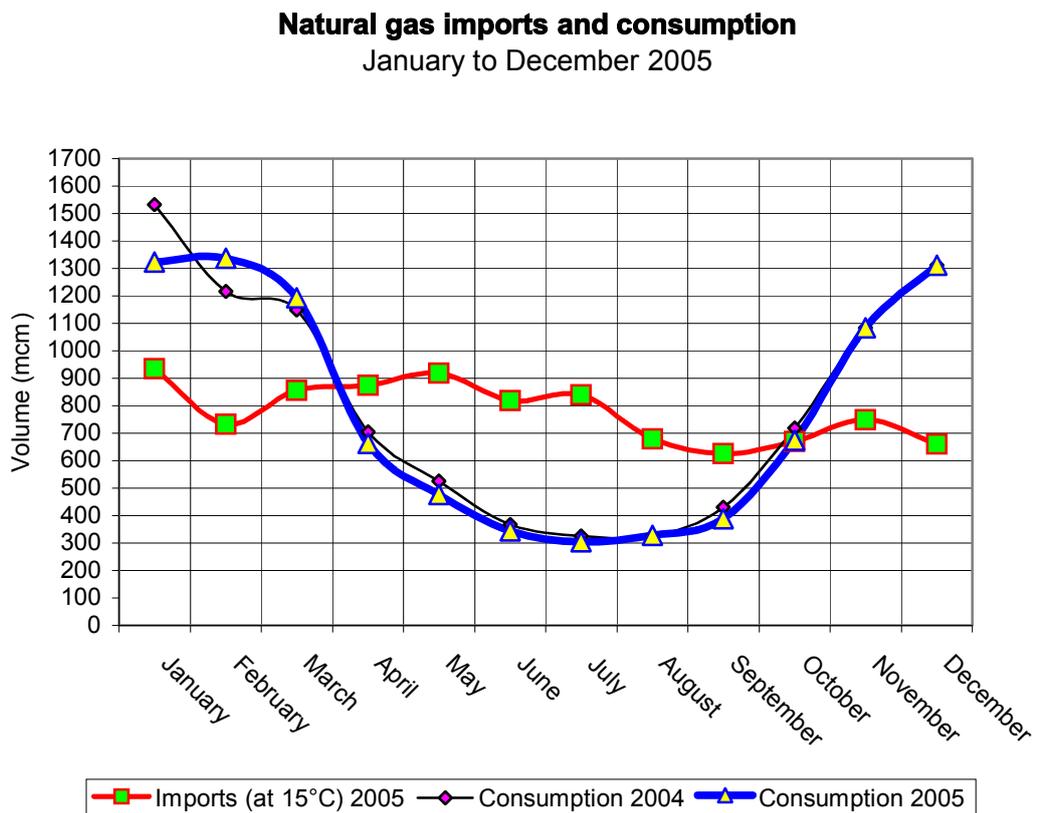
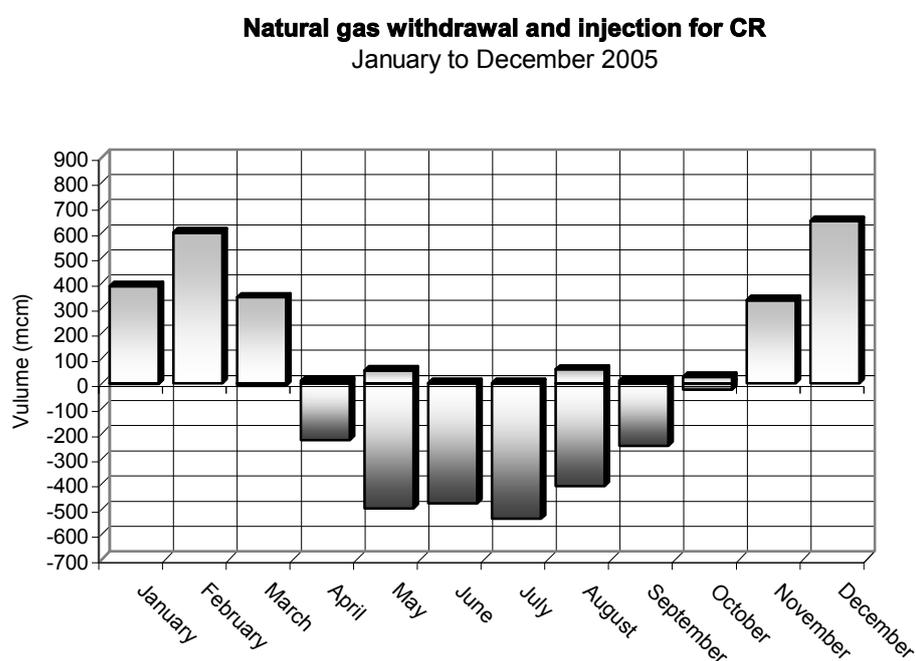


Chart 3 Gas withdrawal and injection



5.2.4 Natural gas consumption expected from 2006 to 2010

The upward trend in the Czech Republic's natural gas consumption came to a stop in 1997. Since that year gas consumption has been stagnant (notwithstanding the continued gas penetration by bringing gas supplies to new areas); over the last two years consumption declined slightly. In 2006 the current trend can be expected to continue, with natural gas consumption going down to 9.350 bcm.

The main reason for the currently decreasing consumption is the oil prices, which are increasing and which also cause increases in natural gas prices. When the prices of other energies, for example, solid fuels (coal, wood) grow at a slower rate in comparison with gas, many customers switch to these solid fuels because of the price difference.

Other causes for the downward trend in consumption include customers' efforts to achieve energy savings and the installation of better and more modern boilers, thermal insulation on buildings, the use of dual-fuel systems (oils, coal, etc.), energy savings thanks to energy audits, and the almost complete gas penetration – connection of towns and villages to gas supplies from the perspective of return on investment.

Projections for 2007 to 2010 expect slight year-on-year increases of about 0.5% to 1.2% related to the long-term normal temperature (see the following table), in particular if this period sees a certain stabilisation of prices and preference for the benefits of natural gas as an environmentally-friendly fuel. Natural gas consumption expected from 2006 to 2010 is shown in Table 9.

Table 9 Natural gas consumption expected from 2006 to 2010; projections drawn up by the Balancing Centre

Consumption in mcm	Actual	Preliminary	Forecast				
	2004	2005	2006	2007	2008	2009	2010
Actual consumption	9,691.0	9,520.0					
Converted consumption	9,821.9	9,577.0	9,350.0	9,400.0	9,490.0	9,600.0	9,700.0
Change, in %	1.19%	-2.49%	-2.37%	0.53%	0.96%	1.16%	1.04%
Actual temperature °C	8.6	8.2					
Normal temperature °C	7.8	7.8	7.8	7.8	7.8	7.8	7.8

The natural gas market is changing continuously, and it is influenced by various factors, like in the case of other energy markets. The strongest factor at play in gas sales levels is the price of the gas, which depends on factors that are beyond the Czech Republic's control completely, or can be influenced by the country to only a minimum extent (world prices of oil and oil products, the Czech currency's dollar rate).

5.2.5 Supply safety standards

In connection with an amendment to the Energy Act, which was enacted in Act No. 670/2005 of 30 December 2004, Directive 2004/67/ES concerning measures to safeguard security of natural gas supply has been implemented in Czech law. This is now also reflected in the statutory obligation imposed on gas traders to observe the gas supply safety standard. The details are set out in Public Notice No. 375/2005 on states of emergency in the gas industry, which entered into force on 1 October 2005 (see the annex). The safety standard of the gas supply required is understood to consist in ensuring a safe and reliable supply of gas when preventing a state of emergency, and in states of emergency, to households and those of final customers, who are not able to switch to other sources of energy; there is an exhaustive list of such specific situations.

In the Czech Republic the gas supply safety standard for the peak daily demand at an average daily temperature of $-14\text{ }^{\circ}\text{C}$ is, under the above criteria, 63,786,000 cubic metres; it has been set taking into account the number and size of the customers connected to each of the gas traders.

The above quantification of the gas supply safety standard was vindicated on 23 January 2006, when at an average ambient temperature of $-16.9\text{ }^{\circ}\text{C}$ the highest ever daily consumption of natural gas for 24 hours was registered in the Czech gas system: 67,639,000 cubic metres, while no problems at all occurred in respect of supplying final customers with natural gas. Similarly, the situation caused in Europe at the end of 2005 and the beginning of 2006 by reduced supplies from the Russian Federation to Ukraine did not affect the final customers at all.

5.2.6 Production and import investment and the role of the regulatory authority

Under the Energy Act, the construction of infrastructure for natural gas imports is subject to the State's consent, which has the form of authorisation for construction. In this respect the Ministry of Industry and Trade plays the role of the regulatory authority. In 2005, and to date in 2006, no entity applied to the Ministry of Industry and Trade for an authorisation to permit the development of new gas pipelines interconnecting the Czech gas system with other countries. Certain gas companies consider such investment in their capital

expenditure plans for the next three years (specifically the Záhohř – Spálenířtě, Třanovice – Chotěbuz and Břeclav – Reintal gas pipelines), and the European Commission was informed of them in April 2006 through the ‘report to the Commission of the European Union on investment projects in the Community’s interest in the oil, natural gas and electricity sectors’, but the investors have not yet approved of such projects with finality, and the consent (in the form of the State’s authorisation for construction) required for implementing such projects has not been requested.

6 Public service issues

6.1.1 Key information

The Czech Republic has implemented the obligations of public service and consumer protection in the energy sector, which the EU member states are to introduce under, in particular, Directives 2003/54/EC and 2003/55/EC on the rules for the internal electricity and gas markets, in Act No. 670/2004, which amends the existing Energy Act, and also partly in Act No. 180/2005 on support for the use of renewable resources.

Licence holders' basic duties concerning the public service obligation and protection of consumers' interest include, in particular, the following:

- a) The duty to carry on the licensed activity so as to ensure continually safe and reliable energy supply if the Energy Act imposes such obligation (i.e., to supply energy) on the licence holder;
- b) The duty to ensure that equipment and installations meeting the safety and reliability requirements set out in legal regulations and technical standards are employed for the licensed activity;
- c) The duty to keep the specified parameters of supply and service quality; in the event of failure to keep them, to provide compensation as set out in the respective public notice.

The Energy Act requires the following of system operators and SSOs:

- a) To ensure reliable operation and development of the systems and storage facilities they operate;
- b) To connect to such system any person who requests so and meets the connection conditions set out in the law, implementing legal regulations, and, in certain cases, the technical code;
- c) To ensure that all market participant enjoy non-discriminatory conditions for receiving the services provided by the system operated by the system operators and SSOs, i.e., electricity and gas transmission, electricity and gas distribution and, partly, gas storage.

6.1.2 Obligations over and above the licence

In the event of sudden crises when, for example, due to the disconnection of a large number of customers or the licence holder's difficult financial situation there exists real danger that energy supply to final customers will be interrupted, the Energy Act permits in its Section 12 to employ the institute of the so-called obligation over and above the licence. In such cases, i.e. in cases of urgent need and general interest, the Energy Regulatory Office has the right to decide to impose an obligation over and above the licence, whereby the entity to which the Office's decision applies must provide supplies or distribute electricity/gas outside its own delineated service area, and the owners of the required distribution facilities must make their facilities available to enable the performance of the obligation over and above the licence (they are entitled to a compensation for that). The Energy Regulatory Office may impose such an obligation for no more than twelve months. The Office has used its authorisation in this respect, and in two cases issued decisions imposing an obligation over and above the licence.

6.1.3 Supplier of last resort

This public service obligation is provided for in Sections 12 and 12a of the Energy Act. The supplier of last resort is the designated electricity/gas trading licence holder that is, in

a delineated area, obligated to supply electricity/gas for controlled prices (universal service) to every customer in the household and small customer categories who request so. Such supplier must provide the supply for prices set by the Energy Regulatory Office; the time for which the specified group of customers are entitled to use this service is not limited. The Energy Regulatory Office is authorised to select the supplier of last resort for a certain specified area; however, before the Office issues such decision, this obligation is carried out by the electricity/gas trading licence holder who is, or was, a part of the same vertically integrated undertaking where the supply point of the affected final customer is located. The Czech Republic has not yet experienced a situation resulting in the Office's decision to appoint a supplier of last resort.

The Energy Act defines that a household is understood to be a final customer who does not buy electricity/gas for any other purpose than for his own consumption in a household, and a small customer is understood to be a final customer that employs less than 50 employees under a contract of employment, and the net turnover of which for the past accounting period does not exceed CZK 250 million.

The prices of supplies of last resort, which are set out in the ERO's price decisions, are based on the wholesale electricity/gas price on the Czech electricity/gas market.

6.1.4 Labelling of primary energy sources/guarantees of origin

In respect of the labelling of primary energy sources, these obligations have been implemented in national legislation in the amendment to the Energy Act, i.e., through Act No. 670/2004. Under Section 23, subsection 2(k) of this law electricity generators are obliged to inform the market participants about the shares of the sources used for electricity generation, and the share of CO₂ emissions and the amount of radioactive waste produced in electricity generation in the preceding year. Under Section 30, subsection 2(e) of the Energy Act, in billing the electricity supply to final customers electricity traders are obliged to include in the data shown in the billing document, data indicating each electricity source's share in the supplier's overall mix of fuels in the preceding year, and a reference to a public source of information on the impact of electricity generation on the environment.

6.1.5 Disconnection of final customers

The approach to customer disconnection does not differentiate between vulnerable and other customers. The various distribution companies keep the data on disconnected customers, and the Energy Regulatory Office currently does not require any differentiation.

From the perspective of supply interruption or disconnection, there exists no differentiation by customer groups. Under the law, a final customer can be disconnected, or its energy supply interrupted, only for reasons that are exhaustively listed in the law, i.e. chiefly due to unauthorised take of energy, in particular when the customer fails to pay; in the event of imminent danger to life, health or property and in dealing with such situations; in states of emergency and in preventing such states; and in the event of failures on installations and repair of such failures. The various distribution companies keep statistics on the number of disconnected customers, and the ERO and MIT do not require this information.

6.1.6 Protection of final customers under contract

The provisions of Annex A to Directives 2003/54/EC and 2003/55/EC, which set out the rules for the internal electricity and gas markets, have been implemented through the

Energy Act, which stipulates the ‘essential provisions’ of electricity/gas supply agreements. Thus, every final customer has the right to enter into a supply agreement that will contain all the required essentials envisaged in Annex A to Directives 2003/54/EC and 2003/55/EC.

6.1.7 Pricing for final customers on the electricity market

In 2006 the transfer of the last large group of protected customers (households) to the category of eligible customers had the heaviest influence on the pricing of electricity transmission for final customers. In the electricity industry, this transfer prompted the necessary changes to the pricing principles in place for this customer category until then. The Energy Regulatory Office opted for the alternative - similarly as in the case of small business customers - of the differentiation of charges for distribution services at the low voltage level in relation to the nature of the demand. At the low voltage level approximately the original range of tariffs has therefore been maintained, which makes it possible for the customers to optimise their costs of the services related to electricity supply.

For 2006, the resulting average price of regulated items for customers connected to the low voltage level (small business customers and households) has been set at CZK 1,304.8/MWh (without VAT). In comparison with 2005 the average regulated price to this customer category has increased by CZK 54.4/MWh, i.e. 4.35%.

In comparison with 2005 the increase in the price of electricity supply (commodity + distribution and related services) to households, averaged across the Czech Republic, is 9.0%. This increase is attributable mainly to the price of energy on the wholesale market, which is more than 15% higher. The increases in electricity prices to individual customers connected to the low voltage level differ by the region, the tariff selected, and nature and size of demand.

6.1.8 Pricing for protected customers on the gas market

In the gas industry the Energy Regulatory Office sets the charges for gas transmission and gas distribution once a year, at all times effective from 1 January; the Office may change the prices of gas supply to protected customers once every three months. In 2005 the prices of natural gas supplies were reduced as from 1 April in response to a drop in the prices for which RWE Transgas, a.s. was buying gas, but as from 1 July the prices to protected customers were adjusted upwards. As from 1 October the prices of natural gas supply were increased markedly in response to the growing prices of competing fuels.

The price charged by a trader who supplies gas to protected customers connected to a distribution system is, to the extent of supplies to protected customers, a double-component price. The basis for determining this price is forecasts of the development of natural gas import prices, and forecasts of the Czech currency's US dollar and euro rates. The price is also adjusted by the difference between the actual cost of gas purchase incurred by RWE Transgas, a.s., and the price set by the Energy Regulatory Office in the preceding closed quarter.

6.1.9 Public administration and terms of supply contracts

The Energy Act provides that the terms and conditions of supply agreements are ‘essential provisions’ of agreements, i.e. any such agreement executed under the Energy Act must contain all the essential provisions so required. The Energy Regulatory Office has no competencies in this respect, that is, in respect of ensuring the transparency of the terms and conditions of supplier agreements, but for two exceptions:

a) It is competent to adjudicate certain disputes between licence holders or between licence holders and their customers over the execution of agreements the subject matter of which is a regulated activity, that is, in particular, electricity/gas connection, transmission and distribution, and also agreements on thermal energy supply, and certain other types.

b) It is competent to approve the rules for the operation of the electricity transmission and distribution system and the gas transmission and distribution system operators' codes. The Energy Act envisages (and this essential element is provided for explicitly in the part on the electricity industry) that the commercial terms and conditions of the provision of these regulated services shall be included in the above documents, which are subject to approval.

The Office for the Protection of Competition (ÚOHS), which regulates on an *ex post* basis, is another authority of review on the energy market, mainly in its liberalised part. ÚOHS's competencies include, for example, conducting enquiries into discriminatory practices applied by energy suppliers having a dominant market position (coercion to unreasonable contract terms and conditions, applying different conditions to identical or comparable supplies to different market participants, etc.). These cases very often involve traders of vertically integrated undertakings in the electricity and gas industries. ÚOHS reviews the justifiability of their practices under Act No. 143/2001 on the protection of competition, as amended.