



Authority for Electricity and Gas

ANNUAL REPORT ON THE STATE OF THE SERVICES AND THE ACTIVITY CARRIED OUT

Introduction by the President of the Authority

Rome, 3 July 2003

Presidents of the Senate and the Chamber of Deputies, Ministers,
Authorities, Ladies and Gentlemen,

The Authority for Electricity and Gas today presents its sixth Annual Report on the state of the services and the activity carried out.

Over the last few days the country has experienced serious and widespread interruptions in the supply of the electricity service as a result of exceptional circumstances. The Gestore della Rete di Trasmissione Nazionale (GRTN, the Italian TSO), and distribution companies have introduced a programme of emergency interruptions that have affected a large number of firms and much of the population. The interruptions took place with little or no advance notice, with the people and firms affected being taken completely by surprise in some cases.

The fact that the emergency situation was put right fairly rapidly must not allow us to lower our guard; indeed the experience of the last few days needs to be put to good use to ensure that such situations are not repeated.

The Authority, which is entrusted by law with the task of safeguarding users and consumers, is analysing the event and has launched a fact-finding investigation to clarify the underlying technical factors and identify responsibilities and appropriate solutions, not least with a view to providing an informational input to whichever action the Government may decide to take.

The crisis was caused in part by structural inadequacies of which are all aware, the origins of which date back some time. This underlines the vulnerability of Italy's energy system at a time of profound transformation. Consumers' habits are changing: the increase in summer-time demand has been rapid and in Italy too we are now finding two similarly high peaks, in winter and in summer. Increased awareness of environmental issues has led to the introduction of constraints limiting generating and transmission capacity. The obstacles to the development and upgrading of the country's generating plant and network are familiar to us all.

The difficulties experienced by the electricity system have been increased by the redistribution of competencies and responsibilities as a result of liberalisation. A competitive market framework is more efficient but also more complex than a monopolistic one: the transition needs to be planned clearly, guided firmly, and completed in a short and certain timescale.

Network-based energy systems are characterised by complex interdependencies: if they are to function well and at the same time cope with natural, social and economic emergencies, competencies and responsibilities need to be defined in a precise and stable fashion. The re-merging of the ownership and management of the national electricity transmission grid as envisaged by the Government could make a significant contribution to the task of identifying responsible actors who are able to face up to their responsibilities.

The liberalisation of the energy markets needs to be brought rapidly to completion, not least in the light of the part this process can play in boosting the competitiveness of the European and Italian economies. An unfavourable economic climate should act as a spur for reform, not as a brake on the process

At the global level, the oil markets seem to have settled down after the brief conflict in Iraq. Weak energy demand is keeping prices down: in the immediate term this will benefit consumers, but uncertainties persist over the future development of the international markets.

The liberalised energy markets in Europe and North America have overcome the crisis of confidence following the collapse of important energy companies and the failings of the Californian reform. Liberalisation is proceeding more slowly, but on a sounder basis.

The new operators, who have laid their bets on liberalisation, are growing and creating new organisational structures.

In Europe the restructuring of the energy markets has been accompanied by industrial concentrations that are placing the liberalisation process at risk. Imbalances in the opening of the markets and the dominant role of the major - formerly monopoly - companies are holding back competition.

The two new Directives for the internal market in electricity and gas and the regulation for cross-border electricity trade, which

were adopted by the European Council in June, mark the transition to the second stage of the process of liberalisation and integration in Europe. They testify to the intention of European institutions and governments to drive forward the opening up of the energy markets, put right a number of shortcomings in the previous legislative framework, and respond to the challenges of change.

We need to complete and fine-tune the regulatory framework and guarantee its stability, so that operators can make their production and investment decisions in conditions that are as sure and certain as possible.

In this light, the Authority can assure the Government and Parliament of its fullest cooperation in the task of developing a more systematic primary legislative framework for energy issues and bringing it more closely into line with the evolving European legislative and market context.

Bill AC 3297, which re-organises the energy sector and anticipates some of the changes envisaged at the European level, is currently going through Parliament. Its many provisions include the acceleration of electricity liberalisation on the demand side, the unification of the ownership and management of the electricity grid, the unbundling of the distribution networks, and incentives for new infrastructure investments. The Authority has provided an input, as envisaged by its institutional role, and has submitted observations and contributions to the Government and to Parliament.

The liberalisation of the energy markets

There are three main strands to the process of opening up Europe's energy markets: free access to networks, as guaranteed by the separation of transportation from the production and sale of energy; freedom of choice for final customers; and competition among producers. Considerable progress has been made thus far.

Italy has made a substantial contribution to this process by adopting measures nationally that actually go further than the minimum degrees of market opening laid down at European level.

Seven years ago no customers at all were able to exercise the right to choose. Today, on the other hand, all gas customers in Italy are free to choose their supplier and eligible electricity customers account for two-thirds of overall demand. The ability to exercise the right to choose is still constrained, especially for small gas consumers, by the low degree of competition on the supply side. However, the market is moving: more than 50% of large electricity customers have changed supplier and all of them have re-negotiated their contractual conditions, while 10 to 20% of gas customers have changed supplier. In both cases the percentages are high compared with the European average.

Access to the networks under non-discriminatory conditions is guaranteed. Transportation tariffs are set with respect to the costs of an efficient undertaking and devised in such a way as to

encourage enhanced efficiency and investment to develop the network.

There were fears that the opening of the energy sector to the market would lead to a reduction in the quality of the service, undermine its universal nature and act against the interests of the weakest segments of the population. As the liberalisation process has gone ahead, new rules and guarantees have been put in place to prevent this from happening and at the same time ensure that significant improvements would take place.

The previous system provided only weak quality guarantees, with the parameters being defined unilaterally by operators. As a result of regulation, quality levels regarding parameters such as the time required to provide estimates, connections, the activation of new contracts, or similar services, are based on standard compulsory criteria drawn up by the Authority. New supplies must be activated or existing ones deactivated in no more than five working days, compared with the previous system where the timescale, set unilaterally by the operator, was between 10 and 20 days and failure to respect this timing generally did not attract any penalties. Customers are better protected now: failure to respect the envisaged timescales gives rise to automatic compensation payments. In 2002, over 50,000 such payments were paid in the electricity service alone. The rules for the electricity service in the regulatory period 2004-2007, now the subject of consultation by the interested parties, introduce further safeguards for customers and extend the regulation of commercial quality to smaller distribution companies, which were previously exempt.

The cost of electricity and gas for final customers is being studied in order to bring it gradually down towards the European average. This will require coordinated actions at various levels, the fiscal one included, and will be a significant testbed for the entire liberalisation process.

Prices on the free market are lower than the tariff levels for similar supplies. Tariffs are coming down only slowly as a result of the continuing dependence of the Italian energy system, especially in the case of electricity, on sources that are more expensive than the European average. The indexation of tariffs to the international prices of energy raw materials has stood up well to the test of the first four years of application, protecting consumers and enabling producers to optimise their purchasing strategies. At the beginning of 2003, following decree law 193 of 4 September 2002 (as converted) and the Prime Minister's decree of 31 October 2002, the indexation system was reviewed to lend more weight to those features designed to keep price fluctuations to a minimum. As a result, the inflationary effects of rises in oil prices and the corresponding deflationary impact of reductions are diluted over time. The tariff element covering transportation and distribution costs is coming down constantly and gradually as a result of the price cap.

Competition remains the most effective means of keeping costs down and reducing prices. The gradual, and necessary, convergence of prices towards European levels is turning out to be slower than envisaged.

The actors who make the choices are the energy companies: it is they who evaluate technological and location options, and make the profits and assume the risks that are intrinsic to them. Slowly, more favourable conditions are emerging for operators to make these choices, such as the divestment of formerly publicly-owned companies and a review of the constraints imposed at the central and local levels. Experiments in diversification, based on the "multi-utility" model, have spread economic value.

The Authority for Electricity and Gas and the Antitrust Authority have recently initiated a joint fact-finding investigation on the state of liberalisation of the electricity and natural gas sectors, since both are concerned about the delays in the process and the obstacles standing in its way.

The new European Directives

The new European Directives mark an important step forward. They include the following provisions: the obligatory unbundling of the networks from the companies using them; regulated network access; the establishment in each country of a regulatory authority for gas and electricity, independent of companies and the interests of the two sectors; and the right from 1 July 2007 for all customers to choose their supplier (1 July 2004 in the case of non-domestic customers).

Only the last of these changes is a new development for Italy, where the other provisions have to a large extent already been applied.

With the implementation of the Directives of 1996 and 1998, Italy set limits on the share of the national electricity and gas markets held by the principal, formerly monopolistic, operator. The Italian rules are stricter than those applied in most of the other EU Member States; however, they are not sufficient to reduce the market power of the dominant operator to a level that is compatible with a competitive framework. The difficulty is caused by inadequate network interconnections, as a result of which the market power of Italian companies has to be measured at the national level rather than against the wider European market. Further steps to impose competitive conditions are being held back by the fear that some major companies in other Member States might enjoy undue advantages in competing with Italian firms as a result of the continuing existence of national markets that are in effect largely impenetrable, and the privilege conferred by vertical integration.

The new Directives have a valuable role to play in achieving a liberalised European energy market, but cannot in themselves provide the whole solution. A constant effort will be needed to dismantle actual and legal barriers, incentivise a more entrepreneurial approach and educate operators and consumers. To ensure that the decisions taken in the general interest are balanced ones, the interests of consumers and new operators must not count for any less than those of the established energy companies.

Security of supply needs to be pursued taking Europe as a whole as a reference rather than the individual national markets, as

was previously the case: this would reduce the costs involved and at the same time make security needs more compatible with the efficiency of the system, freedom of enterprise and environmental protection objectives.

It is absolutely essential for interconnections to be improved, through major public projects and the up-grading and extension of the existing infrastructure, including by actors other than the present owners and operators of the networks. In the case of Italy, the cost-effectiveness of development projects will be assured by Authority decisions that are in line with the recommendations of the Government and Parliament.

With respect to the bigger operators, company concentrations should be subject to the condition that the firms involved relinquish control, by means of divestment operations, of the major transportation networks. The unbundling of the ownership structure of the major networks, which it was not possible to include in the new European Directives, remains an objective for the future completion of the liberalisation process.

In the case of gas, the main hindrance to the creation of a competitive European market is the concentration of the sources of supply and the disproportionate weight of a small number of primary suppliers, especially those in Russia and Algeria, which have a monopolistic tradition. The situation is however changing with the entry of new suppliers.

The action of the European Commission to eliminate contractual clauses tying the gas to specific national markets will help in

this respect. Only with the creation of a European wholesale market will the benefits of the liberalisation at the national level of the commercialisation and sale of gas to final customers be achieved in full.

The new Directives have the potential to give a new impetus to liberalisation and help overcome the fear of an excessive imbalance in liberalisation processes, on condition that the new provisions are implemented in a rapid timescale and the European Commission's action to protect competition becomes ever-more firmly established.

The electricity service

Over the last year, significant advances have been made in the liberalisation of the Italian electricity sector. The divestment of Interpower in January 2003 was the final stage in the disposal of Enel S.p.A.'s plants, for a total of 15,000 MW, as envisaged by Legislative Decree 79 of 16 March 1999 (hereafter Legislative Decree 79/1999). The reduction in the degree of concentration in generating capacity was followed by the lowering of the eligibility threshold, which gives more than 150,000 customers access to the free electricity market for the first time.

The excessive costs of electricity production weigh on captive customers, for whom tariffs continue to be set administratively, and on customers in the free market, who are seeing the margins of advantage offered by bilateral contracts drawn up on the free market continue to shrink. Overall, the price of

electricity continues to be higher than the European average and is exposed to trends in international fossil fuel prices.

During the early stages of liberalisation, customers transferring to the free market could obtain discounts of up to 15% on the price paid on the captive market; today the advantage is shrinking to 5% at most. This poses questions as to the real degree of market competition on the electricity production side. Only with the introduction of transparent market mechanisms will it be possible to see the full effects of the potential of competition to bring down prices and the introduction of regulatory mechanisms to discourage possible anti-competitive conduct by actors holding a significant degree of market power. The greater price transparency following the opening of the electricity exchange could in the medium-term also have positive effects on captive customers.

The price of electricity for Italian households fell by 1.5% in 2002 compared with the previous year. The extension of the reference period for tariff updating at the end of 2002 shifted to the first half of 2003 an increase deriving from the rise in the international prices of oil products in 2002. The inflationary impact of this was subsequently re-absorbed.

The electricity price components deriving from fixed production, transmission and distribution costs have fallen by 18% in nominal terms over the six years of the Authority's activity, from 1997 to 2003.

Consumers continue to pay a high cost for incentives for the use of renewable sources, which in 2002 alone amounted to more than 2,200 million euros, or just under 10% of the average tariff. The move to more market-oriented incentive systems such as green certificates should be welcomed. The difficulties encountered in getting the new systems off the ground can be overcome; we must avoid any temptation to return to previous systems envisaging a guaranteed price for indeterminate quantities, like the one set by Interministerial Committee on Prices (CIP) provision 6 of 29 April 1992 (hereafter CIP 6/1992), as a result of which over 70% of the incentivised electricity produced in Italy today comes from so-called "assimilated" plants rather than plants using renewable energy sources.

The costs making up the electricity tariff also include, with effect from 2000, that of the refund to production-distribution companies of non-recoverable costs incurred for the production of electricity, or stranded costs. Decree law 25 of 18 February 2003, as converted, introduced a cut-off point of end-2003 for such payments, except in the case of Nigerian gas purchases by Enel, for which they remain in place until the end of 2009.

In view of the extension of the free market to all domestic customers, the electricity tariff needs to reflect the costs of the service. The tariff inherited from the past is lower than the cost of the service for categories of users with low contractual power and consumption levels; the mechanism whereby this is balanced out at higher consumption bands can penalise large families, even where these are economically disadvantaged. The difference with respect to costs has fallen in the last few years,

without any ill-effects for disadvantaged categories. But special provisions are required to protect economically vulnerable customers: the Authority has published a consultation paper seeking indications from the Government regarding social policy decisions. The provisions envisaged by the Authority will establish criteria for access to the special tariffs that are transparent, objective and designed to minimise the burden on those customers who are not eligible.

To reduce Italy's electricity price disadvantage we need to see a more highly diversified range of fuels used in thermoelectric generation, with a preference for those resulting in lower production costs, and the modernisation of the country's generating plant, which at present are characterised by low levels of energy efficiency.

National generating capacity currently satisfies about 83% of electricity demand, with the remaining 13% coming from imports, using the interconnections to the maximum. The portion of national production that can compete in price terms with the electricity supplied by the rest of Europe is still too small. We need to develop more competitive generating facilities if we are to bring the average Italian price closer into line with the European one: the spur of competition can significantly speed up this process.

A joint effort by all the institutions involved to remove the obstacles holding back the renewal of production capacity and of the network is a priority requirement. The potential effect of high electricity prices in attracting new investments is being

neutralised by the continuing uncertainty over the prospects for a real opening of the Italian market under competitive conditions, the availability of primary energy sources such as natural gas at reasonable prices, and the still uncertain institutional division of competencies in terms of the issuing of permits, the imposition of environmental constraints, and taxation.

The renewal and expansion of generating capacity is made more urgent by the increased and changing characteristics of electricity demand. Compared with an increase in demand of 1.8% in 2002, national electricity production increased by just 1.6% in the same period. The working reserve available to the Italian electricity system has reached alarm levels in terms of security of the service.

To cope with a 2% annual increase in demand, about 1,000 MW per year in new generating capacity is needed. A more rapid increase is needed to cope with the growth in peak demand. And the development of new capacity, in the form of high efficiency plants, needs to be even more rapid to replace the least efficient existing plants and reduce costs and the pressure on imports. The rate at which new capacity has been coming into operation in recent years is insufficient.

Between 2002 and the first few months of 2003, 24 thermoelectric generating stations were authorised, corresponding to just under 12,000 MW in new installed power (the process was speeded up by the legislative provisions designed to facilitate authorisation procedures). The new plants

will have to be built in the space of just a few years if they are to produce the desired effects. Applications for new capacity totalling over 39,000 MW have been submitted to the Ministry for Productive Activities but a significant number of them still needs to be evaluated.

We have good reason to fear that more time might be needed than had previously been hoped for the renewal of production capacity in the Italian electricity sector.

We need to adopt procedures that are suited to a system that can now be considered, much more than in the past, as being systematically exposed to the risk of shortfalls. We need to review the conditions of plant unavailability and the planning of maintenance works; the use of interruptibility clauses in supply contracts and other instruments for the management of demand; the planning and management of the grid in respect of internal bottlenecks and the respective responsibilities of the GRTN (TSO) and the distribution companies.

Elasticity in demand to match the different prices that reflect the different costs of the service at peak and other times might be helpful. In the wholesale market the exchange will provide sufficient scope for such diversity. Retail customers too can be elastic in the timing of their highest consumption: some suppliers also extend multi-hour tariff options, as set out in the regulations issued by the Authority in 1999, to domestic customers, and it is to be hoped that the practice will become more widespread, along with the digital meters that make it possible.

For as long as the anomalous situation persists where the average wholesale price is markedly higher than the European one, we are faced with a problem of allocation of import capacity, which is scarce with respect to demand. Interconnections are only partly within the remit of the Italian authorities: we always need to reach agreement with the authorities of the neighbouring countries in question.

Agreements between the Italian authorities and the regulatory bodies of these countries have led thus far to administered allocations based on capacity shares that are proportionate to the amounts applied for, as long as they exceed a minimum threshold, with reserved allocations for final customers agreeing to interruptions in supply when the security of the system so requires.

The benefits of purchasing abroad have in this way been spread to a large number of customers, with favourable conditions for those high-consumption companies which, in view of their sensitivity to energy costs, have found it cost-effective to install equipment to cope even with unannounced interruptions in supply.

The recommendations made by the Minister for Productive Activities pursuant to Law 273 of 12 December 2002 regarding the capacity to be reserved for particular categories of customers will provide an important input to the import rules for 2004.

The new European regulation for electricity trading prescribes the adoption of market-based methods with effect from 1 July 2004. Fears have been expressed over the harm the Italian economy might suffer as a result of higher supply costs resulting from the adoption of an auction system for transmission capacity.

Market-oriented methods are diverse and can produce diverse effects: we need to identify the one most conducive to low-cost imports. Even in an auction-based system, the average final cost to Italian consumers after the proceeds of the auctions were returned to the system could be lower than the previous one. For those sectors whose competitiveness depends most closely on the cost of the electricity consumed during production processes, we need to seek when implementing the European regulation to create conditions that do not penalise them during the transition of the Italian electricity towards a more normal situation.

The electricity grid and the organised markets

The plan to bring the ownership and management of Italy's electricity transmission grid together appears to be timely, on condition that the new grid operator is independent of any generation and sales undertakings. The unified company will have a consistent approach and sufficient assets to meet the challenges involved in reinforcing the infrastructure and ensuring efficient management, as compared with the best European business practices.

Even before these functions are merged we will need to encourage and accelerate the projects for the development and improvement of the grid. In proposing transmission tariffs for the second four-year regulatory period that opens in 2004, the Authority intends to make the development of the electricity grids more cost-effective by adjusting the tariff mechanisms for the return on investment.

The task of up-grading electricity transmission capacity needs to go hand in hand with criteria of cost-effectiveness in its use. In merit order dispatch, plants that are able to guarantee the greatest efficiency and therefore the lowest prices are given priority in the use of the grid infrastructure. The Authority, which drew up the rules for merit order dispatch in April 2001, is committed to removing the technical and organisational difficulties that have delayed its implementation, with a view to introducing the system at the beginning of 2004. We have been working closely with operators to overcome the difficulties involved, including the fact that we only have access to incomplete information on the consumption profiles of eligible customers.

The delays that have held back the launch of merit order dispatch are linked to the difficulties encountered in defining the bidding system for the sale and purchase of electricity, and more specifically the electricity exchange, which will complete the liberalisation process launched in 1999. Within the terms of its remit and in cooperation with the Ministry for Productive Activities and the other bodies involved, the Authority is working to ensure that the exchange can be launched in the

shortest time possible. The Gestore del Mercato Elettrico Spa (Electricity Market Operator), which was set up pursuant to Legislative Decree 79/1999, has done a considerable amount of preparatory work in drawing up legislative and IT instruments for the running of the electricity Exchange.

Pending the entry into operation of the Exchange, the Authority has sought to introduce greater transparency to the process of selecting the bids formulated by electricity producers to supply the captive market. A transitional system began operating on 1 July, drawn up in collaboration with the Ministry for Productive Activities, the Authority and the GRTN (TSO), after consultation with operators. Free market customers use bilateral contracts, and will continue to do so.

The protection of those customers who are still "captive", which pursuant to Legislative Decree 79/1999 is the responsibility of the Acquirente Unico Spa (Single Buyer), needs to be guaranteed, including on the basis of the preparatory work done by that company.

The electricity metering service, which is distinct from the distribution service, will acquire a structure that is more in keeping with the development of the liberalised market: the rules for the second period of regulation will pave the way for this. The possibility for consumers to be promptly informed of their consumption patterns and the resulting costs will enable them to play an active role in the electricity market and increase overall elasticity of demand with respect to price

variations, to the benefit of price stability and the efficiency of the system.

The effects of regulation on the technical quality of the electricity service can be seen in the reduction in service interruptions attributable to the distribution networks, therefore excluding those arising from shortages of available electricity in the system as a whole or from natural disasters. At the beginning of the liberalisation process the incidence of these interruptions was much higher in Italy than in the other principal EU Member States, with excessively high variations between one part of the country and another. In 1999 the Authority introduced rules based on improvement targets, allowed costs and penalties. The duration of the interruptions covered by the rules (unplanned and lasting more than 3 minutes) has fallen from an average 228 minutes per customer per year in 1999 to 130 minutes in 2002. The most marked improvement has been in Central and Southern Italy, evidencing a process of geographical convergence.

The regulations will be confirmed more or less as they stand for 2004-2007. The experience gained and our collaboration with the operators has made it possible to improve some of the rules, such as the one regarding the handling of interruptions caused by third parties or force majeure. Measures to record voltage fluctuations are gradually being introduced, with the caution dictated by the difficulties experienced by the distribution companies in applying them. For medium-voltage customers individual compensation payments will be introduced in the event of interruptions exceeding the limits. It will also be

possible to draw up distribution contracts that envisage higher individual quality guarantees than those defined by the Authority.

The natural gas service

Although in a context characterised by strong dependency on imports and the preponderant role of the dominant operator, the liberalisation of the gas sector in Italy has been more incisive than actually required by the European Directive. This is all the more true in the light of the significant delays experienced in other countries. Since 1 January 2003 all final customers have the right to choose their supplier. Legislative Decree 164 of 23 May 2000 (hereafter Legislative Decree 164/2000) introduced the obligatory unbundling of distribution, transportation and storage from other activities, with the regulation of this essential infrastructure being carried out by the Authority.

For distribution tariffs, the Authority has established a standard cost based on the average costs of a representative sample of companies, thus introducing an emulative mechanism. The element reflecting the capital invested was amended to comply with the rulings of the Administrative Courts, which require tariffs to be based on concrete data, the reference parameter being the investment costs declared by companies holding certified annual accounts. The effect of this is to reduce the spur to productive efficiency, at least in the case of the larger operators.

In the case of transportation tariffs, the accounting evidence of the dominant operator - on which 96% of the infrastructure depends - has been carefully scrutinised in order to avoid a purely bottom line reimbursement. The tariff mechanism lessens the impact of distance and is based on pre-booked transportation capacity entering and leaving gas pipelines and on the volumes of gas transported. The mechanism facilitates the progressive unhooking of commercial from physical flows and fosters competition, including through the increased liquidity of the market.

In view of its competition-oriented features and flexibility, the entry-exit criterion was recently indicated by the European Commission as the model to be adopted in Member States. The formulation recently proposed by the French regulator for gas transportation tariffs also echoes the one adopted in Italy.

Another objective of the new tariff mechanism is to encourage firms to carry out new investment in the sector and, at the same time, to increase the flow of gas carried in the existing infrastructure. Since the adoption of this mechanism in October 2001, an increase of over 10% in available transportation capacity has been recorded, as a result of efficiency improvements and new investment on the network. The combined effect of the increased capacity and the impact of the price cap put in place to generate these efficiency improvements led to a 7% reduction in tariffs in 2002 compared with the previous year. The fall has been confirmed in 2003.

The Authority has been the first in Europe to establish criteria for the tariff for access to regassification and storage facilities. As Italy has sufficiently large storage facilities to ensure much lower costs than in other European countries, the reference to costs has enabled the tariffs paid by import and sales companies to be reduced by 40% compared with 2001. Moreover, the structure of the charges for price-capped reserved capacity is such as to induce storage companies to improve their productive efficiency through increases in available capacity. The 2002-2003 thermal year alone has seen a 12% increase in storage capacity for third parties.

Access to storage is a key element in encouraging the entry of new operators. The current monopolistic structure of the storage sector is not imposed by reasons of economic advantage to the system and can be replaced.

The storage tariff criteria are intended to incentivise the entry of new companies, leaving them free for four years to draw up their own tariffs for the new fields. They are also intended to control the current monopoly situation by setting a regulated tariff in place of the previous seasonally-differentiated price mechanism.

The effects on final prices of these actions on infrastructure costs are still limited. The prices paid by industry are starting to fall: by an estimated 17% net of taxes in 2002, as a result of the lower cost of the raw material. Even taking into account the low degree of data comparability, we can say that in 2002 the gap between Italian prices and the European average narrowed (from

8% over the average, to 5%). The remaining gap appears to be largely attributable to differences in transportation costs, both domestic and international; there is scope for further reductions.

Prices are continuing to fall in 2003 following the renewal of contracts along free market lines.

Exceptions to this are supplies for high energy-consuming firms, which in the past benefited from special arrangements and were able to recover the fixed cost element of the price.

In 2002, gas prices net of taxes for the domestic sector fell more markedly in Italy than in the rest of Europe, for all consumption categories. Italian prices still remain relatively higher, however, with the exception of those applied to the lowest consumption categories. The differences do not appear to be justifiable in structural terms. According to data produced by ISTAT (the National Statistics Institute), the average annual price of gas fell by almost 5 percentage points in 2002, with a saving for the average consumer of about 32 euros per year. The fall in the price of gas is entirely attributable to the fall in the cost of the raw material: the reductions expected as a result of competition have not materialised.

Following the complete liberalisation of demand at the beginning of 2003, the Authority has intervened by obliging sellers to continue applying the existing economic terms, in order to avoid price rises occurring in the interim period during which competitive forces have not had time to exercise their

price-reducing effects in this sector of the market. The need to adopt provisions to protect final customers indicates that the opening of the market on the demand side and the separation of the potentially competitive stages of production from monopolistic ones does not automatically generate competition and lower prices.

A consultation exercise on the commercial code of conduct for the sale of gas to final customers is currently under way. This activity is now completely open to companies that in some cases are new and in any case different from those handling distribution. The code of conduct sets out the general principles for transparency and the minimum requirements that each gas sales company will need to comply with.

After consultation, and having sought the opinion of the Antitrust Authority, the Authority is about to approve the rules for safety checks on domestic gas installations. In order not to obstruct competition in the sale, installation and maintenance of domestic plants, distribution companies have responsibilities that are limited but essential in preventing dangerous situations and guaranteeing the physical safety of persons.

The gas infrastructure and the organised markets

The unbundling process that led to the creation of the company Snam Rete Gas Spa and its subsequent quotation on the stock market was a positive advance in the introduction of market conditions. The transparency resulting not only from the unbundling but also from compliance with the obligations

imposed on listed companies has enabled the market to take off and the regulator to acquire valuable information.

Many obstacles still lie in the way of the creation of a competitive gas market. These include the concentration of supply in the wholesale market, the bottlenecks in transportation capacity from abroad, the cost structure for new import infrastructure, which discourages assertive conduct by new operators, and the constraint of take or pay contracts.

The dominant operator still holds a significant share, about 70%, of import flows, although this is much lower than in 2000 (86%) as an effect of the ceilings imposed by Legislative Decree 164/2000. However, as the Antitrust Authority has pointed out, the arrangements chosen by Eni S.p.A. to comply with the requirement to divest part of its gas holdings favoured some potential competitors, did not follow transparent and non-discriminatory procedures, and led to the saturation of gas transportation capacity in the international high-pressure networks.

We need to move on from a gas market limited by national borders, characterised by one-way import flows and in effect controlled by the dominant operator, to a market that sees two-way cross-border flows within a competitive framework. We need to oversee market conditions in order to prevent forms of conduct that could potentially hinder the play of competition.

The availability of more gas as a result of the diversification of sources and the construction of new infrastructure, is a

necessary pre-condition for the development of a wholesale market for natural gas. We need to ensure that operators in this market are able to compete on an equal footing. To facilitate the entry of new gas to our system, the Authority has provided for incentives for new investments. However, none of the many infrastructure projects, which envisage a substantial increase in capacity in terms of liquefied natural gas (LNG) regassification terminals and new pipelines, are yet up and running.

The creation of a gas exchange in Italy is increasingly becoming a focus for study and debate. A trading forum operating under transparent rules would provide instruments of flexibility and liquidity that would benefit operators, especially new ones, who have a reduced portfolio of contracts for the purchase of the raw material. A virtual exchange within the entry-exit system would favour the matching of demand and supply and the drawing up of multiple contracts with potentially diverse physical delivery points; contracts for imports over very high distances; and around these, a large number of local re-sale contracts, giving rise to a 'hub' arrangement. The gradual creation of a market of this nature could be the task of a technically capable and neutral actor that could easily generate a sufficiently high degree of negotiating activity to attract a significant number of operators. Any candidate for this task needs not just to develop the necessary capacity and capabilities but also to convince operators of its neutrality.

The transformations currently under way, generated by the liberalisation and regulation of access, are profound and far-reaching. In the course of 2002, short-term and spot contracts

accounted for 5% of total trade, and from 2000 to 2002 the number of importers rose from 3 to about 20. The number of operators, and the role played by consortiums of consumers, is rising in all those stages of the chain that are open to competition. The number of operators having access to transportation rose from 4 in 2000 to 27 in 2002, while that of operators with storage contracts rose from 2 to 14 over the same period. In the industrial sector about 15% of volumes were subject to changes of supplier between 2000 and 2002.

The Authority has taken action to facilitate new investments in import structures by recognising exclusive long-term access rights for operators taking on the cost of new investment in gas pipelines or LNG terminals. To provide favourable conditions for access by other companies, priority allocations were limited to 80% of new capacity. This provision was taken up again in Law 273 of 12 December 2002. The new European Directive introduces a system of access charge exemptions in the event of new infrastructure investments.

The fear has been expressed that increases in import capacity in a context of weak demand might lead to excess supply. It is difficult to evaluate developments in demand and supply precisely, in view of the uncertain economic cycle and the construction times for the infrastructure and electricity generating plant that are the major component of new demand. In view of system security requirements we must ensure we do not err on the side of a possible shortfall in supply. The creation of a liberalised European market enables us to set demand projections in a wider and more stable context. For the

development of a competitive market and the availability of gas, infrastructure capacity should not be tailored precisely to demand but should offer greater leeway; otherwise operators already holding contracts with customers would continue to enjoy a position of excessive advantage.

The Authority has taken steps to encourage the development of the wholesale market, along with a range of flexible forms of negotiation that can respond to the needs of the system. A secondary capacity market is envisaged. A requirement to provide interruptible transportation and storage services has been introduced. The priority system for the allocation of access is limited to average daily capacities. The possibility of trading gas within the system through the separate allocations of entry and exit capacity is envisaged.

Well aware of the need to continuously up-date and review the rules in order to meet the requirements of a developing market, the Authority has followed the lines laid down in Legislative Decree 164/2000, which favours company self-regulation through codes of conduct. The Authority's task is to set out the general principles and monitor conduct. This formulation has favoured the participation and interaction of operators, reducing the need for recourse to coercive powers and helping to limit the number of disputes.

The transportation companies, Snam Rete Gas and Edison T&S, have already submitted their network codes, which are based on rules laid down by the Authority itself. The codes are due to be

published soon in view of the new thermal year beginning this October.

Work is currently under way on the rules for the storage and distribution codes.

Protection of the environment and energy efficiency in final uses

Italy ratified the Kyoto Protocol in June 2001. Energy accounts for 80% of greenhouse gas emissions and is therefore a key element in respecting the commitments we have entered into.

The emission-reduction programme envisages the use of market instruments.

Starting this year green certificates have been introduced on a trial basis. Electricity producers and importers must ensure that at least 2% of the electricity they introduce to the network comes from recently constructed plants using new renewable sources, or obtain green certificates, either through bilateral negotiations or on the market set up by the Market Operator. The market price of the certificates provides greater incentives than those available to operators of wind and geothermal plants benefiting from the arrangements set out in CIP 6/1992, but less than those applied to photovoltaic and biomass or waste combustion plants.

Greater efficiency in the use of energy is another means of achieving the Kyoto objectives. The Authority is working on the

new framework for the efficient use of energy, as introduced through two ministerial decrees in April 2001 and envisaging programmes promoted by electricity or gas distributors and other operators. Obligations on electricity or gas distributors have been introduced, measured in terms of quantities of energy saved by consumers. Energy efficiency certificates are envisaged for operators carrying out eligible projects. The market in energy efficiency certificates will enable the development of programmes by companies with the capacity to do so, thus keeping the overall cost of the operation to a minimum. Another aim of the provision is to improve the reliability of the national electricity system by reducing the rate of growth of national electricity consumption and generating savings of over 7 million tons oil equivalent over five years.

Institutional matters

The reform of Title V of the Constitution envisages changes to the framework of competencies in the energy field. The government's new constitutional bill reviews the division of competencies between the State and Regions and the matters governed by the respective levels of legislation: more specifically, the production and transportation of electricity and gas, reserves, and strategic stores of gas come under the sole competence of the State.

The difficulties experienced in developing energy infrastructure highlight the need for a concerted approach by the institutions

based on a clear definition of responsibilities, without which the national energy system is exposed to risk.

The case of the environmental tax on the owners of gas pipelines, as introduced by the Region of Sicily, illustrates the danger of uncoordinated actions. The Authority rejected the transportation company's request to include the cost of the tax in the natural gas transportation tariff, considering the tax to be unlawful. This avoided a situation arising where a tax imposed by a regional administration would have been applied to consumers throughout the country, bringing about a distortion of competition. The Courts agreed with the Authority's interpretation and suspended the application of the tax.

This redefinition of institutional roles also affects relations between the national and European institutions. The new Regulation on electricity trading gives the European Commission wide-ranging direct powers in the area of tariff harmonisation and the handling of congestions. The national institutions have a key role to play in the formation of opinion in the European institutions.

The enlargement of the European Union poses new problems and opens up new opportunities. Collaborative agreements between regulatory bodies are providing new members with support in their efforts to bring themselves into line with the European Directives in energy matters. As part of the EU programmes, the Italian Authority is providing assistance to the regulatory bodies of Lithuania, the Czech Republic and Turkey.

The development of an integrated energy market in the Balkans is the new challenge facing the governments of that area and of some EU countries, Italy included, along with the European Commission. The Italian and Greek Authorities are working hard to share the experience the European Union has built up in energy market issues with the newly established regulatory authorities of the countries of south-eastern Europe.

During this current year the mandate of the first Board of the Authority comes to an end. On 4 December 1996 the Authority began operating in a context characterised by a tradition of monopolies and public companies. The urgency driving the privatisation process has sometimes overshadowed the complexity of the liberalisation effort. The presentation of the reforms has been accompanied by widespread fears.

In less than seven years the progress made has been impressive. The regulation of public utility services, and energy services in particular, is nowadays a given factor in industrialised countries. Our common objective is the development of competitive, dynamic systems that include adequate guarantees of security of supply, including on a long-term basis, and public service obligations. Italy is taking a rightful part in the development of projects and experiments in this area. A significant event in this context is the organisation of the "World Forum on Energy Regulation" in Rome this coming October, during Italy's Presidency of the European Union, with the participation of associations of regulatory bodies from all over the world and the support of the European Commission, the World Bank, and the International Energy Agency.

The regulation of public utility electricity and gas services in Italy is an on-going and developing phenomenon. It would not have been possible to achieve the results that this Board can now point to without the independence granted to the Authority by its founding law and the collaboration it has enjoyed with the other institutions of the State and the associations operating in the sector.

The Finance Corps, and in particular the Division responsible for the protection of competition and the market, has made a valuable contribution to our supervisory and monitoring tasks. To them goes our warmest appreciation.

In carrying out its institutional role, the Authority has come to realise that actions alone are not enough and that an intense effort is needed to explain the reasons for these actions. A balanced liberalisation requires a widespread awareness, which is built up gradually. We need to clarify the scope of the planned transformations, the benefits that they can bring, the essential conditions for their success, the need for actions to safeguard the public service nature of the sector, and the fact that it is not possible in the short-term to bring about major reductions in tariffs and prices.

Alongside its statutory activity, the on-going work of illustrating and explaining to public opinion the nature, characteristics and limits of the process under way has therefore been an integral part of the Authority's activity.

This activity has been carried out with the convinced collaboration of the Authority's employees, to whom it is my great pleasure, on behalf of the Board, to express my and their heartfelt thanks for the commitment, dedication and skill they have devoted to their tasks.

At present the Authority has just over 100 employees. The competitive recruitment process currently under way will bring us up to the legally envisaged limit of 150. We are still understaffed with respect to our growing workload, and our structure appears to be markedly smaller than those of other European regulatory authorities with similar tasks.

This Authority faces growing and complex tasks. We are sure that the team that has grown up in the course of our mandate will succeed, under the guidance of our successors, in responding to the growing needs of operators, consumers and the country as a whole.