



Autorità per l'energia elettrica e il gas

ANNUAL REPORT
TO THE EUROPEAN COMMISSION
ON REGULATORY ACTIVITIES AND THE STATE OF
SERVICES IN THE ELECTRICITY AND GAS SECTORS

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1 FOREWORD

With the present document the Italian Regulatory Authority for Electricity and Gas reports to the Commission on the state of the Italian electricity and gas markets in compliance with the dispositions of which at Articles 3, 4, 23(1) and 23(8) of Directive 2003/54/CE for the electricity sector and Articles 3, 5 and 25(1) of Directive 2003/55/CE.

The report structure follows the guidelines issued by the European Commission Directorate-General Energy and Transport. After a brief description of the institutional role of the Authority and of recent normative developments in the energy market, it analyses the principal elements of structural evolution in the two markets, electricity and gas, relative to regulatory activities and the state of competition. It also provides an update on security of supply and on public service obligations.

2 SUMMARY/DEVELOPMENTS IN THE LAST YEAR

Legislative developments

The Government, in power since the national political elections of 9 and 10 April presented, in July, the economic policy guidelines for the period 2007-2011 in the Economic and Financial Planning Document (DPEF). In a specific chapter of the DPEF dedicated to energy, Parliament and the Government lay down strategic guidelines for the decisions of the Authority. Highlighting and insufficient level of competition in the electricity and natural gas sectors, the policy emphasised the need to: diversify the supply and provide adequate infrastructures; guarantee non discrimination in access to the grids, also, where necessary with forms of separation of ownership and limits on shareholdings in electricity transmission grid and natural gas storage and transport companies; to assure non discriminatory access conditions also to electricity metering activities, in view of the full liberalisation of the electricity market with effect from 1 July 2007; define public service obligations in the sectors liberalised and review the “social tariff” (i.e. tariffs for vulnerable customers); adapt the energy mix to reduce dependence on foreign supplies, through the efficient promotion of renewable resources, aiming at advanced, low environmental impact technologies. The DPEF, for the first time, also dedicated a section to the obligations stemming from the Kyoto Protocol.

The 2007 Finance Bill (27 December 2006, No. 296) paid particular attention to energy matters, defining significant incentives to promote energy efficiency (solar panel installation, energy re-qualification of buildings, renewal of domestic appliances and industrial motors, use of bio fuels). The same Bill re-defined the date by which Eni S.p.A. must proceed to alienation of its shareholding, over the limit of 20%, in the capital of Snam Rete Gas S.p.A. (within 2 years of the expected Snam Rete Gas privatisation decree) and ordered a review of the CIP6¹ regulations aimed at reducing the costs born by end users and implementing Article 2 of Directive 2001/77/EC (limits on new incentives to the so-called “assimilated” energy sources and incentives allowed only to renewable plants authorised and whose construction was already started).

Among the draft laws, whose content is expected to have a major impact on the structure of the energy sector and the activities of this Authority, is the draft *Government powers to complete the liberalisation of the electricity and natural gas sectors and to re-launch energy savings and renewable resources, in application of EC Directives 2003/54/EC, 2003/55/EC and 2004/67/EC (AS 691)* bill, issued in July 2006 shortly after the new Government took office and illustrated in the *2006 Annual Report*. The draft bill is still pending in Parliament, however part of its measures were anticipated by the afore mentioned 2007 Finance Bill (energy taxation, energy saving, renewable resources). Moreover the rulings referring to the duties and competences of the Authority, contained in the draft bill AS. 691, might be superseded by a new draft law, issued in Spring 2007, which completely overhauls the entire discipline of independent authorities (*Dispositions in matters of market regulation and vigilance and of the function of the independent administrative authorities* (AS 1366). Finally, the

¹ In 1992 the CIP6 regulation introduced an incentive system in favour of electricity production from renewable and “assimilated” (i.e. similar) resources. The incentives, specific to production technologies, are of variable, limited duration over time.

imminence of the full liberalisation of the markets on 1 July 2007, rendered legislative intervention urgent in June 2007 (full implementation of Directives 55 and 54 of 2003 and new competences of the Authority (see Chapter 6).

Developments in the electricity market

In 2006 electricity demand rose by 2.2% against the previous year settling at 337.8 TWh. The growth in demand for electricity, driven by good overall performance in the Italian economy, is associated with a continuative positive trend in electrical intensity (0.5%). The mean growth of 2.2% derives from differentiated increases of consumption across sectors. On the basis of the provisional data published by TERNA (the national grid company) the most significant increase, of 3.7%, was recorded by the service sector, while industrial consumption rose by 2%. Increase in domestic and agricultural consumption was rather less significant: with respect to 2005, they recorded variations of 0.5% and 0.7% respectively.

Net national production available for consumption registered a growth of 4.2%, settling at 293.1 TWh, while net imports fell significantly with respect to 2005 (-9.0%), at 44.7 TWh. Following this decrease, derived both by falling imports (-7.8%) and an increase in exports (44.5%) and largely due to the "gas shortage and emergency" (described in the *2006 Annual Report*) of winter of 2005-2006, the share of demand covered by net imports fell from 14.9% in 2005 to 13.2% in 2006.

During 2006, gross thermo-electric generation rose by 4.1%, at approximately 257 TWh. There was a slight consequent increase in the share of thermo-electric generation on total generation (from 81.3% in 2005, to 81.6%), to the detriment of production from pumping.

With reference to the mix of thermo-electric generation, despite a reduction of 2.1% in total natural gas consumption due substantially to the mild temperatures in the later months of 2006, natural gas consumption for electricity production rose by 6.1% during the year. This may be attributed to the start up of new combined cycle plants, which counter-balanced the effects of the imposition of fuel oil operation on *dual fuel* thermo-electric plants foreseen among the emergency measures adopted by the Government in the early months of the year, in order to contrast premature exhaustion of gas stocks. One effect of the emergency measures was a significant slowdown in the substitution of oil as an energy source: electricity generation from oil products did, indeed, fall by 1.8%, while over the last three years the use of oil as a generation source fell on average slightly less than 20% per year. Production from renewable resources rose in line with the overall increase in generation (3.6% over 2005), albeit notably below the value reached in 2004 (-7.2%) due to a natural hydro-electric supply significantly below the average of the last decade (36.7 against 41.8 TWh). 2006 was distinguished by a significant increase in wind power, at 0.9 TWh, which brought this source to contribute to over 6% of overall generation from renewable resources. The increase in geothermal production was also above the average (3.8%). In terms of generation market shares, in line with the trend in recent years, there was a further contraction of the ENEL group market share (some -4%) mainly in favour of Edison, which reached a market share of almost 13%. The rises in the market shares of the other major companies, ENI, Endesa Italia and Edipower, were less significant. During the year new gross efficient capacity for approximately 4,500 MW, mainly constituted by thermo-electric plant, was started up.

With reference to the performance of the regulated market operated by GME S.p.A. (the electrical market operator company), the transactions on the Power Exchange reached 196.5 TWh, falling by 3.2% with respect to 2005. The reduction in demand on the Power Exchange derived mainly from a significant reduction in demand from the Single Buyer company, of approximately 7.0 TWh, due to a contraction in the captive market, for which the Single Buyer procures on the Exchange. By contrast, demand through bilateral contracts rose by almost 11% over 2005, following a rise in demand of over 17 TWh from the national operators other than the Single Buyer.

The average purchase price (PUN) on the Italian Power Exchange was 74.75 €/MWh, rising by 16.17 €/MWh over 2005 (27.6%). The increase reflects, among other components, the input price trend, in particular in Brent oil, rising by approximately 19% on the European markets, and natural gas, whose average import price in Italy rose by approximately 30% over 2005. A significant differential in prices (17-26 €/MWh) between the Italian Power Exchange and the major foreign exchanges, particularly high in peak hours, was recorded also in 2006.

With reference to the retail market, at 31 December 2006 the eligible clients were 7.6 million and they consumed, during the year, 221.5 TWh of electricity (net of consumption by users benefiting from special tariff regimes). With respect to the previous year, the volume of energy withdrawn by the same group of clients fell by approximately 1.7 TWh. At 31 December 2006, the eligible clients effectively supplying on the free market, were, by contrast, around 700,000, with a total consumption of 149.7 TWh, corresponding to 67.7% share of the potentially free market. Energy consumption on the captive market in 2006 settled at approximately 138.5 TWh, of which 61.6 TWh for domestic consumption.

The standards of continuity of service in the electricity distribution grids were improved also in 2006. Indeed, the duration of interruptions without warning for low voltage clients fell from 80 minutes per client in 2005, to 64 minutes in 2006, considering all interruptions. However, with reference to commercial quality, data supplied to the Authority by the operators evidence that in 2006 both the number of cases of failure to respect the specific quality standards subject to reimbursement and the number of indemnities paid to clients rose.

Developments in the gas market

2006 was a troubled year for natural gas consumption: beginning with the tension caused by the gas shortage and emergency of the winter months, there were then worries in the opposite sense in the autumn and winter seasons, much warmer than the average in the preceding years. Overall, according to the preliminary data issued by the Economic Development Ministry, gas consumption in Italy fell from 86.3 to 84.5 G(m³). Also on the basis of the data provided by the operators in the annual survey conducted by the Authority, gas consumption in Italy appears to be falling with respect to the previous year: adding to sales, which reached 77.3 G(m³) and self-consumption, 7 G(m³), we obtain a total estimated consumption of 84.3 G(m³). Consumption was covered by national production of 10.4 G(m³) and the remainder by imports, which reached 77.4 G(m³). Part of the gas acquired remained in storage: storage variations show a negative value, at -3.7 G(m³). National production saw another fall (-9.1%), following the decreasing trend which has now lasted for more than a decade. The national production quota of total consumption

fell further to 12.5% (it was 33.6% in 1997). Italian dependence on foreign supplies rose, consequently, year by year: in 2006 a further 5.4% of gas was imported than in 2005, reaching 87.5% of the gas distributed.

With respect to 2005 the balance of gas operators in 2006 appears to be substantially unchanged. On the procurement side, there was an appreciable effort by minor operators who increased both production and imports, although the latter were mainly cross-border purchases from Eni S.p.A. The excess stock accumulated in expectation of a cold winter was significantly less for the major wholesalers (Eni excluded) perhaps as they are more specialised in sales for large industrial consumers and electricity generation. Similarly, climatic conditions determined a fall in purchases and sales, albeit differentiated across the diverse categories of national operators. The fall was higher for retailers, specialising in the domestic sector, than for wholesalers; it also heavily impacted on purchases at the border. On the other hand, there was a general increase in transactions at the VTP (Virtual Trading Point), particularly important to the sales and purchases of the minor wholesalers and the purchases of retailers.

The split of sales between the free and protected markets did not change substantially with respect to preceding years: from the 77,3 G(m³) sold (the data excludes self-consumption), approximately 69% was purchased by the free market, against 31% by the protected market.

Organisation and mandate of the regulator

The need to respond to the changing conditions of the market, prompted the Authority to complete the process of reorganisation of its' offices begun in the second half of 2004 and addressing progressive regulatory harmonisation in the gas and electricity sectors, more coherent with full liberalisation of the markets, foreseen for 1 July 2007. From 1 January 2007, the objective of "convergence" of regulation in the two sectors pushed the reorganisation towards the creation of a single Markets Direction dedicated to the technical-economic regulation of the electricity and gas markets. The new organisation thus foresees three regulatory Directions horizontal to the electricity and gas sectors (Markets; Tariffs; Quality and Consumers' Affairs) and four service/support Directions (Strategies, Research and Documentation; Human Resources, Administration and Finance; Legislation and Legal; Vigilance and Control). The new structure of the General Secretariat which, in the new reorganisation, further to programming, planning and strategic control, also includes institutional relations - national and international - and communications, aims to give further space to *advisory* activities and the dialogue with all the *stakeholders*.

There were no changes in the competences of the Authority in 2006. It must however be noted that the energy sector restructuring Bill (AS. 691), in discussion in Parliament, is oriented to restore the fullness of the Authority's original powers (in particular in matters of electricity imports and tariff control), and confirming others not explicitly foreseen in the founding law (extension of competency to all phases of the chain and not solely those in natural monopoly conditions), foreseeing augmenting the control function of Parliament over the activities undertaken by the Authority itself, and redefining the composition of the Board.

Main developments common to both sectors

Among the regulatory activities common to both sectors, particular attention, in view of full liberalisation in July 2007, was paid in 2006 to those relative to consumer protection (transparency of billing documentation, commercial codes of conduct and price comparison instruments) alongside the normal handling of complaints and queries from both individual customers and from the consumer associations.

2006 was the second year of full application of the mechanism of energy efficiency promotion based on a system of individual energy saving obligations on the operators and on trading system of efficiency certificates (white certificates) started in 2004. Further the review of the regulations increasing the efficiency of the mechanism, the Authority, during the year, developed an important collaboration with ENEA² to evaluate, verify and certify projects. In October 2006 the first *Annual Report on the White Certificates Mechanism* was on the basis of the results of the first 17 months of operation published; the *Report* documents a system which, after three years of building up, shows an overall positive performance.

The experimental phase of Regulatory Impact Analysis (RIA)³ started in 2005 (see last year's Annual Report), was carried on in 2006 and four dispositions subject to RIA were adopted on: storage tariffs, electricity dispatching discipline, the hourly bands for delivery of electricity and standards for communications between the distributors and retailers of natural gas.

Monitoring and vigilance over the effective implementation of regulation, also addressing improvement of the same, are to assume growing importance among the Regulator's activities. Thanks to the definition of collaboration agreements with the Finance Police, the Italian National Agency for New Technologies, Energy and the Environment (ENEA) and other technical support institutions, in 2006, the offices of the Authority undertook over 100 inspections and controls on operators and plants, over half of which dedicated to technical and commercial quality and the safety of service.

Activity in the electricity sector

Tariff regulation activities concentrated on: a review of the protection mechanism for disadvantaged and vulnerable consumers; modification of the criteria for updating of the "Avoided Fuel Cost" in the incentive prices for renewable and assimilated energies (CIP 6 disposition); the re-determination of the tariff costs connected with the dismantling of nuclear power stations and with *stranded costs*; the start up of activities for the definition of the transmission, distribution and measurement tariffs for the third regulatory period (2008 - 2011).

Among the measures to *promote competition* adopted in 2006: the revision of the rules for the allocation of interconnection capacity undertaken within the European regional market integration programme promoted by ERGEG; the proposal of measures to promote competition and transparency in the retail market in view of the opening of the domestic market on 1 July 2007; the simplification of the hourly bands for electricity distribution

² ENEA is a public body that promotes and undertakes basic and applied research and technological innovation activities in the energy field.

³ Mandatory in Italy for independent administrative authorities as indicated by Article 12 of Law No. 22 of 29 July 2003.

and sale driven by criteria of homogeneous prices. Finally, in January 2007, the Authority modified the regulation of *unbundling*, adopting the criteria of functional separation of the activities essential to the liberalisation foreseen by the European directives.

With reference to *technical-economic regulation*, the main measures adopted in 2006 are: a review of dispatching discipline, of *load profiling* and of the remuneration of interruptibility. Particular attention was paid, in the regulation of metering, to the application of the progressive obligation, from 2008 to 2011, to provide all consumers with remotely controlled electricity meters.

The regulation of *quality* of service during the year, focussed on: the application of the rulings established for the regulatory period 2004-2007 by the *Electricity Service Quality Code*; the introduction of new dispositions relative to detection of low voltage clients supplied effectively affected by power cuts; the simplification obligations of medium voltage clients; the proposals for regulation in matters relative to *extended and prolonged power cuts* and *commercial telephone service quality*, matters which will be merged into the new regulation for the third regulatory period, whose study began in September 2006.

Activity in the gas sector

In 2006 the activity undertaken in matters of *tariff regulation* referred principally to completion of the discipline of the transport tariff (metering charges for the re-delivery points, tariffs and conferral of capacity at the interconnection gas pipe points and incentives for interruptible supplies), the modification and integration of the distribution tariff discipline rendered necessary after the prolonged legal dispute and the determination of the storage tariffs for the 2006-2010 regulatory period.

In the activities addressing the *promotion of competition*, the Authority adopted a series of measures intended both to guarantee the adequacy of the gas supply and to prevent the repetition of a gas emergency and shortage similar to that which occurred in the thermal year 2005-2006. Further to foreseeing a transitory balancing regime to facilitate the reintegration of storages, measures were adopted to favour the interruptible supplies of consumption and the release of unused capacity. On the retail side, a change of the economic conditions for the supply of natural gas and of the cost component of the raw material was necessary in order to take into account the high and consistent rises in fuel prices, the definition of new storage tariffs and the update of the transport related component. Finally, in January 2007, the Authority modified the regulation of *unbundling* adopting the criteria of functional separation of the activities essential to the liberalisation foreseen by the European directive.

With reference to *regulation of the infrastructures*, various measures of technical nature intended to regulate access to the sector's *essential facilities* were adopted. Among these: the approval of the Standard Grid-Distribution Code and the Storage Code, of the changes to the Transport Code of Snam Rete Gas and the Società Gasdotti Italia, the predisposition of the criteria for allocation of transport capacity at the entry points of the regassification terminals, for which there was an exemption from the third party access obligations. Further the provision of standard withdrawals for the diverse gas usage categories were defined. Finally, in July 2007 the introduction of infra-annual allocations with effect from 1 October 2007, in compliance with EC Regulation No. 1775/2005 was completed.

Regarding the *quality of service* the activities were mainly devoted to the monitoring of the regulation of safety, continuity and commercial quality standards of gas distribution that brought, in some cases, to adjustments in rulings and implementation procedures. In the regulation of post metering safety standards, some simplification and further information guarantees for consumers to the norms that regulate control obligations were introduced. Better information standards about the minimum national insurance for gas end users were also introduced. In 2006 new proposals to regulate standards for quality, safety and continuity also for natural gas transport were also defined.

3 REGULATION AND PERFORMANCE OF THE ELECTRICITY MARKET

3.1 Regulatory issues

3.1.1 Overview

With effect from 1 July 2004, all non domestic customers were eligible and thus free to choose their contractual counterpart and to negotiate their supply conditions. With respect to the previous year, 2006 was distinguished by free market growth in terms of both client numbers (by approximately 365,000) and of energy withdrawals (by approximately 13 TWh); with the effect that per capita withdrawal is much diminished, falling from approximately 0.41 GWh in 2005 to 0.22 GWh in 2006. Despite the number of customers leaving the captive market, the percentage of clients supplied on the free market (9.2%) is still limited with the respect to the total potential market. In terms of volumes, that percentage rises to 67.6%, indicating that, above all, large consumers are those exploiting the free market.

Table 3.1 Opening of the electricity market

| | Eligible clients at 31/12/2005 | Eligible clients at 31/12/2006 | Clients supplied by the free market at 31/12/2005 | Clients supplied by the free market at 31/12/2006 |
|---|--------------------------------|--------------------------------|---|---|
| No. clients (withdrawals points) | 7,747,182 | 7,590,279 | 329,864 | 695,279 |
| Withdrawals (TWh) | 223.2 | 221.5 | 136.6 | 149.7 |

N.B.: does not include data for users benefiting from special tariff regimes, who take up approximately 4.8 TWh.

Source: AEEG analysis on distributors data.

During 2006, due to regulation of continuity of service in electricity distribution grids, there was a significant reduction in the duration of unplanned interruptions to low voltage customers. The overall duration of interruptions fell from 80 minutes per year per client in 2005 to 64 minutes per year per client in 2006 (considering all interruptions). More detail on quality of service in the electricity sector is provided at Paragraph 3.1.3, in the section on continuity of electricity service and commercial quality.

3.1.2 Allocation of interconnection capacity and congestion management mechanisms

The method of allocation of interconnection capacity for 2006 was described in detail in last years' Annual Report. On the issue of congestion management, in particular, the Decree of the Ministry of Production Activities of 13 December 2005 established that the use of transport capacity was to be determined by an implicit allocation method, on the basis of electricity sale and purchase bids, relative to trans-border trading by foreign and

Italian operators, equating, substantially, imports to the zones into which the Italian electricity market is organised.

The Authority's Resolution No. 269/05 recommended, in conjunction with the application of the implicit auction method, that this market mechanism should be accompanied by the introduction of financial hedges to be distributed to final clients. The financial hedges, relative to the differential between the foreign price and the import zone internal price, are intended to guarantee Italian consumers against the risk of volatility of congestions costs on the interconnection grids. The rights to use the interconnection capacity held by the Italian grid operator (TERNA) were allocated on the day-ahead market (MGP in Italy), through a market mechanism, coherently with the dispositions of Community Regulation No. 1228/2003. The Authority, further, established that competition procedures shall be used for the allocation of risk coverage instruments associated with the price differentials between the electricity market zones and the adjacent foreign zones on each border (Import Firm Transmission Rights IFTR, to cover import risks, and Export Firm Transmission Rights, EFTR, to cover export risks). For 2006, an explicit auction was held, while in 2005 financial hedges were distributed with pro quota criteria, at no charge.

In 2007, the Authority, with Resolution No. 288/06, laid down the rules for electricity import and export to be applied during the year, according to the criteria established by the Ministry of Economic Development Decree of 15 December 2006. The new trans-border management discipline, established by Resolution No. 288/06, foresees joint allocation of the interconnection capacity on the French, Greek and Austrian borders. The interconnection capacity referring to the Swiss and Slovenian borders was assigned, in the quota due, by the respective national grid operators.

Explicit auctions were used to allocate the available capacity, organised on an annual, monthly and daily basis, with execution procedures elaborated by the grid operators. The auctions assign the market operators titles denominated in Italian DCT (Rights of Use of Transmission Capacity), which authorise the import or export of energy in a quantity equal to the sum of the DCTs purchased. DCTs may be freely traded among dispatching users.

The income deriving from the assignment of rights of use of transmission capacity, resting with the Italian grid operator, is shared among the users of withdrawal dispatching, similarly to previous years. The Resolution foresees that 30% of the income be assigned to the Single Buyer, while the remainder is shared by the free market customers proportionally to the average contracted power in 2005 by each user. The quota assigned to the Single Buyer may be reduced during 2007 in the case of a reduction of the captive market.

The Authority's Resolution recognises, finally, reserves for imports, for transit and the return of electricity on the Swiss border where joint allocation of interconnection capacity is not foreseen. In detail, a 600 MW reserve is assigned for the execution of multiannual import contracts, held by Enel Spa, for the coverage of the captive market.

Table 3.2 summarises the results of the allocation of the annual interconnection import capacity by single border for the year 2007.

Table 3.2 Destination of import capacity by border for 2007

| Border | Product | Available Capacity | Allocated Capacity | Price | Price |
|---------------------|--------------------------|--------------------|--------------------|-------|---------|
| | | MW | MW | €/MWh | €/MW |
| France – Italy | Baseload | 1,000 | 1,000 | 15.12 | 132,451 |
| | Winter Baseload | - | - | - | - |
| | Baseload August excluded | 600 | 600 | 16.16 | 129,539 |
| Switzerland – Italy | Baseload | 365 | 365 | 11.00 | 96,360 |
| | Winter Baseload | 305 | 305 | 6.25 | 31,800 |
| | Baseload August excluded | 520 | 520 | 10.58 | 84,809 |
| Austria – Italy | Baseload | 182 | 182 | 15.21 | 133,240 |
| | Winter Baseload | - | - | - | - |
| | Baseload August excluded | - | - | - | - |
| Slovenia – Italy | Baseload | 50 | 50 | 7.87 | 68,941 |
| | Winter Baseload | - | - | - | - |
| | Baseload August excluded | 100 | 100 | 8.02 | 64,288 |

Source: TERNA.

3.1.3 Regulation of transmission and distribution companies

In November 2005, with the creation of TERNA, the re-bundling of ownership and operation of the national grid took effect. TERNA is a public limited company quoted on the stock market; currently the relative majority shareholder is the State's Cassa Depositi e Prestiti (Deposits and Loans Bank), which holds 29.99% of the equity.

The company owns over 97% of the national transmission grid, with approximately 39,000 km of lines, 357 transformer and distribution stations and 3 remote stations.

The infrastructure's share held by TERNA rose significantly in 2006, following the acquisition, through a subsidiary company R.T.L. – Rete Trasmissione Locale Spa (R.T.L. Spa), of the full company capital of Edison Rete Spa and of 99.99% of the capital of Aem Trasmissione Spa, in October 2006; in November 2006 the Italian Antitrust Authority approved the operation. This takeover was part of TERNA's strategy of unification of the national transmission grid, in compliance with the dispositions of which at Law No. 290 of 27 October 2003 on the restructuring of the energy sector, as well as the subsequent Decree from the President of the Council of Ministers on 11 May 2004.

On the date of signature to the contracts, Edison Rete held approximately 2,800 km of high voltage power lines and 29 electricity substations located in Northern Italy, while Aem Trasmissione was the owner of approximately 1,100 km of high voltage power lines and 12 electricity substations, also located in Northern Italy.

In January 2007 TERNA published its' 2007-2016 National Transmission Grid Development Plan, subject to approval by the Ministry of Economic Development. The new Plan foresaw approximately 75 new interventions, mainly focussing on priority infrastructures in Italy and the strengthening of foreign interconnections.

The interventions, in particular, should guarantee the extension of power lines by approximately 4,600 km and the construction of 72 new electricity stations, delivering increased reserve margins ranging from 5% to 15% of 2006 peak demand, a reduction in grid congestions of over 8,000 MW of further usable generation capacity and increased capacity of foreign interconnection between 3,000 MW and 6,000 MW. Further opportunities are linked to undersea cable interconnections in the Balkan area, to allow a further increase of import capacity, improving security of supply and energy procurement efficiency.

By envisaging just one distribution concession for each municipal area and giving local authority companies the option of asking former monopolist Enel to dispose of branches carrying out distribution activities in their municipal area, Decree 79/1999 opened a gradual rationalisation process in this sector of activity, which is set to continue in coming years.

Overall, from 2000 to 2005, the reorganisation process has seen the transfer of portions of the grid from Enel to 31 local authority companies in 295 municipal area involving 1,901,484 clients. The sale by Enel, in 2006, of the distribution grids of 18 municipalities with approximately 82,000 clients to Hera Spa was highly significant.

The reorganisation process has determined a reduction in the number operators in this segment of the electricity supply chain: in 2006 there were 169 distribution grid operators, against approximately 200 in 2000. On the basis of the data provided by the operators to the Authority, approximately 29% of those who replied are organised as public limited companies and 17% as cooperatives. In a further 17% of the sample, the distributor is identified as a local authority.

On the basis of the same survey undertaken by the Authority in 2006, it emerged that out of the 137 companies which answered the questionnaire, 125 serve less than 100,000 users (calculated in terms of withdrawal points).

Transmission and distribution tariffs

Previous Annual Reports illustrated in detail the methodology applied by the Authority to set the transmission and distribution tariffs. According to the Code for the second regulatory period (2004-2007), the Authority is required to adjust annually the parameters for the transmission and distribution tariffs; the remuneration for the metering service, on the other hand, are not subject to automatic annual update mechanisms.

The annual adjustment of transmission and distribution tariffs for the year 2006 foresaw:

- the application of a *price cap* mechanism (see also Table 6.1) to the transmission and distribution tariff components covering operating costs and depreciation;
- a review of the value of the invested capital allowed for tariff purposes at the national level, to take into account net investments completed during 2004.

The annual adjustment did not involve substantial changes either in the transmission cost coverage components or the distribution cost coverage components; marginal increases were determined by the cumulative effect of rounding of previous adjustments.

As part of the annual adjustment of transmission and distribution tariffs, the Authority also reviewed the tariff components covering the allowed costs arising from the

improvements of the quality of service and the costs deriving from the initiatives addressing the control and management of demand through the efficient use of resources. In detail, the costs allowed for the improvements of the quality of service rose by approximately 80%, from € 50 million in 2005 to approximately € 90 million in 2006. As regards the costs arising from the initiatives addressing the control and management of demand through the efficient use of resources (distribution tariff components), the need for revenue was unchanged with respect to 2005, and thus remained at €50 million.

Table 3.3 Regulation of grid operators

| | Number of regulated Companies | Estimate of the transmission tariff (€/MWh) at 1 July 2006 | | |
|--------------|-------------------------------|---|------|----------------------|
| | | Ig | Ib | Dc |
| Transmission | 9 | 3.60 | 3.49 | 69.40 ^(A) |
| Distribution | 169 | 40.2 | 5.83 | |

(A) It includes recovery of sale marketing costs.

Source: AEEG.

Electricity service continuity - Commercial quality

2006 saw a further improvement in continuity of service in the electricity distribution grids. By effect of the regulation of continuity of service, introduced by the Authority with effect from 2000 and redefined for the 2004-2007 regulatory period, the duration of unplanned interruptions fell significantly during the last year, while the number of interruptions per client with respect to 2005 was unchanged.

Table 3.4 Continuity of electricity service indicators

| Indicators | 2000 | 2001 | 2002 | 2003 ^(A) | 2004 | 2005 | 2006 |
|--|------|------|------|---------------------|------|------|------|
| Duration of interruptions per low voltage client (minutes lost per client) | 187 | 149 | 115 | 104 | 91 | 80 | 64 |
| Number of interruptions throughout the year for low voltage clients | 3,6 | 3,1 | 2,8 | 2,7 | 2,5 | 2,4 | 2,4 |

(A) Excluding scheduled interruptions and blackouts.

Source: AEEG.

The overall duration of interruptions fell from 80 minutes per year per client in 2005 to 64 minutes per year per client in 2006 (considering all interruptions); the improvement over 1999 is 67% (Table 3.4). 2006 was distinguished not only by an improvement in the overall duration of interruptions at the national level but also by progressive convergence of the continuity of service values between the Northern and central-Southern regions. In 2005 a new mechanism was introduced to regulate interruptions attributable to external causes, previously excluded from regulation, which imposed a greater assumption of

responsibility by the operators. The mechanism is based on voluntary adoption which implies a reduction in the obligations on interruptions registration to the operators.

The number of long interruptions (duration exceeding 3 minutes) per client was 2.4 power cuts (considering all interruptions in this case too); the overall improvement on 1999 is 37%.

There was a discrete improvement in the number of short interruptions per client too (duration inferior to 3 minutes but superior to one second), falling from 5.9 short interruptions per client in 2005 to 4.8 in 2006; the improvement since 2002 (the first year for which short interruptions data is available) was approximately 29%. Considering the global number of long and short interruptions per low voltage client in 2006, there was a further reduction from previous years to 7.18 per year per client.

From 2006, further to regulation of the duration of interruptions, an individual regulation came into force for the maximum annual number of long unplanned interruptions attributable to the distributor company for medium voltage clients, differentiated by level of concentration. It establishes that clients, if subjected to a number of power cuts exceeding the standard, shall receive automatic refunds commensurate with their size and with the disturbance suffered, upon condition that their plant has been adapted to comply with the requisites established by the Authority. During the current regulatory period, the application of the individual discipline of the maximum number of interruptions is limited to medium voltage clients and to the interruptions available. In the next regulatory period (2008-2011) it will be possible to extend this type of regulation to low voltage clients too, given the introduction of new mandatory registration of the number and listing of low voltage clients effectively involved. The mandatory identification of low voltage clients is of fundamental importance, especially for the purpose of automatic payment of refunds (with no requirement for the client to present a claim to the distributor company), in the case of breach of the specific quality standards.

As to the quality of transmission service, 2006 saw the application of the norms introduced in 2004, defining obligations both of registration of power downs regarding national grid users, and transparency in diverse aspects of quality of transmission service.

With reference to the discipline of commercial quality standards, in force from 1 July 2000, during 2006 the Authority initiated a working group with operators and consumers to study alternative solutions to regulate the quality of telephone services (operator's call centres) in a regime of liberalisation and, simultaneously, the Authority began a pilot survey of the satisfaction and expectations of customers contacting the sales companies' *call centres*.

Finally it is reported that, in view of the full liberalisation of the sales sector foreseen in July 2007, the Authority, with Resolution No. 105/06, adopted a Commercial Code of Conduct for the sale of electricity to eligible end users, with came into force on 1 January 2007 laying down, for the suppliers, specific performance and information obligations, both during the phase of contact with potential clients and in the phase of stipulation of contracts. (see Chapter 6).

Balancing

In the Italian electricity system a special market, known as the Dispatching Service Market (*mercato per il servizio di dispacciamento*, MSD), has been operating since April 2004. This market is intended to ensure the “physical” balancing of electricity demand and supply by addressing imbalances between scheduled and actual flows. In this market GRTN and Terna procure the resources needed to solve congestions, ensure balance and provide an adequate reserve system.

The MSD operating rules, contained in Authority Resolution No. 168/03 and in the Market Discipline Code, foresee that the authorised users of dispatching must present for each unit, each hour, a buy and a sell bid. These bids are eventually used by TERNA both in the *ex ante* MSD, to eliminate residual congestion and to constitute the necessary reserve margins, and in the *ex-post* MSD, for system balancing purposes, and these are remunerated at the bid prices (*pay as bid*). The costs sustained by TERNA on the MSD, defined as the value of the sell bids accepted net of the value of the buy bids accepted, are recognised to TERNA by dispatching withdrawal users, together with other costs through a supplementary charge on energy (uplift).

The rapid growth of uplift during 2006 caused the Authority to modify the rules on remuneration of bids accepted on the MSD with Resolution No. 165/06, with effect from 1 August. With respect to the previous rules, the new rules foresee, among other matters, that bids accepted are not valued each at their own bid price but are remunerated only with the net balance of the quantities bought and sold, at the sale price when the balance is positive and at the buy price otherwise. This rule brings, by definition, a reduction in procurement costs as, given that the buy price is always below the sell price specified by dispatching users, it is possible to save the difference between the two prices on the balance of the quantities.

In 2006 the regulation for management of power reserves, needed to maintain frequency and voltage stability on the grid within pre-defined levels, saw no substantial change. By norm, the primary regulation band must be fully usable within 30 seconds; the secondary regulation band must be fully usable within a time lapse ranging from a few seconds to a maximum of 15 minutes; the tertiary reserve margin has, finally, activation times which may range from 15 minutes to an hour.

With reference to imbalance regulation, a simplified system was foreseen, for 2006 too, for their remuneration, so as to reduce the cost to operators withdrawals with respect to that foreseen for the mechanism of full operation in which they may participate in the Dispatching Service Market. The adoption of this regime is intended to allow, for operators responsible for demand whose withdrawal programmes are not relevant for purposes of forecasting by the Grid operator of resource requirements for dispatching, the time necessary to improve the accuracy of its' forecasts. The system is described in detail in last years' Annual Report. The sole variations, introduced with effect from 1 August 2006, regard the re-definition of the perimeter against which the aggregate zonal imbalance is calculated, with substitution of the previous configuration (zonal) with the macro-zones of which at Resolution No. 50/05, as this configuration permits a more precise identification of the costs of the resources activated in the MSD.

3.1.4 Regulation of unbundling

In 2006, the majority of electricity distribution companies continued to operate in the segment of sale to the captive market too.

Legislative Decree No. 70/99 of 16 March, applying Directive 96/92/CE, established an obligation on distribution plant owners supplying over 300,000 end users to constitute one or more public limited companies, to which they were to transfer the assets and liabilities, profits and losses referred to electricity distribution and to sales to non-eligible customers.

Subsequently, Law No. 239 of 23 August 2004 reformulated the provision cited above, disposing that “operators holding distribution concessions *may* constitute one or more public limited companies, of which they maintain control, and to which they transfer existing assets and liabilities, profits and losses referred to electricity distribution and to sales to non-eligible customers. The Regulatory Authority for Electricity and Gas shall issue the criteria for the timely operational and administrative unbundling of the activities undertaken by the afore mentioned companies”. In 2006, then, no obligation was established for the legal separation between distribution operators and those operating in electricity supply.

In 2005 the Authority embarked on a review of the rules governing accounting and administrative unbundling in the electricity and gas sectors. This process was rendered concrete in January 2007 with the a specific resolution, whose new rulings replace those previously emanated in December 2001. In detail, these rulings establish the premises to guarantee:

- the neutrality of operation of the infrastructures under concession and, more in general, of the essential infrastructures for the development of a free energy market;
- the neutral management of commercially sensitive information, relevant to the correct development of competition;
- the absence of crossed subsidies across activities, in particular between those subject to tariff regulation and those undertaken in markets non subject to tariff regulation, i.e. in a process of liberalisation;
- the presence of a certain, homogenous, detailed information flows about the economic and asset situation of the companies operating in the electricity and gas sectors, with particular attention to cost structures, coherent with the regulation targets established by Law No. 481/95 in matters of promotion of competition, efficiency and the definition of certain and transparent tariff system.

The rulings adopted by the Authority are coherent with the formulation of European Directive 2003/54/CE for the electricity sector, which envisages administrative unbundling in terms of *functional separation*, aiming to impact on the *corporate governance* of the companies (that set of processes, policies, habits, norms and institutions which influence the modalities in which a company is managed and controlled), in order to guarantee the independence and tertiary nature in the management of the activities essential to liberalisation in the electricity sector, with particular reference to the interests of the operators who operate simultaneously in liberalised activities.

With respect to the previous *unbundling* discipline, Resolution No. 11/07 significantly reduced the administrative burden on the operators who are not owners of infrastructures

essential for the liberalisation of the two sectors (i.e. different from those necessary to undertake transmission/transport, dispatching, distribution and metering activities and, in the gas sector also for storage and regassification activities) excluding them from the field of application of administrative unbundling and foreseeing the possible accounting separation of activities also on the basis of management type information contained in the analytical accounts.

On the other hand, for those operating in infrastructural activities essential for the liberalisation of the two sectors and belonging to vertically integrated companies, the definition of the minimum requirements for the application of administrative separation with the functional separation was improved. In particular, electricity distribution companies are subject to mandatory functional separation when the activity is undertaken in conditions of legal separation and, in any case, when the service is provided to at least 100,000 withdrawal points. All operators active in natural gas distribution are subject to mandatory functional separation, independent of the number of delivery points.

Given the novelty of the intervention, and the magnitude of its' effects, the Authority foresaw extended time (approximately one year) for the full application of mandatory functional separation, in particular for those requiring an organisational review within the company, as in the case of creation of an "independent operator" to whom the activities to be separated are assigned and of the definition of "programmes of fulfilment", as per the Authority's guidelines, intended to render the internal processes of the companies coherent with the objectives of functional separation.

The Authority, with Resolution No. 11/07 also defined separate accounting rules for activities which the electricity and natural gas sector operators must apply in the preparation of separate annual accounts reserved for the Authority itself. It also established that the separate annual accounts are subject to audit, effected by the same subject to whom, as required by the law, the accounting control of the company is entrusted. The separate annual accounts, the comment notes and profit and loss account, accompanied by the auditor's report relative to the separate annual accounts, are transmitted by the operator to the Authority within 90 days of approval of the accounts for the financial year.

On the basis of the dispositions emanated in January 2007, all companies operating in the distribution and transmission/transport of electricity and gas are subject to the obligations on accounting *unbundling*.

For details of the number and the organisation modalities of the grid companies in the electricity market, reference may be made to paragraph 3.1.3 relative to the regulation of transmission and distribution companies.

3.2 Competition issues

3.2.1 Description of the wholesale market

In 2006 demand for electricity was 337,8 TWh, increasing by 2.2% against the preceding year. Peak power demand reached its maximum of 55,619 MW in the month June.

Net Italian production recorded a rise of 3.8%, while net imports fell significantly against the preceding year (-9.0%).

Table 3.5 Electricity balance in Italy in 2006

GWh

| | 2005 | 2006 | Variation |
|--------------------------------|---------|---------|-----------|
| Gross Production | 303,672 | 315,016 | 3.7% |
| <i>Ancillary services</i> | 13,064 | 13,290 | 1.7% |
| Net Production | 290,608 | 301,726 | 3.8% |
| <i>Electricity for pumping</i> | 9,319 | 8,648 | -7.2% |
| Net Production for consumption | 281,289 | 293,078 | 4.2% |
| Net imports | 49,154 | 44,718 | -9.0% |
| Electricity demand | 330,443 | 337,796 | 2.2% |

Source: TERNA, provisional data.

Gross thermoelectric generation rose by 4.1%, at approximately 257 TWh. As a consequence, the share of this production on total generation rose slightly (from 81.3% in 2005 to 81.6% in 2006), to the detriment of production from pumping (falling from 2.3% to 2.0%).

In 2006, natural gas production rose by 6.1%, parallel to a slight contraction in oil products production (-1.8%).

Generation from renewable resources rose in line with the overall rise in production (3.6%). Alongside a slight increase in hydroelectric generation from natural sources, which, however, remained at values significantly inferior to those recorded up to 2004, there was a significant increase in wind power generation whose contribution to production from renewable resources was over 6%. The increase in geothermal production (3.8%) was also above the average.

The foreign balance of trade for 2006 amounted to 44,718 GWh, as the difference between imports, at 46,323 GWh (-7.8%), and exports, at 1,605 GWh (44.7%). With respect to 2005, the trade balance was reduced by 9.0%, settling at values in line with those of 2004; net imports thus covered 13.2% of demand in 2006, a net decrease from the 14.9% of the previous year.

In generation, in line with the *trend* in recent years, there was a further contraction of the Enel Group's market share (of approximately 4 percentage points), settling in 2006 at 34.8%. This reduction was, above all, in favour of Edison, which reached a market share of approximately 13%. There were less significant upward variations in the market shares of the other major companies Eni, Endesa Italia and Edipower.

Overall, calculation of the Herfindahl-Hirschman Index (HHI) highlights a diminution of market concentration, with reference to gross generation; the index for 2006 assumes a value of 1,650, while in 2005 it was just under 1,900.

Table 3.6 Development of the Wholesale Market

| | Total demand ^(A) (TWh) | Peak demand (GW) | Net installed capacity (GW) | No. of companies with > 5% share of generation | % share of generation held by the three main companies |
|------|--------------------------------------|---------------------|-----------------------------------|--|---|
| 2001 | 304.8 | 52.0 | 76.2 | 4 | 70.7 |
| 2002 | 310.7 | 52.6 | 76.6 | 3 | 66.7 |
| 2003 | 320.7 | 53.4 | 78.2 | 4 | 65.9 |
| 2004 | 325.4 | 53.6 | 81.5 | 5 | 64.4 |
| 2005 | 330.4 | 55.0 | 85.5 | 5 | 59.4 |
| 2006 | 337.8 | 55.6 | 89.8 | 5 | 57.1 |

(A) Net of power destined to pumping and gross of grid losses.

Source: AEEG analysis on TERNA and producers data.

Gross installed capacity, in 2006, grew by almost 4,500 MW, a 5.1% rise on the previous year. Thermoelectric plants (some 4,200 MW) made the most of the new installed capacity while renewable source plants accounted for only a very reduced percentage (some 7.0%). Edison increased its' capacity by over 800 MW with the Torviscosa plant going on line, while EniPower capacity rose by approximately 350 MW with the Brindisi power station going on line.

Maximum net generation capacity at 31 December 2006, considering plants with capacity over 10 MW⁴, was 75,321 MW. There were five operators with a market share over 5%: Enel Produzione (48.3%), Edison group (9.6%), Edipower (8.4%), Endesa Italia (8.1%) and Eni group (6.4%). On the basis of this data, the percentage capacity held by the first three operators was 66.3%.

The Herfindahl-Hirschman index (HHI) relative to maximum net capacity, considering plants' capacity over 10 MW, shows a decrease of market concentration; the relative index at 31 December 2006 assumes a value of 2,623, while in the early months of the same year, as indicated in the previous *Annual Report*, it was 2.759.

Table 3.7 Breakdown of Generation Capacity by Type of Plant Use

| Plant Type | MW | % Share |
|----------------|--------|---------|
| Baseload | 36,280 | 48.2% |
| Mid-merit | 27,604 | 36.6% |
| Peak | 6,202 | 8.2% |
| Self producers | 5,235 | 7.0% |
| TOTAL | 75,321 | 100.0% |

Source: AEEG analysis on TERNA data (Production units register).

⁴ Net of long term unavailability.

Italian generation consists of *baseload* plants, the great majority of which are thermal plants, for just under half of the maximum net power available, just under 37% of *mid-merit* plants and 8.2% peak plants, of which approximately two thirds are pumping plants; 7.0% of capacity, finally, consists of self-production plants.

Structure of the electricity market

In terms of operations of electricity market, there was no significant innovation in 2006 with respect to the information provided in previous Annual Reports, except for measures intended to contain dispatching costs described at paragraph 3.1.3 in the section on balancing.

The regulated market operated by the Electricity Market Operator (GME) is split into two sub-markets: the Day-Ahead Market (MGP), which hosts the majority of electricity purchase and sale transactions, followed by the Adjustment Market (MA), which allows the operators to modify the schedules defined on the MGP, through further buy or sell bids. Subsequent to these there is the Ancillary Services Market (MSD), where TERNA procures the resources necessary to operate the transmission and dispatching activities and to guarantee the security of the system. Full scale dispatching discipline foresees the active participation of demand in all these markets, but the transitory dispositions for the year 2006 foresaw, as for the preceding year, that this should participate in the MGP only.

Demand participation in the MGP only, made it necessary to activate transitory mechanisms to compensate the reduced flexibility of trading deriving from the ban on participation of demand in the MA and in the MSD. These mechanisms are:

- scheduled imbalances, which enables the holders of contracts concluded outside the bidding system to present in-put and off-take schedules not balanced on the MGP;
- the Bilateral Adjustment Platform for the demand side (PAB), in which balanced hourly electricity trades can be conducted by operators of off-take points belonging to the same geographical zone.

In addition to the above mentioned measures, and the envisaged simplified system for the valorisation of imbalances, the electricity market regulations established that TERNA may present integrative offers/bids on the MGP to ensure that the level of demand resulting from the market does not diverge from its projections by more than 5%; from August 2006 this percentage is set at 2%.

The Day-Ahead Market

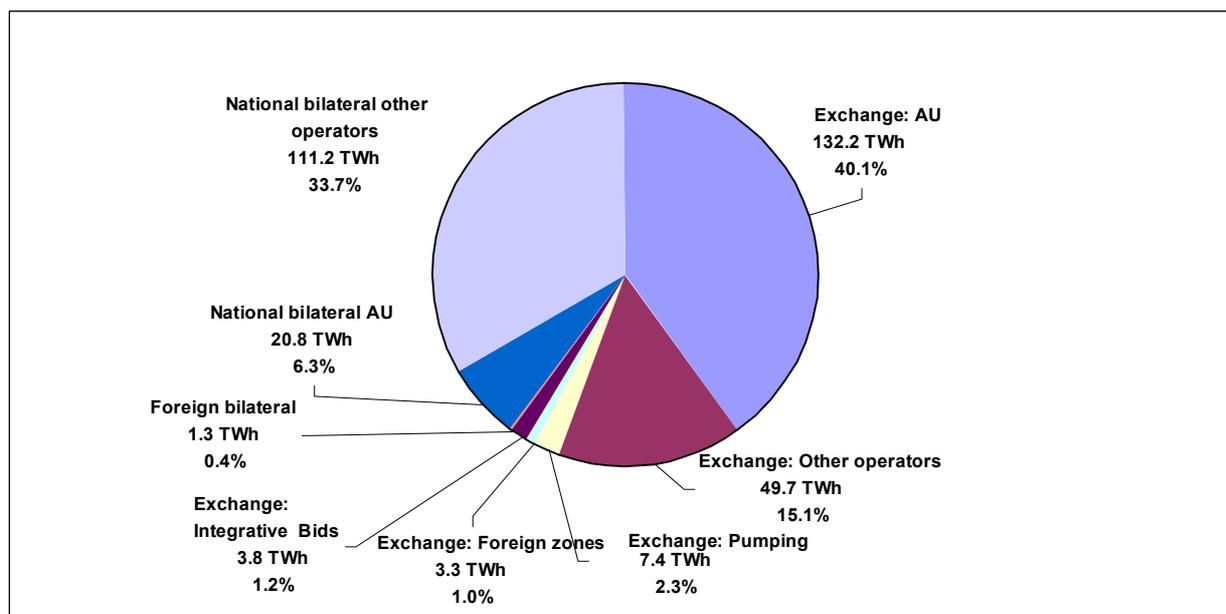
Electricity demand on the MGP in 2006, gross of bilateral contracts trading, was 329.8 TWh, growing of 2.0% against 2005. Italian demand rose by 1.8%, with more sustained rises in Sicily (4.9%) and Sardinia (3.3%), while purchases on foreign zones registered an 18.3% increase.

Power exchange transactions reached 196.5 TWh, reducing by 3.2% from 2005; average market liquidity fell therefore from 62.8% to 59.6%.

The reduction in demand on the Exchange is largely due to a significant decrease, of approximately 7.0 TWh, of the demand of the Single Buyer (AU in Italy) resulting from a contraction of the captive market, for which the AU largely procures on the Exchange. This trend was partially contrasted by increased demand from other operators, by approximately 2.0 TWh.

Demand via bilateral contracts rose by almost 11% on 2005, as a consequence of increased demand of over 17 TWh from Italian operators other than the Single Buyer.

Figure 3.1 Percentage composition of electricity demand in 2006

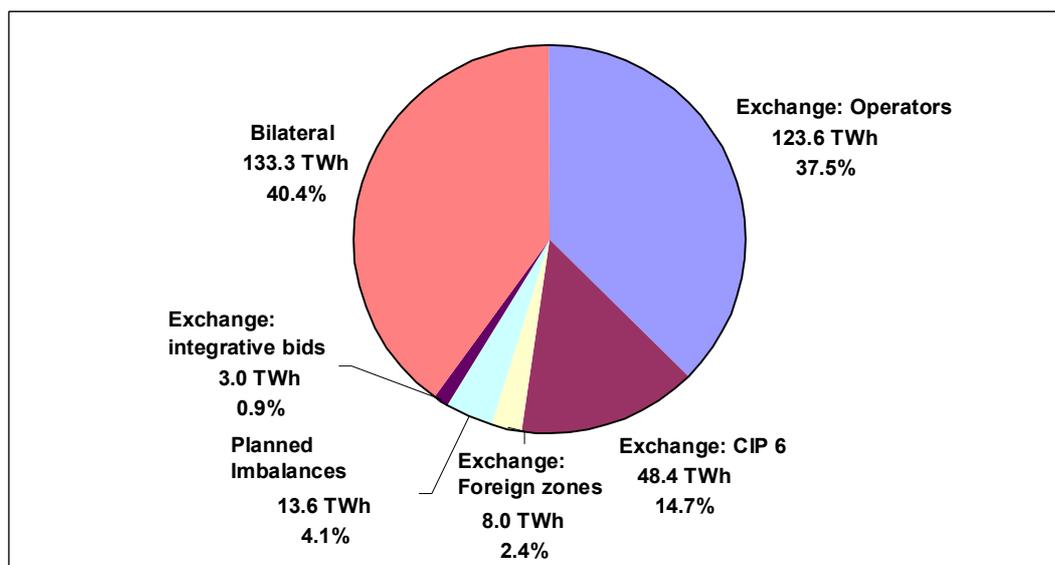


Source: AEEG analysis on GME data.

With reference to the energy supplied on the Exchange, in 2006, there was a clear growth in the weight of the foreign zones, whose contribution to demand rose by approximately 7.0 TWh; in parallel, there was a fall in supply offered by Italian operators (-7.7%) and by CIP6 plant operators (-6.8%), for a total of approximately 14 TWh.

The CIP6 energy, produced by renewable and/or assimilated resource plants benefiting from incentives under Ruling No. 6 of the Inter-Ministerial Prices Committee (CIP) adopted in 1992, is acquired by the Electricity Services Operator (GSE) as established by Legislative decree No. 79/99 and retailed thereby on the free and captive markets. With effect from 1 January 2005, CIP6 energy is offered directly on the Power Exchange and the operators to whom quotas of this energy is assigned are required to stipulate contracts for difference with the GSE, which commits them to procure the assigned quantity thereto on the electricity market. On the basis of this contract, in 2006 the operators received or paid, for the capacity assigned, the difference between the market price (PUN) and the allocation price, set at €55.5/MWh for all hours of the year.

Scheduled imbalances reached 13.6 TWh, a 6.2% rise against the previous year. Supply side integrative offers were 3.0 TWh, down by approximately 400 GWh from 2005, while demand side integrative offers were 3.8 TWh down by approximately 1.5 TWh from 2005.

Figure 3.2 Percentage composition of electricity supply in 2006

Source: AEEG analysis on GME data.

The average purchase price (PUN) on the Italian Power Exchange was €74.75/MWh, rising by €16.17/MWh from 2005 (27.6%).

The increase reflects, among other components, input price trends, in particular Brent oil, which rose by 19.0% on the European markets, and of natural gas, whose average import (source: World Gas Intelligence) rose by 30,0% on 2005.

Alongside the impact of fundamentals, there are persistent criticalities of structural nature, linked with the level of effective development of competition on the supply side.

The HHI index of concentration at the zonal level, calculated on energy sales and to sales bids, highlights this phenomenon, in particular with reference to the macro-zones excluding the North, where the index is always over 3,000 in every month of the year.

The marginal operator index highlights the presence of a single operator per macro-zone capable of setting the Exchange price for large part of the volumes traded; in particular, the share of overall volumes traded in which this operator sets the price constantly exceeds 80% at the national level in every month of the year.

The Adjustment Market and the Bilateral Adjustment Platform

The market average price of the Adjustment Market (MA in Italy), the market created for the modification of the schedules defined in the MGP, was approximately €69.59/MWh, almost 7% below the PUN. On average the volumes exchanged equalled 3.0% of overall demand on the MGP.

In 2006 on the Bilateral Adjustment Platform which enables the registration of hourly balanced electricity trading between operators of withdrawal points belonging to the same geographical zone, a total of 8.4 TWh was traded, with a reduction of almost 9% on the previous year. The trades accounted for 2.6% of volumes on the MGP.

The Ancillary Services Market

The Ancillary Services Market (MSD) is the market on which TERNA procures the energy required to eliminate intra-zonal congestion, to create power reserves and for real time balancing. The changes introduced in 2006 in the regulation of activities by TERNA to procure the resources for provision of ancillary services are described at paragraph 3.1.3.

In order to calculate the level of concentration of the Ancillary Services Market, four segments were identified, distinguishing between *ex ante* MSD and *ex post* MSD and for each of these, taking into consideration step-up and step-down offers.

The market, in fact, is operated in two sessions, the first immediately after the Adjustment Market, on which TERNA buys and sells energy to generate reserve margins and to eliminate eventual residual congestion (*ex ante* MSD), while the second is operative throughout the following day and is used by TERNA to buy and sell energy for real time system balancing (*ex post* MSD).

The MSD requires the presentation of both sell bids, offers to increase input availability (step-up offers), and buy bids, offers to reduce input availability (step-down offers). Currently off-take dispatching users do not participate in this market.

In 2006 step-up *ex ante* purchases rose to 12.2 TWh, a 5.0% increase over the previous year. The step-down quantities sold *ex ante* rose to 14.3 TWh, a rise of approximately 1.2 TWh on 2005. In respect to the total quantity traded on the MGP, these volumes were, respectively, 3.7% and 4.3%.

On the step-up *ex post* MSD, TERNA bought 11.0 TWh of energy, an 11.9% increase on 2005, while on the step-down *ex post* MSD, TERNA sold 8.0 TWh of energy, in line with the previous year.

Table 3.8 illustrates the market shares and HHI index for each of the four segments into which the MSD is divided, for the year 2006. Note that the data available for calculation of the market shares does not refer to 100% of trades in the single segments; in particular, the data used guaranteed coverage of approximately 85% of the volumes traded on the *ex post* MSD.

Table 3.8 Market shares and HHI index in the four MSD segments

| | ex ante MSD | | ex post MSD | | MSD |
|---------------------------------|----------------|------------------|----------------|------------------|--------------|
| | step-up offers | step-down offers | step-up offers | step-down offers | |
| Enel Produzione | 64.3% | 42.4% | 72.3% | 72.0% | 60.0% |
| Endesa Italia | 11.2% | 17.5% | 9.1% | 10.0% | 12.7% |
| Edipower | 13.0% | 13.9% | 7.4% | 8.0% | 11.3% |
| Edison Trading | 0.9% | 12.1% | 2.4% | 3.2% | 5.4% |
| Tirreno Power | 7.9% | 3.3% | 4.0% | 3.5% | 4.8% |
| ASM Brescia | 0.3% | 3.3% | 1.9% | 1.1% | 1.8% |
| AEM Trading | 0.8% | 3.3% | 1.4% | 0.9% | 1.8% |
| Aceaelectrabel Trading | 0.2% | 1.0% | 0.7% | 0.5% | 0.6% |
| Azienda Energetica - Etschwerke | 0.3% | 1.4% | 0.1% | 0.0% | 0.6% |
| S.I.E.T. | 0.3% | 0.8% | 0.4% | 0.4% | 0.5% |
| Ottana Energia | 0.3% | 0.1% | 0.2% | 0.3% | 0.2% |
| Idroenergia | 0.3% | 0.2% | 0.0% | 0.0% | 0.2% |
| AGSM Verona | 0.0% | 0.4% | 0.0% | 0.0% | 0.1% |
| TraFigura Electricity Italia | 0.1% | 0.1% | 0.1% | 0.0% | 0.1% |
| Others | 0.1% | 0.2% | 0.0% | 0.1% | 0.1% |
| TOTAL | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| HHI Index | 4.492 | 2.480 | 5.395 | 5.379 | 3.941 |
| <i>Data coverage</i> | 99.7% | 99.7% | 84.9% | 84.9% | 93.5% |

Source: AEEG analysis on TERNA and GME data.

Trading on the Power Exchange and Bilateral Trading

During 2006 there was a reduction against the previous year in the energy sold on the Exchange, equal to approximately 6.5 TWh, with a parallel significant increase in the quota of energy traded on the basis of bilateral contracts on the MGP, exceeding 13 TWh.

Table 3.9 Electricity market

TWh

| | Total consumption | | | | Trading on the MGP | | | | Other trading |
|------|-------------------|-------------------------|----------------------------------|------------------------|--------------------|-----------------------------|---------------------------|-------------------------|---------------|
| | | <i>of which pumping</i> | <i>of which self consumption</i> | <i>of which losses</i> | | <i>of which on Exchange</i> | <i>of which bilateral</i> | <i>of which forward</i> | |
| 2002 | 321.4 | 10.6 | 22.2 | 19.8 | - | - | - | - | - |
| 2003 | 331.2 | 10.5 | 21.1 | 20.9 | - | - | - | - | - |
| 2004 | 335.7 | 10.3 | 21.1 | 20.9 | 231.6 | 67.3 | 164.3 | - | 104.1 |
| 2005 | 339.8 | 9.3 | 21.3 | 20.6 | 323.2 | 203.0 | 120.2 | - | 16.6 |
| 2006 | 346.4 | 8.6 | 21.9 | 21.4 | 329.8 | 196.5 | 133.3 | - | 16.6 |

Source: AEEG analysis on TERNA and GME data.

Overall, the energy procured via bilateral contracts on the MGP was 133.3 TWh. There is no detailed information available about the duration of these contracts, although the majority of these is stipulated on an annual basis.

The increase in energy trading via bilateral contracts is due to an increase in the volumes traded by Italian operators other than the Single Buyer; the latter, by contrast, significantly reduced the energy volume procured via bilateral contracts, due to a reduction in the overall energy supplied thereby to clients on the captive market.

Table 3.10 Bilateral contracts on the MGP in 2006

TWh

| | 2005 | 2006 |
|---------------------------------|-------|-------|
| Bilateral Contracts | 120.2 | 133.3 |
| Italian | 119.1 | 132.0 |
| <i>of which Single Buyer</i> | 25.2 | 20.8 |
| <i>of which other operators</i> | 93.9 | 111.2 |
| Foreign | 1.1 | 1.3 |

Source: AEEG analysis on GME data.

Degree of integration of the Italian electricity market in Europe

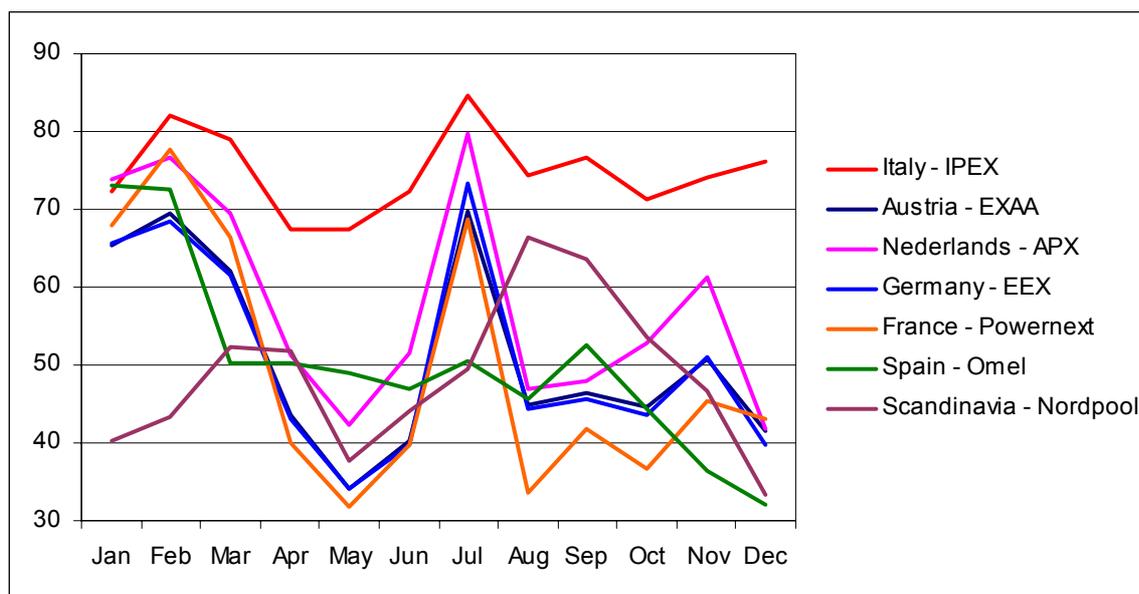
Regarding the integration between the Italian market and those of neighbouring countries, 2006 confirmed a significant price differential between the Italian Power Exchange (IPERX) and the main foreign Exchanges.

The annual average Italian price, €74.75/MWh, was higher than that on the other European Exchanges by €17-26/MWh. Furthermore, the Italian Exchange recorded, after Nordpool, the largest price increase against 2005 (27.6%).

The price differential, with respect to the other Exchanges, was particularly significant at peak hours, when the Italian price was higher than the average of the other European Exchanges by €40/MWh. In *off-peak* hours on working days, this differential was a little over €10/MWh.

The analysis of the correlation of daily prices on the Italian Exchange with prices on other European Exchanges indicates a limited degree of integration of the markets; the highest level of correlation is recorded between the Italian and Austrian Exchanges, while the correlation between the French and Dutch Exchanges was slightly lower.

The price differential between Italy and the neighbouring countries caused a substantially unilateral use of the foreign interconnection lines, with a prevalent import direction in the flow which reached 97% of the hours on the North West border and 100% of the hours on the North East border. There was a more consistent phenomenon of exports to Greece on the Southern border, which occurred in approximately 26% of the hours. In percentage terms, the hours in which there was full physical saturation of foreign transits were absolutely marginal.

Figure 3.3 Electricity price trends on the main European power exchanges in 2006

Source: AEEG analysis on European energy exchanges data.

Table 3.11 Average daily price correlation indices for European day-ahead markets in 2006

| | AUT | ESP | FIN | FRA | GER | ITA | NL | NOR | SWE |
|-----|------|-------|------|-------|------|------|-------|------|-----|
| AUT | 1 | | | | | | | | |
| ESP | 0.50 | 1 | | | | | | | |
| FIN | 0.21 | 0.12 | 1 | | | | | | |
| FRA | 0.91 | 0.53 | 0.08 | 1 | | | | | |
| GER | 0.87 | 0.42 | 0.17 | 0.80 | 1 | | | | |
| ITA | 0.74 | 0.30 | 0.25 | 0.66 | 0.60 | 1 | | | |
| NL | 0.83 | 0.39 | 0.11 | 0.81 | 0.74 | 0.59 | 1 | | |
| NOR | 0.07 | -0.07 | 0.89 | -0.09 | 0.06 | 0.13 | -0.01 | 1 | |
| SWE | 0.15 | 0.01 | 0.95 | 0.00 | 0.13 | 0.22 | 0.06 | 0.97 | 1 |

Source: CEER analysis on European energy exchanges data.

Zonal fragmentation

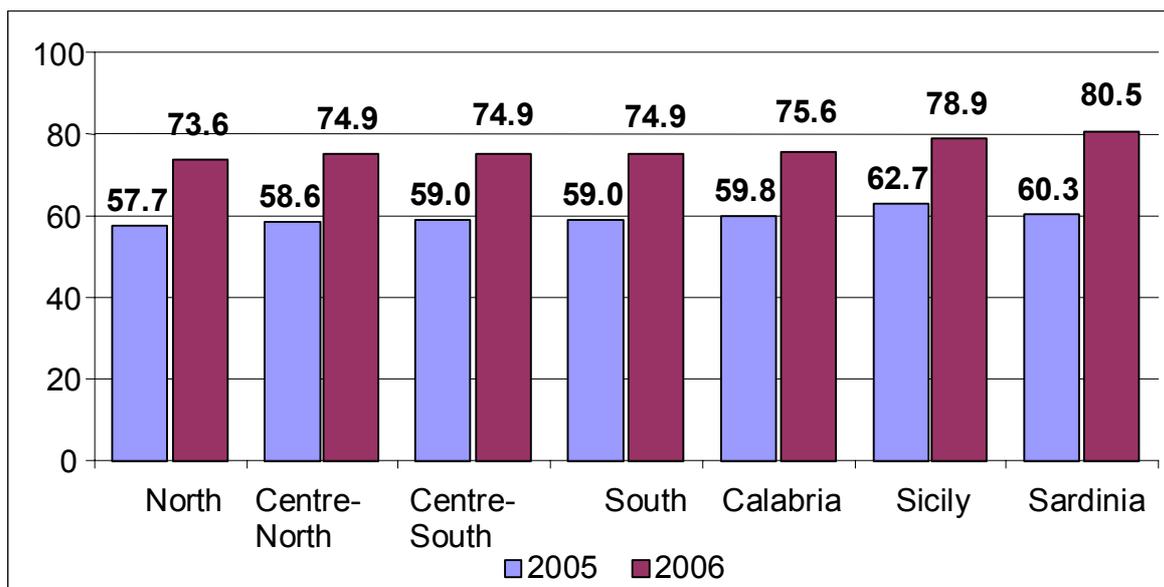
As regards to the degree of internal zonal fragmentation within Italy, in 2006 the average number of zones was 3.87, higher than both the 2005 value 2005 (51%), and than that of 2004. This rise was mainly determined by the more frequent separation of the peripheral zones, i.e. the virtual foreign zones and the islands.

The four most frequent zonal configurations saw the entire system united, except for sporadic separations of Sicily or some virtual foreign zones. The system, in detail, constituted a single market zone in 4% of the hours, a significant fall from the 17% in 2005, as the second configuration by frequency.

Alongside a rising trend of market fragmentation, price differentials increased in 2006, identifying, substantially, four zone groups corresponding to the four macro-zones - North, South, Sicily and Sardinia. The price differential, calculated as the gap between the annual average maximum zonal price and the minimum zonal price, was €6.92/MWh, an upturn with respect to the €5.06/MWh of 2005, but still significantly lower than the €11.04/MWh of 2004.

Figure 3.4 Average zonal sale prices on the MGP

€/MWh



Source: GME.

For the third consecutive year, the lowest price was registered in the North zone, at €73.63/MWh, rising by almost €16/MWh on 2005 (27.6%) and the only price below the PUN on average. A similar rise was registered by prices in the other zones, while in Sardinia there was both the highest average price, at €80.55/MWh, and the most significant increase, approaching €20/MWh (33.4%).

The price difference between the various zones was substantially constant across the different time bands, with the North registering the lowest prices in all time bands, always below the PUN by approximately €1/MWh, the other continental zones aligned on average with the PUN or higher by approximately €1/MWh, and Sardinia, a zone which registered prices which were approximately €7/MWh higher than those of the North. Sicily, finally, in off peak hours, registered significantly lower prices than Sardinia, while in peak hours and on holidays, their prices were aligned.

Mergers in the electricity sector in 2006

Three significant mergers took place in the energy sector during 2006, none of which challenged the level of competition in the electricity sector.

In October 2006 the IRIDE group was created, by the merger through incorporation of AMGA Spa into AEM Torino Spa. IRIDE thus became the most important *utility* operator

in the North West, active in the integrated supply chain (hydroelectric generation and cogeneration, power transmission, distribution and sale, district heating system, import, distribution and sale of gas), in the water sector and in the service sector. In 2006, the two merged companies generated 3.4 TWh (1.3% of Italian generation) and sold approximately 13.7 TWh of electricity on the market, of which 2.0 TWh to captive clients. The group also holds a quota of Edipower production, via a *tolling* contract (2.5 TWh in 2006).

In October 2006 E.On acquired 75% of the equity of the Italian company Dalmine Energie. The Luxembourgish industrial company Tenaris SA, until then the sole owner of Dalmine Energie, retained 25% of the shares. Dalmine Energie is a *multi-utility* which operates in the electricity and gas sectors, and in 2006 supplied approximately 3 TWh of electricity and 11 TWh of gas to approximately 1,800 industrial and business sector users. With this acquisition E.On strengthened its' market position in Italy, by increasing its' gas and electricity sales; E.On Italia, before the acquisition, supplied an average of 1,8 TWh of electricity to approximately 1,100 industrial and business sector users, while on the Italian natural gas market, E.On Ruhrgas and its' subsidiary Thüga Italia supplied approximately 800,000 domestic, business and industrial users, with approximately 18 TWh of gas per year. A combined cycle power station of 800 MW is currently under construction at Livorno Ferraris, where E.On expects to go on line at the beginning of 2008.

On 14 December 2006, finally, agreement was reached by the two shareholders in Serene Spa - Edison Spa and BG Italia Spa - on the sale to BG Italia of the equity held by Edison, 66.32% of the company share capital. BG Italia already held the remaining 33.68%. Serene specialises in the production of CIP6 subsidised electricity which is sold to the Electricity Services Operator, a public operator assigned a central role in the promotion, incentives and development of renewable resources in Italy. The agreement was perfected on 14 February 2007 with a favourable opinion from the European Antitrust Authority

3.2.2 Description of the retail market

The retail market is divided into two segments, one supplying clients on the captive market (which includes all household clients and eligible non household clients who have chosen to continue to purchase electricity at regulated tariffs) and the other clients on the free market (which includes those non domestic clients who have chosen to change supplier). From 1 July 2007, all users are free, and thus able to choose their contractual counterpart and to negotiate the supply conditions, while retaining the right to remain within the captive market.

In 2006, captive market consumption, on the basis of the preliminary data supplied to the Authority by the distributors, fell by over 9% from the previous year, settling at 138.5 TWh of energy⁵ of which 61.6 TWh correspond to withdrawals by household users and 76,9 TWh to non household use. Non household clients - excluding users subject to special tariff regimes and public illumination - who at 31 December 2006 procured on the captive market - were mainly of small size, with average withdrawal of 9,986 kWh; more than

⁵ On the basis of preliminary estimates from TERNA, in 2006 captive clients electricity consumption should settle at 142.0 TWh.

60% of the related consumption is attributable to low voltage users whose average withdrawal settled at 7,400 kWh.

The captive market continues to show a high level of concentration, mainly to the benefit of Enel Distribuzione, which has an extremely high market share, 86.3% in 2006, rising from the 85.5% of previous year. The three major distribution companies, Enel Distribuzione, Acea Distribuzione (4.3% of the market) and Aem Elettricità (3.0%), cover 93.6% of the captive market; this share is stable compared to 2005.

At 31 December 2006, there were 7.6 million eligible and thus potentially free clients who withdrew, during the year, 221.5 TWh of energy (net of consumption by users benefiting from special tariff regimes); with respect to the previous year the volume of energy withdrawn by the same clients fell by approximately 1.7 TWh. Average withdrawal by client showed a slight increase compared to the previous year settling at 29,187 kWh/year.

There were 700,000 clients, at 31 December 2006, who procured effectively on the free market, with total withdrawals of 149.7 TWh⁶, corresponding to 67.7% of the potential market.

Sales to the clients of the free market show a lower level of concentration with respect to sales on the captive market; the market share of the first three operators exceeds 50% only for the class of consumption lower than 50 MWh/year.

Table 3.12 Concentration in sales on the free market by class of consumption

| Annual class of consumption | Market share of the first three operators |
|-----------------------------|---|
| < 50 MWh | 55.0% |
| 50 - 5,000 MWh | 34.5% |
| > 5,000 MWh | 48.7% |

Source: AEEG analysis on data provided by the operators.

Considering overall free market sales, there were 4 groups with market share of 5% or more: the Edison Group (15.8%), the Enel Group (14.8%), the Eni Group (7.8%) and the Sorigenia Group (5.5%).

The non Italian companies (considering those with at least one foreign shareholder, whatever equity percentage they hold), sold a total of 24.9 TWh, that is approximately 16% of the entire free market. The leader by energy sold is the Sorigenia Group (85 TWh of energy sold), owned by approximately 38% by the Austrian company Verbund, followed by Ergon Energia (5.4 TWh of energy sold), a company owned 50% by the Spanish group Endesa. The third operator by sales is the Dynameeting company (2.8 TWh of energy sold), 100% owned by the Swiss group Ratia Energie.

According to the data collected by the Authority during 2007 from the wholesalers/retailers, out of 264 companies, 213 wholesalers declared their corporate independence from production and distribution, 6 wholesalers declare to be connected with a

⁶ On the basis of the preliminary estimates from TERNA, in 2006 free clients electricity consumption should settle at 152.5 TWh gross of consumption by users benefiting from special tariff regimes; on the basis of the data provided to the Authority by the operators, the latter would be approximately 4.8 TWh.

distributor, while other 25 with a producer and 20 have corporate links with both a distribution and a production company.

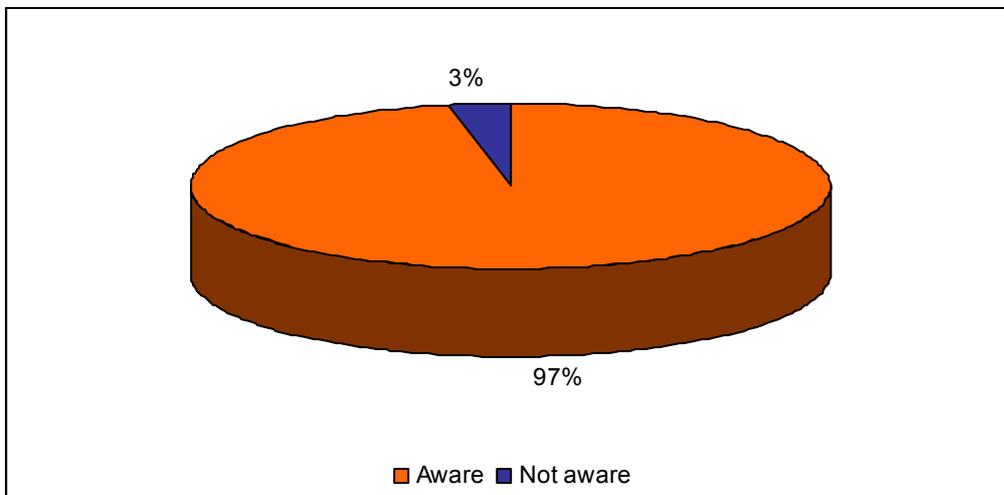
Conduct with respect to liberalisation

Within its annual survey of the electricity sector conducted in spring 2007, the Authority collected some *switching* data from grid operators. According to the survey over 450,000 users (or withdrawal points) switched from the captive to the free market in 2006, representing approximately 64% of free market users at 31 December of the same year. Approximately 52% of these ex captive clients, switched to the free market choosing an operator connected with the distributor of the captive market. On the other hand just over 16,000 clients (withdrawal points) switched back from the free to the captive market. During 2006, furthermore, Indis - the technical service of the Italian Union of Chambers of Commerce - and the Milan Chamber of Commerce promoted an analysis of the cost of electricity supply for different business firms in the Province of Milan. In the absence of similar surveys of national relevance in 2006, the results of this study, albeit limited to the single territorial ambit of the Province of Milan, allows to understand to some extent whether the non domestic end users perceive the liberalisation process as a real opportunity for saving.

The purpose of the survey, addressing a total of 644 production sites, was both to analyse the different consumption profiles of non domestic users and to quantify the potential savings switching from the captive to the free market.

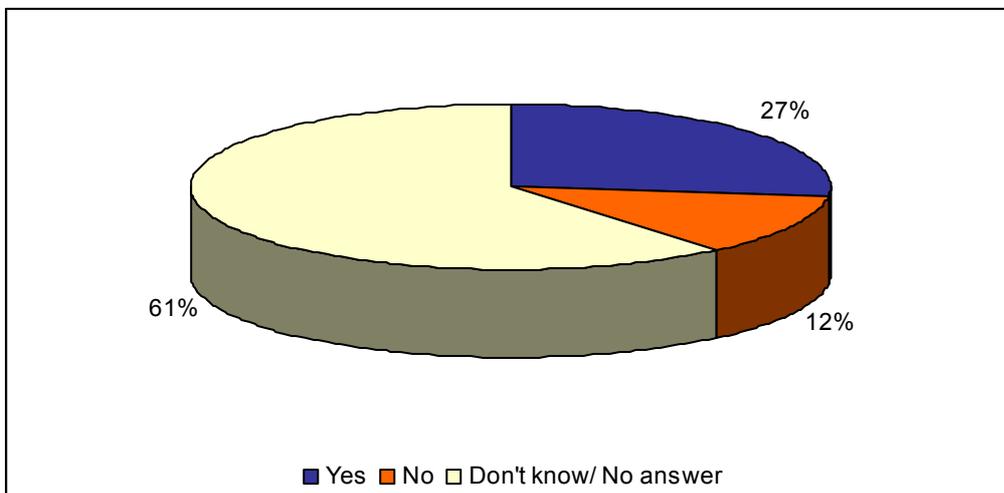
The survey shows a polarised situation: small consumers on the one hand, medium and large consumers on the other. Among the former, in particular, it is useful to distinguish the companies operating in energy intensive and non energy intensive sectors. Small non energy intensive consumers, with low voltage connections and no hourly meter, procuring on the free market could obtain savings in electricity costs of 3-4%, corresponding to a discount on the generation cost component of 5-6%. Small energy intensive consumers, usually with a medium voltage connection and an hourly meter, could benefit, instead, savings of 7-8% on the average kWh cost, corresponding to a discount on the generation cost component from 10 to 12%. The savings which may be gained by shifting from the captive to the free market in the higher consumption classes (medium and large consumers) are even more considerable. The results show an average kWh cost falling as consumption rises: from € 16.2/kWh for annual consumption below 300 MWh, to approximately €13/kWh for consumption from 300 MWh to 3 GWh, through to €9.8/kWh for annual consumption over 10 GWh.

According to the results of the survey, it may be concluded that, while non domestic customers generally perceive real opportunities in terms of savings by switching to the free market, the communications procedures and strategies used by current and potential suppliers towards the users are often inadequate, in particular for the lower consumption users.

Figure 3.5 Awareness of liberalisation among business users in Milan and Province

supplied by the captive market

Source: Indis and Milan Chamber of Commerce survey.

Table 3.6 Willingness to change supplier among business users in Milan and Province supplied by the captive market

Source: Indis and Milan Chamber of Commerce survey.

Final electricity tariffs

The electricity prices paid in July 2006 by the standards consumer defined by Eurostat and their breakdown are illustrated at Table 3.13.

Unlike previous years, it is not possible to provide a comparison of 2006 and 2007 electricity tariffs, given that from 1 July 2007, together with the full liberalisation of the

market on the demand side, some changes were introduced in the tariff structure which does not allow direct comparison.

The tensions which characterised the international fuel markets and the consequent rises in the electricity price recorded on the major European exchanges since 2004 are reflected in a significant rise in generation costs for the different user categories. With respect to the previous year, in 2006 there were increases reaching 14.5% for the household clients, 24.1% for medium voltage users and 19.2% for large industrial clients.

Another significant aspect is the increased incidence on electricity tariffs of the general charges component. For all classes of user, in fact, there was a increase in these charges of over 80% with respect to 2005, particularly substantial for households.

Table 3.13 Electricity tariffs

July 2006

| Standard consumer (Eurostat definition) | Dc | Ib | Ig |
|---|--------|--------|--------|
| Wholesale price of electricity or generation cost | 86.80 | 94.98 | 82.80 |
| Transmission tariff (excluding general charges) | 69.40 | 3.60 | 3.49 |
| Distribution tariff (excluding general charges) | | 40.21 | 5.83 |
| Estimated margin to recover sales marketing costs | | 1.23 | 0.003 |
| Grid losses | 10.30 | 5.02 | 4.37 |
| General charges | 14.20 | 16.62 | 15.80 |
| TOTAL (€/MWh) | 180.70 | 161.66 | 112.30 |

Notes:

- The distribution tariff also includes the component to cover metering costs and equalisation of transport costs and the component to cover improvement costs of quality of service.
- The costs of ancillary generation costs and generation cost equalisation are included in the wholesale price of electricity.
- General charges include: *stranded costs*, incentives for renewable resources and other residual costs not connected with production and grid services.

Source: AEEG.

3.2.3 Measures to avoid abuse of dominant positions

The activities of the Regulatory Authority for Electricity and Gas to promote competition in the wholesale market continued throughout 2006

In August, in particular, the Authority ordered an update of the fact finding investigation into the state of liberalisation of the electricity sector started with Resolution No. 13/03 and the preparation of a new report on the structural conditions of the wholesale electricity market for the years 2006 and 2007. The purpose of the investigation is to define new possible measures and to report and deliver proposals to Parliament and to Government. The investigation was conducted, as with the previous investigation of 2003-2004, in collaboration with the Italian Antitrust Authority.

The 2003-2004 investigation showed that the wholesale power market was characterised by the structural presence of a single operator, Enel, with extensive market power in all four geographical markets, and the presence of one operator, Endesa Italia, with market power in the Sardinia macro-zone. The subsequent results of monitoring activities in the electricity wholesale market and in the ancillary services market confirmed, for the year 2005, that the critical aspects highlighted by the investigation were still there.

The conclusions of the joint investigation and monitoring activity led the AEEG to conclude that there was a need to take urgent steps to remove the remaining obstacles to the development of effective competition in the wholesale supply of electricity.

The Authority, with Resolution No. 212/05, thus proposed the adoption of *Virtual Power Plants* (VPP), foreseeing the imposition of a temporary obligation, on Enel Produzione, to sell a quota part of its available production capacity to third parties not linked with Enel. The amounts to be sold are decided in advance at prices based on an auction conducted according to rules verified by the Authority.

For the sale of the virtual production capacity for the year 2006, Enel organised two auctions held, respectively, on 30 November 2005 and 13 December 2005. The two auctions, which foresaw the definition of an auction base price, failed to produce any allocation of capacity.

On 20 December 2006, the Italian Antitrust Authority accepted, rendering them mandatory, the commitments assumed by Enel in exchange for closure of the investigation into abuse of dominant position on the Italian Power Exchange started in April 2005. The commitments were extended with respect to the original versions, establishing an obligation to hold procedures for virtual sale of capacity for 2007 for 1,000 MW in the South macro zone. In fulfilling the commitments assumed according to Article 14, third comma, of Law No. 287/90, and approved by the Italian Antitrust Authority, beginning on 21 December, 2006 Enel Produzione began the procedure to allocate virtual production capacity for the year 2007, where dispatching users or operators delegated thereby could participate.

The virtual production capacity, of 1,000 MW, was split in to fixed size bands of 5 MW, for which the purchase bids were offered. The products offered consisted of two way contracts for difference, which foresee that the contracting parties regulate together, for the full virtual capacity contracted, the difference between the market price (corresponding to the average zonal price on the day-ahead market in the zones composing the South macro-zone weighted by the quantities accepted for sale in those zones) and the *strike* allocation price, for a number of hours identified beforehand (indicated as the activation period). In particular, three products were offered: *baseload* contracts, for all the hours of the year (*strike* allocation price of €69.32/MWh), *off peak* contracts, for the 0-8 and the 20-24 time bands on working days and for all hours at weekends and holidays (€50.80/MWh) and *peak* contracts, for the 8-20 interval in working days (€102.60/MWh).

The virtual production capacity, for each product, was allocated for the bands requested at the *strike* allocation price up to full exhaustion of the virtual production capacity made available, respecting certain criteria. In particular, in the cases in which the overall quantity requested for each product was:

- less than or equal to the quantity to be allocated, a maximum awardable quantity of 60% of the allocated amount would be set for each bidder;
- more than the quantity to be allocated, a maximum awardable quantity of 20% of the quantity for allocation would be established for each bidder.

Further, in the cases in which where, after application of this criterion, the overall quantity requested was:

- still higher than the allocated amount for each product, a progressive reduction of 5 MW (equal to one band) of the quantities requested by the bidders was to be extracted by lots until the total quantity available is allocated;
- less than the allocated amount for each product, the maximum awardable quantity was to be increased by a percentage which allows the allocation of the entire quantity to be allocated.

The bids presented within the allocation procedure held on 28 December 2006 were 10 times higher than the supply for each of the products offered. There were thirty winning operators, including the Single Buyer – the public operator which supplies the captive market – who won 120 MW, of which 65 MW of *baseload product*, 25 MW *peak product* and 30 MW *off peak product*.

Table 3.14 Results of the allocation of virtual capacity for 2007

| Product | Bidding Operators | Number of bands requested | Winning Operators | Number of bands allocated |
|---|-------------------|---------------------------|-------------------|---------------------------|
| Baseload contract (from 0 to 24 every day) | 22 | 1.460 | 13 | 130 |
| Peak load contract (from 8 to 20, Monday to Friday) | 20 | 816 | 13 | 70 |
| Off-peak contract (in the remaining hours) | 13 | 722 | 11 | 70 |

Source: Enel.

4 REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET

4.1 Regulatory issues

4.1.1 Overview

In the gas sector, in spite of the advances made in the legislative and regulatory framework, the state of competition still gives rise to concerns both in terms of infrastructural system developments insufficient to keep up with demand trends, and of ENI's dominant position in the market.

The state of investments for gas procurements and storage are still highly problematic: the availability of infrastructure capacity is by far inadequate both to create a competitive market and to guarantee an acceptable level of security of supply. The few investments started-up (such as the GNL plant at Rovigo, the upgrading of the gas pipeline from Austria and some STOGIT storage reservoirs) are all delayed for different reasons; others, such as the GNL plant at Brindisi, seem once again to be coming to an alt.

The framework of liberalisation has not changed, given that Italy decided to open up the market completely with effect from 2003 (from 1 January 2003, all clients became free to choose their supplier) and since 2000 has envisaged legal unbundling between transport and sales activities and regulated access to the network. As in previous years, it is necessary to emphasise that the adoption of advanced regulation is a necessary yet insufficient condition to start genuine competition in the market.

4.1.2 Allocation of interconnection capacity and congestion management mechanisms

Table 4.1 illustrates the results of the continuous transport capacity allocation at the beginning of the 2006-2007 thermal year.

With respect to the available capacity⁷ of the previous thermal year, in 2006-2007, there was a significant change in allocable capacity at the Tarvisio point, which rose by 12.6 M(m³)/day following the planned developments of the *build up* of ENI's Russian procurements.

⁷ Note that the transport capacity values are calculated by hydraulic simulation of the transport network which takes into account the withdrawal scenarios for the year of reference. The transport capacity at each entry point is determined considering the most severe transport scenario (Summer for the Mazara del Vallo, Tarvisio and Gorizia entry points, Winter for the Passo Gries entry point). In particular, Snam Rete Gas evaluated the maximum volumes which can be injected into the network from each entry point without exceeding the minimum pressure limitations at the diverse points on the system, and without exceeding maximum plant performance limits, in order to assure transport service availability at the level required throughout the thermal year.

Table 4.1 Continuous transport capacity in ItalyStandard M(m³) per day, unless otherwise indicated; thermal year 2006-2007

| ENTRY POINT TO THE NATIONAL NETWORK | ALLOCABLE | ALLOCATED | AVAILABLE | PROPORTION ALLOCATED/ALLOCABLE |
|-------------------------------------|----------------------|---------------------|-------------|--------------------------------|
| Passo Gries | 57.5 | 57.5 | 0.0 | 100.0% |
| Tarvisio | 100.9 ^(A) | 85.3 ^(A) | 15.6 | 85.4% |
| Mazara del Vallo | 85.1 ^(A) | 80.4 ^(A) | 4.7 | 94.5% |
| Gorizia ^(B) | 2.0 | 0.9 | 1.1 | 45.0% |
| Gela | 25.6 | 25.6 | 0.0 | 100.0% |
| TOTAL | 271.1 | 249.7 | 21.4 | 92.1% |

(A) Maximum capacity allocable and allocated with effect from January 2007.

(B) Note that import at the Gorizia entry point is a "virtual" operation, produced by lesser physical export volumes.

Source: AEEG analysis on Snam Rete Gas data.

The results of the allocation for thermal year 2006-2007 show nearly all that continuous transport capacity at the entry points to the national network, interconnected by pipeline with abroad, being allocated (92%). Moreover, considering the further capacity allocated after the beginning of the thermal year at the Tarvisio point, corresponding to the allocations of spot capacity on the TAG gas pipeline, the allocated capacity quota of the total rises by a couple of percentage points.

At the beginning of the 2006-2007 thermal year, 32 operators applied for and obtained access at these points, and the capacities applications were met, in some cases also with the allocation of interruptible capacity.

The table does not report on the Panigaglia entry point, whose daily allocable capacity, of 13 M(m³)/day is, on the basis of the current procedures, allocated to the Panigaglia terminal operator, GNL Italia, which injects gas into the network on behalf of its' regassification clients, in order to allow an efficient use of transport capacity at the interconnection with the terminal.

Multiannual allocation

Table 4.2 summarises the multiannual capacity allocated at the entry points to the national network interconnected by pipeline with abroad. According to the Authority's rulings, in this year capacities were allocated for the next five years, with effect from 2008-2009, to 20 holders of multiannual import contracts. The table also illustrates the 2007-2008 thermal year, with the multiannual capacity allocated last year.

With Resolution No. 53 of 15 March 2006 (see previous *Annual report*), the Authority amended the transport capacity allocation regulations, allowing interested parties the option of submitting their applications for access to re-delivery points within the first seven working days of September, with effect from 1 October of the same year (the limit, until then, was 1 August). In the first half of 2007 (Resolution No. 163 of 2 July 2007), transport discipline was further extended to provide for infra-annual allocations, aiming at the maximisation of imports, especially in critical periods for security of supply.

Table 4.2 Allocation at the national network entry points interconnected by pipeline with abroad for the thermal years from 2007-2008 to 2012-2013Standard M(m³) per day

| ENTRY POINT | ALLOCABLEABLE CAPACITY | CAPACITY ALLOCATED | CAPACITY AVAILABLE |
|-------------------------------|---------------------------|--------------------|--------------------|
| THERMAL YEAR 2007-2008 | | | |
| TARVISIO | | 100.9 | 84.9 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | From 01/10/07 to 31/12/07 | 57.5 | 52.8 |
| | From 01/01/08 to 30/09/08 | 58.0 | 52.8 |
| MAZARA DEL VALLO | From 01/10/07 to 31/03/08 | 86.0 | 69.2 |
| | From 01/04/08 to 30/09/08 | 86.6 | 69.2 |
| GELA | | 25.6 | 21.9 |
| THERMAL YEAR 2008-2009 | | | |
| TARVISIO | | 100.9 | 87.5 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | | 59.4 | 53.0 |
| MAZARA DEL VALLO | | 86.6 | 76.5 |
| GELA | | 25.6 | 21.9 |
| THERMAL YEAR 2009-2010 | | | |
| TARVISIO | | 100.9 | 87.5 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | | 59.4 | 52.2 |
| MAZARA DEL VALLO | | 86.6 | 77.5 |
| GELA | | 25.6 | 21.9 |
| THERMAL YEAR 2010-2011 | | | |
| TARVISIO | | 100.9 | 87.5 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | | 59.4 | 52.2 |
| MAZARA DEL VALLO | | 86.6 | 77.4 |
| GELA | | 25.6 | 21.9 |
| THERMAL YEAR 2011-2012 | | | |
| TARVISIO | | 100.9 | 87.1 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | | 59.4 | 50.8 |
| MAZARA DEL VALLO | | 86.6 | 77.4 |
| GELA | | 25.6 | 21.9 |
| THERMAL YEAR 2012-2013 | | | |
| TARVISIO | | 100.9 | 87.1 |
| GORIZIA | | 2.0 | 0.0 |
| PASSO GRIES | | 59.4 | 48.8 |
| MAZARA DEL VALLO | | 86.6 | 76.4 |
| GELA | | 25.6 | 21.9 |

Source: AEEG analysis on Snam Rete Gas data.

Rules for the allocation and management of interconnection capacity

Capacity allocation for the continuous transport service on the national network is effected on an annual and infra-annual basis (Resolution No. 137/02, see the *2005 Annual Report*). In the case of entry points interconnected with abroad, the annual frequency of allocation is maintained, but with two years lead time and the possibility of extension of the allocation to a duration of five years, for the holders of multiannual import contracts (limited to the contracted average daily quantity).

During the 2006 gas supply crisis, on 4 August the Ministry of Economic Development issued a Decree which established measures intended to maximise use of the allocated capacity. In particular, the Authority was to regulate the re-allocation of unused capacity, providing incentives for the buy-back of unused capacity at points of interconnection from abroad for the 2006-2007 winter period.

The Authority, with Resolution No. 254 of 17 November 2006, recognised transport service users, for the period 1 December 2006 – 31 March 2007, a faculty to opt-out part of the allocated continuous capacity at points of interconnection with abroad. In particular, the holders of import contracts had the faculty to opt-out the transport capacity on a continuous or interruptible (according to different import contracts) monthly basis, also in case the transport capacity at the entry point was not fully allocated. Transport companies were ordered to publish the capacities released and to assign them on a monthly basis according to the date of applications (*first come first served* rule). Charges for failure to maximise imports (i.e. fail to use the full capacity allocated at the entry point to the national network interconnected with pipelines from abroad), specifically foreseen by the cited decree, are not applicable with reference to the quota and to the period of effective allocation to third parties.

The new obligations to publish the capacities released (Resolution No. 254/07) are supplementary to information obligations in favour of the Authority and of service users already in force (see the *2005 Annual Report*).

As mentioned above, in July 2007 the Authority amended transport rulings to establish infra-annual allocations (Resolution No. 163/07), with the purpose of import maximisation in critical periods for security of supply. During the thermal year, according to the new rulings, the transport company allocates the capacity which is or becomes available during the same thermal year, also in case of both capacity upgrading or start-up of new delivery and redelivery points, on a monthly basis (with effect from the following month). To apply for this capacity, operators must submit applications to the transport company within 7 working days from the publication of the new availabilities.

As for capacity trading in the secondary market, the transport company applies to the purchaser the same transport tariff applied to the original purchaser. In general, trades on the secondary market are based, however, on bilateral agreements between purchaser and supplier, at freely negotiated conditions.

Finally, as already pointed out in the *2005 Annual Report*, as Italy is a nation with limited transits, the rulings for transport contracts and tariffs do not establish specific conditions for transits.

4.1.3 Regulation of transmission and distribution companies

The ownership structure of gas transport have not changed significantly since last year. The gas transport network, divided into the national and regional networks, is operated by a restricted number of companies. The main company, Snam Rete Gas Spa, is the dominant operator in this sector. The company, owns 30,889 km of network out of the approximately 33,000 km which compose the Italian gas transport system. The second is the Società Gasdotti Italia Spa, which operates certain regional networks⁸, whose total length reaches 1,260 km.

Transport activities are regulated by network codes drawn up the transport companies and approved by the Regulator. The Codes have been in force since 1 October 2003 and are regularly updated.

The process of ownership concentration in gas distribution, which has characterised recent years continued during 2006. However the ownership of the distribution network remains fragmented among approximately 360 distributors (there were some 430 in 2005). The Eni group controls, through Italgas, approximately 21,4% of the market (in terms of volumes sold).

As pointed out last year, in June 2006 the Authority approved a Distribution Network Code, containing the rules for access to and delivery of the gas distribution service. The Code is a key step for the development of the gas market since it acts as the contractual instrument which regulates and clarifies relations between the operators of the distribution plants and the sales companies and wholesalers using them. The Code guarantees that distribution companies provide the distribution service to sales companies and wholesalers in a neutral and non discriminatory manner. The Code contains provision in matters of access to the distribution plant, detailing both the contents of the applications for access and the follow-up procedures. Regarding service delivery, the Code contains clauses for the performance of services provided by the companies upon request users, such as, for example:

- operations at the redelivery points (opening, termination, interruption of supply, etc.);
- management of operations linked with the allocation of user's commercial lots of gas, that transit from city gates (i.e. at the stations where the distribution companies receive the gas from the transport system; here the gas is also metered and its' pressure regulated);
- service billing procedures;
- metering procedures for the quantities of gas transiting the redelivery points.

⁸ Currently there are three minor operators (Retragas Srl, Comunità Montana Valtellina di Sondrio, Netenergy Service Srl) which own short segments of regional network.

Table 4.3 Regulation of transport and distribution companies

| | Number of regulated companies | Estimated network tariffs ^(A) €/m ³ | | |
|-----------------------------|-------------------------------|--|-----------------------|-----------------------|
| | | I4 (418600 GJ) | I1 (418.6 GJ) | D3 (83.7GJ) |
| Transmission | 2 | 0.0175 ^(A) | 0.0280 ^(B) | 0.0309 ^(C) |
| Distribution ^(D) | 360 | - | 0.0553 | 0.0803 |

(A) Referred to gas transport from the entry point with a *load factor* of 0.9 and *load factor* outgoing and redelivery of 0.68, distance covered o the regional network of 12 km.

(B) Referred to gas transport from the entry point with a *load factor* of 0.9 and *load factor* outgoing and redelivery of 0.32, distance covered o the regional network of 12 km.

(C) Referred to gas transport from the entry point with a *load factor* of 0.9 and *load factor* outgoing and redelivery of 0.27, distance covered o the regional network of 12 km.

(D) Average GCV = 38.73.

Source: AEEG analysis on data provided by operators.

Transport tariffs

The criteria governing the tariff system for the second 4-year regulatory period, (from 1/10/2005 to 30/9/2009), were established in July 2005 by Resolution No. 166/05 (see the 2006 *Annual report*). In 2006, the Authority approved the transport charges for the 2006-2007 thermal year proposed by the companies on the basis of tariff criteria identified at the beginning of the regulatory period.

On 21 January 2006, given the continuation of the gas supply shortage, the Authority issued a provision, foreseen by the decree of 20 January 2006 from the Ministry of Production Activities, setting-up a transitory market based interruptibility regime, for industrial consumers willing to interrupt their withdrawals of natural gas against economic compensation (Resolution No. 10 of 21 January 2006). To this purpose a special fund was created within the Electricity Equalisation Fund (Resolution No. 297 of 29 December 2005) and financed by some components of the transport tariff charge⁹.

On 4 August 2006 the Ministry of Economic Development issued a new Decree aimed to maximise gas imports during the winter of 2006-2007 and to set up an obligation of gas supply interruptibility for industrial clients.

With Resolution No. 192/06 t he Authority, in compliance with the Decree, established a reduction of up to 50% of gas transport charges as a special incentive for interruptible supplies. For industrial clients with dual fuel supplies (identified in compliance with the climatic emergency procedure) it also introduced the faculty to withdraw from contracts signed before 4 August and pass to contracts with an interruptibility clause.

⁹ In particular, these were the CP_e, CP_u, CR_r, CM, CV and CV_P transport tariff fees established by Resolution No. 166/05.

Distribution tariffs

As for transport tariffs, distribution tariffs are set by companies following the criteria established by the Authority at the beginning of each 4- year regulatory period. Each year, the Authority checks and approves the tariffs set by distribution companies on the basis of their reference revenue.

For the year 2006, as for the years 2004 and 2005, the regulation of distribution activities suffered from the long lasting legal dispute originated by the Regional Administrative Court of Lombardy (TAR) ruling 16 February 2005, which partially revoked Resolution No. 170 of 29 September 2004 on the criteria for gas distribution tariff, and Regional Administrative Court of Lombardy (TAR) ruling of 13 April 2005, which partially annulled Resolution No. 173 of 30 September 2004 on the criteria for definition of distribution tariffs for gases other than natural gas.

The partial annulment of the two Resolution refers to the parts which:

- do not allow, for the second regulatory period, the constraint on distribution revenues to take into account the investments effected and to be effected by the companies subsequent to those considered for approval of the constraint for the 2003-2004 thermal year;
- foresee, in updating the constraint on revenues, a constant price cap throughout the duration of the regulatory period.

At the closure of the legal dispute the Authority, with Resolution No. 109 of 6 June 2006 began proceedings to define decreasing values for the price cap for the thermal years from 2005-2006 to 2007-2008, determined in order to induce, in the second regulatory period, overall productivity recoveries lower than those of the first regulatory period.

Moreover, in consideration of the indications received from the distribution service operators who highlighted a need to modify the tariff discipline relative to newly created locations, with the same Resolution No. 109/06, the Authority began proceedings to establish new criteria for tariffs during the start up period, and after its conclusion. The adjustment of tariffs for start up locations, on the one hand, assures distributors tariff levels reflecting the investments effected; on the other hand, where tariff levels exceed pre-established trigger values, it protects the final client whose tariff, is partially covered by the Fund to temporarily compensate the elevated distribution costs.

Subsequently, with adoption of Resolution No. 218 of 4 October 2006 which modifies and integrates Resolution No. 170/04, the Authority complied with the deliberations of the Council of State, introducing an annual rate of recovery of productivity from distribution costs of 4.8% for the 2005-2006 thermal year, 4.6% for the 2006-2007 thermal year and 4.4% for the 2007-2008 thermal year.

To sustain the process of corporate concentration, given that the entire gas distribution system can benefit from the resulting operational economies, the Resolution also foresaw a transitory reduction in price cap after mergers, acquisitions or the assignment of new local concessions. The transitory reduction in price cap takes into account possible higher costs sustained by the companies due to the physiological structural and organisational adjustments in the phase immediately following the aggregation and before achieving full operating conditions.

The measure also foresees the recognition, in the constraint on distribution revenues, of an amount to further finance the Gas Service Quality Account to cover both contributions to the municipalities requesting the same in the terms of Article 14 of Resolution No. 40 of 18 March 2004, and the incentives for recovery of security in gas distribution as foreseen by Resolution No. 43 of 22 November 2005.

With reference to gases other than natural gas, the Authority applied the afore mentioned Council of State decisions with Resolution No. 219/06, which modified and integrated Resolution No. 173/04. In this case too, the provision establishes an annual price cap, both for distribution activity costs and for retail activity costs, decreasing during the regulatory period: 2.8% for the 2005-2006 thermal year, 2.7% for the 2006-2007 thermal year and 2.6% for the 2007-2008 year.

Resolutions Nos. 218/06 and 219/06 also modify the discipline of the start up period, assigning the companies the faculty to determine the tariffs for the start up area with criteria homogenous to those foreseen for the remaining area, further permitting, for start up area supplied with natural gas, access to the Fund for temporary compensation of elevated costs.

As with Resolutions Nos. 218/06 and 219/06 the regulatory framework for natural gas distribution activities and the supply of gases other than natural gas for the second regulatory period (from 1/10/2004 to 30/9/2008) was completed the Authority's offices launched an extensive tariff control process for the 2005-2006 and 2006-2007 thermal years. The very first steps of which entailed the definition of distribution tariffs for 21 (twenty one) companies, for the 2005-2006 thermal year, and for 27 (twenty seven) companies, for the 2006-2007 thermal year, which had failed to present tariff proposals or which had presented proposals incomplete in the terms established (Resolution No. 240 of 7 November 2006).

To date, the control process has brought about the determination of tariffs and the approval of tariff proposals for the 2005-2006 and 2006-2007 thermal years respectively for 383 and 359 natural gas distribution companies and companies supplying gases other than natural gas (Resolutions No. 258 of 27 November 2006 and No. 295 of 18 December 2006, No. 7 of 16 January 2007 and No. 53 of 7 March 2007). Completion of approval of the tariff proposals will be achieved with the analysis of the requests to relinquish the tariff liberty for start up localities which the companies began presenting on 2 March 2007.

With reference to individual operation, Resolution No. 171 of 2 August 2005 defined the criteria for calculation of the limitation on distribution in individual operation, of which at Resolutions Nos. 170/04 and 173/04. For the 2005-2006 thermal year, 3 distribution companies applied for application of individual operation and the Authority began investigation to verify the availability and solidity of the relevant economic and asset information and the pertinence of the costs considered in calculating the limitation on revenues.

Storage tariffs

As indicated last year, with the end of the first storage regulatory period, with Resolution No. 50/06 of 3 March 2006, the Authority set the criteria to determine the storage service tariffs for the second regulatory period (1/4/2006 - 31/3/2010).

The provision, in order to promote the strengthening and development of new reservoirs, characterised by rising costs, foresaw the application of a single national tariff. Furthermore, to guarantee, in any case, each company the recovery of its' due revenues, it introduced an equalisation system which foresees the payment of a variable additional charge applied to the energy moved to cover eventual imbalances in the equalisation system.

Another distinguishing element of the new discipline is the introduction of a specific fee for the peak availability service at the injection phase and the differentiation between fees at the injection and delivery phases, in order to stimulate the correct use of storage availability by the users, and to maintain system performance at the end of this phase.

For the determination of the tariff levels, the mechanisms already applying in the first regulatory period were substantially confirmed, and the remuneration rate of invested capital was set at 7.1% in real terms before tax. Differing from the first regulatory period, new investments received a higher remuneration rate than that applied at the end of the 2005 financial year and for a duration exceeding that of the regulatory period. Both the increase in the remuneration rate, and the duration are differentiated on the basis of the diverse typologies of investment: for structural investments, addressing the construction of new storage reservoirs, the increase in the rate was 4% for 16 years; for investment intended to strengthen and develop storage facilities already operating, the increase in the rate was 4% for 8 years. The remuneration, and the relative amortisation quota, of new investments is independent of volumes.

With reference to the structure of the storage tariff, the multi-part tariff was substantially confirmed, as a linear combination of the unit fees for the sizes quantifying the storage service. The tariff structure is updated annually, applying the price cap (at 1.5% for the capacity component and at 2% for the commodity component) to the variable unit charge and to the amortisation quota, while the allowed revenue referred to remuneration of the net capital invested is subject to update by annual recalculation of the revalorised historic cost of the net capital invested taking amortisation into account.

In compliance with Resolution No. 50/06, the storage companies transmitted to the Authority the data necessary to check the business charges relative to the 2006-2007 thermal year. Upon verification of the information received, the Authority approved (Resolution No. 56/06) the business charges and determined the single national charges for the 2006-2007 thermal year (Table 4.4). With the later Resolution Nos. 180 of 2 August 2006 and 191 of 4 August 2006, the Authority approved the percentage reduction in the unit charge for interruptible storage capacities for the 2006-2007 thermal year, proposed respectively by Stogit Spa and by Edison Stoccaggio Spa (Tables 4.5 and 4.6).

Table 4.4 Single national storage charges included in the tariff

| CHARGES | VALUE |
|--|-----------------------|
| unit fee for space f_s | 0.155673 (€/GJ/year) |
| unit fee for injection capacity f_{PI} | 9.503475 (€/GJ/day) |
| unit fee for delivery capacity f_{PE} | 11.295975 (€/GJ/ day) |
| unit fee for gas movement CVS | 0.102119 (€/GJ) |
| unit fee for strategic storage f_D | 0.156773 (€/GJ/year) |

Table 4.5 Percentage reduction in unit charges f_{PI} and f_{PE} for Stogit interruptible storage capacity

2006-2007 Thermal year

| | Entire Phase | Monthly | Daily |
|-------------------------|--------------|---------|-------|
| % reduction in f_{PI} | 30% | 20% | 5% |
| % reduction in f_{PE} | 30% | 20% | 5% |

Table 4.6 Percentage reduction in unit charges f_{PI} and f_{PE} for Edison Stoccagio interruptible capacity for the modulation storage service

Thermal year 2006-2007

| | Monthly |
|-------------------------|---------|
| % reduction in f_{PI} | 70% |
| % reduction in f_{PE} | 70% |

Balancing

No significant modification to balancing was introduced after July 2005 apart the introduction of a charge for the injection point introduced on the occasion of the definition of the new storage tariff. In particular the entrance and exit charge for the storage hub, was coupled differential charge in cases in which the quantity injected to the network or withdrawn by a user exceeds the allocated transport capacity (Table 4.7).

Table 4.7 Tolerance limits and balancing charges

| | Tolerance Limit | Differential Charge |
|--|------------------------|---------------------------------------|
| Entry point interconnected with abroad | $SC_K > 2\%$ | $1,125 \cdot \max SC_K(M) \cdot CP_e$ |
| National production entry point | $SC_K > 4\%$ | $1,125 \cdot \max SC_K(M) \cdot CP_e$ |
| Point of exit | $SC_k \leq 5\%$ | <i>Not applicable</i> |
| | $5\% < SC_K \leq 15\%$ | $1,125 \cdot \max SC_K(M) \cdot CP_u$ |
| | $SC_K > 15\%$ | $1,5 \cdot \max SC_K(M) \cdot CP_u$ |
| Redelivery point | $SC_k \leq 10\%$ | <i>Not applicable</i> |
| | $SC_K > 10\%$ | $1,1 \cdot \max SC_K(M) \cdot CR_r$ |
| Storage hub entry point | none | $1,25 \cdot \max SC_K(M) \cdot CP_e$ |
| Storage hub exit point | none | $1,1 \cdot \max SC_K(M) \cdot CP_u$ |

- SC_K is the difference, on a daily basis, between the capacity used by the k^{th} user and capacity allocated at the point of reference;
- $\max SC_K(M)$ is the maximum differential of the k^{th} user registered during the month M at the point of reference (above the tolerance limits in the case of point of exit and redelivery point);
- CP_e , CP_u are the annual capacity unit charges relative to the capacity allocated at the points of entry to and exit from the national gas pipeline network;
- CR_r is the annual capacity unit charge relative to the capacity allocated at the point of redelivery on the regional network.

Source: AEEG.

The transport company stipulates a contract with the storage company for use of the storage services in order to guarantee operative network balancing and to provide for hourly modulation. The regulated tariffs which the storage company bills for both the sale of basic services, and for the sale of special services, determine the allowed cost in the transport tariff (balancing revenue).

4.1.4 Regulation of unbundling

With effect from 1 January 2002, transport is subject to legal unbundling from all other gas activities, except storage, which must, in any case, be accounted and managed separately from transport. Storage is subject to legal unbundling from all other gas activities, with the exception of transport. Distribution is subject to legal unbundling from all other gas activities.

In Italy, the main transport operator, Snam Rete Gas is controlled by the incumbent Eni at 50,04% (quota at 31/12/2006). This situation is set to change as, on the basis of the disposition of the Finance Bill for 2007 (which reviewed the term previously established by Law No. 290/03), Eni must sell its shares exceeding the 20% limit in Snam Rete Gas capital within 24 months of the expected Snam Rete Gas privatisation decree.

The second transport company Società Gasdotti Italia S.p.A. is owned by the private equity fund Clessidra Capital Partners which acquired it in 2004 from the Edison T&S company.

Retragas SpA, a transport company established to manage the regional transport networks interconnected with Snam Rete Gas is controlled by the distribution company Asm Brescia SpA. Netenergy Service Srl, owned by the Consorzio di Sviluppo Industriale della Valle del Biferno, operates a small natural gas transport network in Molise.

As mentioned above, distribution, despite the significant process of concentration which has occurred in recent years, remains fragmented among approximately 430 distributors. Of these approximately 79% only distribute natural gas; the remainder distribute natural gas and other types of gas, or other types of gases (such as LPG) only.

Distribution

At the beginning of each year the Authority undertakes a wide ranging survey on the electricity and gas markets. 351 natural gas distributors replied to the survey on to the gas market in 2006, of whom 308 answered to the entire data set data¹⁰. Of the 351, 117 had corporate connections to at least one natural gas sales company.

257 distributors with less than 100,000 final clients (i.e. metering groups) accounted for 267 of the 297, against the first three companies in the sector (in the order: Italgas, Enel Rete Gas and Hera Holding Energia Risorse Ambiente) which account for over a million clients (the first, in particular, has almost 5 million). This is to demonstrate how severely the natural gas market is fragmented in Italy and operated by local companies; note that of the 267 distributors with less than 100,000 clients, there are indeed 93 (35%) with less than 5,000 clients.

With reference to ownership of assets, the results of the answers to the Authority's survey in 2006 are summarised at Table 4.8. Approximately one third of distributors fully own the infrastructures they operate; in case the operators are not the owners of the infrastructures those are normally owned by their respective municipality. Co-ownership is, generally, between the public authority and the distributor or between the latter and third party companies: there are only 17 cases, for example, in which the ownership of the final gate stations is shared by the distributor, the municipality and third parties, a number which falls to 14 in the case of the networks and to just 5 operators in the case of stations.

¹⁰ In the paragraph, the overall number of operators differs according to the different number of questions answered.

Table 4.8 Ownership of the assets operated by natural gas distributors

| DISTRIBUTORS | NETWORK | STATION | FINAL GATE STATION |
|--|---------|---------|--------------------|
| Do not own the infrastructure they operate | 89 | 111 | 82 |
| Own less than 50% of the infrastructure they operate | 45 | 0 | 35 |
| Own more than 50% the infrastructure they operate | 55 | 51 | 53 |
| 100% owners of the infrastructure they operate | 107 | 114 | 107 |
| Did not reply | 12 | 32 | 31 |
| TOTAL | 308 | 308 | 308 |

Source: AEEG analysis on data provided by operators.

Of the 351 operators undertaking distribution activities accredited to the data observation system, a large share, 33.3%, was founded between 2000 and 2004 in parallel with the coming into force of Legislative Decree No. 164/00 which foresaw legal unbundling between sales and distribution activities in local networks. The 22 companies, 6.3% of the total, which were, instead, founded in the last two years, are the result of the strong concentration processes taking place in a sector which is re-organising, itself towards a medium-large size industrial structure¹¹.

As for the juridical nature of companies, 48% of those operating as natural gas distributors are public limited companies, while 42% are limited liability companies. The remaining 10% of distributors are split between the other diverse forms of a juridical nature; in detail 6-8% are under the so called "economic management regime" (i.e. the municipality assumes liability for operation of a public service). Before liberalisation almost 40% of gas distribution service operators were under the "economic management regime".

Table 4.9 illustrates a preliminary elaboration of the corporate structure of distributors at 31 December 2006, limited, however, to direct the first level holdings recorded by the annual survey. First of all, just 3 companies have part of their share capital quoted on the stock market, accounting for just 0.3% of total company share capital in the companies undertaking distribution activities. 43% of shares is, instead, held by public authorities, 23% is held by energy companies, local in 14.1% of cases, national in 8% and less than 1% in the case of foreign companies (with parent companies in Spain, Austria and France). Finally, 12% of total company share capital is held by individuals.

¹¹ Note that in 1998 there were 774 natural gas distributors.

Table 4.9 Corporate formation of the distributors

| JURIDICAL NATURE OF THE SHAREHOLDERS | % |
|--------------------------------------|------|
| Public authorities | 43.0 |
| Other companies | 19.6 |
| Local energy companies | 14.1 |
| Individuals | 12.4 |
| National energy companies | 8.1 |
| National financial institutes | 1.0 |
| Foreign energy companies | 0.9 |
| Foreign financial institutes | 0.4 |
| Floating capital | 0.3 |
| Others | 0.1 |
| TOTAL | 100 |

Source: AEEG analysis on data provided by operators.

In compliance with the gas sector liberalisation law, since 2001 (Resolution No. 311/01), the Italian Regulatory Authority laid down the rules for the accounting and administrative unbundling of the companies operating in the gas sector. These rules applied with effect from 1 July 2003. Consequently, transport and distribution companies prepare their asset statements and profit and loss statements, separated by activities, as well as separate annual accounts which show a greater detail, reserved exclusively for the Authority. These accounts are drawn up applying the guidelines established by the Regulator which precisely identified the compartments into which each activity was to be broken down, the common cost and revenue breakdown criteria, the criteria for financial proceeds and direct taxation breakdown. Finally, the unbundling resolution disposed that the separate accounts shall highlight transactions between operators from the same group and required the “unbundled” drawing up of the consolidated financial statements. In the case in which the interested parties fail to respect the regulatory dispositions, the Authority may apply administrative sanctions.

The separate annual reports, both those published and those reserved for the Authority, are subject to accounting audit and certification by a qualified auditor who shall ascertain compliance with civil legislation and the regulatory dispositions as listed at Table 4.10.

Table 4.10 Summary information on gas unbundling

| | Transmission | Distribution |
|--|---------------------|---------------------|
| Separate Headquarters (YES/NO) | YES | NO |
| Separate corporate presentation (YES/NO) | YES | NO |
| Unbundling of accounts and guidelines (YES/NO) | YES | YES |
| Audit of unbundled accounts(YES/NO) | YES | YES |
| Publication of unbundled accounts(YES/NO) | NO | NO |
| Separate boards of Directors (with some members also sitting on the board of other group companies) (YES/NO) | YES | NO |

Source: AEEG.

Italian legislation and regulations do not foresee the figure of a “*Compliance officer*”.

After the first period of application of Resolution No. 311/01 the Authority began a process of review of the Directives relative to accounting unbundling. In March 2006, a document for consultation was published in which the Authority illustrated its’ proposals. Once consultation was concluded, in January 2007 the Authority ruled the new unbundling regulations which replace those previously in force. A synthesis of the new regulation, common to both the electricity and gas sectors, was provided in the preceding Chapter, to which reference should be made.

4.2 Competition issues

4.2.1 Description of the wholesale market

According to the preliminary data released by the Ministry of Economic Development, natural gas consumption¹² fell from 2005 to 2006 by 86.3 to 84.5 G(m³), that is by 2.1% on the previous year. Italian natural gas production in the last year was 11.0 G(m³), falling by 8.5% on 2005; this market segment is dominated by Eni which holds the largest quota of natural gas produced, at 80%.

Italian dependence on foreign suppliers is rising year by year: in 2006 gas imports rose by 5.4% (77.4 G(m³)) on the previous year, now covering 87.5% of consumption. Import capacity rose from the previous year by approximately 3,2 G(m³), 2 of which to the benefit of access not reserved for long term contracts.

¹² The mean calorific power of natural gas in Italy is 38.1 MJ/m³.

Table 4.11 Development of wholesale market

| | Total Demand ⁽²⁾ (G(m ³)) | Peak Demand ⁽³⁾ (M(m ³)/day) | Production (G(m ³)) | Import Capacity ⁽¹⁾ (G(m ³)/year) | | | | No. of companies with a share of production and import capacity >5% | No. of companies with a share of available gas >5% | Market share of the three largest wholesale companies |
|------|---|--|------------------------------------|---|--|----------------------------------|---------------------|---|--|---|
| | | | | Total | Priority Access for Transit ⁽⁴⁾ | Priority Access for Contracts LT | Non Reserved Access | | | |
| 2001 | 125.1 | not available | 15.5 | not available | not available | not available | not available | not available | 2 | 68.2% |
| 2002 | 111.8 | not available | 14.3 | 84.0 | 0.5 | 77.3 | 4.2 | 3 | 3 | 67.4% |
| 2003 | 123.6 | not available | 13.9 | 84.8 | 0.5 | 78.8 | 3.1 | 3 | 3 | 63.8% |
| 2004 | 127.3 | 386 | 12.9 | 88.7 | 0.5 | 84.6 | 2.1 | 3 | 3 | 62.4% |
| 2005 | 138.3 | 421 | 12.0 | 90.9 | 0.5 | 73.5 | 16.9 | 3 | 3 | 66.7% |
| 2006 | 134.3 | 443 | 11.0 | 94.1 | 0.5 | 74.5 | 19.1 | 3 | 3 | 66.5% |

(1) Preliminary estimates for 2005.

(2) Volumes of gas sales on national wholesale and retail markets; it includes resales.

(3) Peak injection reached on 26 January in 2004, 19 December in 2005 and 25 January in 2006; the volume indicated includes injections, deliveries from storage, network losses and internal consumption.

(4) In Italy transits are handled as normal transports; the value indicated in the table refers to a transit contract which obtained priority access as a part of a multiannual contract.

Source: AEEG analysis on data provided by Snam Rete Gas and other operators.

Like last year, the groups¹³ with a market share over 5% of total gas supply (i.e. produced or imported) were Eni, Enel and Edison which, together, cover 87.6% of the total; the other operators hold imported and/or produced gas quotas from 3.6% and upwards. The same three groups also hold over 5% of the available gas, with a similar quota (87.5%) to that of gas supplied.

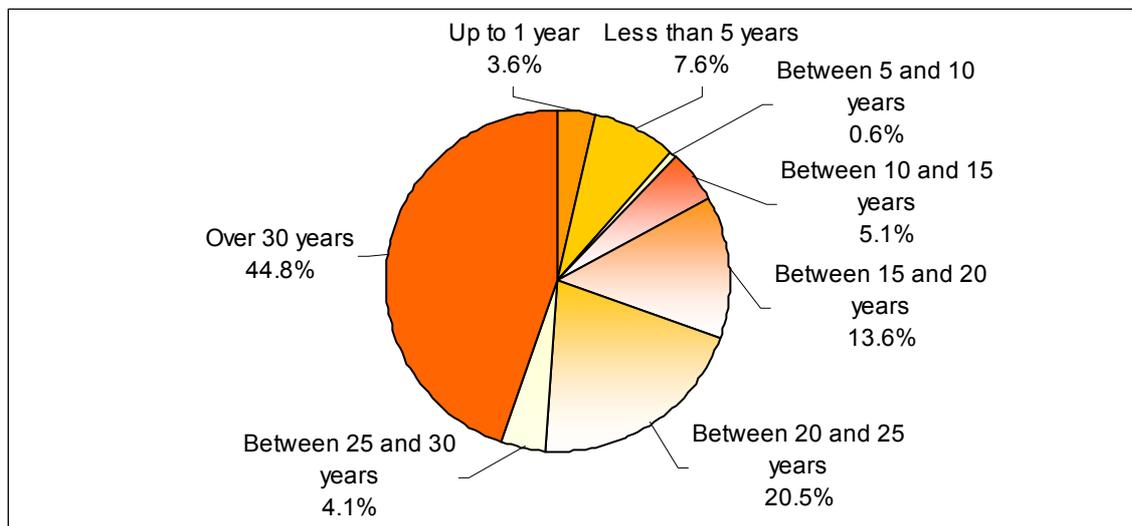
Procurement is based mainly on non EU sources, in particular, Algeria and Russia. provides 35.6% of total imports (almost entirely via pipeline with entry to the national network at Mazara del Vallo, while 9% of the gas is imported by ship) come from the former; 29.1% of imports arrive from the latter via the Tarvisio and Gorizia entry points. Imports from Northern Europe, which enter the Italian network at the Passo Gries, account for 19.5% of the total: 12.1% of which from the Netherlands and 7.4% from Norway. Gas from Libya, 9.9% of total imports, passes through the Gela entry point. 4.1% of import volumes are regassified at the Panigaglia terminal, including those procured from Algeria.

Procurement activity is mainly conducted through *take or pay* type multiannual contracts. Calculations based on operators' declarations to the Authority again highlight Italian dependency on very long term contracts, of over ten years, led by the historic Eni contracts dating from the early 1980's and the end of the 1970's. If we consider contractual volumes

¹³ In the gas market survey, participation in a corporate group is defined on the basis of the specifications at Article 7 of Law No. 287 of 10 October 1990: in brief, if there is effective control by a shareholder company in a company this establishes the existence of a group.

for 2006 over the entire duration (Figure 4.1) 44.8% of the total consists contracts of over thirty years' duration, followed by those with duration from 20 to 25 years (20.5%) and those with duration from 15 to 20 years (13.6%). Contracts of one year or less in duration (approximately 140) refer to very small volumes of gas and account for less than 4% of total volumes contracted.

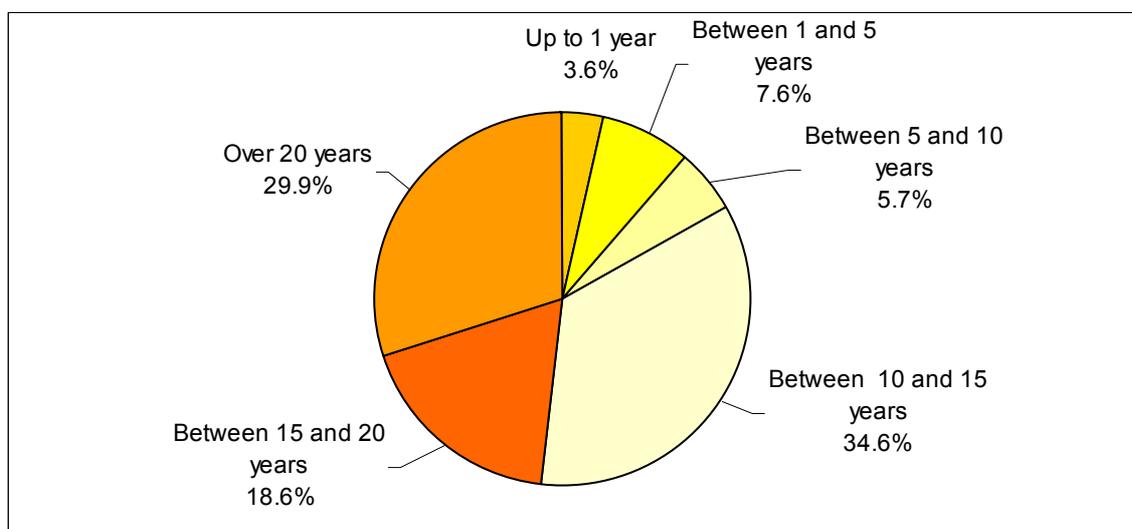
Figure 4.1 Breakdown by duration of import contracts in force in 2006



Source: AEEG analysis on data provided by operators.

If the same contracts are analysed by residual duration in 2006 (Figure 4.2), the most significant class is that with contracts of 10 to 15 years' duration (34.6%), followed by that with duration of over 20 years (29.9%) and that relative to contracts with 15 to 20 years' duration (18.6%). The importance of the contracts of over twenty years' duration rose significantly from the previous year, mainly due to the extension to 2035 of supplies from Russia obtained by Eni.

Figure 4.2 Breakdown by residual duration of import contracts in force in 2006



Source: AEEG analysis on data provided by operators.

In 2006 and the first quarter of 2007, the Ministry of Economic Development granted a total of 34 authorisations to import from non European nations, of which 22 for imports for less than one year (spot) and 6 for multiannual imports. 30 EU import notices were communicated in 2006, and a further 13 notices were received in the first quarter of 2007. The number of authorisations does not, nevertheless, reflect an effective number of operators importing natural gas, merely the completion of the administrative formalities preliminary to import activities, in compliance with the dispositions of Legislative Decree No. 164/00; import of gas produced in European Union nations is free but non EU imports require a Ministerial authorisation.

In 2006 total demand in the gas sector, expressed as volumes of gas sold on the wholesale and retail markets (including, thus, resale) reached 134.3 G(m³), recording a fall of 2.9% from 2005 (Table 4.11). The operators with more than a 5% share of this market were once again the Eni, Enel and Edison groups. These three groups together cover 66.5% of total demand with shares, respectively of 44.1%, 13.2% and 9.2%, far higher than those of the competitors which start from 2.6%.

Purchases on the secondary market (Table 4.12) grow at a very fast rate; total trades on the Virtual Trading Point (VTP) accounted for 3.9 G(m³) against 3.5 G(m³) acquired on the Italian side at the entry points interconnected with abroad. Of these approximately 2 G(m³) were volumes purchased by Eni who conveyed them in gas release operations, as the result of rulings by the Antitrust Authority.

Table 4.12 Gas market

G(m³)

| | Total consumption ^(A) | Trading on organised spot market | Trading on forward hub market | Bilateral trading OTC ^(B) |
|------|----------------------------------|----------------------------------|-------------------------------|--------------------------------------|
| 2002 | 71.0 | not applicable | not applicable | 1.7 |
| 2003 | 77.4 | not applicable | not applicable | 2.7 |
| 2004 | 80.3 | not applicable | not applicable | 5.4 |
| 2005 | 86.2 | not applicable | not applicable | 7.0 |
| 2006 | 84.5 | not applicable | not applicable | 7.4 |

(A) Gas availability gross of network consumption and losses.

(B) Volumes of gas purchased at the VTP or at entry points. More precisely, gas purchased on the secondary market; the rest of the gas is purchased on the primary market (i.e. it originates from domestic production, imports or storage).

Source: AEEG analysis on data provided by operators.

4.2.2 Description of the retail market

At 1 September 2006 there were 386 companies authorised by the Ministry of Economic Development to undertake gas sales activities. Most of these originated from the split off of sales divisions from earlier integrated distribution companies and the restructuring process in the natural gas trading sector has yet to come. Furthermore, several wholesalers, who do not engage in sales activities in the end-user market, are not required

to apply for sales authorisation from the Ministry of Economic Development, as indicated by Article 17 of Legislative Decree No. 164/00.

308 of the companies operating in the sales sector replied to the 2006 gas market survey conducted by the Authority. Of these 211 were sell on the end-user market, 86 were “wholesalers” selling gas both to other operators and directly on the end-user market and 11 “pure wholesalers” who sell gas to retailers only.

Out of the 337 respondents, 150 were independent gas suppliers, 44.5% of total, in that they are no part in any corporate group connected with distributor or transport activities

Table 4.13 illustrates the main data for this market. Meteorological trends caused, for the first time in five years, a slight fall in end gas consumption (-2.1%), from 86.3 G(m³) in 2005 to 84,4 G(m³) in 2006.

Table 4.13 Development of the retail market

| | Total consumption (G(m ³)) | No. of companies with >5% of final market | No. of independent companies (A) | Market Shares of the First Three Companies (%) | | | | % Accumulation of Clients Who Changed Supplier (by Volume) | | | |
|------|--|---|----------------------------------|--|--------------------------------|--|---|--|--------------------------------|--|---|
| | | | | Thermo-electric uses | Large industrial companies (B) | Small-medium sized industrial and commercial companies (C) | Very small firms and household sector (D) | Thermo-electric uses | Large industrial companies (B) | Small-medium sized industrial and commercial companies (C) | Very small firms and household sector (D) |
| 2001 | 70.1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 2002 | 70.0 | 4 | n.a. | 85.7 | | 54.3 | | n.a. | n.a. | n.a. | n.a. |
| 2003 | 76.4 | 5 | n.a. | 74.4 | | 45.6 | | n.a. | n.a. | n.a. | n.a. |
| 2004 | 80.6 | 5 | 110 | 80.3 | 54.1 | n.a. | 33.2 | 53(E) | | 6(F) | 1(G) |
| 2005 | 86.3 | 3 | 123 | 91.2 | 71.1 | 43.1 | 47.3 | 53(E) | | 6(F) | 1(G) |
| 2006 | 84.4 | 3 | 182 | 89.7 | 71.1 | 47.3 | 47.1 | n.a. | | n.a. | n.a. |

(A) Fully independent of network operators

(B) Industrial companies

(C) Businesses and Services

(D) Domestic clients

(E) Standard consumer with annual consumption > 200,000 m³/year. Datum observed at 1 June 2005.

(F) Standard consumer with annual consumption 5,000-200,000 m³/year. Datum observed at 1 June 2005.

(G) Standard consumer with annual consumption < 5,000 m³/year. Datum observed at 1 June 2005.

Source: AEEG analysis on data provided by operators.

The fall in consumption did not change the degree of market concentration, which was substantially unchanged with respect to the previous year: again in 2006, indeed, there were 3 companies with a market share of more than 5%, who, together, had a 66.5% share of the total market (including, that is, self consumption). The three major groups are Eni (44.1%), Enel (13.2%) and Edison (9.2%).

In 2006 the first three operators covered:

- 89.7% of sales to electricity generation (in order: Eni, Enel and Edison);
- 71.1% of sales to industrial clients (in order: Eni, Enel and Gaz de France);
- 47,3% of sales commercial and services clients (in order: Eni, Enel and Hera);
- 47.1% of sales to households (in the order: Eni, Enel and Hera).

For the first time, the Annual survey of the natural gas sector conducted by the Authority evidenced operator self-consumption, that is the quantities of gas produced, imported and/or acquired within Italy consumed by them directly in the calendar year 1 January – 31 December 2006, split into consumption sectors. The analysis of the market and its' level of concentration contain several surprises if one takes this data into account. Indeed, excluding self-consumption from the market, overall gas sales were 77.4 G(m³). There were just 2 groups with over 5% of sales: Eni, with a 49.4% share, and Enel with a 15.2% share. The third group is Hera with a share of just 2.9%. Edison, which consumes a large quantity of gas in its' power stations, drops to fourth place with a 2.6% share. Even when the self-consumption is excluded, the level of concentration by client classes does not change significantly (or the order of the groups).

Foreign penetration of the Italian sales market does not appear relevant. 23 of the companies who answered the Authority's survey are operating on the sales market with at least one foreign partner. Together these account for a 10.6% share of the total market (including self-consumption and 4.2% of sales alone). The leading companies with foreign shareholders who sell to power generation are Edison, Gas Natural Vendita Italia and Sorgenia (who together cover 20.3% of that market); the first three suppliers to industrial clients are Sorgenia, Dalmine Energie and Cartiere Burgo (with an overall share of 5.2%); the first the suppliers for commercial and services clients are Gas Natural Vendita Italia, Sinergas and Begas Energy International (with an overall share of 1.8%); finally, the first three companies with at least one foreign shareholder selling to households are Gas Natural Vendita Italia, Sinergas and Libera Energia (with an overall share of 1.8%).

Regarding the degree of integration between supply and sale to the end-user market, there are 17 companies operating in both phases of the supply chain. The three leading companies are Eni, Enel Trade and Edison; who together cover 87.6% of the gas produced or imported and 58.8% of the gas sold to end clients (net of self-consumption).

No data is available on switching for the year 2006 at 31/07/2007.

Average sale prices

With the full liberalisation of the market, the price of gas in Italy became freely negotiated. As liberalisation occurred in a context of low effective competition, it was deemed appropriate to retain a protection system for the more vulnerable clients (particularly households and small non domestic clients), planned to be reduced gradually over time. The Authority retained the obligation on suppliers to offer the reference economic conditions of supply established by the Authority both to the end-user clients who, at 31 December 2002, were non eligible (substantially all end-user clients with consumption below 200,000 m³/year), and to the eligible clients who, on that date, had not exercised the faculty to stipulate free contracts. Resolution No. 134/06, of 1 October 2006, disposed that those economic conditions were to be offered only to households with consumption below 200,000 m³. The conditions defined by the Authority, may obviously be proposed together with others formulated by the individual suppliers. Thus the analyses of average prices applied on the Italian gas market shall be conducted distinguishing between the protected customers, who accept the economic conditions of supply calculated by the Authority, from free clients, who pay a price freely negotiated with the suppliers.

The growing trend in international oil product prices since spring 2003, caused a market acceleration in gas costs to Italian consumers in 2006.

Last year the average price of gas (weighted with the quantities sold), net of tax and duties, applied by the suppliers or wholesalers operating on the end-user market was €41.56/m³ for clients on the protected market and €28.53/m³ for free market clients. The weighted mean of the two markets reached €32.61/m³. This is the result which emerges from the provisional analysis of the data from the Authority's annual survey of the gas sector.

As illustrated in Table 4.14, the data confirms expectations on trends and volumes: the protected market clients pay significantly more than those on the free market with similar consumption profiles. As customer size grows, in terms of annual volume consumption, the price tends to fall more for the free than for the protected clients.

In the categories subject to regulatory protection, the price appears slightly higher than the economic conditions established by the Authority (which in 2006 was on average €39.40/m³ net of tax and duties). The difference is due, with high probability, to the regulatory uncertainties deriving from the dispute over Resolution No. 248/04 on the basis of which the coverage of the raw material component of the conditions of supply established by the Authority is updated. In the Italian protected market, the smallest clients pay on average of €43.31/m³, against the €37.94/m³ of medium clients and the €32.59/m³ of large clients; the price differential between small and large clients is, thus, fairly significant, at almost €11/m³. On the free market, the smaller clients, instead, pay almost €14/m³ more than the large clients, who obtain gas at a mean price of €28.07/m³.

Comparison with the equivalent data for 2005 shows a rise in the gas price which is somewhat differentiated by market typology: the protected market clients were subject to lower increases overall than those on the free market. The crude oil price rises appear to have a proportionally higher weight on the medium-small clients.

Table 4.14 Average sale prices net of taxes on the final market

€/m³

| CUSTOMER CATEGORY | 2004 | 2005 | 2006 | VAR. % 2006/2005 |
|--|-------|-------|-------|---------------------|
| Protected Market | | | | |
| Consumption less than 5,000 m ³ | 35.32 | 37.01 | 43.31 | 17.0 |
| Consumption between 5,000 and 200,000 m ³ | 30.44 | 32.12 | 37.94 | 18.1 |
| Consumption of more than 200,000 m ³ | 27.04 | 29.39 | 32.59 | 10.9 |
| PROTECTED MARKET AVERAGE | 33.65 | 35.36 | 41.56 | 17.5 |
| Free Market | | | | |
| Consumption less than 5,000 m ³ | 32.99 | 31.95 | 41.99 | 31.4 |
| Consumption between 5,000 and 200,000 m ³ | 27.24 | 29.76 | 35.53 | 19.4 |
| Consumption of more than 200,000 m ³ | 18.46 | 23.00 | 28.07 | 22.0 |
| FREE MARKET AVERAGE | 18.76 | 23.23 | 28.53 | 22.8 |

Source: AEEG analysis on data provided by operators.

The average price levels for Eurostat standard customers are indicated at Table 4.15 and are substantially in line with the average values described above. The industrial client defined by Eurostat I1 with reduced consumption, indeed, pays for gas, net of tax and duties, €37.24/m³: a value in the range (indicated at Table 4.14) from €3794/m³ for protected clients and €35.53/m³ for clients providing on the free market. Similarly, the price for larger industrial clients in the Eurostat I4 typology, of €28.34/m³, is an intermediate value between those indicated at Table 4.14 for clients with consumption over 200,000 m³, respectively of €32.59 and €28.07/m³ for the protected and free market. Probably, in this case, as typology I4 has very high consumption, of almost 11 M(m³), the Eurostat price is much closer to that observed on the free market than to that of the protected market. Finally, also for domestic D3 clients there was a price of €41.93/m³, between the values of €43.31 and 41.99/m³ observed in the market survey.

Table 4.15 Breakdown of final price components for Eurostat standards customers

€/m³; year 2006

| | I4 ^(A) | I1 ^(B) | D3 ^(C) |
|--|---|---|---|
| Annual Consumption | 418,600 GJ (10,986,877 m ³) | 418,6 GJ (10,987 m ³) | 83,7 GJ (2,197 m ³) |
| Network tariff (excluding service charges) | 0.0175 ^(D) | 0.0833 ^(D) | 0.1112 ^(D) |
| Service charges included in network tariff | - | - | - |
| Raw material costs and sales margin | 0.2659 ^(E) | 0.2891 ^(E) | 0.3081 ^(E) |
| Total net of tax and duties | 0.2834 | 0.3724 | 0.4193 |
| Tax and duties | 0.0407 | 0.2074 | 0.2489 |
| Total (including taxes) | 0.3241 | 0.5798 | 0.6682 |

Observation for the following consumer types:

(A) Clients with consumption between 2,000,001 and 20,000,000 m³/year

(B) Clients with consumption between 5,001 and 200,000 m³/year

(C) Domestic clients with consumption between 500 and 5,000 m³/year

(D) See Table 4.2.

(E) Includes storage costs.

Economic reference conditions

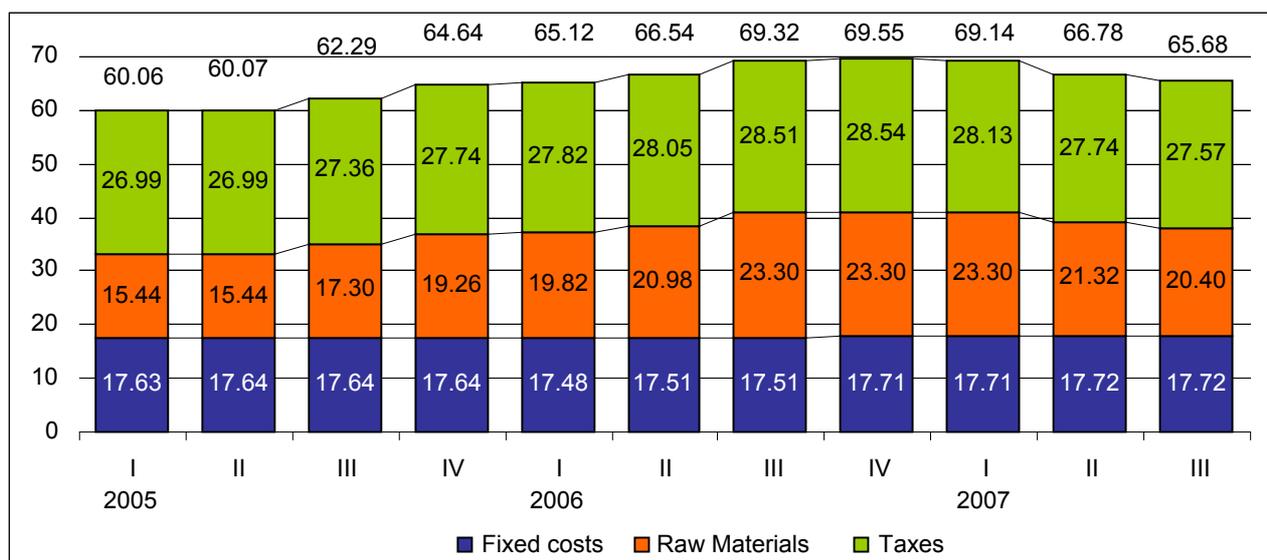
The trend in economic conditions of supply published by the Authority with reference to consumers using less than 200,000 m³ per year is illustrated at Figure 4.3. It is the national average value of the economic conditions of supply, defined by Resolution No. 138/03, which, from 1 January 2004, the suppliers are obliged to offer, alongside any eventual other specific conditions (identified by each supplier), to small consumers in business, crafts and households (that is the clients of the old captive market). As stated at the paragraph above, from 1 October 2006 the obligation on suppliers to offer those conditions of supply remains only for households consuming less than 200,000 m³ per year.

As in large part of 2005, in 2006 too, the conditions of supply continued to rise, with a downturn only at the beginning of 2007. The persistent rise in the average reference price can be attributed, to a large extent, to the protracted rises in international oil prices and to the multiplier effect which taxes and duties add to the rise in the raw material component

(QE). This component rose constantly from the third quarter of 2005 through to the third quarter of 2006, whence it remained substantially constant until the second quarter of 2007, when the first significant fall was registered. At the beginning of 2006 the rises in QE were attenuated by the fall of the component to cover operating costs (in turn due to increased transport costs more than compensated by a fall in the cost of wholesale selling). In the second and fourth quarter of 2005, rather, raw material price increases were accompanied by a rise in the component to cover operating costs (due to a rise in storage costs in April and transport costs in October). The result of these trends is an average price which, from the €60/m³ of the beginning of 2005 almost reached €70/m³ at the end of 2006, then returning to a little under €66/m³ in July 2007.

A situation of serious uncertainty characterized the economic reference conditions, over the last three years, due to the protracted legal dispute about Resolution No. 248/04 which, at the end of 2004, had redefined the raw material component indexing mechanism. This dispute should have reached a conclusion in March 2007.

Figure 4.3 Trend in the average national reference price published by the Authority for small consumers using less than 200,000 m³/year



At 1 July 2007, the average national reference tariff is composed approximately of 58% by components covering costs and in the remaining 42% by the taxes and duties applying to the natural gas sector (excise duty, regional surcharge and VAT).

The weigh the of raw materials on the overall value of the tariff is just under one third (31.1%), that of marketing costs is 9% and that of the use and maintenance of the infrastructures makes for the remaining 17.9%. Within infrastructure costs, the most relevant component is that necessary to cover distribution which accounts for 11.3% of the total tariff; the component covering transport costs is 5.1%, while the incidence of the storage component is 1.5%.

5 SECURITY OF SUPPLY

5.1 Electricity

Peak demand in 2006 and forecasts for 2007-2012

In 2006 both winter and summer peak demands set new records. Peak winter power demand, on January 25, was 55.539 MW, slightly above the values of 55,400 forecast by TERNA for an average winter. Peak summer demand, on June 27, was 55,619 MW, somewhat below the forecasts assuming a torrid summer. The trend towards a summer peak greater than the winter peak, was nevertheless confirmed even though the difference between the two is minor.

TERNA forecasts for the years to come, illustrated at Table 5.1, indicate a growing difference in favour of the summer peak, which should reach approximately 1.5 GW in 2010 and 2.2 GW on the in 2012. On this matter, it should be noted that the peak forecasts (both winter and summer) have tended to fall in recent years as a result of growing evidence of improved demand management made possible by electricity market reform. In the last two forecasts, the mean annual growth in the period 2005-2011 fell from 2.6 to 2.3% for the mean winter peak and from 3.3 to 3.1% for the torrid summer peak.

Table 5.1 Peak power demand in the years 2004-2012

GW

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|------|------|------|
| Average winter | 55.0 | 55.5 | 57.9 | 59.2 | 60.4 | 61.7 | 63.0 | 64.4 |
| Torrid summer | 54.2 | 55.6 | 58.5 | 60.0 | 61.6 | 63.2 | 64.9 | 66.6 |

Source: TERNA.

Generation capacity in 2006

Strong generation capacity expansion, started in 2004 - 2005 continued significantly also in 2006. According to provisional TERNA data, the net power installed at the end of 2006 amounted to 89.8 GW, with the structure by type of generation indicated at Table 5.2. The increment was significantly higher in 2006 compared to 2005 (4.3 against 4.0 GW) and now guarantees an appreciable power reserve against demand peaks. Over 85% of the growth between 2004 and 2006 is attributable to thermoelectric plant, prevalently combined cycle gas plants.

Table 5.2 Net generating capacity in 2003-2006

MW

| | 2003 | 2004 | 2005 | 2006 |
|-------------------------------|--------|--------|--------|--------|
| Hydroelectric | 20,660 | 20,744 | 20,993 | 21,070 |
| Thermoelectric ^(A) | 56,047 | 58,990 | 62,164 | 66,200 |
| Geothermal | 665 | 642 | 671 | 671 |
| Wind and solar | 877 | 1,135 | 1,642 | 1,865 |
| TOTAL | 78,249 | 81,511 | 85,470 | 89,806 |

(A) Includes biomass and waste combustion plant.

Source: TERNA, provisional data for 2006.

New generation capacity in the period 2007- 2010

For several years there has been important re-qualification and expansion of Italian generating capacity, above all in the implementation of combined cycle gas plants. As indicated at Table 5.3, it is now practically certain that 3.6 GW of thermoelectric plant will come on line in 2007, 5.5 GW in 2008 and 1.9 GW in 2009. A further 5.1 GW of thermoelectric power is forecast to enter into service in 2010 or the immediately following years. Furthermore, approximately 6.000 additional MW have received authorisation to proceed with construction.

Table 5.3 Increases in Generation Capacity in the Period 2007-2010

MW

| | Thermoelectric | From Waste | Hydroelectric and Wind | Total |
|-------------------------------|----------------|------------|------------------------|--------|
| By year of entry into service | | | | |
| 2007 | 3,550 | 0 | 256 | 3,806 |
| 2008 | 5,460 | 0 | 591 | 6,051 |
| 2009 | 1,850 | 184 | 528 | 2,562 |
| 2010 | 2,005 | 0 | 0 | 2,005 |
| By geographical area | | | | |
| North | 3,720 | 0 | 24 | 3,744 |
| Centre | 1,950 | 0 | 340 | 2,290 |
| South and Islands | 7,195 | 184 | 1,011 | 8,390 |
| ITALY | 12,865 | 184 | 1,375 | 14,424 |

Source: TERNA, National Electricity Transmission Grid Development Plan, January 2007.

The development of generating capacity based on renewable resources, consisting essentially of wind power. Considering only plants for which commitments have been made to cover the costs of connection to the transmission and distribution grid, it is reasonable to estimate that approximately 1,380 MW will go on line between 2007 and

2009. The potential is, however, highly significant given that applications for connection amount to over 10,000 MW.

Slightly less than 60% of the new electrical power expected to go on line in the period 2007-2010 is sited in the Southern regions, mainly Campania, Apulia and Calabria. The contribution of the South is even more significant in terms of the new capacity based on renewable resources. The geographical distribution of new capacity should contribute in the long term to attenuating congestions in certain Southern areas of the country; on the other hand, in the short to medium term it may well aggravate them in the Northern and North Central sections of the grid. Implementation of TERNA's plans to strengthen the grid should attenuate these problems to a large extent.

Peak Power Availability

Over the last five years, plant availability was overall between 63 and 65% of net total power. The unavailability of hydroelectric plant is mainly linked to poor reservoir supply in the winter period of historically peak demand and to growing requirements for agricultural use. In the case of thermoelectric plant, unavailability is due to unforeseeable interruptions and long term shutdown for overhauling and repowering. Unavailability of wind power plant is due to the discontinuous nature of this resource.

Table 5.4 Peak power availability in the years 2003-2006

GW

| | 2003 | 2004 | 2005 | 2006 |
|--------------------------------|-------------|-------------|-------------|-------------|
| Net Power | 78.2 | 81.5 | 85.5 | 89.8 |
| Hydroelectric | 20.7 | 20.7 | 21.0 | 21.1 |
| Traditional thermoelectric | 56.0 | 59.0 | 62.2 | 66.2 |
| Geothermal | 0.7 | 0.6 | 0.7 | 0.7 |
| Wind and solar power | 0.9 | 1.1 | 1.6 | 1.9 |
| Power available at peak | 49.7 | 52.8 | 56.3 | 58.3 |
| Hydroelectric | 13.5 | 13.6 | 13.7 | 13.8 |
| Traditional thermoelectric | 35.5 | 38.4 | 41.6 | 43.5 |
| Geothermal | 0.6 | 0.6 | 0.6 | 0.6 |
| Wind and solar power | 0.2 | 0.3 | 0.4 | 0.4 |
| Demand at peak | 53.4 | 53.6 | 55.0 | 55.6 |
| Power surplus/deficit | -3.7 | -0.9 | 1.3 | 2.7 |

Source: AEEG analysis on TERNA data.

After a long period of stagnation until 2001-2002, power available at the peak has been rising consistently from 49.7 GW in 2003 to 58.5 GW in 2006, as indicated at Table 5.4. But it was only from 2005 that power available at the peak was greater than demand. The deficit of 3.7 GW in 2003 and 0.9 GW in 2004 turned into a surplus of 1.3 GW in 2005 and of 2.7 GW in 2006. In the years to come, the surplus is expected to increase significantly, thanks to the strong growth in capacity described above. An assessment of the Italian

power system security must include the approximately 7 GW of import capacity, whose availability is not always guaranteed to the extent required, as seen in the summer of 2003 and, more recently, in the winter of 2005-2006, when a 4,000 MW import deficit emerged on the Northern border. In combination with low hydroelectric generation, this caused the almost total elimination of the operating reserve.

Composition of electricity generation

The data provided at Table 5.5 gives a clear indication of the growing dependence of the Italian power system on natural gas. The growth in natural gas fired generation (6.1%) would have been even greater had the gas crisis not forced the Government to impose use of fuel oil to avoid the premature exhaustion of gas in storage. The gas emergency measures were reflected in a significant slowdown in the substitution of oil in the energy system. Electricity generation from oil products fell, in fact, by just 1.8%, against an annual mean of 18.6% in the preceding three years.

Generation from coal appears to have largely stabilised, with further growth awaiting the conversion of the Civitavecchia and Porto Tolle power stations. The former is fairly advanced, despite local political opposition; the latter is still awaiting authorisation stage, but favoured by local public opinion.

Table 5.5 Electricity balance in the years 2000-2006

GWh

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Thermoelectric production | 218,549 | 216,792 | 227,646 | 238,291 | 240,488 | 246,918 | 256,969 |
| Solids | 26,272 | 31,730 | 35,447 | 38,813 | 45,518 | 43,606 | 44,600 |
| Natural gas | 97,608 | 95,906 | 99,414 | 117,301 | 129,772 | 149,259 | 158,300 |
| Oil products | 85,878 | 75,009 | 76,997 | 65,771 | 47,253 | 35,846 | 35,200 |
| Others | 8,791 | 14,147 | 15,788 | 16,406 | 17,945 | 18,207 | 18,869 |
| Production from renewable resources | 51,386 | 55,087 | 49,013 | 47,971 | 55,669 | 49,894 | 51,682 |
| Biomasses and waste | 1,906 | 2,587 | 3,423 | 4,493 | 5,637 | 6,155 | 6,283 |
| Wind | 563 | 1,179 | 1,404 | 1,458 | 1,847 | 2,343 | 3,211 |
| Solar | 6 | 5 | 4 | 5 | 4 | 4 | 4 |
| Geothermal | 4,705 | 4,507 | 4,662 | 5,341 | 5,437 | 5,325 | 5,527 |
| Hydroelectric from natural sources | 44,205 | 46,810 | 39,519 | 36,674 | 42,744 | 36,067 | 36,657 |
| Hydroelectric production from pumping | 6,695 | 7,115 | 7,743 | 7,603 | 7,164 | 6,860 | 6,365 |
| Total production | 276,629 | 278,995 | 284,401 | 293,865 | 303,321 | 303,672 | 315,016 |

Source: TERNA.

The contribution from renewable resources to electricity generation rose appreciably (3.6% from 2005), though falling by 7.2% from the level in 2004, a year characterised by more favourable hydrological conditions. Distinctive features of 2006 were the very strong development of wind power (37%), which brought this resources to contribute 6.2% of

overall generation from renewable resources (against 4.7% in 2005 and 3.3% in 2004), and the low natural hydroelectric supply, notably lower than the mean for the last decade (36.7 against 41.8 TWh).

In 2006 electricity imports net of exports fell by 4.4 TWh (-9.0%) with respect to the previous year. This significant fall was due to both the decline in imports (-7.8%), and to increased exports (44.7%) and reflects the expansion in thermoelectric generation capacity, as well as their improved competitiveness with respect to foreign competition. The new combined cycled power stations coming on line in recent years, though characterised by higher average generation costs, are able to compete favourably with the coal and nuclear energy plant prevalent in other European nations, at given points on the load curve and in given operating conditions.

Network planning process

The planning criteria for the network are delineated in the TERNA Concession Regulations and in the Network Code, which foresees that TERNA pursues the development of the power transmission service in conditions of security, efficiency, reliability and continuity in the short, medium and long terms, guarantees the impartiality and neutrality of the service; and contributes to promotion of environmental protection.

The planning process, described in the National Transmission Grid Development Plan which TERNA publishes annually, is based on:

- the growth in electricity and power demand;
- the development of generating plant in terms of capacity, location and typology;
- the capacity of interconnections with neighbouring nations for energy exchanges;
- the criticalities in the functioning of the national grid.

The planning procedure identifies the critical problems in the transmission system and the planned remedies based on specific simulations of grid operation in the most likely demand and supply scenarios. The criticalities are highlighted in terms of risk of overload on the primary grid, when current flow in at least one element of the grid (line or transformer) is in excess of 20% of the maximum load under normal operation.

The Development Plan published in January 2007 identifies among the principal issues for grid development as the growth in demand, the implementation of authorised plant, the availability of power imports and the need to meet peak power demand with reserve margins averaging around 20% in continental Italy, 30% in Sicily and 80% in Sardinia. It underscores how, in the absence of suitable grid development, the benefits deriving from new generating plant would be lost within five years on account of growth in demand and network congestions, preventing the full exploitation of the generating capacity. Indeed, the new plants would be operating to a large extent in areas already congested or close to the limits and the risk of lack of meeting peak requirements in would be come particularly high in certain areas of the country.

Projects implemented in 2006 and future development issues

Most noteworthy projects implemented in 2006 regard specific applications to power lines and transformers at 380/220/132 kV allowing improvements in flexibility and security of supply as well as removing congestion risks in the city of Milan and urban outskirts, in some provinces of Emilia Romagna and Tuscany and in the metropolitan area northwest of Naples. The new submarine 150 kV AC cable between Sardinia and Corsica also went on line.

The area under greatest risk continues to be the North East, in particular the Veneto and Friuli Venezia Giulia regions, with inadequate transport capacity to convey energy from local generating plant and imports crossing the Slovenian border, now permanently congested. The most serious problems regard networks in metropolitan areas where loads are greatest (such as Milan, Turin, Florence and Naples) and in the areas where secondary grids at 150-132 kV are employed to supply transport services, particularly under N-1 conditions (Emilia-Romagna, Campania, Marche and Abruzzi).

A number of important projects are being implemented or planned for the near future to reinforce the 380 kV network in the South and on the critical South-Centre South sections in order to reduce congestions ultimately limiting the potential of new power stations currently going on line or under construction in the Southern areas of the country. Furthermore, portions of the high voltage grid, characterised by high load densities and non optimal levels of reliability and quality of service are being rationalised, also with a view to reducing environmental impacts. The short to medium term plan, illustrated in Table 5.6 foresees a 6.5 GW increase in the capacity of principal transits between market zones compared to 2006.

Table 5.6 Transit capacity increases between market zones in the short to medium term

MW

| Interzonal Section | Transit Capacity (MW) | |
|------------------------------|-----------------------|-------|
| | 2006 | Piano |
| North - Centre North | 3,600 | 4,100 |
| Centre North - Centre South | 1,300 | 1,600 |
| South - Centre South | 2,000 | 3,500 |
| Calabria - South | 4,800 | 6,800 |
| Sicily - Calabria | 600 | 1,000 |
| Calabria - Sicily | 100 | 1,000 |
| Sardinia - Continent/Corsica | 350 | 1,150 |

Source: TERNA, National Transmission Grid Development Plan, January 2007.

Interconnector development

Interconnections with adjacent countries represent a particularly important and strategically relevant category of grid development. Existing interconnections are with

countries on the Northern borders at 380 and 220 kV AC and with Greece at 400 kV DC. There are also 150 kV DC and AC connections between Sardinia and Corsica. These interconnections play a vital role in the liberalisation of the integrated EU power market and provide the country with notable opportunities for reducing electricity costs.

Simulations over the medium to long term confirm an almost certain reduction in the transactions and price differentials on the North Western border (France and Switzerland) due to reduced availability of power and to the repercussions on these borders of congestions in imports from central and central-Eastern Europe. TERNA is planning a number of measures to address these phenomena.

The principal interconnections planned in the medium term regard the new 380 kV Udine - Okroglo power line with Slovenia; the strengthening of the 220 kV lines with Switzerland, the Avise-Villeneuve-Chatillon ring; raising the capacity of the interconnection with Austria, Prati di Vizze - Steinach, to 150 kV from the current medium voltage. For the longer term, new 380 kV power lines are being studied for interconnection with Austria and Slovenia and two 220 kV power lines over the French border.

A further option for Italy lies in interconnection with the Balkans given the generating capacity available in South Eastern Europe (SEE), expected to increase in the medium to long term, as this provides an opportunity to diversify supply sources, exploit synergies with the power systems of the countries of this area and benefit from very competitive prices in the medium to long term. Interconnection with the SEE nations would enable, in the longer term, to open up new energy routes with Russia, the Ukraine and other CIS nations.

In this context, a number of projects are already under study involving interconnections at 400 kV with Croatia, Albania and Montenegro. Implementation of these interconnections will require improvements in the transmission grids of Albania and the FYR of Macedonia to reduce the risk of network congestion in the SEE area and thus guarantee continuity in the supply of the generated energy.

In the development of power system scenarios, TERNA also takes into consideration independent interconnection projects (merchant lines), presented in the framework of Community law and Italian legislation. The merchant lines already authorised or currently awaiting authorisation from the various transmission system operators involved, amount to an increase in capacity of between 1,000 and 2,000 MW in the short to medium term on the Northern border crossings. Problems of integration of the independent interconnectors into the national grid make these values subject to change.

5.2 Gas

Gas consumption in 2006 and demand forecasts for the period 2007-2015

For the first time in over a decade, 2006 saw a significant fall in natural gas consumption. The 2.1% fall from 86.3 to 84.5 G(m³), is largely attributable to the mild temperatures recorded in the later months of the year. Final consumption in the residential sector indeed fell by 2.8 G(m³) (-8.5%) and the fall in industrial sector consumption (-4.5%) also reflects reduced heating requirements on factory premises.

By contrast, there was a significant increase (6.1%) in natural gas consumption for electricity generation, a remarkable increase considering the obligation on dual fuel thermoelectric plant to run on fuel oil, imposed by the Governments' emergency measures in the early months of the year to contrast the premature exhaustion of gas stocks. This growth is not overly surprising however considering the increase of over 8 GW in combined cycle generating capacity in 2005-2006, which also explains the net fall in electricity imports mentioned in paragraph 5.1.

Demand forecasts for the next decade, are taken from the Ministry of Economic Development scenarios published in the spring of 2007. These scenarios do not integrate the effects of decisions taken at the Energy Council meeting of 6 - 8 March 2007 establishing concrete objectives for 2020 at the EU level in terms of energy efficiency, use of renewable resources and containment of greenhouse gas emissions. Their update in this sense awaits a decision at the European level on the allocation of the commitment across the 27 member states.

The two scenarios proposed by the Ministry of Economic Development, referred to respectively as "historic trend" and "eco-sustainable", reflect the strong increase in natural gas fired generation over the next decade and result in overall requirements of 108 and 105 G(m³) of gas in 2015 (Table 5.7). Of greater concern from the point of view of security of gas supply is the requirement in 2010, estimated as 98-99 G(m³).

Table 5.7 Natural gas requirements in the period 2005-2015

G(m³)

| Scenario | 2005 | 2006 | 2007 | 2008 | 2010 | 2015 |
|-----------------|------|------|------|------|------|------|
| Historic trend | 86.3 | 84.5 | 89 | 93 | 99 | 108 |
| Eco-sustainable | | | 89 | 93 | 98 | 105 |

Source: Ministry of Economic Development, May 2007.

Preparations for the gas emergency in the Winter of 2006-2007

The Government moved early to prepare an Emergency Plan to deal with a possible gas deficit in the winter of 2006-2007 caused by a repetition of severe climatic conditions of the previous winter combined with possible supply interruptions. The Emergency Plan included an increase in seasonal storage capacity of 0.6 G(m³) in a number of Stogit reservoirs through pressure increases made possible by adding compressor power. The

additional capacity would have permitted a reduction in the use of strategic storage to meet peaks in demand in the event of particularly cold spells at the end of the winter period. To discourage gas fired generation for export, the plan also included an increase in the tariffs for gas transport to power stations.

Among the measures adopted the most important regarded the restocking and upkeep of the reserves in storage, imposed on suppliers; this determined a consistent increase in natural gas imports (5.4% from 2005) despite the fall in consumption recorded during the year. The exceptionally mild temperatures which characterised the entire winter period thus resulted in a significant increase in end of year storage (surplus of 3.5 G(m³) against a deficit of 1.1 G(m³) at the end of the previous year).

The Emergency Plan may turn out to be useful in the winter of 2007-2008, considering that supply conditions remain essentially unchanged (if not deteriorating due to the further fall in domestic production) and a particularly severe winter could require withdrawals from storage greater than the current maximum.

Domestic production in 2006 and forecasts for future years

The fall in Italian gas production continued in 2006. The gas fields in Italy and its' territorial waters produced 10,837 M(m³), against 11,962 in 2005 and 12,921 in 2004. However, the data presented in Table 5.8 for 2006 indicate the beginnings of an inversion with respect to preceding trends in exploration activity indicators (number of permits, number of wells and metres drilled) which kindles hope for an upturn in the sector. Even if it is too soon to understand if this recovery is real and lasting and if it will result in an increase in reserves and production, it nevertheless seems to be well timed for the currently scheduled termination in 2010 of the gas supply ceilings imposed on the incumbent by Legislative Decree No. 164/2000. In any case, the Ministry of Economic Development has slightly increased its production forecast for 2010 to 7.8 G(m³) from its forecast of 6.5 G(m³) in 2006.

Table 5.8 Oil and gas exploration and development activity in Italy and natural gas reserves and production in the period 1985-2006

| Years | Permits | Number of wells | | Metres drilled (x 1,000) | | Recoverable reserves G(m ³) | Production G(m ³) |
|-------------|---------|-----------------|-------------|--------------------------|-------------|---|-------------------------------|
| | | Exploration | Development | Exploration | Development | | |
| 1985 - 1989 | 312 | 88 | 68 | 189.4 | 157.7 | 296 | 16,0 |
| 1990 - 1994 | 175 | 40 | 63 | 101.2 | 173.1 | 316 | 18,6 |
| 1995 - 1999 | 164 | 28 | 34 | 75.6 | 74.6 | 274 | 19,4 |
| 2000 | 148 | 20 | 33 | 54.8 | 46.0 | 249 | 16,8 |
| 2001 | 140 | 11 | 29 | 23.9 | 91.9 | 233 | 15,5 |
| 2002 | 130 | 8 | 22 | 14.2 | 43.2 | 217 | 14,9 |
| 2003 | 103 | 10 | 30 | 20.2 | 63.6 | 188 | 14,0 |
| 2004 | 95 | 10 | 29 | 22.2 | 59.3 | 180 | 12,9 |
| 2005 | 90 | 7 | 33 | 15.1 | 66.0 | 170 | 12,0 |
| 2006 | 93 | 15 | 31 | 27.0 | 51.3 | 151 | 10,8 |

Source: Hydrocarbon research and cultivation activities in Italy, UNMIG 2006 Annual Report, Ministry of Economic Development, June 2007.

Import capacity in 2006 and forecasts for the years to come

Following the decisions imposed by the Antitrust Authority on Eni with the conclusion of enquiry A358, capacity at the gas entry points at the national borders has changed slightly with respect to the indications provided in the *2006 Annual Report*. The data provided at Table 5.9 highlights in particular the postponement of the first phase in the expansion of the TAG pipeline to gas year 2009-2010 and the earlier than originally planned expansion of the second phase of the TTPC gas pipeline to gas year 2008-2009. The second phase of enlargement of the TAG gas pipeline has yet to be defined, but the data provided in the table assume it will be effective in gas year 2010-2011 as originally planned.

Table 5.9 Forecasts of continuous import capacity at the entry points to the Italian network

M(m³)/day

| Entry point | Thermal year | | | | | | |
|------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | 2010-2011 |
| Tarvisio | 88.2 | 88.3 | 100.9 | 100.9 | 100.9 | 109.9 | 118.7 |
| Gorizia | 1.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Passo Gries | 57.5 | 57.5 | 57.5 | 58.0 | 59.4 | 59.4 | 59.4 |
| Mazara del Vallo | 80.5 | 80.5 | 85.1 | 86.6 | 95.4 | 104.4 | 104.4 |
| Gela | 21.5 | 22.8 | 25.6 | 25.6 | 25.6 | 25.6 | 25.6 |
| Panigaglia | 11.4 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| TOTAL | 260.1 | 264.1 | 284.1 | 286.1 | 296.3 | 314.3 | 323.1 |

Source: AEEG analysis on Snam Rete Gas data.

Further expansion of existing import infrastructures are currently uncertain. A possible expansion of the Greenstream pipeline from Libya to Italy is under discussion as also of the regassification terminal at Panigaglia which, in any case, could not be operational before 2010-2012. The latter, in particular, may encounter notable difficulties in the authorisation procedures, which require competing decisions at the national, regional and local levels.

The data provided in the table indicate a significant increase in import capacity which, under the given the demand forecasts, should guarantee security of supply at least through gas year 2009-2010. Table 5.10 illustrates a simulation of the balance in the supply of and demand for import capacity, based on the historic trend scenario forecasts formulated by the Ministry of Economic Development assuming the planned upgrading of existing infrastructures and the implementation of new gas pipelines and regassification terminals, discussed in the following section.

The simulation develops two supply scenarios: the first "in normal conditions" supposes a load factor of 85% for the gas pipelines and of 90% for the terminals; the second "in maximum security conditions" which supposes a 10% reduction in these load factors. The simulation indicates difficult supply conditions through 2009 followed by a growing, strong surplus in the following years. Evidently the balance depends closely on the date of entry into service of the new import infrastructures and may be severely handicapped by delays in their implementation.

In the medium and longer term, the balance is also influenced by Italy's achievement of the new EU energy efficiency and renewable energy objectives, which may result in lower natural gas requirements than those forecast by the Ministry of Economic Development. In this case, the surplus import capacity would be instrumental in spurring Italy's role as a primary hub for European gas supplies.

Table 5.10 Simulation of import capacity supply and demand

G(m³)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Demand | 86 | 84 | 89 | 93 | 96 | 99 | 101 | 103 | 105 | 106 | 108 |
| Domestic production | 12 | 11 | 10 | 9 | 9 | 8 | 7 | 7 | 7 | 6 | 6 |
| Imports | 74 | 74 | 79 | 84 | 87 | 91 | 94 | 96 | 98 | 100 | 102 |
| Minimum import capacity | | | | | | | | | | | |
| - in normal conditions | 88 | 87 | 93 | 97 | 101 | 105 | 108 | 111 | 113 | 115 | 118 |
| - in maximum security conditions | 97 | 96 | 103 | 108 | 112 | 117 | 120 | 123 | 126 | 128 | 131 |
| Total available capacity | 96 | 100 | 104 | 107 | 116 | 130 | 139 | 153 | 161 | 166 | 166 |
| - expansion of existing plant | 96 | 100 | 104 | 106 | 111 | 116 | 116 | 116 | 116 | 116 | 116 |
| - new LNG plants | 0 | 0 | 0 | 1 | 5 | 12 | 16 | 20 | 20 | 20 | 20 |
| - new gas pipelines | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 17 | 25 | 30 | 30 |
| Surplus capacity | | | | | | | | | | | |
| - in normal conditions | 8 | 13 | 11 | 10 | 15 | 25 | 31 | 43 | 48 | 51 | 48 |
| - in maximum security conditions | -2 | 4 | 1 | 0 | 4 | 14 | 19 | 30 | 36 | 38 | 35 |

Source: AEEG estimates based on Ministry of Economic Development data.

New infrastructures under construction in design

Import gas pipelines

During 2006 and early 2007 significant progress was made in the planning and implementation of gas import projects in Italy, as summarised at Table 5.11.

The IGI project consisting of an undersea interconnection between Italy and Greece (Poseidon pipeline), a trans Greece extension (Zeus pipeline) and a connection to the Turkish network, should go on line in 2011. The promoters of the project (Edison and Depa, with respectively 80% and 20%) have begun negotiations for the supply of 8-10 G(m³)/year with the producers in the Caspian sea area. In January 2007 a protocol of understanding was signed by the Italian and Greek governments, as agreed also with the national regulatory authorities, which recognises the exemption of access to third parties for 80% of the transport capacity for a period of 25 years. Construction of the gas pipeline should begin already in 2008 and start up is expected for early 2012.

The TAP project originally promoted by the EGL company foresees the construction of a gas pipeline connecting Italy with producers in the Middle East via Turkey, Greece, Albania across the Adriatic. Basic engineering studies were completed in 2006 and construction works could begin in 2008 with entry into service in 2010. Supply accords

have been signed with Iran and other producers for a total of 10 G(m³)/year, but the transit agreements are still under discussion. The company intends to allocate gas pipeline transport capacity based on open season criteria and has not yet requested the exemption from third party access foreseen by European and Italian law. Approximately 50% of the imported gas would be delivered to EGL power stations under construction in Italy.

The Galsi project, eventually delivering 10 G(m³)/year of Algerian gas to Italy via Sardinia, is currently at the stage of preparation of an inter-government agreement between Italy and Algeria. In November 2006 five of the companies involved in the joint venture signed agreements with the Algerian producer Sonatrach for the supply of 6 G(m³)/year for 15 years, a further 2 G(m³)/year, is earmarked for distribution in Sardinia directly by Sonatrach through a joint venture with the Sfirs company owned by the Sardinia Regional Government.

Table 5.11 New pipeline gas import projects

| | Nominal capacity G(m ³) | Length (km) | Diameter (inches) | Date of completion of the feasibility study | Forecast date on line |
|--------------------|--|-------------|----------------------|--|--------------------------|
| IGI ^(A) | 8 - 10 | 212 | 32 | 2005 | 2012 |
| Galsi | 10 | 2,000 | 36 | 2005 | 2011 |
| TAP | 10 | 420 - 500 | 32 | 2006 | 2010 |

(A) The length for the IGI project refers to the submarine tract.

Source: Ministry of Economic Development.

LNG terminals

The status of the new regassification projects, illustrated in Table 5.12, shows no significant progress from the *2006 Annual Report*. On the contrary, there have been setbacks especially in the case of Brindisi LNG where investigations under way have effectively blocked construction activity and may lead to a new Environmental Impact Assessment (EIA) and even a definitive abandonment of the initiative.

The only plant likely to be completed in a relatively short period of time is the LNG Adriatico terminal, expected to go on line towards the end of 2008. The Olt LNG terminal is approaching completion of the permitting procedure and could be operational before the end of 2010, if all the authorisations are obtained during 2007. Two new projects were added in 2006 to those listed in the Table and already listed in past years: the Atlas LNG terminal, presented by the Belleli company for Ravenna offshore; another offshore terminal off the coast of the Marche presented by Gaz de France.

Table 5.12 State of advancement of regassification projects at the end of 2006

| Locality | Capacity G(m ³)/year | Proposing company | Authorisation stage |
|------------------|-------------------------------------|---|---|
| Rovigo offshore | 8 | GNL Adriatico (Edison - ExxonMobil - Qatar Petroleum) | Investigation completed; implementation at advanced stage |
| Brindisi | 8 | Brindisi LNG (British Gas Italia) | Environment Ministry requires new assessment |
| Toscana offshore | 4 | OLT LNG (Endesa Italia, Iride, Asa, OLT Energy) | Investigation approaching completion |
| Rosignano | 8 | Edison, BP, Solvay | EIA and other assessments under way |
| Gioia Tauro | 12 | LNG MedGas (Cross Gas, Sorgenia, Iride) | EIA and other assessments under way |
| Taranto | 8 | Gas Natural Internacional | EIA and other assessments under way |
| Trieste Zaule | 8 | Gas Natural Internacional | EIA and other assessments under way |
| Trieste offshore | 8 | Endesa Italia | EIA and other assessments under way |
| Porto Empedocle | 8 | Nuove Energie (Enel) | EIA and other assessments under way |
| Rada di Augusta | 12 | Erg Power & Gas - Shell Energy Italia | EIA and other assessments under way |

Source: Ministry of Economic Development.

Storage

The data provided at Table 5.13 shows no appreciable changes to the situation presented in the *2006 Annual Report*, except for the addition of the Sinarca gas field in Molise. Considering project development times it seems unlikely that there will be substantial additions to storage capacity before 2008-2009.

Table 5.13 State of progress of storage concessions at the end of 2006

| Project | Province | Type | Working gas M(m ³) | Peak production M(m ³ /day) | Feasibility study | Approval procedure started | Developer | State of progress |
|---------------------------------|----------|-------------|-----------------------------------|--|----------------------|----------------------------------|---------------------|----------------------|
| Alfonsine | RA | Field | 1,550 | 10.0 | 2006 | Not available | Stogit | Authorised |
| Bordolano | CR, BG | Field | 1,500 | 20.0 | 2006 | 2006 | Stogit | Authorised |
| Cornegliano | MI | Field | 590 - 1,010 | 16.5 | 2002 | 2004 | Ital Gas Storage | Under investigation |
| Cotignola - San Potito | RA | Field | 915 | 8.0 | 2002 | 2004 | Edison Stoccaggio | Under investigation |
| Cugno le Macine - Serra Pizzuta | MT | Field | 742 | 6.6 | 2002 | 2004 | Geogas | Under investigation |
| Rivara | RA | Water table | 3,000 | 32.0 | 2003 | 2004 | IGM | Under investigation |
| Sinarca | CB | Field | 324 | 3.3 | 2006 | 2008 | Gas Plus and Edison | Under investigation |
| TOTAL | | | 8,600 - 9,000 | 96.4 | | | | |

Source: Ministry of Economic Development.

6 PUBLIC SERVICE ISSUES AND CONSUMER PROTECTION

Supplies to the end market

With reference to the natural gas sector, the characteristics of supply to the end-user market at 31 December 2006 were unchanged with respect to the previous year: gas suppliers must be corporately separate from the distributors and authorised to operate by the Ministry of Economic Development. At September 2006 there were 386 authorised selling companies, of which presumably little more than 300 effectively operative. In September 2006 the Ministry – having verified that 16 of the 17 suppliers identified in 2004 as suppliers of last resort had declared their inability to operate due to the difficulty in procuring the necessary volumes of gas – identified the “largest wholesalers for each area” as the suppliers of last resort until the 30 September 2007; specific tender procedures shall be started in the meanwhile by the Authority.

At 31 December 2006 the characteristics of the electricity supply, was unchanged with respect to the Report for the previous year: no authorisation is required to sale electricity on the end-user market, nor is there a Supplier of last resort. In any case, where clients cannot find a supplier on the market, the Single Buyer ought to guarantee their electricity supply. On the captive market, sales activities are generally undertaken by the distributing companies and on the free market, normally by the wholesaler, defined as the natural or legal person who acquires and sells electricity without undertaking any production, transmission and distribution activities in any country of the European Union.

In July 2006 a Bill was presented in Parliament (A.S. 691) which delegates the Government to complete implementation of Directives 54 and 55 of 2003¹⁴.

Suppliers' obligations, conditions of supply and consumer protection

As mentioned in last years' Report, the obligations on suppliers in the two sectors, defined by AEEG's non price regulation for consumer protection, fully implement the prescriptions of Appendix A of Directive 2003/54/EC. these refer, in particular, to:

- the **billing transparency rules** (contract and supply, billing, consumption, detail of charges, payments) and the content of the mandatory information to be provided to consumers, in force since 1999 for the gas sector and since 2000 for the electricity sector;
- the minimum mandatory **contractual conditions of supply** (meter reading, consumption calculation, billing frequency, payment times and modes, delayed payment and non payment, suspension of supply, payment by instalment, complaint management) in force since July 2000 for the electricity sector and since January 2003 for the natural gas sector;

¹⁴ Given the length of the Parliamentary debate, in view of the full liberalisation of the electricity market of 1 July 2007 (note that the natural gas market was fully liberalised in January 2003), urgent measures (see last par.) were adopted to enable the start up of the electricity sales market (separation of retailers from distributors and identification of the supplier of the last resort).

- the **Commercial codes of conduct** for sales to eligible clients (specific behavioural obligations, first of all that of information, in contacting potential clients and in the contractual phase) in force since December 2004 for natural gas and since 1 January 2007 for the electricity sector;
- the procedures **complaints handling**;
- the standards of **commercial quality of service, of security and continuity** of supply, uniform across the nation, binding on distributors (who directly supplied the captive market in the electricity sector at 31 December 2006);
- the **automatic refund mechanisms** for failure to respect the specific or individual commercial quality standards, as well as breach of certain contract clauses (in 2005 and 2006 automatic indemnities to end clients for breach of commercial standards rose in the gas sector from 31,189 to 35,146 and in the electricity sector from 62,725 to 73,690).

Principal Actions and Proposals Developed During 2006

The following are the principal actions taken in 2006 and the major proposals for action, in view of full liberalisation of the markets.

The **Commercial code of conduct** for the electricity sector was approved in May 2006 to protect the “eligible” low voltage consumers including households which, with effect from 1 July 2007, are able to exercise the right to choose their supplier.

The Commercial code of conduct foresees that a specific **price comparison note** be prepared as an instrument to facilitate comparison of the offers presented to consumers, both domestic and non domestic, in order to reduce poor transparency on the part of the suppliers.

During the year, the Authority has worked, in close contact with the consumer associations in the definition of proposals for the price comparison note and **other instruments of information** to be prepared in view of the date of full liberalisation of the electricity sector (call centres, FAQ, lists of suppliers, rules for withdrawal, see below).

In July 2006 **the billing transparency regulations were redefined** and they will take force for all low voltage clients on the free and captive markets on 1 January 2007. These require that the information in the bill be provided in two distinct sections (one synthetic and easy to read containing the main items composing the total amount and one detailed enabling a deeper analysis of the price component elements) and introduce further information obligations relative to the complaints procedures, average daily and annual consumption, as well as information about the mix of resources which characterise Italian electricity production. With reference to the latter item, at 31 December 2006 the dispositions of European Directive 2003/54/EC of which at Article 3, comma 6 have only been partially implemented.

Still in July 2006, the Authority, following numerous complaints from consumers and reports from the consumer associations, strengthened and updated the **instalment payment rules** for clients in the electricity sector, for particularly high adjustment bills. As an additional guarantee for consumers, a disposition was introduced on the minimum number of instalments which the operator is obliged to allow, with the provision of non

accumulation of instalments in a single bill and payment frequency comply with billing frequency.

In November 2006, the Authority concluded an **Investigation** in to the implementation of the Commercial Codes of Conduct in the natural gas sector, in force since December 2004, with a view to possible modification and integration.

In 2004 the Authority began monitoring the quality of the **commercial call centres** of electricity and gas suppliers and published an initial consultation document, containing a review of the state of the art and several proposals for regulation of the quality of the services provided. In May 2006 a working group, with operators and consumers, began to study alternative solutions for telephone service quality regulation in a regime of liberalisation of sales. With the same measure a pilot public opinion survey from September to November 2006, on the satisfaction and expectations of clients contacting the suppliers' call centres was also launched. The results of this survey, together with other monitoring initiatives dealt in collaboration with consumer associations within the memorandum of understanding with the National Council of Consumers and Users (CNCU), are intended to define, in the first half of 2007, mandatory quality standards for the services provided by supplier call centres.

Treatment of vulnerable customers

The regulations relative to the treatment of vulnerable customers were not modified during the current year, so reference should be made to this section of last years' Annual Report.

From the tariff viewpoint, note that in the electricity sector, the definition of new social conditions for households (which is rendered necessary by the cross subsidies in the current system) will be possible as soon as the Government has indicated the criteria necessary to the definition of new, improved social protection, identifying the more needy and vulnerable categories (low income levels, numerous families, users of medical energy intensive appliances). During 2006, the Authority proposed a "discount" mechanism to be applied to any commercial proposal which the "needy and vulnerable" consumers may eventually choose to best satisfy their exigencies.

The Authority hopes for intervention of a similar nature also in the gas sector where the provision in force allows local authorities to create special funds - funded by a surcharge of no more than 1% of the distribution tariffs, net of tax and duties - to cover the cost of gas supplies to a clients in vulnerable economic conditions, to the elderly and diversely able, with criteria defined by the local authorities themselves. For the 2006-2007 thermal year 303 out of approximately 7,200 municipalities, serving approximately a quarter of total clients (19 million), had activated this procedure.

Disconnections for non-payment

The contractual conditions of supply defined by the Authority also regulate the suspension of supply for failure to settle bills. Operators can proceed with disconnection for non-payment only after notifying the client in writing, indicating the further term for payment, how to deliver notice of payment and the term beyond which suspension may

occur in the absence of payment. Suspension of supply is not permitted, in any case, where the supply is necessary to the operation of health care devices or on Friday, Saturday, Sunday and public holidays or the eve thereof.

The Authority does not monitor the number of disconnections for late payment, but it does monitor the number of requests for reconnection following suspension for non-payment which reached 862,967 in the electricity in 2006 (low voltage clients), while in the gas sector there were 60,597 (end clients supplied at low pressure)¹⁵. The number of requests for reconnection following suspension for non payment in the electricity sector has risen in recent years (there were 310,540 in 2004) following the introduction of remote managed meters which permit operators to apply, as an alternative to disconnection, a drastic reduction of the voltage supplied to a so called “vital minimum” level (approximately 0.5 kW). This practice, recommended by the Authority to better protect consumers, minimises the effective damage to the client while awaiting regularisation of the account.

Tariff regulation and end-user prices

Tariff regulation primarily concerns infrastructure activities conducted through networks is implemented, in compliance with the instituting law of the Authority (Law No. 481/95) through the price cap mechanism (described in last years’ Report). It sets out the Regulator’s efficiency targets for a four year regulatory period as indicated at Table 6.1.

Table 6.1 Price cap coefficients at December 2006

| ELECTRICITY SECTOR | | NATURAL GAS SECTOR | |
|-------------------------------|------|--|--|
| Transmission (2004 - 2007) | 2.5% | Transmission (2005 – 2009) | 2% (<i>capacity</i>) 3.5% (<i>commodity</i>) |
| | | Distribution (2004 – 2008) ^(A) | 4.8% 2005-2006 thermal year 4.6% 2006-2007 thermal year |
| Distribution (2004 – 2007) | 3.5% | LNG Regassification (2005 – 2009) | 1.5% (<i>capacity</i>) 1.5% (<i>commodity</i>) |
| | | Storage (2006-2010) | 1.5% (<i>capacity</i>) 2.0% (<i>commodity</i>) |

(A) The coefficients, reviewed after the Council of State Sentence in September 2006, apply solely to operating costs and amortisation.

For captive market clients in the electricity sector –i.e. households and non domestic clients who chose not to purchase on the free market at 31 December 2006 – the end-user prices are tariffs established by the Authority.

¹⁵ In the natural gas sector, the number of household clients is approximately half that of the electricity sector (30 million) but the significant gap in the number of disconnections is explained primarily by technical and security motives which induce the operator to disconnect the supply in extreme cases only.

The sale of natural gas was fully liberalised in January 2003, but, given the poor competitive conditions still prevailing in the market, the Authority has deemed it necessary to set “reference economic conditions” (such as locally differentiated maximum prices) which suppliers must offer alongside their eventual offers, for better protection of end-user clients¹⁶. From 1 October 2006 the “reference economic conditions”, set by the Authority, may be offered to domestic clients only.

In the natural gas sector just under 90% of the gas consumed by households is supplied with the reference economic conditions set by the Authority and the quota is stable with respect to the preceding year. Given that the regulated conditions are no longer obligatorily offered to non domestic clients only with effect from 1 October 2006, the gas quotas supplied at non market prices in the commercial and service sectors, to industry and to electricity generation are, with the exception of the commercial and services sector where there was a reduction of approximately 9%, relatively stable with respect to those of the previous year (respectively of 64.2%, of 6.4% and of 0.03%).

In the electricity sector, domestic clients are still 100% supplied by the captive market (they become eligible clients only with effect from 1 July 2007); the withdrawals from the grid by non domestic clients supplying on the captive market, reached 72 TWh¹⁷ (31.8% of the potential market). This is mainly composed by small users, over half (75%) at low voltage and fell by approximately 7% with respect to the previous year.

Table 6.2 Regulation of end-user prices at 31 December 2006

| | Electricity | | | Gas | | | |
|---|----------------------------|--|--------------------|----------------------|------------------|------------------------------|---------------------------------------|
| | Large industrial companies | Small-medium industrial and commercial firms | Household sector | Thermo-electric uses | Industrial firms | Commercial and service firms | Very small firms and household sector |
| Regulated tariff exists (YES/NO) | YES ^(A) | YES ^(A) | YES ^(A) | NO | NO | NO ^(B) | YES ^(B) |
| % clients on regulated tariffs | 31.8 | | 100 | 0.03 | 6.4 | 64.2 ^(C) | 89.5 ^(D) |
| Faculty to return to regulated tariff (YES/NO) | YES | YES | Not applicable | NO | NO | NO | YES ^(D) |
| No. of suppliers with obligation to propose tariffs | 169 ^(E) | | | 380 ^(F) | | | |

(A) Only households are obliged to buy electricity at regulated tariffs as they are not eligible clients. Non-household customers may choose whether to purchase on the free market or on the captive market.

(B) The clients in this sector with consumption below 200,000 m³ can accept the reference economic conditions set by the Authority.

(C) With reference to commercial and service companies of any size.

(D) With reference to households only.

(E) Distributors at 31 December 2006.

(F) Data at 30 September 2006 grounded on authorisations issued by the Ministry of Economic Development.

Source: AEEG analysis on data provided by operators.

¹⁶ The results of the investigation into the supply conditions of natural gas in Italy, conducted by the Authority in 2005 and published via Internet on 16 February 2006 (The State of the Market of Natural Gas Sales to End-user Clients in Italy), confirmed the persistence of non competitive conditions in this market segment and thus the need to maintain the reference prices as a form of protection, at least for households.

¹⁷ Similarly to last year, approximately 5 TWh of special tariff regimes are not included.

Special update at 30 June 2007

In view of the full liberalisation of the electricity market on 1 July 2007 – while awaiting approval of the Bill assigning the Government the authority to fully implement Directives 54 and 55 of 2003 – Legislative Decree No. 73 of 18 June 2007 (*Urgent Measures for the Implementation of Community Dispositions in Matters of Liberalisation of Energy Markets*) for the purposes of the information provided at this paragraph defined:

- the mandatory legal unbundling of distributors and suppliers (for distribution companies with at least 100,000 end-user clients) and functional separation between the operation of the infrastructures of the electricity and gas systems (including storage) and the remaining activities;
- the right of access of suppliers to end-user metering data held by the distributors for the proposal of commercial offers and the management of the relative supply contracts;
- the “protection regime” – i.e. standard conditions (reference energy prices, commercial quality and minimum contract conditions) set by the Authority - for households and companies with LV supplies and less than 50 employees and annual turnover not exceeding € 10 million who do not choose a supplier on the free market;
- the “safeguard regime” for non domestic clients with MV supplies who do not choose a supplier on the free market guaranteed by a supplier of the last resource identified, with auction mechanisms, by the Ministry of Economic Development;
- the obligation on suppliers to provide transparent information about the energy mix to clients via the bill.

The Authority, in view of 1 July 2007, adopted the following dispositions:

- the price comparison note, foreseen by the Commercial code of conduct, which the suppliers must present, together with new commercial offers for supply (Resolution No. 110 of 11 May 2007);
- a voluntary register of supplier which satisfy certain requisites of reliability, to permit consumers to have better awareness of the vendors on the market (Resolution No. 134 of 12 June 2007, n. 134);
- the mandatory quality standards (with effect from 2008 for vendors with more than 100,000 clients) for the electricity and gas suppliers’ call centres (Resolution No. 137 of 20 June 2007);
- favourable rules for withdrawal from electricity and gas supply contracts for consumers (Resolution No. 144 of 26 June 2007);
- the dispositions for the regime of “protection and safeguard” of end-user clients in the delivery of electricity sales services in compliance with Decree Law No. 73/07 of 18 June 2007 (Resolution No. 156 of 7 June 2007);
- the discipline of access to data for the formulation of commercial proposals regarding the supply of electricity and/or natural gas (Resolution No. 157 of 27 June 2007).

Information to clients was further reinforced by the promotion of an information service on liberalisation of the electricity market assured by a specific call center activated by the Single Buyer and the publication of a FAQ page on the Authority’s Internet site.