



REPUBLIC OF AUSTRIA  
FEDERAL COMPETITION  
AUTHORITY

# **General investigation of the Austrian electricity industry**

under section 2(1)(3) Competition Act (Federal Law Gazette I No. 62/2002)

2<sup>nd</sup> interim report

**Vienna, April 2005**

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# 1 Introduction

Recent and announced electricity price increases hitting both the mass and large consumer markets, and the threat of further price rises ahead led to intense public discussion of the competitive situation on the Austrian electricity market in the second half of 2004. Against this backdrop the Federal Competition Authority (FCA) launched a general investigation of the electricity market pursuant to section 2(1)(3) Competition Act<sup>1</sup>(a so-called “sector investigation”), to be conducted in close cooperation with Energie Control GmbH (E-Control) as well as involving the Federal Cartel Prosecutor.

The first interim report on the investigation (published in December 2004) contained generally available information and an analysis of most of the responses to a consumer opinion survey. It was not possible at that time to analyse the responses from power suppliers, traders, and system operators due to the fact that some deadlines for returning the questionnaires had not yet been reached, and that some of the information provided was inadequate.

The first interim report singled out the following questions as requiring further study<sup>2</sup>:

1. Is there empirical evidence to support or disprove the factors widely blamed for the energy price increases, including demand growth, primary energy price movements and the much criticised linkage with exchange quoted prices? Are they quantifiable?
2. If there is little significant competition (particularly from foreign suppliers), what are the reasons for this? What barriers to entry are there? Could new legislation mitigate or remove these barriers?
3. What role do the system charges, which are often alleged to be excessive, play in this connection? Is there cross-subsidisation by system operation of

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<sup>1</sup> A general investigation of a business sector where circumstances indicate a suspicion of limitation or distortion of competition.

<sup>2</sup> General investigation of the Austrian electricity industry by the Federal Competition Authority, 1<sup>st</sup> interim report, December 2004, page 56, posted at:  
<http://www.bwb.gv.at/NR/rdonlyres/0F08C8BB-9F4A-4D90-B766-84FA85B66452/15968/1ZwischenberichtStrom061204.pdf/>.

activities in which companies compete in the market, and if so does this raise legal concerns?

4. Do some suppliers have dominant positions, and do these imply special responsibilities?
5. To what extent might changed circumstances point to a need to reassess and modify EnergieAllianz and the “Austrian electricity solution”?
6. Is there any convincing, tangible evidence of anticompetitive collusion or other unlawful practices that would stand up in court?

The first question, which relates to market fundamentals, and the extent to which wholesale price formation is an accurate reflection of market forces, is separately discussed in the last chapter of this report. The second, third and fourth questions form a group of issues all relating to limits to competition in the electricity market and dominant positions held by suppliers, especially in the retail market, as well as possible special responsibilities of such dominant companies. This second complex of issues cannot be addressed without precisely defining the market and its boundaries. Only in this way is it possible to assess which companies are competing in which retail markets, and which competitive forces are at work in given markets.

- The chapter on market definition uses the survey data available to date to tackle the question as to the relevant product markets and their geographic boundaries over the observation period from 2003 up to the present, as well as the closely related issue of barriers to entry.
- The following chapter identifies companies that appear to have dominant positions in the light of the interim results of the analysis. It also asks what special responsibilities dominant companies might have.
- Chapter 7 reassesses the EnergieAllianz and “Austrian electricity solution” mergers in the light of the interim findings of the sector investigation, thereby providing answers to question no. 5.
- The chapter on the logic of retail pricing looks in depth at the question as to whether the energy price increases and the reasons advanced for them are justified.

Reliable evidence of anticompetitive collusion and the like (question no. 6) was not found.

- **Summary and conclusions**

The second phase of the general investigation of the Austrian electricity industry pursuant to section 2(1)(3) Competition Act (“sector investigation”) focused on analysis of Austrian electricity companies’ responses to requests for information from the FCA. While the information provided by actual and potential alternative electricity suppliers, and consumers was comprehensive and detailed, the survey of “local players” was an uphill task. In many cases the responses omitted important points (e.g. purchasing and selling prices and volumes, and switching), and repeated requests were required to obtain the missing information. Although the FCA set out to obtain comprehensive data from a relatively small sample of electricity companies the data from these firms was still incomplete at the time of final editing of the second interim report.

To arrive at a retrospective assessment of the competitive situation on the electricity market it was essential to reappraise the legal precedents for market definition, at least as far as the retail markets were concerned. Despite the data problems it was possible to identify numerous parameters for delineation of the product and geographic retail markets.

Put in highly simplified terms, the test for market definition is whether a permanent price increase by a hypothetical monopolist in a given market would be profitable, or in other words, whether the additional contribution margin would more than compensate for any customers lost.

As a first step, consumer responses to price increases by local players, and the effect on the gross margins of given companies – taken as an approximation of profits – were investigated. This revealed that during the observation period the increases in the energy prices charged by local players to households, small businesses and farms (grid level 7 consumers) – which resulted in price differentials vis-à-vis the lowest cost supplier of up to 30% – had indeed probably been profitable. An investigation of the behaviour of medium-sized enterprise consumers (grid level

6), which were also very reluctant to take the opportunities open to them for significant savings (e.g. by joining electricity pools), brought similar but much less pronounced results. Final consumers at grid levels 6 and 7 account for some 60% of total retail electricity sales in Austria.

In order to ascertain whether price increases by local players actually lead to higher profits it was also necessary to take the companies' costs into account. To this end the evolution of the local players' gross margins was analysed. There were significant differences in gross margins, both as between companies and consumer groups. It was apparent that companies were able to pass higher procurement prices on to final consumers at an early stage. Since there was very little switching activity by consumers the companies could at least temporarily achieve higher profits. However it was not possible to reach any firm conclusions as to whether the purchasing and/or selling prices of the various suppliers were excessive. In part, high in-house purchasing prices are attributable to profit allocation strategies inside integrated companies. Thus in some integrated companies transfer pricing was such that the potential profits accrued not to the retail power suppliers but to the generating businesses. Even if there were no signs of such strategies, it would still be necessary to identify a clear procurement price benchmark for a given supplier and to obtain a precise knowledge of its actual selling costs to arrive at reliable conclusions about the reasonableness of its prices. This information did not form part of the survey, and would require further detailed research at company level.

It was striking that the differences between the local players' purchasing prices persistently exceeded the spread between the cheapest and most expensive spot products on the wholesale market. The differentials between electricity suppliers' procurement prices are wider than those on the spot market. All in all, it appears that inside their grid areas to all intents and purposes the local players can **behave like monopolists** when setting their prices for residential, small business and agricultural consumers, as well, possibly, as medium-sized enterprises connected to grid level 6. These consumers' low level of switching activity – despite some appreciable price differentials between local players and alternative suppliers – means that the additional revenue gained from a price increase far outweighs the marginal losses from switching.

The picture with respect to medium and large-scale industrial consumers is very different. Here, too, switching rates were found to be low, but this was because the local player was often (ultimately) the lowest bidder in a tender. In their approach to pricing for this customer segment the local players already appear to be reacting to competitors' bids, and holding on to customers by improving their offers. The different competitive conditions in the case of large consumers, and the changed pricing practices of local players are reflected in the relatively narrow differentials, viewed at national level, as compared to prices for small consumers.

In a second step, the results of the analysis of switching after price increases were tested by looking at trade flows. This methodology takes account of the fact that information on prices, goods, supply and demand in different regions influences decisions on out-of-area sourcing. The evolution of trade flows over time provides useful additional indications of the economic impact of supply and demand factors, and the extent to which these constitute effective barriers to entry. Both alternative suppliers' aggregate deliveries within given grid areas and local players' out-of-area deliveries were found to be below the generally accepted thresholds for extension of the relevant geographic market beyond the grid area.

In a third step, a qualitative analysis of the entry barriers was undertaken to test market delineation. This demonstrated that the barriers to entry to the mass market were considerably greater than those to the (customised) large consumer market. Both the switching costs an alternative supplier would have to bear to acquire customers and energy suppliers' marketing costs are much higher, in relation to a kilowatt hour sold, for small than for large consumers. Moreover, the disadvantages of inadequate unbundling – closely associated with incumbents' ability to charge low energy prices – limit alternative suppliers' prospects of achieving positive contribution margins. The inadequate implementation by the provinces of the unbundling provisions of federal legislation is regrettable in view of their importance for the emergence of effective competition.

**Both qualitative and quantitative methods of investigation thus yield clear indications that the grid area is the relevant geographic market for consumers**

**connected to grid level 7 – households, small businesses and farms – and, to a lesser extent, for grid level 6 consumers (medium-sized enterprises).**

Calculations of market shares suggest that **virtually all the large suppliers with their own grid areas – the local players before liberalisation – hold dominant positions in the respective small consumer markets.** Judging purely on the basis of market share, there is one Austrian company with a dominant position on the large consumer market.

Both the Electricity Directive and the Austrian implementing legislation – the EIWOG (Electricity Industry and Organisation Act) – require Austrian electricity companies to play their part in the creation of functioning competitive markets. Moreover, settled ECJ competition case law points to the conclusion that dominant companies have special responsibilities, or in other words, that certain types of behaviour constitute abuse.

In the electricity sector, these special responsibilities relate to contractual terms and conditions, and in Austria the following practices raise particular concerns:

- opaque all-inclusive prices,
- unreasonably long contract terms,
- certain rebate schemes (loyalty rebates), and
- bundling and tying (multi-utility offers).

In addition, the price differences observed – particularly in the residential consumer segment – could give rise to competition concerns. These differentials have yet to be satisfactorily explained.

Companies should contribute to effective competition by formulating their offers and all customer information in a transparent manner.

The interim findings of the sector investigation – especially the continued narrow market boundaries in the small and large consumer market – show that, contrary to expectations at the time, the reduction in the number of competitors as a result of the

formation of EnergieAllianz was by no means a temporary phenomenon. Instead of entering the Austrian market in increased numbers suppliers have been withdrawing from it. Barriers to entry and the unwillingness of consumers to switch mean that this situation is unlikely to change in the near future. EnergieAllianz thus continues to hold a dominant position in the retail market. When clearing the “Austrian electricity solution” the European Commission continued to anticipate rapid realisation of the internal market. Current developments on the European electricity market cast doubt on the benefits of the “Austrian electricity solution” in competition terms.

The final chapter of this report answers points raised by the widespread and often heated public discussion of retail pricing methods and the role of wholesale prices. In essence, this is mainly a question of the “right” market price, the relevance of the Leipzig and Graz electricity exchanges, and that of the prices of primary energy sources (e.g. oil) to price formation.

Investigation of the first question – namely, whether there is a “right” market price – led to the conclusion that there is no single wholesale procurement price that is equally applicable to all transactions, since a wide range of products are traded on the wholesale market. This is hence not possible, as is often suggested in public discussion, to speak of a single reference price, but rather of relevant benchmarks.

The second question, as prices on the Leipzig and Graz exchanges are representative benchmarks, can be answered in the affirmative. Certainly, the same may also be true of other wholesale prices (OTC market), but the exchange quoted prices are preferred because of their rapid and inexpensive availability. The related question as to how far these wholesale prices are actually formed by free competition could not be conclusively answered by this investigation.

The question as to how far generators and suppliers are justified in blaming increased wholesale prices on dearer primary energy sources, given the fact that hydro power accounts for most domestic generation, can be answered as follows. The level of the wholesale prices at which hydro power generators actually sell or could sell their electricity is ultimately determined not by the costs of Austrian run-of-river power stations but by those of coal-fired and, to a lesser degree, gas-fired (but

seldom oil-fired) stations. Higher wholesale prices are thus justified to the extent that primary energy prices have risen. Whether the current level of wholesale prices is entirely explained by primary energy price trends is a matter that can only be settled by an inquiry at European level for which the European Commission is currently making preparations.

### **3 Course of the investigation to date**

The Federal Competition Authority conducted wide-ranging research in the course of the sector investigation. During the second and third week of October 2004 questionnaires were sent to 786 market participants.

A total of 249 industrial and 443 medium-sized enterprise consumers were asked about their experiences with actual or attempted supplier changes, and electricity price trends (encountered by their own companies and their consumer groups as a whole). In addition to these questions, the medium-sized enterprise consumers were asked about the electricity companies' terms and conditions (especially minimum terms and agreements based on all-inclusive prices). As the FCA's sector investigation mainly focused on the question as to whether competition in the electricity industry is limited or distorted – which would be detrimental to consumers – there was a strong response to the consumer survey. Industrial and medium-sized enterprise consumers tended to provide particularly extensive and detailed information.

The survey of electricity companies was structured according to their functions along the supply chain. A total of 94 requests for information were sent to about 40 electricity companies, some of them integrated.

General questions were put to 17 (potential) domestic and international retailers without proprietary networks. These suppliers were mainly asked about their activities in Austria as well as obstacles faced by new entrants in gaining a foothold on the Austrian market.

The rest of the questionnaires were sent to vertically integrated electricity companies with a longstanding presence on the Austrian market – some of which were at the centre of the public debate about electricity price increases. Energy suppliers, system operators and electricity traders (including integrated electricity companies in their capacity as electricity traders) were asked for information of a different nature. The types of information requested and groups surveyed were as follows:

- *34 suppliers* were mainly asked about their:
  - Product and geographic retail markets, and the contractual terms and conditions employed;
  - Pricing policies (especially regional differentials);
  - Bidding practices;
  - Own purchasing and selling prices, and the factors determining them.
- *16 electricity traders* (or integrated electricity companies in their capacity as power traders) were asked about their procurement portfolios, price determinants (especially the role of the power exchanges) and sales.
- *27 system operators* were asked about switching, broken down by consumer segments, in their respective grid areas.

Due to the scope and detail of the questionnaires, the Federal Competition Authority granted numerous extensions. As a result it was not possible to include an analysis of the responses in the first interim report.

The responses of the energy suppliers, system operators and electricity traders were inspected during preparation of the second interim report. It was found that none of the respondents had completed the questionnaires in their entirety and that important disclosures relating to their own companies were virtually always missing (purchasing and selling prices, volumes and number of connected consumer systems). Despite the fact that lengthy extensions were granted the data supplied was incomplete. The FCA received the last reply from an electricity company near the end of 2004 – more than two months after the questionnaires were distributed. Table 1 gives an overview of the status of the responses from electricity companies operating in Austria as at the end of 2004.

Table 1: Overview of questionnaire responses as at the end of 2004

Addressees		Contents	Sent	Response rate	Significant in adequacies
Type	No.				
Retailers	34	Purchasing & selling prices and volumes, offers and customers	8 – 14 Oct. 04	100%	97%
Traders	16	Purchasing & selling prices and volumes	21 Nov. 04	100%	81%
System operators	27	Switching	14 Oct. 04	100%	78%

In order to prevent delays in further analysis, some electricity companies deemed to be representative of the Austrian market were asked to make major improvements to their original responses and provide additional information on recent developments. Even after “completing” these written follow-up questionnaires some companies had still failed to provide the information requested by the FCA in accordance with the prescribed classification, degree of detail and/or format (despite extensions). Moreover there were a number of inconsistencies in the data supplied by companies or corporate divisions.

In February 2005 the FCA made a third attempt to fill in the gaps in the information, this time by way of personal conversations with the contacts named by the companies. Nevertheless, some responses were still outstanding at the time of the editorial deadline for the second interim report.

All in all, experience with the survey showed that the written form, dictated by the large sample, resulted in actual or claimed comprehension problems. The FCA named contacts to answer any queries. The poor quality of the information provided by some electricity companies in spite of this raises questions about their data management systems. Only a few of the companies/divisions were capable of sending the FCA data rapidly (i.e. without extensions) and in the required detail. With others, including some large companies, the disclosure of information evidently felt to be “sensitive” was a notably long drawn-out and unsatisfactory process.

In spite of the inadequacies of some of the data it was still possible to arrive at a number of clear indicators of market delineation and draw some important conclusions about the Austrian electricity market.

## 4 Market definition

Market definition is a tool for precisely mapping the boundaries of competition between firms. Its main purpose is to identify in a systematic way the competitive constraints that the companies under observation face. The purpose of defining a market in both its product and geographic dimensions is to identify those actual competitors of the undertakings involved that are capable of constraining their behaviour and preventing them from behaving independently of effective competitive pressures. Market definition makes it possible, *inter alia*, to calculate market shares that would convey meaningful information as to the market power of an undertaking for competition law purposes.

The concept of the relevant market is different from the market concepts often used in other contexts. For instance, companies frequently use the term “market” to refer to the area where they sell their products or to refer broadly to the industry or sector they belong to. The starting point for determining the boundaries of the markets in which Austrian electricity companies operate is the previous decision-making practice of the competition authorities concerned on the basis of existing competition law.

### 4.1 The starting point – previous decision-making practice

According a Commission Notice<sup>3</sup> the definitions of the relevant product and geographic markets are:

“A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.”

“The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which

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<sup>3</sup> Commission Notice on the definition of the relevant market for the purposes of Community competition law, published in Official Journal No. C 372 on 09/12/1997, pp. 5–13.

the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.”

The following basic distinctions between relevant product markets in the electricity industry<sup>4</sup> can be drawn on the basis of existing European Commission decisions, though a more detailed classification may be necessary in some cases<sup>5</sup>:

- **Generation**, i.e. electricity generation at power stations<sup>6</sup>;
- **Transmission**, i.e. the transportation of electricity via high and ultra high voltage power lines<sup>7</sup>;
- **Distribution**, i.e. the transportation of electricity via medium and low voltage power lines<sup>8</sup>;
- **Supply**, i.e. the supply of electricity to final consumers (this market is sometimes subdivided into further categories such as large and small, or eligible and non-eligible consumers);
- **Electricity trading**, i.e. the purchase and resale of electricity and derivatives by traders and at exchanges, at own risk; this market only emerged in the wake of liberalisation.

The most recent case in which the European Commission has been concerned with the Austrian electricity market was the merger control proceeding regarding the so-called “Austrian electricity solution” (Case COMP/M.2947 – Verbund/EnergieAllianz). In its decision of 11 June 2003 the Commission defined the following relevant

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<sup>4</sup> It is undisputed that electricity and gas represent separate markets, as there are no substitutes for electricity (see M. 493 – Tractebel/Distrigaz (II), M. 568 – EdF/Edison-ISE and M.931 – Neste/IVO).

<sup>5</sup> See M.1107 – EdFI/ESTAG, M.1346 – EdF/London Electricity, M.1606 – EdF/South Western Electricity, M.1659 – PreussenElektra/EZH, M.1673 – VEBA/VIAG, M.1803 – Electrabel/EPON, M.1949 – Western Power Distribution (WPD)/Hyder, M.2209 – EdF Group/Cottam Power Station, M.2532 – Fiat/Italenergia/Montedison, M.2675 – EdF/TXU Europe/West Burton Power Station, M.2679 – EdF/TXU Europe/24 Seven, M.2792 – Edison/Edipower/Eurogen and JV.36 – TXU Europe/EdF-London Investments.

<sup>6</sup> See M.2890 – EdF/Seaboard, though in this case generation and wholesaling were brought together in a single market.

<sup>7</sup> See M3440 – ENI/EDP/GDP.

<sup>8</sup> See M. 2586 – CE/Yorkshire Electric, M3440 – ENI/EDP/GDP.

product markets, which in part extend the above classification; it also left some points open.

### *Generation*

The generation market was not considered separately for the purposes of the decision as the parties use all the electricity they generate internally, and it is thus not available for sale at the generation but only at the trading stage.

### *Supply of small consumers*

The “small consumer” (mass market) category comprises households, small businesses and farms. These are the customer groups for which standardised load profiles are used, i.e. customers with an annual consumption of less than 100,000 kWh (0.1 GWh/y) or a connected load of less than 50 kW.

### *Supply of large consumers (and small distribution system operators)*

Large consumers are large commercial and industrial final consumers for which the price and flexibility of the services offered are the prime considerations. The Commission’s decision refers to the possible existence of a segment of very large final customers (>100 GWh/y) but states that separate treatment would not affect the structure of the large consumer market because of the small number of such customers. The small distribution system operators include the smaller electricity companies such as municipal utilities and private electricity companies, the annual sales of which are mostly well below 500 GWh. Both of these groups are often supplied under so-called exclusive supply contracts (procurement of all electricity including balancing power from a single supplier).

### *Electricity trading and supply of large distribution system operators*

The large distribution system operators are the provincial utilities. Apart from the EnergieAllianz merger parties, this group comprises Salzburg AG, Steweag-Steg, KELAG, TIWAG and VKW. These companies meet part of their electricity needs from their own generating capacity, and procure the rest from domestic and foreign companies, and the wholesale market. They do not normally conclude exclusive supply agreements, but have their own procurement functions which meet their additional power needs, including balancing power.

Although the Commission found clear signs of the existence of a separate electricity trading market (see above) – electricity procured by the large distribution system operators using trading instruments was not attributed to the latter – these two markets were treated as one for the purposes of the decision. The Commission also left unanswered the question as to whether there is a separate relevant market in competition law terms in “supply to the large regional suppliers” (provincial utilities).

#### *Provision of balancing power*

Since it is virtually impossible to store electricity, the amount of power generated must always correspond to demand at any point in time. Balancing power serves to create this balance within a given control area, and is thus integral to the electricity market. The holdall term “balancing power” covers different standards of service, though in Austria only one – the provision of minute reserve – is organised as a market. Balancing power is an essential input for the supply of electricity to consumers. Though the European Commission stressed the importance of balancing power, it did not commit itself as to whether the provision of balancing power should be treated as a separate product market.

In the above decision the Commission reached the conclusion that the markets for the supply of large consumers, small distribution system operators and small consumers did not extend beyond Austria. The Commission’s main argument for this was that the structure of the electricity markets in Austria was fundamentally different from those of neighbouring countries, and that this was reflected in the different breakdowns of competitors’ market shares. None of the main electricity suppliers in these countries has a significant market share in Austria. The same applies to Austrian suppliers outside their domestic market.

The Commission also highlighted the differences in the legal frameworks in neighbouring Germany and Switzerland. There is no shortage of capacity on the interconnectors with these countries, yet electricity imports and foreign suppliers play only a marginal role in supplying the consumer groups in question. The Commission cited the low energy prices in Austria relative to overall prices as one barrier to entry among others. It also singled out the low switching rates in Austria – especially among small consumers who have mainly opted to remain with their local suppliers.

The Commission took the view that the market for the supply of **large distribution system** operators and the **trading market** might be larger than Austria, as there were substantial electricity deliveries from non-Austrian suppliers. It also pointed to considerable cross-border exchanges of electricity between Austria and Germany at the trading level.

With regard to **balancing power** – irrespective of whether this forms a separate relevant product market – it should be noted that the areas within which these services can be provided are restricted by the technical control mechanisms in the UCTE interconnected system. These confine the provision of balancing power, i.e. the boundaries of a conceivable market, to given control areas. Despite its small size Austria has three control areas. The western provinces of Vorarlberg and Tyrol each have their own control areas, which are part of the German control block. The remaining, and far larger portion of Austrian territory comes under the Eastern control area (APG area), which also forms a separate control block.

The electricity transmission and distribution markets, which are natural monopolies, were not dealt with in the decision as they were not affected by the merger<sup>9</sup>.

## **4.2 Review of market boundaries**

The legal precedents offer a starting point for market definition, but they were always coloured by the cases dealt with. The European Commission notes that it is quite possible for market definition to vary, for instance, according to whether a forward looking or – as in this sector investigation – a retrospective perspective is taken.

“The criteria to define the relevant market are applied generally for the analysis of certain behaviours in the market and for the analysis of structural changes in the supply of products. This methodology, though, might lead to different results depending on the nature of the competition issue being examined. For instance, the scope of the geographic market might be different when analysing a concentration, where the analysis is essentially prospective, than when analysing past behaviour.

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<sup>9</sup> See M3440 – ENI/EDP/GDP.

The different time horizon considered in each case might lead to the result that different geographic markets are defined for the same products depending on whether the Commission is examining a change in the structure of supply, such as a concentration or a cooperative joint venture, or issues relating to certain past behaviour.”<sup>10</sup>

The present sector investigation is mainly focused on the past behaviour of Austrian electricity companies and on existing market structures. At present, however, there are no signs that the Austrian electricity market is likely to undergo fundamental structural changes in the near future. Conclusions about the market boundaries in the recent past are hence also applicable to the near future.

The first interim report on the sector investigation refers to a number of indications that a more differentiated view of the retail market than that adopted in previous Commission decisions<sup>11</sup> would be more appropriate to a general investigation under section 2(1)(3) Competition Act. In particular, as a minimum a focus on competition issues in the retail market requires a review of the respective boundaries, i.e. of the existing definitions of the relevant large and small consumer product markets and of the finding that the geographic markets do not extend beyond Austria’s borders.

For instance, the analysis of survey responses contained in the first interim report suggests that the demand behaviour not just of small consumer groups (households, small businesses and farms) but also of some groups attributed to the large consumer category by the legal precedents is at variance with that of other large consumers, and that they are treated differently by electricity suppliers. In particular, users with an annual demand of between 100,000 kWh and 1 GWh<sup>12</sup>, appear to be

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<sup>10</sup> Commission Notice on the definition of the relevant market for the purposes of Community competition law, Official Journal No. C 372 of 9 Dec. 1997, pp. 5–13.

<sup>11</sup> Commission decision COMP/M.2947 – Verbund/EnergieAllianz of 11 June 2003.

<sup>12</sup> The borderline for different treatment by energy suppliers is blurred, and probably lies between an annual consumption of 1 and 4 GWh. For example, alternative suppliers that concentrate on the mass market do not accept customers with an annual demand of over 4 GWh. A company to serve large consumers with a demand of over 4 GWh was formed as part of the merger transaction between the parent companies of EnergieAllianz and Verbund. Other suppliers specialising in the larger consumer segment stated that they dealt with consumers with a demand of between 1 and 4 GWh on a bespoke basis, and did not treat them as mass market customers.

more similar to small than to other large consumers in terms of their demand behaviour, and of the form of service provided by electricity supply and the types of contracts usually employed. These consumers are less price sensitive and, accordingly, less willing to switch than large consumers with a demand of over 1 GWh/year. Residential, small business and agricultural consumers are connected to the lowest grid level. Consumers with an annual demand of between 100,000 kWh and 1 GWh (hereafter referred to as “medium-sized enterprise consumers”) are normally connected to grid level 6. The different switching behaviour of grid level 6 and 7 consumers as compared to large consumers is explained by the fact that at the lower grid levels the energy component represents a lower, and the system charges a higher proportion of the overall electricity price. Final consumers at grid levels 6 and 7 account for some 60% of total retail electricity sales in Austria.

At the same time the responses to the FCA’s survey suggest that existing and potential retail electricity suppliers adopt a different classification of consumers as large or small in their sales strategies and decisions to that applied in the legal precedents. In particular, the minimum annual demand that alternative suppliers serving the large consumer market are prepared to consider is far above the aforementioned upper limit of 100,000 kWh and/or 50 kW peak demand for small consumers.

A general investigation of the electricity market – and in particular the retail markets – under section 2(1)(3) Competition Act requires a review of the extent to which the classification of final consumers in the legal precedents remains valid for the recent past.

As a first step it is thus necessary to look at the manner in which given customer segments are assigned to the small and large consumer markets, and whether the relevant geographic markets – at least in the case of the small consumer segment – are more tightly circumscribed than the borders of the country as whole. As an initial hypothesis, candidate markets were defined as shown in the following table.

Table 2: Boundaries of candidate product and geographic markets<sup>13</sup>

Description			Candidate markets	
Customer segment		Grid level	Product	Geographic
Residential	Non interval metered households	7	Small consumers	narrower than national
Small business	Non interval metered small businesses and farms	7		narrower than national
Medium-sized enterprise	Interval metered consumers with an annual demand of 100,000 kWh to 1 GWh	6		narrower than national
Industrial	Interval metered consumers with an annual demand of 1 – 20 GWh	5	Large consumers	national
Large-scale industrial	Interval metered consumers with an annual demand of > 20 GWh	4, 3		national

#### 4.2.1 Methodology and premises of the review of market boundaries

##### Approach and choice of methodology

The investigation of market boundaries is a tool for precisely delineating the areas in which companies compete with each other. In its notice on market definition the European Commission regards demand substitution as the main source of information on market boundaries<sup>14</sup>. In the words of the notice: “... for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions. A firm ... cannot have a significant impact on ... prices if its customers are in a position to switch easily to available substitute products or to suppliers located elsewhere.”

There is no dispute about the absence of substitutes for electricity<sup>15</sup>. This being so, the demand substitutability of electricity for given consumer groups can only be investigated in terms of transfers to “outside suppliers”, i.e. their switching behaviour.

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<sup>13</sup> The allocation of consumers to grid levels is by electricity consumption; peak demand can be determined on the basis of kilowatt hours. These approximate values do not correspond to the actual grid level allocation practice, since there is no legal entitlement to assignment to a given grid level which is governed by the system operators’ terms and conditions.

<sup>14</sup> See footnote 10.

<sup>15</sup> See M. 493 – Tractebel/Distrigaz (II), M.568 – EdF/Edison-ISE and M.931 – Neste/IVO.

In the Commission's view the effects of supply-side substitutability<sup>16</sup> and potential competition are in general less immediate than those of demand substitutability, and in any case require an analysis of additional factors. As a result they are taken into account at the assessment stage of competition analysis (after the definition stage).

The assessment of substitutability can be viewed as a thought experiment in which a hypothetical small, non-transitory change in relative prices is postulated and the likely reactions of customers to that increase are evaluated. Of particular interest is the question as to whether the change (increase) in the price would be profitable for the company. Here, the focus is on the price, or more precisely, on demand substitution due to small, permanent changes in relative prices. Consumers' (assumed) reaction indicates whether the firm in question could behave like a monopolist.

Since there is no substitute for electricity, but maximum substitutability by outside suppliers, the question to be answered is: would the reaction of some consumer groups to a hypothetical small, permanent relative price increase (in the 5 – 10% range) in electricity prices in the grid area in question be to switch to easily available substitutes (in this case, alternative suppliers)? If the substitution would be enough to make the price increase unprofitable because of the resulting loss of sales, then additional areas are included in the product and geographic market until a small, permanent increase in electricity prices relative to those of alternative suppliers would be profitable.

Starting with the smallest area where electricity is sold, areas are included in or excluded from the market definition depending on whether competition from these areas would affect or restrain pricing.

The review of market boundaries below is based not only on the question as to whether price increases are profitable for local players in given market segments, but also, in accordance with the methods prescribed by the Commission notice, on

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<sup>16</sup> Supply-side substitutability may be taken into account when defining markets in situations where its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. This requires that suppliers be able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and permanent changes in relative prices.

quantitative evidence of trade flows and qualitative analysis of entry barriers. Despite the inadequacy of some of the data it is possible to reach conclusions about market definitions.

### **Consumer reactions to price changes – elasticity of demand**

The reactions of consumers to price changes – the so-called price elasticity of demand – are an important consideration in market definition. If the price elasticity of demand is high the likelihood that an electricity company could raise its prices like a monopolist without suffering a fall in profits through losing customers will be low. Because of this a broad understanding of the price elasticity of electricity demand is of significance for the subsequent analysis<sup>17</sup>.

In the absence of investigations of the price elasticity of demand in the Austrian electricity market recourse has been taken to studies of the Swiss market, among others. Studies by Spierer<sup>18</sup> und Filippini<sup>19</sup> show that the long-run price elasticity for the residential segment is about -0.3, or in other words, a 10% increase in the price results in a 3% drop in demand.

An NIEIR<sup>20</sup> study arrives at similar results. Here, the long-run elasticities of a variety of Australian consumer groups were calculated. The price elasticity estimated for residential consumers is even lower than the above figures, at -0.25. The elasticities for commercial (-0.35) and industrial (-0.38) consumers are only marginally higher.

These studies' thus indicate that the percentage fall in consumer demand is far less than the percentage price increase. This means that electricity companies can push through price increases without facing significant losses in volume sales, and can thus add to their revenue and profits in this way.

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<sup>17</sup> Numerically, the price elasticity of demand is the percentage change in demand in response to a one percent increase in the price. If the period is taken into account in the calculation of price elasticity it is possible to distinguish between short and long-run views. It can be assumed that elasticity, i.e. consumers' responsiveness to price changes, will be greater on a long-run perspective as this will also capture lagged reactions.

<sup>18</sup> See Spierer, *Modélisation économétrique et perspectives à long terme de la demande d'énergie en Suisse*, Expert Group for Energy Scenarios, Bern, 1988.

<sup>19</sup> See Filippini, *Swiss Residential Demand for Electricity*, Zurich, 2000.

<sup>20</sup> See NIEIR, *The price elasticity of demand for electricity in NEM regions*, Victoria, 2004.

The higher elasticities for the commercial and industrial sectors may be due to a variety of factors. Of importance are the higher costs – at least in absolute terms – and the resultant greater potential for savings as compared to the residential consumers.

The aforementioned elasticities are averages for the respective consumer segments. It can be taken that the response of energy-intensive industries (e.g. paper or aluminium) to price increases is stronger, and the price elasticity higher than -0.38. Various influences may result in price elasticity in the residential consumer segment being higher or lower. Here, household income and awareness of switching opportunities are important variables; they operate in opposite directions. For low-income households electricity costs represent a higher share of the family budget than for higher-income households, as electricity consumption does not grow in proportion to income. This should mean that low-income households react more strongly to price increases (i.e. have a higher price elasticity). However this effect is counteracted by lesser awareness of switching opportunities, which leads to lower price elasticity. The impact of these two factors is the reverse with households with higher incomes. The demand response to price increases thus depends on the composition of an electricity supplier's customer base.

The total demand response to an increase in the overall price level must thus be distinguished from the demand response of an individual company's customers to an increase with other firms leaving prices unchanged. There are two ways in which consumers can react to a price increase by their supplier. They can reduce the amount consumed (lower electricity demand) or switch to a cheaper supplier (demand substitution). An important consideration of electricity in retail market definition is whether a supplier will enjoy an improvement in its profits after a price increase, despite switching to other suppliers and the demand response of remaining customers.

There are two *prima facie* reasons for suspecting that price increases can be profitable for Austrian local players:

1. The low switching rates shown by past surveys, despite known savings from supplier transfers; and
2. Average annual electricity demand growth of about 2%, such that a 2% volume sales loss would be offset by annual growth, meaning that price increases were profitable (given constant purchasing prices).

### **Energy suppliers' costs**

The question whether a price increase will be profitable for an electricity supplier cannot be viewed in isolation from its costs. The reason for a price increase might be an attempt to pass on a massive rise in costs to customers. A price increase might, then, not necessarily have to be profitable, provided that it protected the supplier from losses. It is thus necessary to look at the evolution of fixed and variable costs and the extent to which a supplier's costs would be altered by a possible change in the volume supplied.

Since an electricity retailer's overall costs consist of different components the response to volume changes varies according to the proportions of the cost blocks. The main difference is between the electricity procurement and marketing cost groups. The ratio of these two components to each other chiefly depends on the company's size, the types of customer it serves and – last not but not least – whether it is part of an incumbent or is a new entrant. Information from annual reports and other sources points to the conclusion that the ratio of power procurement to marketing costs is about 93:7 in the case of the local players.

The electricity procurement costs, which constitute by far the largest cost component for a power supplier, are almost entirely variable as they depend on the amount of power sold. By contrast the marketing costs have both fixed and variable components. The customer acquisition costs arising from doorstep selling are normally classed as variable while customer care and billing costs have both fixed and variable elements.

Given the relatively small proportion of the overall costs of an electricity retailer accounted for by marketing costs and the fact that these, too, contain variable components, it is safe to assume that changes in electricity purchasing and selling

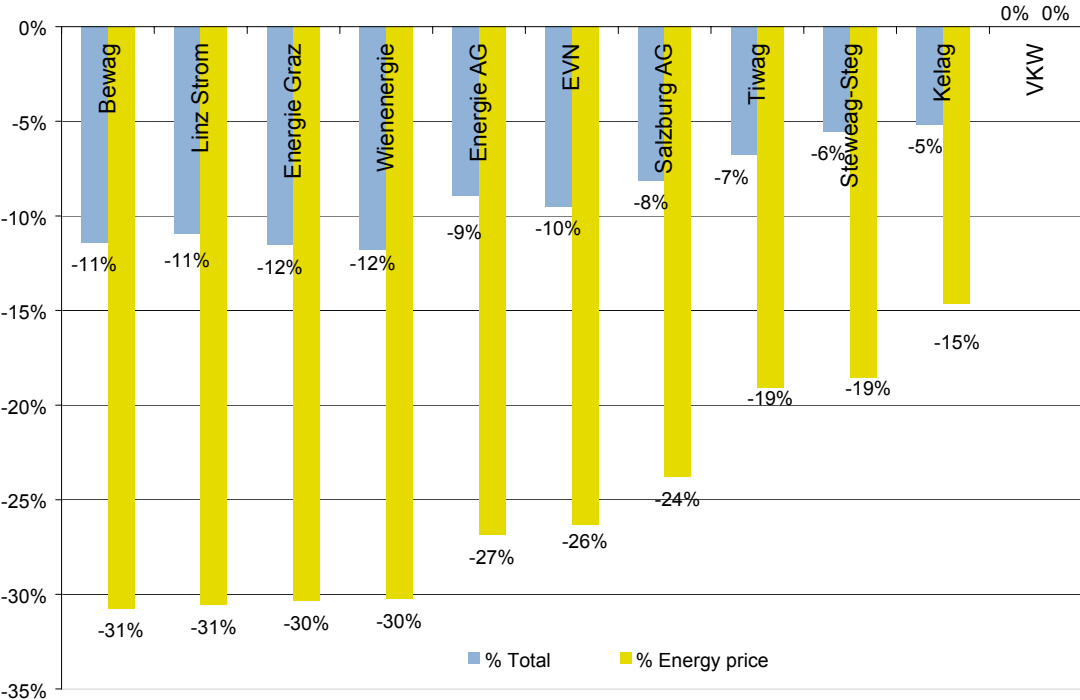
prices, and in supply volume are fully reflected in the total costs of an electricity retailer.

The review of market boundaries below is based not only on the profitability of price increases for local players in given market segments, but also, in line with the Commission notice, on quantitative evidence of trade flows and qualitative analysis of entry barriers. Despite the inadequacy of some of the data it was possible to reach conclusions about market definitions.

#### **4.2.2 Consumers' switching response – evolution of volume and prices**

The section below analyses consumers' switching responses to changes in the local player's energy prices relative to those of the lowest cost supplier. Price differentials may be presented in terms of overall prices and energy prices alone. Small consumers are particularly likely to focus on the overall price rather than looking only at the energy price on which suppliers can compete. The impact of an energy price differential on the overall price differential is in proportion to the ratio of the energy price to the total price. If the energy price represents 30% of the total price then, for example, a differential of 10% between the local player's energy price and that of an alternative supplier will result in an overall differential of 3%. Chart 1 depicts the energy and overall price differentials between local players and the respective lowest-cost suppliers. Leaving aside VKW's grid zone, in February 2005 residential consumers were in a position to save between 15 – 31% on the energy price (5 – 12% on the overall price) by switching to the lowest-cost supplier.

Chart 1: Overall and energy price differentials for residential consumers, February 2005



Source: E-Control

Switching behaviour in four grid areas was examined in detail. Some 45% of all Austrian consumers are supplied with electricity in these areas, which include both rural and urban areas. In all of the selected grid areas there have been substantial differences between the prices of the incumbent and the lowest-cost supplier for at least three months, if not for a considerable period. This results of this analysis should be sufficiently representative to yield conclusions for the entire Austrian market.

The switching behaviour of all consumer segments in the four grid areas from the first quarter of 2003 through to the fourth quarter of 2004 or the first quarter of 2005<sup>21</sup> was investigated. The net customer gains or losses of all the alternative suppliers and the respective local players, and the prices of the latter and of the lowest-cost supplier were compared, breaking the analysis down by consumer groups. Special attention was paid to the differences between the switching behaviour of residential and small

<sup>21</sup> The figures for the first quarter of 2005 only include the switching data for January and February.

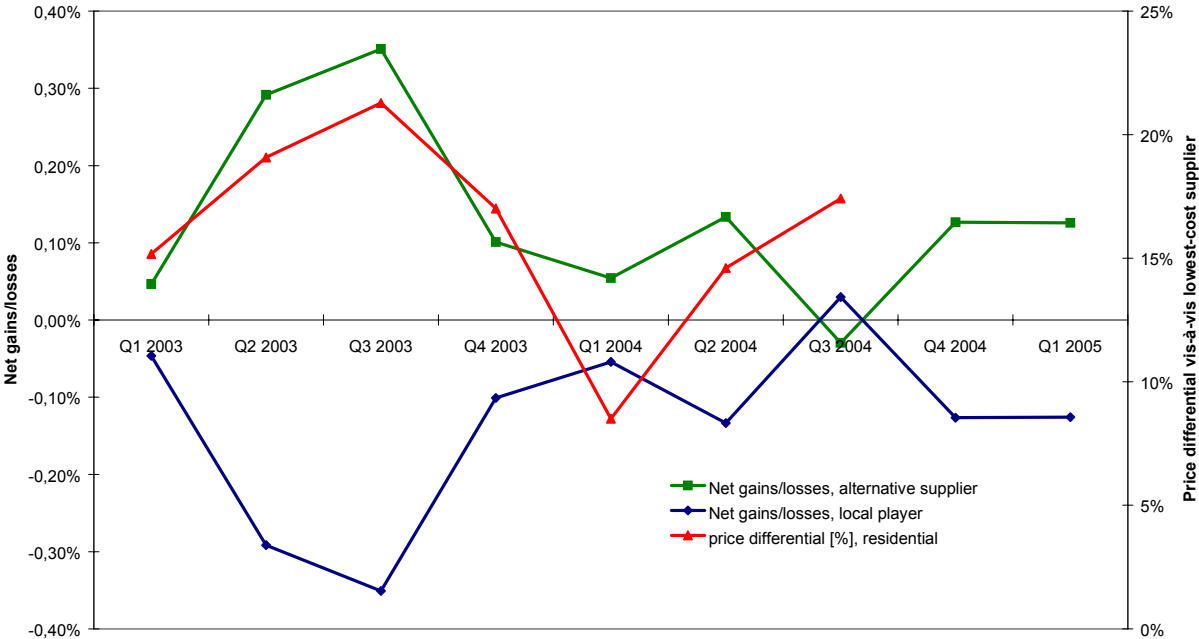
business consumers connected to grid level 7 and that of grid level 6 (medium-sized enterprise) consumers, as well as those between churning by these segments and consumers at higher grid levels (medium and large-scale industry).

Switching behaviour in one of the four selected grid areas is discussed in detail below. The identity of the area is concealed. The switching rates of the various consumer groups observed in the other three grid areas were very similar.

**Residential consumers**

Although the alternative suppliers in the selected grid area recorded gains in all but one quarter, even in the quarter with the strongest growth the increase in customer numbers was small at 0.37%, despite price differentials of between 10 – 22%.

Chart 2: Switching rates and price differentials for residential consumers, grid area X, grid level 7

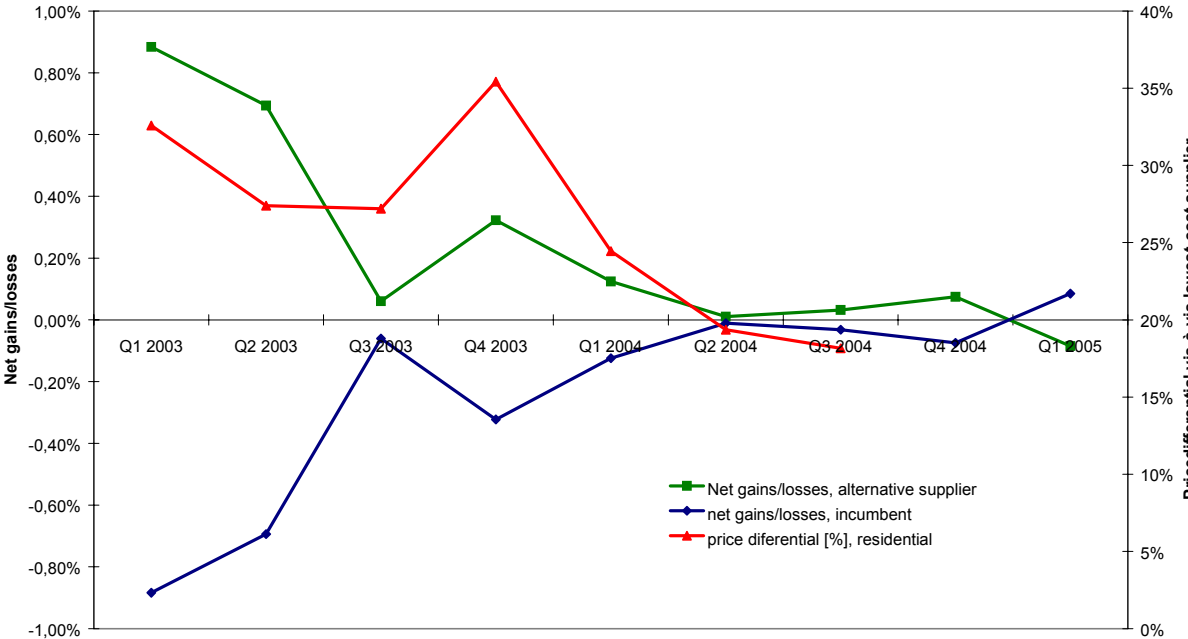


**Small business consumers (grid level 7)**

A similar picture emerges for small business consumers connected to grid level 7. Their willingness to switch was higher in the first half of 2003 than in the other periods, but even then it was low, at 0.9% and 0.7% in the first and second quarters, respectively. From the third quarter of 2003 the switching rate fell to no more than

0.1%, though some consumers could have achieved savings of over 30% by transferring to an alternative supplier. In the first quarter of 2005 the local player registered a positive net switching rate, that is, more customers returned to it than left.

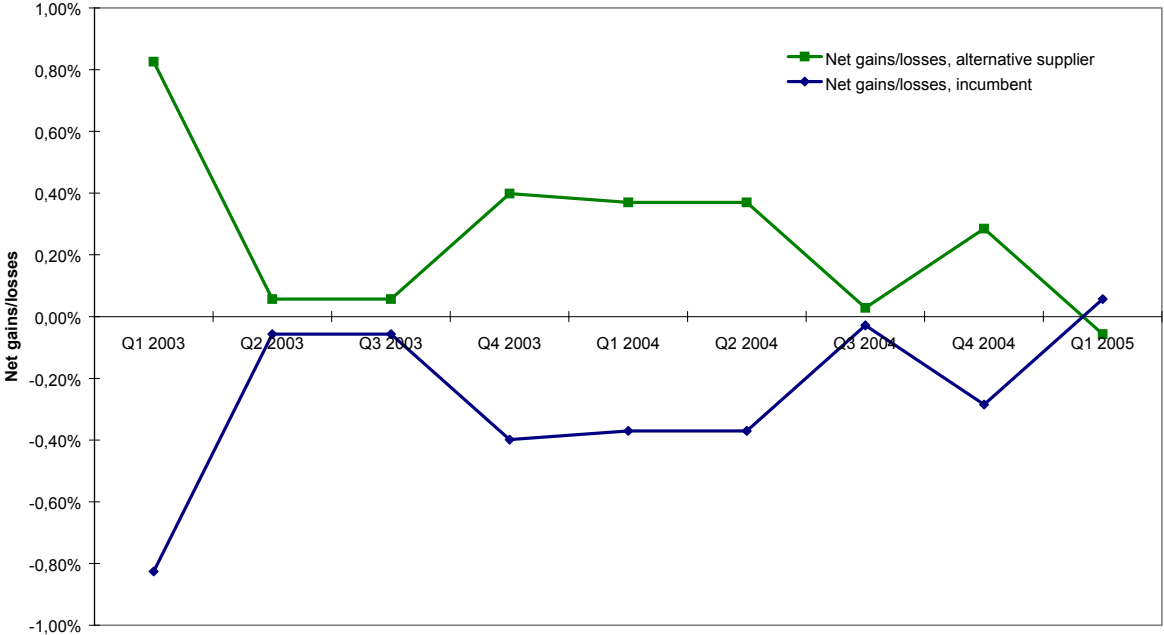
Chart 3: Switching rates and price differentials for small business consumers, grid area X, grid level 7



**Medium-sized enterprise consumers (grid level 6)**

From the second quarter of 2003 onwards the churn rate for consumers at grid level 6 was below 0.4% in all periods, and in the first quarter of 2005 the alternative suppliers actually suffered a net loss of customers. This was despite the substantial savings open to business consumers – for instance, by joining electricity pools.

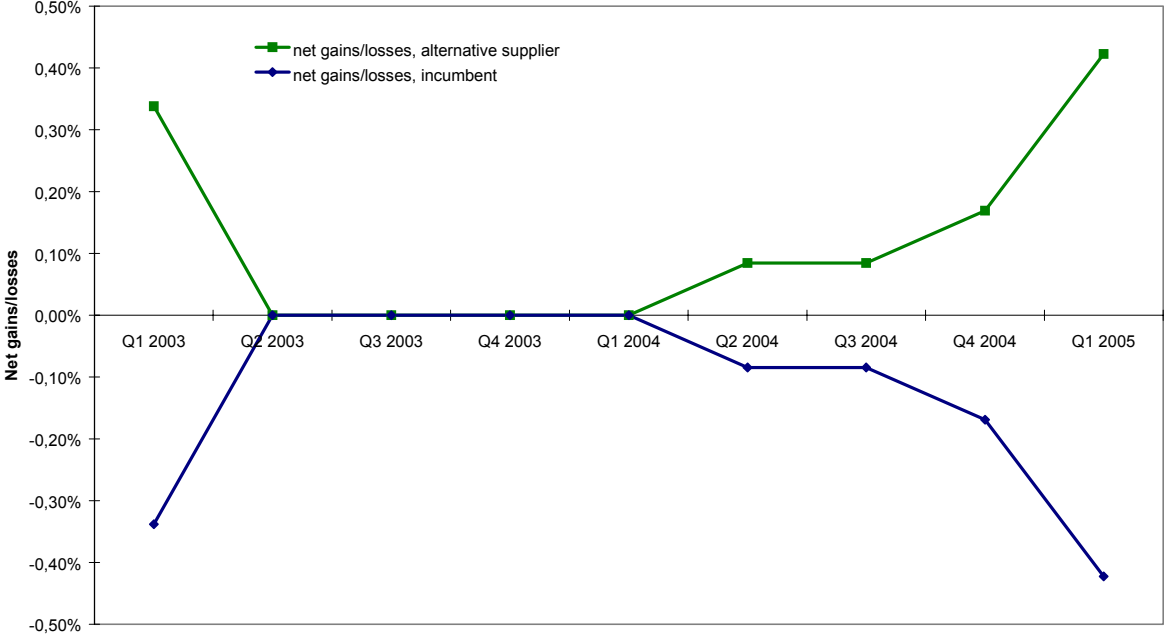
Chart 4: Switching rates for medium-sized enterprises, grid area X, grid level 6



**Large consumers (grid level 5)**

The alternative suppliers' net gains added up to a mere 1.1% of all large consumers over the entire observation period. There has been a slight increase in the switching rate since the first quarter of 2004, but even in recent periods the gains of the alternative suppliers have remained well below 1% per quarter.

Chart 5: Switching rates for medium and large-scale industrial consumers, grid area X, grid level 5



The low level of switching activity by medium and large-scale industrial consumers connected to grid level 5 may seem surprising at first sight, as the considerable amounts of electricity that they often consume mean that they are in a position to realise correspondingly large savings. However energy suppliers' pricing policies for this group differ from their approach to residential, small business and medium-sized enterprise consumers. While wide differentials between the prices of the lowest-cost supplier and the local player were generally observed at grid levels 6 and 7, the incumbent is usually the cheapest supplier at grid levels 3, 4 and 5. The differences in suppliers' pricing behaviour are also reflected in a nationwide comparison of energy prices. Charts 6 and 7 show that the energy prices paid by consumers with a demand of more than 1 GWh (final consumers connected to grid levels 3, 4 and 5) are in a narrower band than those paid by consumers with lower withdrawals (final consumers at grid levels 6 and 7). Evidently the local players select their pricing strategies according to the consumer groups concerned.

Chart 6: Suppliers' energy prices for medium-sized enterprise consumers at grid level 6

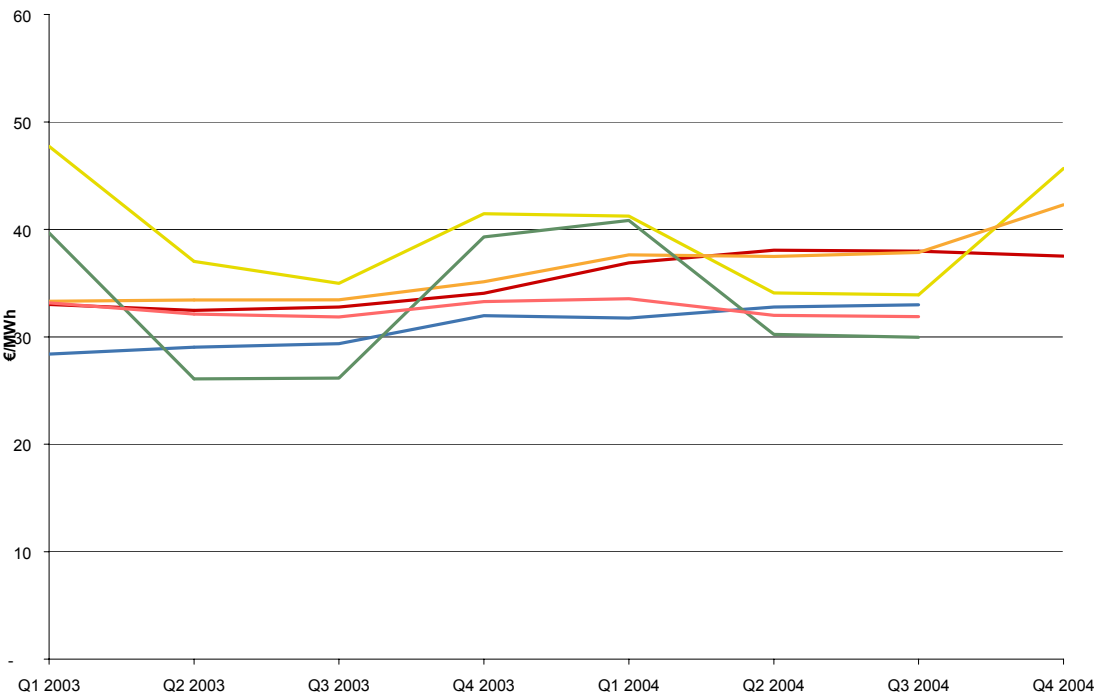
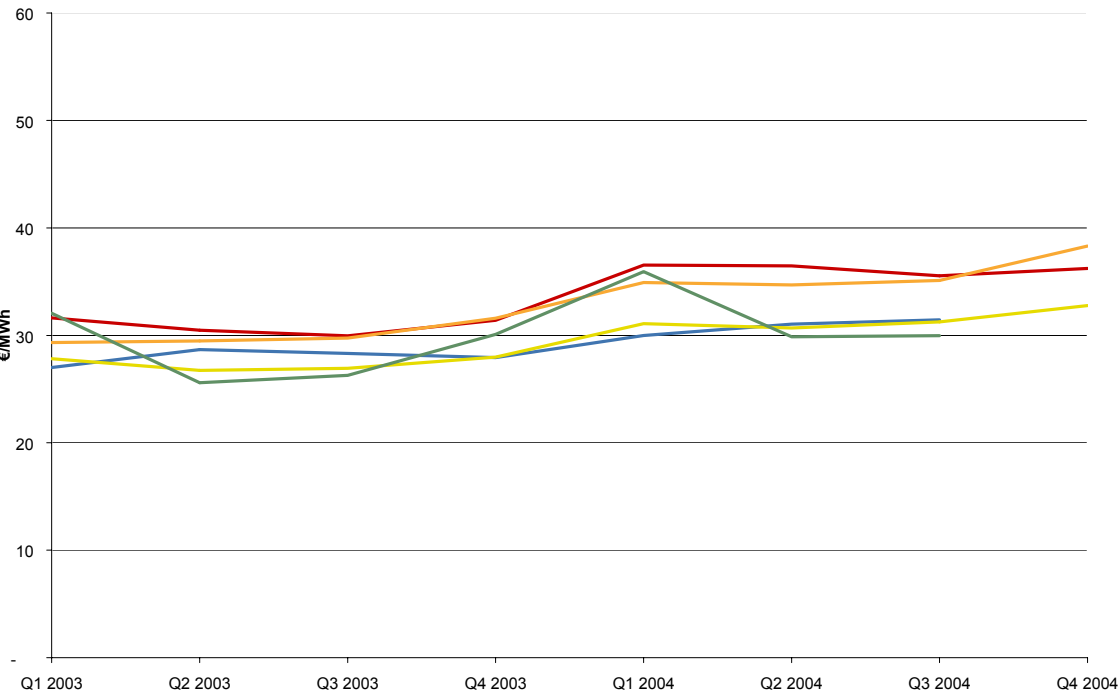


Chart 7: Suppliers' energy prices for industrial consumers at grid level 5



Differences in local players' pricing approaches for customers at grid levels 6 and 7, and those at 3,4 and 5 were also revealed by the evaluation of questionnaire responses contained in the first interim report on the sector investigation.

### **Summary and conclusions**

The investigation of switching rates over the observation period from the first quarter of 2003 through to the first quarter of 2005 reveals that these were very low or even in decline at all grid levels in the grid areas studied. However the reasons for this differed.

The quarterly balance of gains and losses at grid levels 6 and 7 is mostly below 1% (exception grid level 6<sup>22</sup> in grid area X), in spite of the fact that there were considerable (and in some case growing) savings to be made by switching to a cheaper supplier. Some quarters actually witnessed considerable numbers of consumers switching back to the local player. Moreover, in all the grid areas studied switching activity declined as compared to the start of the observation period. As a result local players are not obliged to bring their prices into line with those of the lowest-cost alternative supplier, and they may even be able to raise them further, as consumers' willingness to switch is unlikely to grow in future.

The price differentials between local players and alternative suppliers can effectively be seen as the sum total of the past price increases by the former. In none of the grid areas investigated did these price increases of up to 30% lead to revenue losses of the same order due to customer switching. On the assumption that costs were stable the price increases were clearly profitable for the local players.

Switching activity by consumers at grid levels 3, 4 and 5 – medium and large-scale industrial consumers with an annual demand of over 1 GWh – was also very modest during most of the quarters under review. Though this may be surprising at first sight, the behaviour of this consumer group is attributable to the differentiated pricing strategies of the incumbents, which often ultimately make the lowest bids to consumers connected to grid levels 3, 4 and 5. In consequence the nationwide

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<sup>22</sup> The reason for the switching rates of over 1% probably lies in insufficient adjustment of the data.

comparison shows less variations in the energy prices paid by this consumer group than in those charged to consumers with lower demand.

Both the differences in consumer behaviour (large consumers usually invite tenders for power supplies) and the electricity suppliers' segmented pricing strategies indicate that the product and geographic market boundaries are not the same for all consumer groups.

#### **4.2.3 Evolution of electricity suppliers' gross margins**

Since marketing costs generally represent only a small proportion of an electricity supplier's total costs, gross margins (excluding marketing costs) provide a rough indication of profit trends.

The gross margins of the same four suppliers discussed in section 4.2.2., above, as well as two others were calculated. All these enterprises form part of vertically integrated companies. The gross margin is the difference between a company's average selling and procurement price. Here, the calculation was based only on retail electricity volumes and prices; in other words, volumes traded were excluded. Apart from the suppliers' average gross margins, the gross margins on sales to specific consumer groups were estimated. These are defined as the difference between the selling price to a given consumer group (e.g. residential consumers) and the supplier's average purchasing price.<sup>23</sup>

The gross margins show how much money per unit of power supplied is available to the electricity suppliers to cover their operating expenses (including their marketing costs) and provide the owners with returns on their investment.

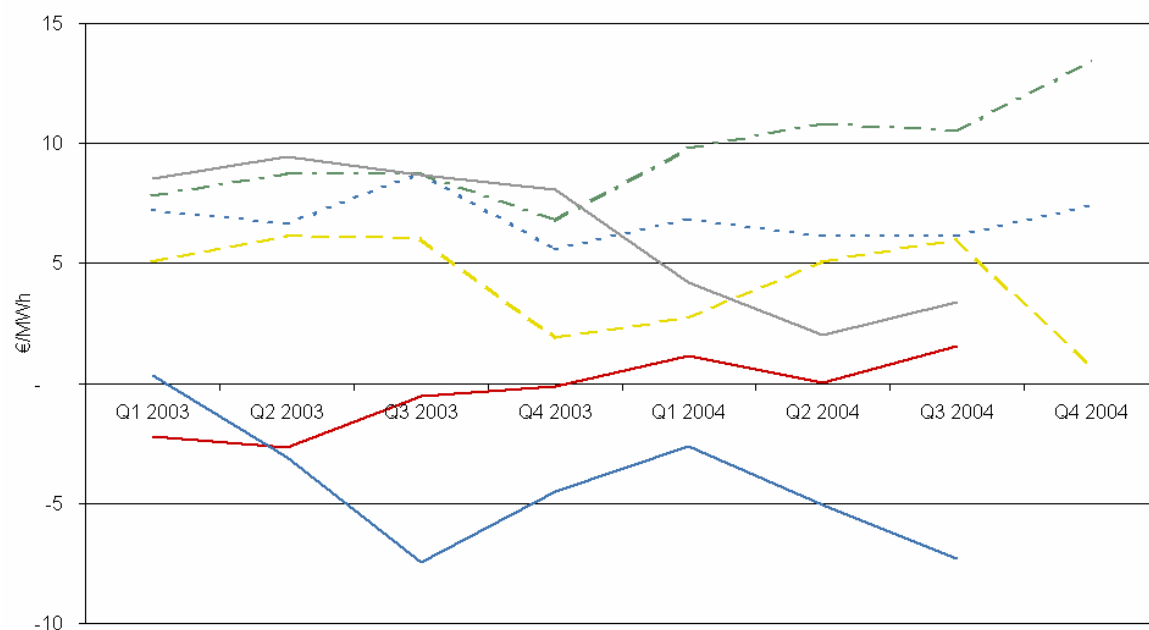
The comparison reveals marked differences between the companies' average gross margins. A salient feature of the results is the negative margins earned by two suppliers. Negative gross margins mean that on average the supplier is buying

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<sup>23</sup> The data available did not allow of the assignment of differing procurement prices to individual consumer groups.

electricity for more than its selling price to its customers, or in other words, that it is making a loss on every kilowatt hour sold. The loss rises to the extent that the cost of every kilowatt hour sold also includes certain marketing expenses.

Chart 8: Electricity suppliers' average gross margins on sales to all consumer groups



Theoretically, low (or negative) gross margins can be explained by:

- High purchasing prices; or
- Low selling prices.

Conversely, high gross margins may be due to:

- Low purchasing prices; or
- High selling prices.

The negative gross margins of the two suppliers may thus be attributable either to high purchasing prices (as compared to the other suppliers) and/or low selling prices. The following charts show that both factors are responsible.

Chart 9: Purchasing prices of suppliers A-F

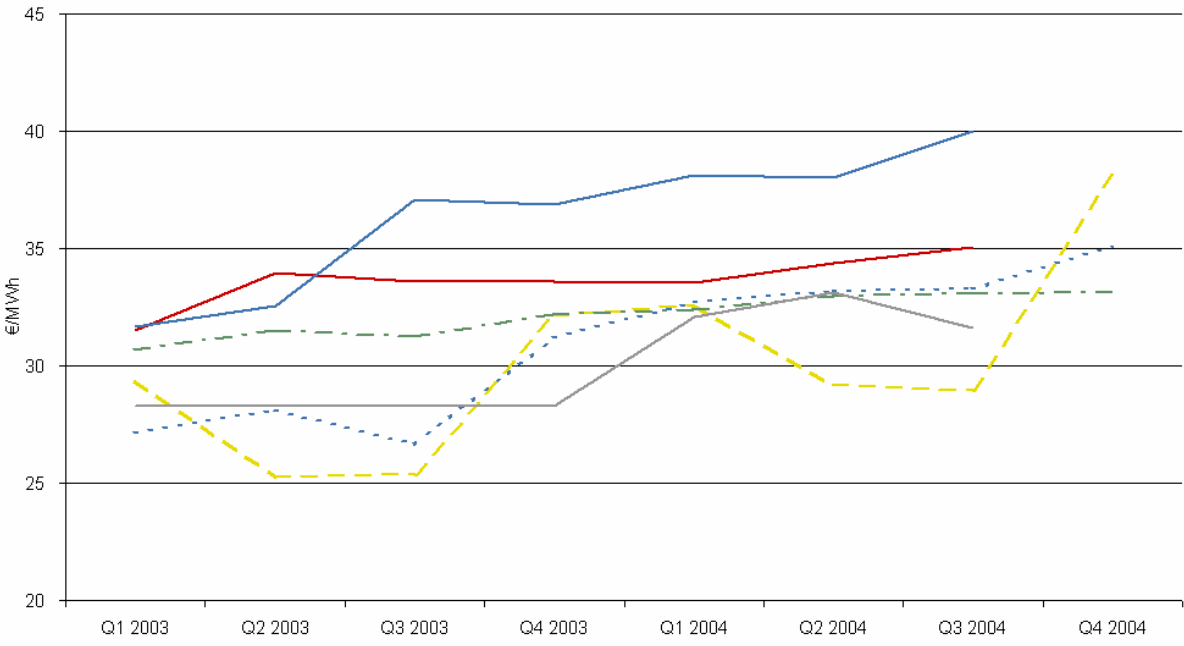
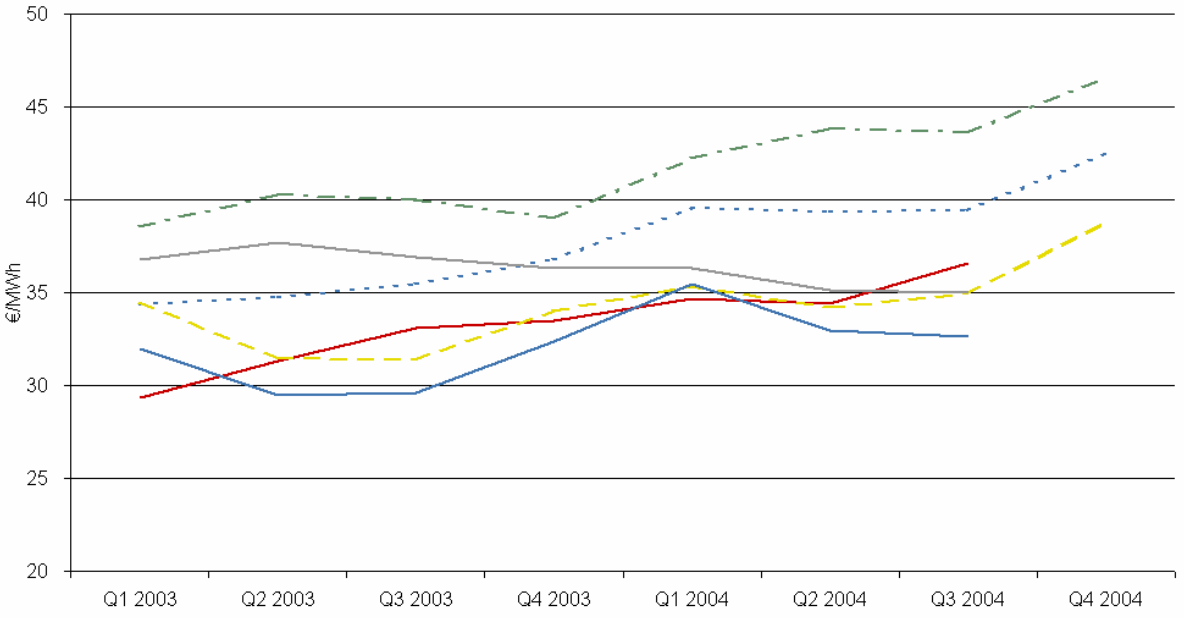


Chart 10: Selling prices of suppliers A-F



The high average procurement prices of the two suppliers with negative gross margins are mainly explained by the fact that they belong to integrated companies,

and are “purchasing” electricity from the internal generation operations at relatively high prices, in comparison both with other suppliers’ procurement prices and with their own purchasing prices for externally sourced power. As a result, retail earnings and profits are being transferred to the generating business. There is thus a strong suspicion that the loss on the retail side (negative gross margins) is being made up by additional earnings from other business operations (generating and system operation, etc.)

However it should be noted that the differences in suppliers’ purchasing and selling prices may also in part reflect differences in the make-up of their customer portfolios. The average purchasing and selling prices of suppliers that principally serve industrial consumers (whose demand profile is such that the electricity costs less to procure) can be expected to be lower. Suppliers that mainly serve residential and small business consumers are likely to have higher purchasing and selling prices. However varying customer portfolios can only account for differences of a few euro per MWh at most, and do not offer an explanation for negative gross margins.

It is difficult to say whether the purchasing prices disclosed by electricity suppliers in their responses are too high or too low in absolute terms. The large number of conceivable procurement strategies (short-term versus long-term) makes it particularly hard to arrive at a single benchmark price. Reference prices may vary considerably, depending on the assumptions made, strongly qualifying the validity of conclusions based on them<sup>24</sup>.

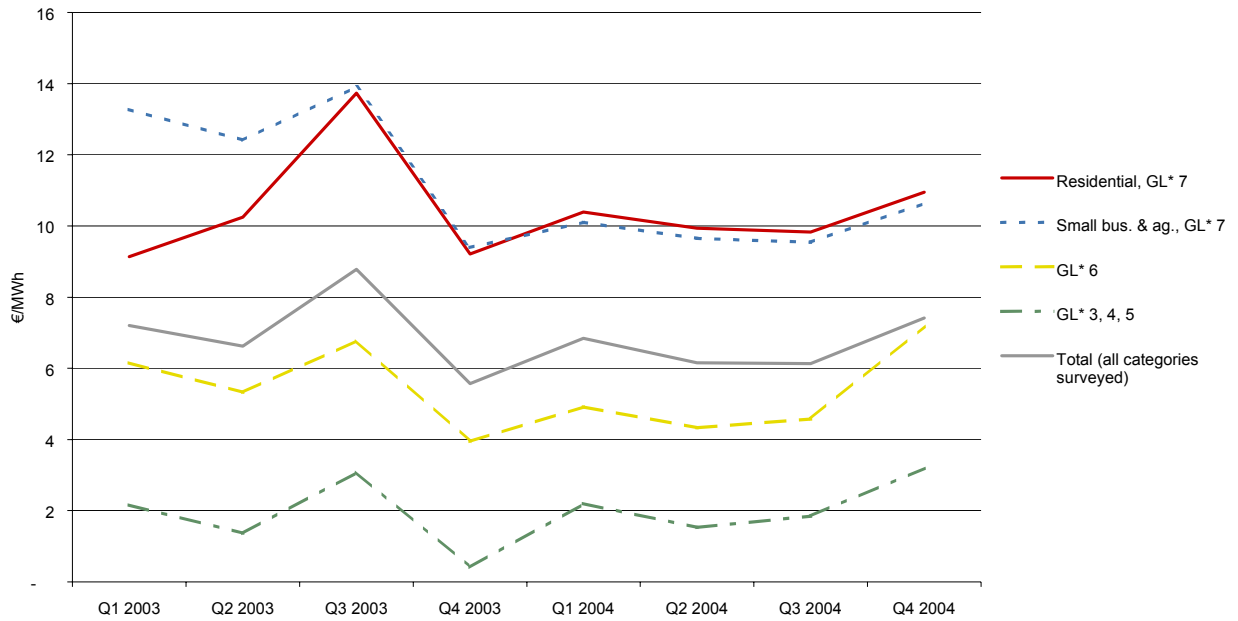
It is however striking that the spread between the local players’ purchasing prices, at €22 – 23/MWh, was consistently wider than that between the dearest and cheapest products on the wholesale market, which averaged an annual €12 – 15/MWh (spot market).

Analysis at the level of individual suppliers reveals that the **gross margins on sales to given consumer groups are widely divergent**, as the following examples show:

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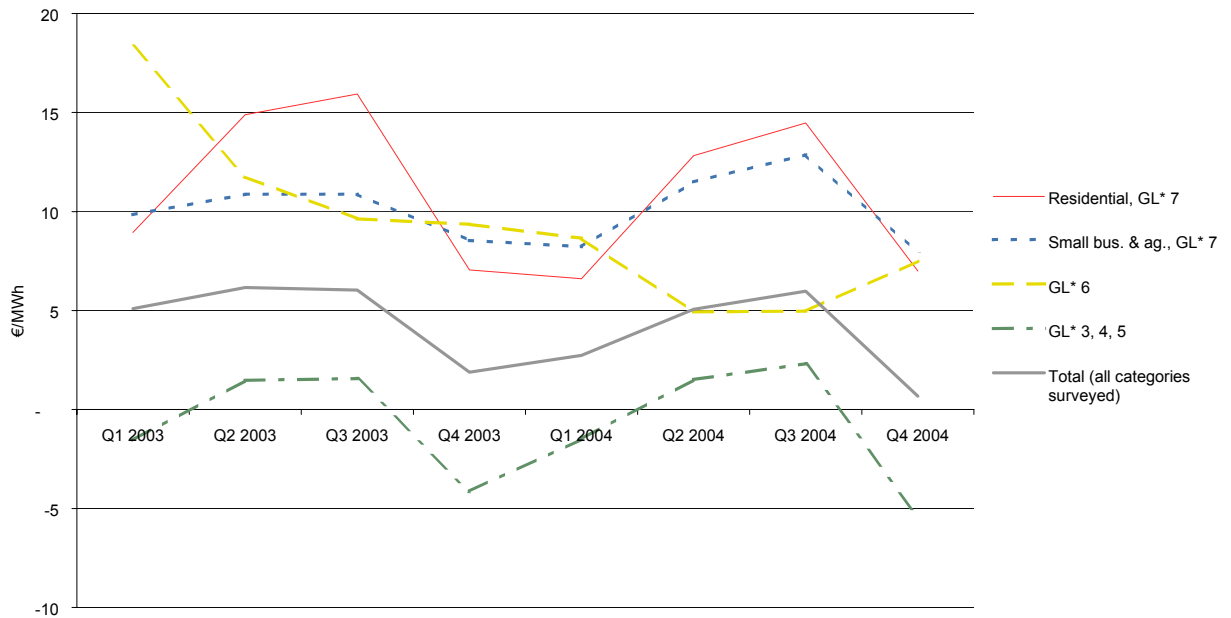
<sup>24</sup> See Chapter 8 on the logic of retail pricing.

Chart 11: Gross margins by consumer groups: Supplier A



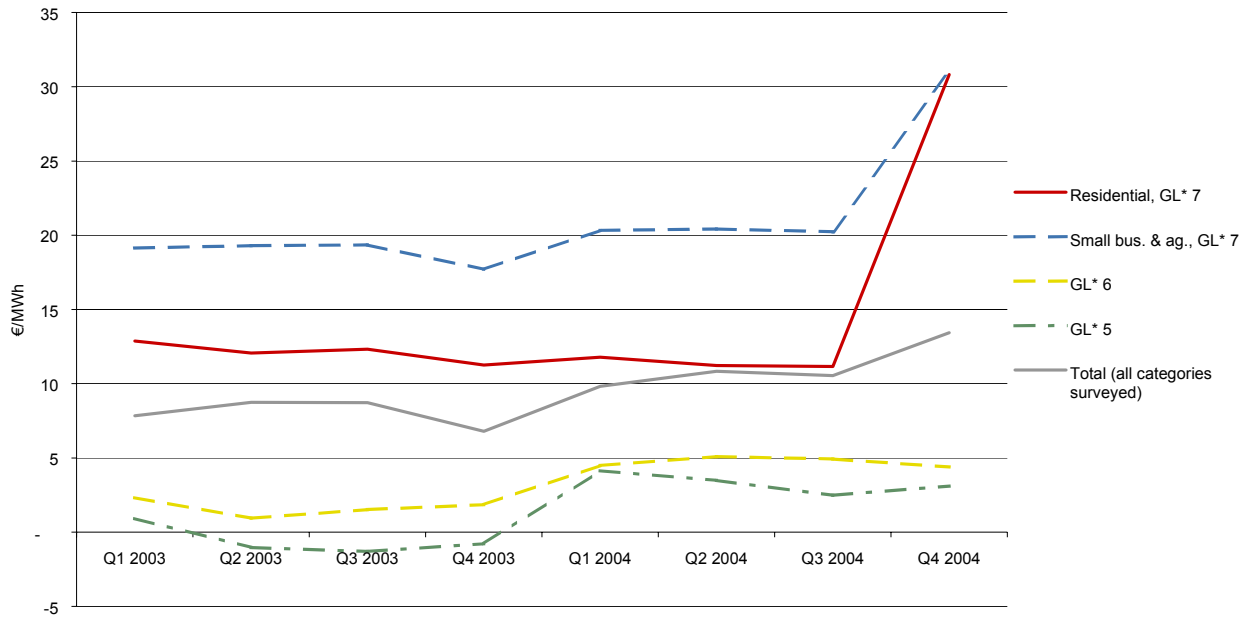
\* GL: grid level

Chart 12: Gross margins by consumer groups: Supplier B



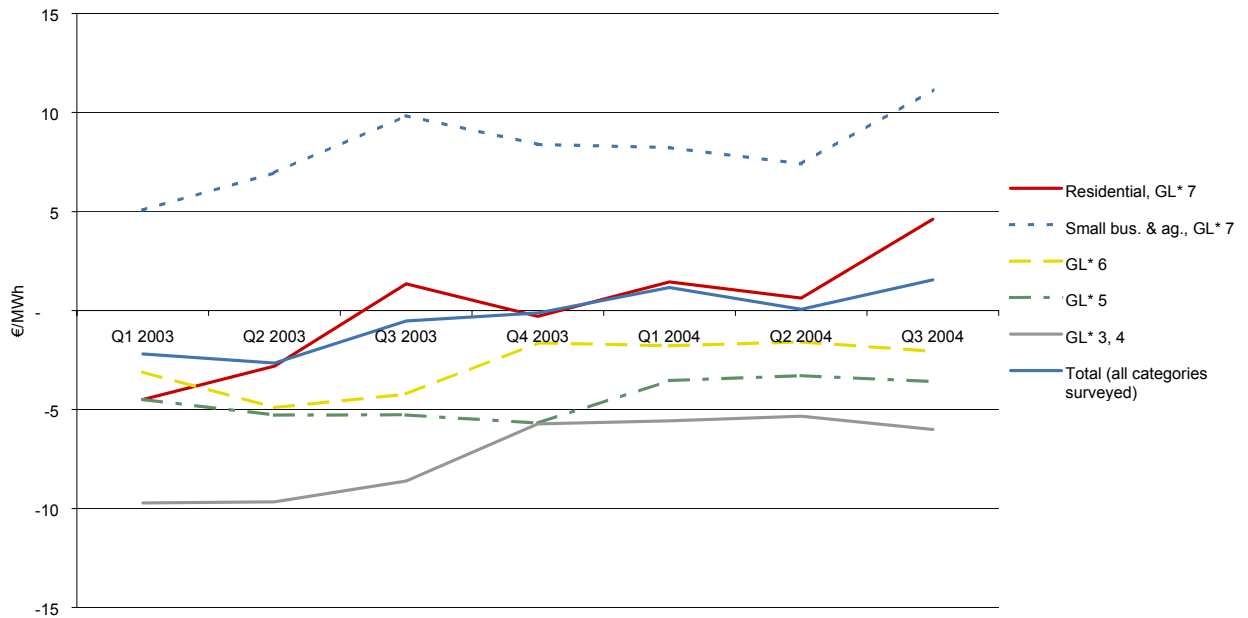
\* GL: grid level

Chart 13: Gross margins by consumer groups: Supplier C



\* GL: grid level

Chart 14: Gross margins by consumer groups: Supplier D



\* GL: grid level

Part of the difference may stem from the varying demand profiles of given customer segments (e.g. higher peak load components with small business than with industrial consumers), since in calculating the gross margins the prices charged to individual consumer groups were always set against the same average purchasing price for a company as a whole. The higher marketing cost component in the selling price in the case of customers with low demand as compared to large consumers (see section above on energy suppliers' costs) probably also played a part. However these factors are insufficient to account for the in part wide disparities between the gross margins on sales to the various consumer groups.

The trends in gross margins present a very mixed picture. The margins of some suppliers have risen while those of others have fallen. The companies' procurement and marketing policies could both be responsible for this. Some suppliers appear to purchase electricity at widely fluctuating prices due to seasonal factors, while others buy at relatively stable prices throughout the year. It is thus not possible to arrive at any firm conclusions as to the overall trend in gross margins, and in particular, whether the price increases were profitable.

### **Summary and conclusions**

There are considerable variations in purchasing and selling prices, and gross margins (the difference between the two). Purchasing and selling prices, and hence gross margins, differ markedly both between energy suppliers and between the consumer groups served by them.

Some suppliers have very low or even negative gross margins. This is largely due to high in-house purchasing prices which mean that earnings are transferred from the retail to the generating operation. There is thus a strong suspicion that the loss on the retail side (negative gross margins) is being made up by additional earnings from other business operations (generation and system operation, etc. )

It is not possible to express a view in this report as to whether the purchasing and selling prices of some suppliers are excessive or have led to high gross margins. To arrive at sound conclusions about this, a definite benchmark for purchasing prices (see section 8.2 on the role of wholesale prices as benchmarks) and a more detailed

knowledge of suppliers' actual marketing costs would be needed. It was apparent, though, that suppliers were able to pass higher procurement prices on to final consumers immediately. Since there was very little switching activity by consumers, they could at least temporarily achieve higher profits by doing so.

The large variations in the gross margins earned on sales to different consumer groups may point to cross-subsidisation between the latter. The differing demand profiles of the various consumer categories alone do not provide a full explanation of the wide range of gross margins.

A look at the switching rates in combination with the gross margins shows that price increases resulting in higher gross margins are profitable, at least at grid level 7 and, in part, at grid level 6, because of the low level of switching activity by final consumers. However, since suppliers' gross margins have behaved differently over time despite rising selling prices due to a variety of factors (including changes in in-house purchasing prices), it is not possible to say more about this.

#### **4.2.4 Evolution of trade flows**

The current structure and evolution of trade flows provides useful supplementary indications of the respective economic importance of supply and demand factors, and the extent to which they constitute effective entry barriers creating different geographic markets<sup>25</sup>. Trade flow analysis generally addresses transport costs and the extent to which these hinder trade between different areas, taking plant location, production costs and relative price levels into account.

In trade flow analysis interregional shipments are used to define geographic markets (Elzinga-Hogarty test). From the presence of shipments between regions it is inferred that these areas actually constitute a single geographic market. It is assumed that the necessary information on prices, goods and elasticities is available, and is reflected in supply and demand behaviour.

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<sup>25</sup> See reference to the Commission notice in footnote 3.

The aggregate trade flows into an area (“little in from outside” [LIFO]) and out of it (“little out from inside” [LOFI]) are used as tests to determine market boundaries. The market is extended until the trade flows in both directions are below a given level – normally 10% of total consumption of a product. Due to its ease of application the Elzinga-Hogarty test plays an important part in geographic market definition.

The table below sets out the aggregate market shares in 2003<sup>26</sup> of the companies supplying the various grid areas studied. All the figures are below the 10% threshold – in some cases significantly so. This argues for very narrow boundaries (grid area) in the case of the customer segments connected to grid level 7. Aggregated figures were used for the calculation for the EnergieAllianz partners’ grid areas. The market shares of other companies in the EnergieAllianz grid areas also add up to less than 10%.

**Table 3: LIFO at grid level 7<sup>27</sup>**

<b>Supplier A</b>	4.70%
<b>Supplier B</b>	6.75%
<b>Supplier C</b>	7.0 %
<b>Supplier D</b>	1.14%
<b>Energielieferant E</b>	7.29%
<b>Energielieferant F</b>	8.25%
<b>Energielieferant G</b>	9.53%
<b>Supplier H</b>	3.13%
<b>Supplier I</b>	7.38%

The trade flows out of the local players’ home markets (grid areas) support the narrow definition of the geographic market for the customer segments at grid level 7 as the grid area. Each of the sample companies meets well under 10% of total demand at grid level 7 in other grid areas. Even the electricity companies that are the lowest-cost suppliers for the residential and small business segment in almost all the

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<sup>26</sup> In view of the low switching rates at grid levels 6 and 7 (see section 4.2.2. Consumers’ switching response — evolution of volume and prices) it is unlikely that the figures changed significantly in 2004.

<sup>27</sup> The calculation was only performed for grid zones for which sufficient data was available. The available data does not permit differentiation between the relevant residential and small business product markets at grid level 7.

grid areas meet only some 5% of total demand outside the areas where they are based.

Table 4: LOFI at grid level 7

<b>Supplier A</b>	1.20%
<b>Supplier B</b>	5.47%
<b>Supplier C</b>	0.70%
<b>Supplier D</b>	0.41%
<b>Supplier E</b>	3.83%

The results both for inflows into and outflows out of grid areas indicate that the relevant product markets for the supply of residential and small business consumers are exclusively confined to the respective grid areas. The aggregate market shares of suppliers in out-of-area grid areas are in each case well below the 10% threshold. Suppliers' sales outside their own areas relative to the total amount of electricity consumed (LOFI) are also very low.

Examination of grid level 6 yields similar results to those for grid level 7. However insufficient data is available to calculate trade inflows into grid areas (LIFO). It is only possible to estimate the outflows. Despite these consumers' higher annual demand the proportions are again well under 10%. This implies that the relevant geographic market for consumers connected to grid level 6 is also the grid area.<sup>28</sup> In the case of grid level 6 customers, too, no other Austrian supplier has succeeded in capturing significant market shares.

Table 5: LOFI at grid level 6<sup>27</sup>

<b>Supplier A</b>	3.69%
<b>Supplier B</b>	0.00%
<b>Supplier C</b>	7.16%
<b>Supplier D</b>	7.60%
<b>Supplier E</b>	0.27%

#### 4.2.5 Entry barriers

Entry to the Austrian electricity market is very difficult, especially for new suppliers that do not have an existing customer base. A certain minimum number of customers

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<sup>28</sup> The calculation can only be carried out for a small number of companies, but the switching survey data for consumers at grid level 6 confirm the results. A narrow geographic market definition is thus justified.

or minimum supply volume is necessary to cover the cost of marketing and operating a balancing group. Additional problems are the facts that virtually all consumers already have a supplier, that electricity – unlike telecommunications, for example – is not a growth market, and that while electricity is largely sold on price the energy price represents only a small proportion of the total charges.

The consumer survey conducted in connection with the sector investigation confirmed that price is one of the main factors driving supplier choice. All the consumer categories surveyed cited price as the most important selection criterion. Over 50% of all consumers with an annual demand of over 4 GWh and of the sub 0.1 GWh category named price as their only yardstick. Nevertheless the switching rates for the low demand consumer categories such as residential consumers are in low single figures, despite opportunities to make considerable savings.

Factors named by the suppliers surveyed as major entry barriers were high system charges, the difficulty of measuring imbalance risk and heavy administrative overheads. Other obstacles referred to were the lack of self-owned generating stations in the balancing group, and congestion at some borders. The existence of a multiplicity of switching costs is a further entry barrier.

An alternative supplier will opt to enter a market if there is a high probability that it will make profits in the near future. To cover its fixed costs it will need to attain a certain critical mass, i.e. a sufficient number of customers and level of volume sales. The greater the cost of acquiring customers, the more difficult this will be, and the less likely an alternative supplier will be to enter the market. These costs can be divided into two basic categories: the switching costs – which are in principle borne by the customer but must in practice at least partly be picked up by the supplier to persuade the consumer to switch – and the cost of serving the customer.

### **Switching costs**

The existence of switching costs influences the functioning of competition, but switching costs are not a negative or anticompetitive factor in all markets. However in existing markets like electricity, in which almost all consumers already have a

supplier, and under conditions of market dominance – as is the case with some electricity submarkets – switching costs are indeed a barrier to entry.

The term “switching costs” refers to all the expenses incurred by a consumer when changing suppliers. It is not confined to switching charges, which do not exist in Austria for electricity supplier transfers. Switching is associated with costs for consumers because they must find out who is operating on their market, make price comparisons, in some cases change direct debit accounts, cancel contracts and sign new ones. The term thus extends far beyond any fees, and apart from the aforementioned transaction and search costs also encompasses penalties for premature contract termination or the loss of loyalty bonuses. The concept of switching costs also includes uncertainties and so-called “psychological costs”. Factors such as lack of confidence in new suppliers, anticipated problems in connection with the transfer or worries that security of supply could be affected come under this heading<sup>29</sup>. Consumers with an electricity demand of less than 1 GWh were especially likely to state that supplier reliability was another important selection criterion, besides price. Small consumers are particularly prone to (wrongly) regard security of supply as one of the benefits provided by their supplier, but even large consumers (upwards of 4 GWh) often do so.

Longstanding – in part personal – relationships with existing suppliers are also an obstacle to switching, and may significantly influence the price differential required to prompt a change. The survey responses gave the impression that all consumer categories would prefer obtaining a lower price through renegotiation to switching. Offset deals were also mentioned by all consumer categories as an argument for the choice of supplier. This was more frequent with the groups consuming between 1 – 4 GWh and between 4 – 40 GWh. These groups are more inclined to see advantages in a longstanding supplier relationship.

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<sup>29</sup> In reality, the main responsibility for security of supply lies with the system operator and generator, and the supplier cannot influence it. However the marketing activities of vertically integrated electricity companies – all of which have their own networks – lead consumers to believe that suppliers are responsible for supply security.

Switching costs can be consciously influenced by a variety of mechanisms, and by market players. For instance, the present lack of price transparency in the electricity market has a considerable impact on search and psychological costs. The opaque billing practices of most integrated companies (particularly all-inclusive prices) make comparison with the offers of other suppliers very time-consuming, if not all but impossible. The lack of comparability creates uncertainty as to how high electricity bills will be in future, and thus colours consumers' switching decisions.

The survey of small businesses and medium-sized enterprises revealed that many were unable to state the energy price paid. Some consumers also confused the energy and overall prices. Local players profit from these information deficits, since the likelihood that such customers will switch is very low. All-inclusive prices and billing are an additional obstacle to awareness that the system and energy charges are two separate price components. Most of the sample of consumers with an annual demand of less than 1 GWh had concluded contracts based on all-inclusive pricing. Only in the demand categories in excess of 4 GWh did offers stating the energy price alone predominate.

Companies with dominant positions can further impede competition by deliberately adding to switching costs, e.g. by offering existing customers loyalty rebates. Where such rebates are only given in return for long-term commitments to suppliers consumers signing up to such deals are effectively off the market for considerable periods, since no switching is possible for the duration. This creates an additional barrier to entry. Rebate systems are employed on the Austrian electricity market, an example being the loyalty bonus offered by Salzburg AG.

The only source of uncommitted customers is new connections. However new connections are not open to competition. Despite the statutory unbundling requirements, consumers are usually sent an offer from the integrated electricity supplier together with the system admission and use of system agreements. Advance information about new customer installations is not available to alternative suppliers and – contrary to the requirement for non-discriminatory treatment of all suppliers by system operators – is in practice only at the disposal of the retailer in the same integrated company as the system operator.

The quantitative analysis of switching costs requires highly complex and expensive techniques, since these costs have many components which are extremely difficult to measure. For instance, what is the cost of abandoning a longstanding business relationship?

It is however entirely possible to make qualitative statements about the influence of switching costs on switching behaviour, and the impact of these costs on competition under current conditions in the Austrian electricity market.

Switching costs enable a company with an existing customer base to charge higher prices and thus realise higher margins (up to the maximum of the switching costs) than would be the case in the absence of those costs. Consumers are only willing to transfer if the price of a new supplier including the switching costs is lower than that of the existing supplier.

An Office of Fair Trading (OFT) report on switching costs published in 2003<sup>30</sup> analyses the relationship between prices and market shares in markets with switching costs, taking the example of the British electricity and gas markets. It is demonstrated that all the largest British gas and electricity companies have been charging higher prices than their competitors (prices for direct debit customers were compared). The situation in Austria is similar. With the exception of VKW, which is one of the lowest-cost suppliers in its own grid area, the prices of the local players in the small consumer segment are in part significantly higher than those of the cheapest rival. Despite differentials of over 30% between the energy prices (and more than 12% between the overall prices) charged to residential consumers the churn rate is in low single figures (see section 4.2.2. Consumers' switching response – evolution of volume and prices).

In the case of larger consumers which called for tenders from a number of suppliers, analysis of the survey responses showed that the local player was often the lowest

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<sup>30</sup> Office of Fair Trading (OFT); Switching costs, Economic Discussion Paper 5, Part one: Economic models and policy implications, (pp. 16 ff), April 2003.

bidder. The higher consumption is, the more likely anticipated savings from switching are to compensate for the switching costs and hence the less importance a consumer will attach to them. Local players will have a strong incentive to hold on to large consumers, and offer attractive prices, sometimes linked to offset deals.

At the same time an electricity company with a large customer base can use price discrimination between new and existing customers. They can win new customers by offering very attractive terms whilst charging existing customers higher prices. Suppliers that must first build up a customer base are thus at a clear disadvantage vis-à-vis incumbents. The rewards harvested by the incumbents from higher prices far outweigh the losses from customers switching to lower-cost suppliers.

Switching costs create contrary incentives. On the one hand, they enable firms to charge existing customers higher prices than would otherwise be the case. On the other they offer an inducement to win customers with lower prices, so as to expand the customer base and reap the benefits of higher prices and profits later on.

The key determinant of the intensity of competition in the presence of switching costs is the ratio of consumers who already have a supplier to uncommitted consumers. The lower this ratio is, the more intense competition will be – as is the case in a growing market. For instance, in the immediate aftermath of liberalisation of the telecommunication market the Austrian mobile telephony sector was still in the early stages of its growth phase. In contrast to the electricity market, market conditions in the mobile telephony sector were initially almost completely homogeneous. However on the electricity market, in which there have long been virtually no uncommitted customers, the existence of switching costs is certainly a major barrier to entry.

In order to win customers, alternative electricity suppliers adopt marketing strategies aimed at reducing consumers' search and transaction costs, and hence their switching costs. For example, in the residential segment door-to-door selling saves customers effort. They are contacted directly and given information in face-to-face sales talks. Here, the firm is paying the consumers' switching costs. Direct selling only pays off if the profits to be made from new customers will actually cover the costs incurred in the medium term. Doorstep selling is one of the most efficient

means of minimising consumers' switching costs and building up a customer base in the residential segment. However of late the electricity companies have increasingly been dropping this approach. Door-to-door selling does not have a particularly good image in Austria, and growing negative media coverage – often inspired by local players – has added to the difficulties of this marketing strategy.<sup>31</sup>

As such, advertising and marketing expenditure represent sunk costs. The aim is to reduce the customer's switching costs by making him/her better informed. However if the attempt to break into the market fails these costs are no longer recoverable.

### **High operating expenses**

As has already been said, building up a distribution system and carrying the high operating costs is only economic beyond a certain minimum number of customers and amount of electricity supplied. Companies with an existing customer base and distribution system are thus at a considerable advantage over new entrants.

According to the companies surveyed not only the fixed costs but also the variable costs per customer are very high. Because of this alternative suppliers – especially foreign ones – have tended to focus on serving large consumers. For instance, one company only accepts customers with an annual demand of at least 20 GWh. One-off problems with customers that cannot be dealt with by automation are hard to predict and can be associated with very high costs.

In particular, the work associated with supplier transfers and billing is highly cost-intensive. Billing problems are particularly prevalent when a supplier submits invoices for both energy and system charges. By offering all-inclusive invoicing alternative suppliers attempt to provide their customers with the wanted service offered by local integrated companies. The additional cost arising from all-in billing comes from the fact that the system operators often only submit hardcopy invoices to the new suppliers, meaning that the data must be manually input. Another difficulty is related to the manner in which system operators bill. There are essentially three different

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<sup>31</sup> Detailed discussion of developments relating to doorstep selling is contained in the Market Report 2004 (p. 94) and Liberalisation Report 2003 (p. 76) published by E-Control.

ways for system operators to present bills to suppliers on behalf of system users – the “intragroup”, “prepayment” and “custodial” formats – each with different tax consequences. Not only does the existence of different systems give rise to additional expenses, but only one of the three, the prepayment format, is competition neutral. In practice, it has emerged that system operators often refuse to bill alternative suppliers in this way.

The captive suppliers of integrated companies have a marked cost advantage over independents through their ability to share billing systems and their direct access to customer billing data.

According to new suppliers another feature of the Austrian market associated with high administrative costs is the large number of system operators. The existence of three control areas is also regarded as an additional cost factor and an obstacle to a nationwide presence. To market electricity throughout Austria suppliers must form a balancing group in each of the three control areas or join an existing one.

Moreover, obtaining the customer data needed for supplier transfers is expensive and time consuming. Some information, found on annual statements among other documents, has to be transferred to the system operator when a switch takes place. If the customer does not have the invoice to hand the supplier must carry out the transfer, and this is a time-consuming procedure. This problem mainly affects switching by residential and small business consumers, as unlike businesses that use large amounts of electricity they do not always have their customer data at the ready.

### **Imbalance risk**

In their answers to the FCA survey both alternative electricity suppliers and potential (foreign) retail market participants argued that the risks associated with balancing power, and the related unpredictability of costs constituted a barrier to entry. According to these respondents a balancing group must have a certain minimum size to be capable of reducing the price and volume risk arising from balancing power payments. It was also said that in a control area where a supplier did not have its own flexible generating capacity it would be unable to cut its balancing power needs

by doing its own balancing. These were seen as disadvantages vis-à-vis incumbents, which have large customer bases and often own generating stations within their balancing groups.

However analysis and comparisons of balancing power expenses and income in the various balancing groups did not bear out this picture. Historically, balancing groups without their own generating capacity have not had significantly higher balancing power costs relative to supply to final consumers than those with flexible capacity or larger volume sales.

However a distinction should be drawn between actual balancing power costs and imbalance risk. The barrier to entry lies not in the actual costs at a given point in time, but in the risk of cost increases, which is difficult to assess for many balancing groups.

Imbalance risk in a given balancing group is determined by a number of structural factors. One of these is the availability of flexible generating capacity to adjust supply rapidly in the group. The less chance there is of using internal generating stations to match supply and demand, the greater will be the risk of large imbalances. Internal balancing also depends on the availability of real time information on current demand in the group. Balancing groups that have no internal generating capacity – usually alternative suppliers – cannot perform such fine-tuning. It is unclear to what extent information on demand in a balancing group is available to a balancing group representative that forms part of an integrated company. Certainly, to rule out the possibility that the local player will enjoy an information lead, complete unbundling is essential, but this is not yet mandatory under Austrian legislation.

The amount of demand in a balancing group also affects the risk borne by a supplier. This is so because the mix of actual supply and forecast consumer demand gives rise to risk diversification, and in the case of customers with synthetic load profiles (mass market consumers) only the volume risk associated with their annual, but not their quarter-hourly demand can be calculated. The larger the number of customers, the greater the volume risk diversification effects.

Suppliers that do not own flexible generating capacity and have low sales volumes in their balancing groups are thus exposed to structurally higher risks than others.

### **Insufficient unbundling**

Non-discriminatory access to the networks of transmission and distribution system operators is one of the main preconditions of completion of the internal market in electricity. It is generally accepted that networks are natural monopolies as they cannot easily be duplicated<sup>32</sup>. Efficient, non-discriminatory network access and avoidance of competitive distortions depends on the existence of independent system operators whose decisions are not influenced by conflicts of interest e.g. with those of a supply or generating business. Community law therefore requires the unbundling of the monopoly network business from the other activities of integrated electricity companies<sup>33</sup> in legal, organisational and accounting terms.

Distinctions must be drawn between:

- Legal unbundling;
- Organisational or functional unbundling; and
- Accounting unbundling.

The Community unbundling rules have evolved in stages.

Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity<sup>34</sup> provided for accounting unbundling of integrated electricity undertakings and a degree of

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<sup>32</sup> See Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas of 16 January 2004 at:  
[http://europa.eu.int/comm/energy/electricity/legislation/doc/notes\\_for\\_implementation\\_2004/unbundling\\_en.pdf/](http://europa.eu.int/comm/energy/electricity/legislation/doc/notes_for_implementation_2004/unbundling_en.pdf/).

<sup>33</sup> **Horizontally integrated companies** are undertakings that perform at least one of the functions of generation for sale, or transmission, or distribution, or supply of electricity, and another non-electricity activity. **Vertically integrated companies** are undertakings or groups of undertakings whose mutual relationships are defined by control in the meaning of Council Regulation (EC) No. 139/2004/EC (EC Merger Regulation) where the undertaking/group concerned is performing at least one of the functions of transmission or distribution and at least one of the functions of generation or supply of electricity.

<sup>34</sup> OJ *Official Journal L 027* , 30/01/1997 p. 0020 – 0029.

organisational unbundling of the transmission system operation functions of integrated companies:

- a. Integrated electricity undertakings were to keep separate internal accounts for their generation, transmission and distribution activities, and, where appropriate, consolidated accounts for other, non-electricity activities, as they would be required to do if the activities in question were carried out by separate undertakings, with a view to avoiding discrimination, cross-subsidisation and distortion of competition. They were to include a balance sheet, and an income statement for each activity in the notes to their accounts<sup>35</sup>.
- b. Unless the transmission system was already independent from generation and distribution activities, the system operator was to be independent at least in management terms from other activities not related to the transmission system.

Experience with the implementation of Directive 96/92/EC showed that its provisions were not sufficient to safeguard the independence of system operators. The following are examples of the practical problems that arise from inadequate separation of the system operation function and captive suppliers:

- New connections: The system operator sends the customer a supply agreement with the captive supplier along with the use of system agreement, although he/she has indicated his/her wish to buy electricity from another supplier.
- Switching: The system operator gives the captive advance notice of the new supplier the customer intends to switch to, and the captive makes a new offer.
- Data access: The captive supplier has access to all the system operator's customer data, and can thus launch targeted marketing activities aimed at poaching consumers from other suppliers in "its" territory.

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<sup>35</sup> Art. 14 Directive 96/92/EC.

- Data quality: The system operator either maintains an information embargo against the “outside” supplier or provides it with data of quality inferior to that given to the captive (e.g. hardcopy invoices instead of electronic data transfer).

The European Commission recognised the weaknesses of Directive 96/92/EC, and put forward a package of proposals including a proposal for a new electricity directive (“Acceleration Directive”) in March 2001<sup>36</sup>. This proposal ultimately led to the adoption of Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC<sup>37</sup>. This directive entered into force in the summer of 2003 and member states were required to implement it by 1 July 2004.

### Legal unbundling

The directive requires legal separation of a transmission system operator or a distribution system operator (with 100,000 or more connected customers) forming part of a vertically integrated undertaking from that undertaking’s other activities. Combined transmission and distribution operators (“combined operators”) are permissible, but in this case legal, organisational and accounting unbundling is mandatory.

The directive provides for a transitional period for legal unbundling of distribution system operators up to 1 July 2007. This is without prejudice to the organisational unbundling obligation.

The legal unbundling provisions do not create any obligation to separate ownership of system assets from the vertically integrated undertaking. Legal unbundling does not result in any change in the ownership of these assets.

### Organisational unbundling

The new directive goes beyond the requirements of Directive 96/92/EC in that it obliges vertically integrated undertakings to unbundle the system operation function

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<sup>36</sup> See [http://europa.eu.int/comm/energy/electricity/legislation/com\\_proposal\\_en.htm/](http://europa.eu.int/comm/energy/electricity/legislation/com_proposal_en.htm/).

<sup>37</sup> OJ L 176 15/07/2003 p. 0037–0056.

from their other activities in organisational terms. Over and above the legal unbundling requirements, the system operator must be independent of other activities not relating to system operation in terms of its organisation and decision-making. The directive establishes the following minimum requirements for organisational unbundling, which may be extended by national legislation, subject to the principle of proportionality:

- Impermissibility of multiple office holding by top management:

Those persons responsible for the management of the system operator may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation and supply of electricity.

- Safeguarding of the independence of senior management:

Appropriate measures must be taken to ensure that the professional interests of the persons responsible for the management of the system operator are taken into account in a manner that ensures that they are capable of acting independently. For example the remuneration of senior executives of the system operator may not be related to the performance of the marketing business.

- Actual decision-making powers of the system operator:

The system operator must have effective decision-making rights, independent from the integrated electricity undertaking, with respect to the assets necessary to operate, maintain or develop the network. However the directive protects the economic and management supervision rights of the parent company (e.g. the undertaking responsible for generation or marketing) in respect of the return on the assets of the system operation subsidiary. In particular, the parent company is entitled to approve the annual financial plan, or any equivalent instrument, of the system operator and to set global limits on the levels of indebtedness of its subsidiary. The parent is not permitted to give instructions regarding day-to-day operations, or make decisions concerning the construction or upgrading of transmission/distribution lines that do not exceed the terms of the approved financial plan, or any equivalent instrument.

- Compliance programme

The system operator must establish a compliance programme which sets out measures taken to ensure that discriminatory conduct is excluded. The system

operator must ensure that observance of this programme is adequately monitored. The programme must establish the specific duties of employees that must be performed to meet this objective. The person or body responsible for monitoring the compliance programme must submit an annual report on the action taken to the regulatory authority.

### Accounting unbundling

The provisions of Directive 96/92/EC were largely left unchanged. A new requirement is the obligation to state revenue from ownership of the transmission/distribution system in the accounts.

DG Energy & Transport has drawn up notes<sup>38</sup> for the implementation of the unbundling provisions of Directive 2003/54/EC for the assistance of the companies affected as well as the authorities concerned with enforcement.

### Implementation of Directive 2003/54/EC in Austria

The directive was transposed into Austrian federal law by Amendment BGBl. (Federal Law Gazette) I No. 63/2004 Electricity Industry and Organisation Act (EIWOG). The amended legislation entered into effect on 22 June 2004. The provinces were given six months to enact implementing legislation. As of the end of March, i.e. three months after expiry of the implementation deadline for the provinces, not one single provincial law had reached the statute book. Since the unbundling provisions of the Electricity Industry and Organisation (Amendment) Act 2004 were framed as enabling legislation requiring subordinate legislation to take effect, it does not give rise to an direct obligations on the part of the electricity companies. Direct application of Directive 2003/54/EC is excluded, since under settled European Court of Justice case law this is only permissible in the case of provisions that create entitlements, rather than duties on the part of private persons. The unbundling rules contained in Directive 2003/54/EC thus to all intents and purposes remain unimplemented in Austria, though a few companies have opted for voluntary – at least partial – compliance. The failure of the provinces to implement

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<sup>38</sup> See:

[http://europa.eu.int/comm/energy/electricity/legislation/doc/notes\\_for\\_implementation\\_2004/unbundling\\_en.pdf/](http://europa.eu.int/comm/energy/electricity/legislation/doc/notes_for_implementation_2004/unbundling_en.pdf/).

unbundling is regrettable in view of its importance for the emergence of effective competition. It should also be noted that in merger control proceeding COMP/M.2947 – Verbund/EnergieAllianz the notifying parties made a commitment to comply with the unbundling provisions to be enacted in connection with Austrian transposition of the revised Electricity Directive “as quickly and comprehensively as possible”<sup>39</sup>. This commitment has neutralised by delayed implementation of the directive.

#### Contents of the Electricity Industry and Organisation (Amendment) Act 2004

Under the Act the award of a system operator’s licence is conditional on compliance with the legal and organisational unbundling requirements of the Directive. The authority responsible for licensing is the respective provincial government. The companies have until 1 January 2006 to furnish proof of fulfilment of the licensing conditions. This provision is clearly at odds with the directive, under which organisational unbundling should have been implemented by 1 July 2004. The federal legislation effectively contents itself with the minimum requirements established by the directive<sup>40</sup>.

#### Impact on competition

In Austria as elsewhere in the Community, implementation of the unbundling rules is an important means of promoting competition. The current situation in Austria is scarcely likely to stimulate what little competition there is in the electricity sector. It is thus important to take the necessary steps to implement the Community legislation, at least in transposition terms.

#### Low energy prices accompanied by high system charges

In their survey responses both consumers and alternative suppliers cited excessive system charges as a barrier to entry. The existing ratio of system charges, taxes and levies to energy prices leaves scant room for competition. Particularly at the lower

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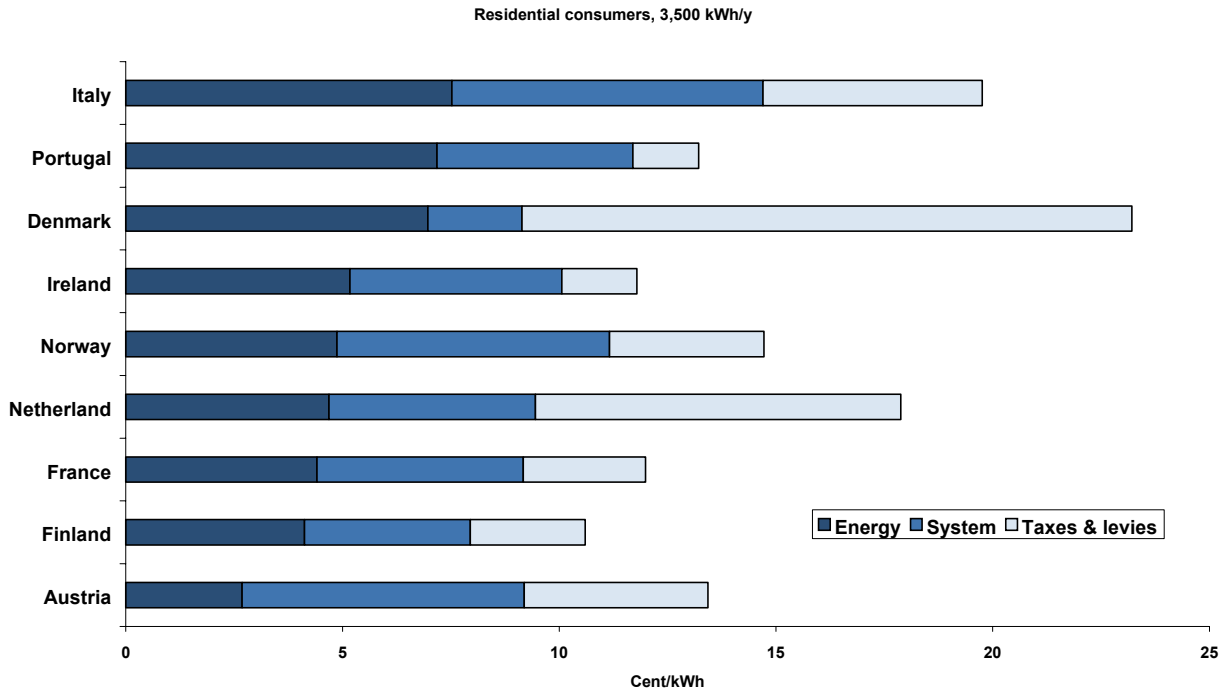
<sup>39</sup> See para. 145 of the Commission decision at: <http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32004D0271:EN:HTML/>.

<sup>40</sup> The only additional requirement is the stipulation that the supervisory board of a distribution system operator forming part of an integrated company must have at least two members who are independent of the parent company.

voltage levels (grid levels 7 and 6), the energy component of the overall prices is very small, while the system charges represent a correspondingly high proportion of the total. The system charges at these grid levels account for some 40% of the overall price (inc. taxes and levies) compared to only about 20% at grid level 4.

In international terms, too, energy prices are very low relative to system charges. Not only in the residential segment (see Chart 15: International comparison of price components) but also in the higher demand categories, Austria is one of the countries with the lowest energy prices and the highest system charges. There is thus good reason to suspect cross-subsidisation in the Austrian integrated companies.

Chart 15: International comparison of price components



Sources: CEER

Companies that are solely active in Austria as suppliers likewise frequently voice suspicions that monopoly rents from the system operation area are being used to offset low retail margins. Only if system charges were lower, removing the option of

recycling revenue from system operation to marketing operations, would higher retail margins permit stronger competition.

All-inclusive pricing and the response to reductions in system charges are indicators of cross-subsidisation between the integrated companies' system operation and marketing businesses. The terms of supply agreements based on all-inclusive pricing are often such that changes in system tariffs do not automatically affect the overall price, meaning that cuts in system charges indirectly result in equal and offsetting increases in the energy price. Integrated companies were also seen to be increasing their energy prices under agreements without all-inclusive pricing clauses almost simultaneously in response to past rounds of system charge reductions. Though the synchronisation of electricity price increases and decreases in system tariffs in February 2005 (Salzburg AG, KELAG and BEWAG) was more in the public eye it was not the first instance of this practice<sup>41</sup>. For instance, the vertically integrated electricity companies reacted to the system tariff reduction in November 2003 with simultaneous or slightly lagged (start of 2004) energy price rises. In some cases energy prices have been increased by precisely the same amount as the cut in system charges (e.g. Salzburg AG and KELAG). Not just the timing but also the amount of the energy price increases that have accompanied reductions in system charges is questionable. The law requires unbundling of system operation from the other areas of integrated companies' activities. Proper implementation of unbundling should mean that changes in system charges have no effect on energy prices. The companies' responses to reductions in system charges point to continued cross-subsidisation of the marketing activities, in which they compete in the marketplace, by the regulated system operation area, due to insufficient unbundling.

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<sup>41</sup> This approach does have the effect of increasing the energy price relative to the system charges, but the shifts have not been sufficient to enable alternative suppliers to gain a permanent foothold on the market. The analysis of consumer behaviour in section 4.2.2. Consumers' switching response — evolution of volume and prices shows that in spite of the recent energy price increases introduced by local players and the resultant widening of the price differential vis-à-vis lowest-cost suppliers in many cases switching rates have actually fallen.

#### **4.2.6 Findings on market definition and conclusions drawn**

While incomplete data prevented a definitive determination of market boundaries the evidence assembled points to the strong probability that:

- Consumers with an annual demand of between 100,000 kWh and 1 GWh (generally those connected to grid level 6) belong to the relevant small consumer and not the large consumer product market;
- The boundaries of the relevant small consumer geographic markets do not extend beyond the confines of the grid areas.

Put simply, the test for market delineation is whether a permanent price increase by a hypothetical monopolist in a given market would be profitable in that the additional contribution margin would more than make up for any losses of customers.

As a first step, consumer behaviour in response to price increases by local players, and the effect on the gross margins of given companies – taken as an approximation of profits – were investigated. This exercise showed that during the observation period the increases in the energy prices charged by local players to households, small businesses and farms (grid level 7 consumers) – which resulted in price differentials vis-à-vis the lowest-cost supplier of up to 30% – had indeed probably been profitable. An investigation of the behaviour of medium-sized enterprise consumers (grid level 6), which were also very reluctant to take the opportunities open to them for significant savings (e.g. by joining electricity pools), brought similar but less pronounced results.

In order to ascertain whether price increases by local players actually lead to higher profits, the companies' costs were also taken into account. To this end the evolution of the local players' gross margins was analysed. There were significant differences in gross margins, both as between companies and consumer groups. It was apparent that companies were able to pass higher procurement prices on to final consumers immediately. Since there was very little switching activity by consumers the companies could at least temporarily achieve higher profits. However it was not possible to reach any firm conclusions as to whether the purchasing and/or selling

prices of the various suppliers were excessive. High in-house purchasing prices were partly attributable to profit allocation strategies inside integrated companies. Thus in some integrated companies transfer pricing diverted profits from the retail to the generating operations. However, even if there were no evidence of such strategies it would still be necessary to identify a clear procurement price benchmark for the respective supplier and to obtain a precise knowledge of its actual marketing costs to arrive at reliable conclusions about the reasonableness of its prices. This information did not form part of the survey, and would require further research.

It was striking that the differences between the local players' purchasing prices persistently exceeded the spread between the cheapest and most expensive spot products on the wholesale market. The ranges between the electricity suppliers' stated procurement prices are wider than those found on the wholesale market. All in all, it appears that inside their grid areas the local players can effectively behave like monopolists when setting their prices for residential, small business and agricultural consumers, as well, possibly, as medium-sized enterprises connected to grid level 6. These consumers' low level of switching activity meant that the revenue gained from a price increase far outweighed the marginal losses from switching.

The picture with respect to medium and large-scale industrial consumers is very different. Here, too, switching rates were found to be low, but this was because the local player was often ultimately the lowest bidder in a tender. When addressing this customer segment the local players already appear to be reacting to competitors' bids, and are holding on to customers by improving their offers. The different competitive conditions in the case of large consumers, and the changed pricing practices of local players are reflected in the relatively narrow differentials as compared to prices for small consumers.

In a second step, the results of the analysis of switching after price increases were tested by looking at trade flows. This methodology takes account of the fact that regional price, commodity, supply and demand information influences decisions on out-of-area deliveries. The evolution of trade flows over time thus provides useful additional indications of the economic importance of supply and demand factors, and the extent to which they constitute effective barriers to entry. Both alternative

suppliers' aggregate deliveries within grid areas and local players' deliveries outside their grid areas were found to be below the generally accepted thresholds for extension of the relevant geographic market beyond the grid area.

In a third step, a qualitative analysis of the entry barriers was undertaken to test market delineation. This showed that the barriers to entry to the mass market were considerably greater than those to the (customised) large consumer market. Both the switching costs an alternative supplier would have to bear to acquire customers and energy suppliers' marketing costs are much higher for small than for large consumers. Moreover, the disadvantages of insufficient unbundling – particularly in combination with incumbents' ability to charge low energy prices – limit alternative suppliers' prospects of achieving positive contribution margins.

Both qualitative and quantitative methods of investigation thus yield clear indications that the grid area is the relevant geographic market for consumers connected to grid level 7 (households, small businesses and farms) and, to a lesser extent, for grid level 6 consumers (medium-sized enterprises).

## **5 Identification of companies with market power**

Once the relevant markets have been defined it is possible to investigate the market power of companies operating in them. Market shares are normally the yardstick used to form an initial assessment of market power. In the European Commission's decision-making practice a market share of 40 – 50% has normally been treated as evidence of a dominant position. Virtually all the electricity companies that were already supplying small consumers prior to liberalisation and have their own grid areas meet this condition. The EnergieAllianz group has a 45 – 55%<sup>42</sup> share of the large consumer market.

From an economic point of view, market shares are not the only measure of market power. A detailed analysis of all the parameters of competition is needed to reach a firm conclusion as to whether a company has a dominant position. Such an analysis should take account of criteria such as legal, strategic and structural entry barriers, potential competition, sunk costs, economies of scale and scope, and product differentiation. Depending on market conditions, it may also be necessary to include factors such as barriers to expansion, other firms' market shares, buying power, vertical integration and past behaviour in the analysis. The market positions of the many very small electricity companies require separate assessment.

Conclusive designations of undertakings with dominant positions are outside the terms of reference of a general investigation of the electricity market under section 2(1)(3) Competition Act, and would have to be undertaken on a case by case basis.

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<sup>42</sup> Commission decision COMP/M.2947 – Verbund/EnergieAllianz of 11 June 2003, p. 32.

## 6 Special responsibilities of undertakings with market power

One of the main objectives of liberalisation of the electricity sector is completion of the internal market<sup>43</sup> and the creation of a fully operational and competitive market<sup>44</sup>. To this end both the Electricity Directive and the Austrian implementing legislation – the EIWOG – require Austrian electricity companies to play their part in the creation of a fully operational and competitive market.<sup>45</sup>

Apart from their duty to play their part in the creation of a competitive market based on a statutory regulatory regime, the electricity companies have special responsibilities as dominant undertakings<sup>46</sup>, which may also apply to the deregulated areas of the sector, e.g. trading and marketing.

The following ruling by the ECJ<sup>47</sup> represents settled case law and was upheld by the Court of First Instance<sup>48</sup>:

“A finding that an undertaking has a dominant position is not in itself a recrimination but simply means that, irrespective of the reasons for which it has the position, the undertaking concerned has a special responsibility not to allow its conduct to impair genuine undistorted competition on the Common Market”.

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<sup>43</sup> See recital 3 of the Electricity Directive (2003/54/EC).

<sup>44</sup> See section 3(2) Electricity Industry and Organisation Act (EIWOG), BGBl. I No. 143/1998 as amended by BGBl. I No. 63/2004 and Notes Legislative Session XX Bill 1108.

<sup>45</sup> For instance, one of the premises on which the directive is based is that for competition to function, network access must be non-discriminatory, transparent and fairly priced. System operators are thus subject to a regulated access regime. In addition, integrated companies must separate the activities which compete on the market from their monopoly system operation businesses in accounting, organisational and legal terms (so-called “unbundling”). The regulatory authorities are required to monitor the level of transparency and competition in the electricity market.

<sup>46</sup> For definitions of market dominance see ECJ judgment of 14 February 1978, Case 27/76, United Brands and section 34 Austrian Cartel Act.

<sup>47</sup> See ECJ judgment of 9 November 1983, Case 322/81, Michelin v. Commission.

<sup>48</sup> See Case T-228/97, Irish Sugar v. Commission and Case T219/99, British Airways v. Commission.

Applying this – admittedly general – statement to the electricity sector, the following discussion asks what desirable or obligatory forms of conduct, essential to the growth of competition, would fulfil this special responsibility.

## **6.1 Contractual terms**

### **6.1.1 All-inclusive prices**

In the electricity sector only one component of the price, namely the energy price, is subject to free competition. The system charges for the transportation of electrical energy, and the applicable taxes and levies are beyond the control of the electricity companies. In the interests of price comparability and switching, the energy price should be stated separately from the other price components in the companies' communications. However many state only a fixed overall price in their contracts for all consumer groups. In such cases the price components are seldom itemised. All these contracts based on so-called "all-inclusive prices"<sup>50</sup> obstruct switching, as they mean that consumers are unable to compare their suppliers' energy prices with alternative offers.<sup>51</sup> Electricity companies often contend that consumers want such agreements and that itemisation of price components would be asking too much of consumers. This argument is implausible if individual price components and the overall price are clearly presented. Itemisation of the energy price in advertising, offers and invoices is highly desirable, as it is essential to the growth of competition, and can reasonably be expected of all electricity companies, especially dominant suppliers.

Such agreements frequently also contain clauses stating that reductions in system charges will not be passed on to customers, and that the overall price will remain unchanged in the event of a reduction, as the following clauses show:

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Standard contracts submitted in connection with the industry survey.

<sup>50</sup> This position was taken by Linz Strom Vertrieb NfG GmbH & Co KG, EAG OÖ Vertrieb GmbH & Co KG, Energie Graz GmbH & Co KG and Feistritzwerke Steweag GmbH, among others.

<sup>51</sup> Here, too, the consumer concludes two contracts – the use of system agreement with the system operator and the supply agreement with the supplier – but a fixed all-in price is agreed with the supplier.

Terms of Linz Strom Vertrieb NfG GmbH & Co KG, EAG OÖ Vertrieb GmbH & Co KG and Energie Graz GmbH & Co KG, among others.

“In the event of a shift in the system and energy price components of the all-inclusive price relative to each other during the term of the agreement due to changes in the regulated system charges this shall not automatically trigger an adjustment of the all-inclusive price in the amount of the change in the system tariff.<sup>53</sup>”

“Changes in the use of system and system loss charges shall not affect the agreed overall price.<sup>54</sup>”

The above clauses, under which reductions in system charges are not to be passed on, but are to result in automatic increases in the energy price could be regarded as unreasonable (abusive) contractual terms. Here, a dominant supplier is using the headroom created by a reduction in system charges to introduce an increase in the energy price which is not reflected in the overall price (and thus not noticed by the customer), and for which there is no objective justification. The cost savings benefit the supplier rather than the consumer.

### **6.1.2 Minimum terms of agreements**

Another example of anticompetitive terms and conditions of contract is unreasonably long minimum terms of agreements which limit customers' freedom to switch and thus exclude competitors from the market. Here, it should be noted that the withdrawal of electricity at a metering point effectively involves exclusive dealing in that the electricity can only be procured from one supplier. Many agreements also expressly stipulate exclusive supply. Exclusivity clauses in favour of dominant undertakings are normally regarded as abusive (in the absence of an objective justification) if they result in appreciable foreclosure effects. The length of the minimum term (notice periods, etc.) plays a major role in assessment of the foreclosure effects. It is of particular importance here, as it is not possible to source electricity from more than one supplier at a time.

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<sup>53</sup> See clause 15.7 of the general terms and conditions for the supply of electrical energy of Energie AG Oberösterreich Vertrieb GmbH & Co KG at:  
[http://www.energieag.at/downloads/AGB\\_EAG\\_Gltigab01Jaenner2003\\_end.pdf/](http://www.energieag.at/downloads/AGB_EAG_Gltigab01Jaenner2003_end.pdf/).

<sup>54</sup> Source: Supplementary agreement, electricity supply agreement (business customer).

Consumers in the meaning of the Consumer Protection Act (KSchG) can terminate energy supply agreements concluded for an indefinite period or a term of over one year subject to notice of two months up to expiry of the first year, and expiry of half a year thereafter (section 15[1] KSchG).

Only if fulfilment of the agreement is associated with substantial expenditure by the supplier, and the latter has informed the consumer of the same not later than the time of conclusion of the agreement may reasonable notice dates and periods deviating from the above be agreed (section 15[3] KSchG).

Compliance with consumer protection law certainly does not always mean that such agreements do not give rise to competition law concerns.

Minimum terms of agreements, particularly with customers that are not consumers in the meaning of the Act, must be judged on a case by case basis, according to competition law. The anticompetitive effect of such clauses (impossibility of switching) must be taken into account. For instance, customers of Wienenergie Vertrieb GmbH & Co KG who opt for the Mega 03, Mega HV 03 or Giga 03 tariffs must commit themselves to remaining with the supplier for at least three years. In this case the lawfulness of rebates is also an issue<sup>55</sup> (lower energy price for a longer minimum term: see 6.1.3. below). It is not possible to reach a general conclusion as to the validity of such clauses here.

### **6.1.3 Rebates**

It is not always lawful for dominant suppliers to grant rebates on posted and generally applicable prices.

The decision-making practice of the European Commission, upheld by verdicts of the ECJ<sup>56</sup> and the CFIEuG<sup>57</sup>, makes a fundamental distinction between quantity rebates

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<sup>55</sup> See [www.wienenergie.at/](http://www.wienenergie.at/).

<sup>56</sup> See: ECJ judgment of 16 December 1975, Case 40/73 to 48/73, 50/73, etc., Suiker Unie and Others v. Commission; ECJ judgment of 13 February 1979, Case 85/76, Hofmann-La Roche v. Commission; ECJ judgment of 9 November 1983, Case 322/81, Michelin v. Commission; and ECJ judgment of 29 March 2001, Case C-163/99, Portugal v. Commission.

which are *per se* lawful and fidelity rebates which are *per se* unlawful<sup>58</sup>. Assessment of the lawfulness of rebates is difficult. There are two tests. Firstly, does the rebate have an anticompetitive effect because it is aimed at market foreclosure by tying the customer to the dominant company? Here it is sufficient to demonstrate that the rebate system is capable of having this effect. Secondly, is the rebate objectively justified, in particular because efficiency benefits (e.g. through increased supply volumes) are passed on to the customer? Here the burden of proof lies with the dominant company<sup>59</sup>.

Accordingly, a rebate is unlawful and abusive if it results in the above loyalty enhancing effect and is not based on the passing on of economic benefits.

An example, culled from the media, is that of Salzburg AG, which grants residential and small business customers a loyalty rebate of 8% in return for tying themselves to it for one year, and an 11% rebate for a two-year commitment<sup>60</sup>.

The fidelity rebate, which is referred to as such, is offered solely as a counterperformance for the customer's commitment to the supplier<sup>61</sup>. The effect, aimed at enhancing customer loyalty and consequently at exclusion of competing suppliers from the market, is evident. However, at least at first sight, it is not evident whether and to what extent cost advantages are being passed on to the customer. This would have to be demonstrated by the company concerned.

Another potential legal problem raised by the granting of rebates under agreements based on all-inclusive pricing should be mentioned in this connection. If a rebate is given on the overall price, i.e. on the regulated system charges, as well, this probably constitutes a breach of the prohibition of profiteering under section 62 EIWOG. Among other things, this provision prohibits the naming, request, acceptance or

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<sup>57</sup> See CFI judgment of 30 September 2003, Case T-203/01 – Michelin v. Commission.

<sup>58</sup> See CFI judgment 30 September 2003, Case T-203/01 – Michelin v. Commission, paras. 56 ff.

<sup>59</sup> See ECJ judgment of 30 September 2003, Case T-203/01, Michelin v. Commission, paras. 107 ff.

<sup>60</sup> See <http://www.salzburg-ag.at/content/default.asp?mainid=9&kapitel=53&newsid=541/>.

<sup>61</sup> This is presumably a fidelity rebate, as it is linked to the exclusive relationship rather any (higher) amount supplied.

acceptance of a promise of a price for system services lower than that determined by the regulatory authority.

An example would be an energy supplier that grants its grid level 6 customers a rebate on the unit and capacity charges, both of which include system charges and energy prices<sup>62</sup>. The same applies to other companies that grant rebates on all-inclusive prices to residential and small business customers connected to the grid level 7.

The situation is somewhat different with the aforementioned “loyalty bonus” offered by Salzburg AG. “The loyalty bonus is calculated on the basis of the applicable net prices<sup>63</sup> (rate per kWh and base rate or capacity charge) and deducted from the energy component.”<sup>64</sup> The calculation basis of this rebate thus includes the system charges, but it is only applied to the energy price. While this is probably not a case of “profiteering” in the meaning of the EIWOG, the competition concerns raised by this form of rebate are all the more serious. In the first place the rebate on the energy price is significantly higher (approx. 16.4%), and in the second the linkage of the rebate to the system components underlines the fact that – as suggested by the delinking from actual demand – this is not a matter of passing on savings resulting from higher electricity consumption.

Moreover, this high rebate for customers in the supplier’s home grid area raises the question as to whether a mixed calculation, based on both the marketing and the system operation businesses (or in other words, unlawful cross-subsidisation between the two), was performed.

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<sup>62</sup> Standard contracts submitted by the company in question in connection with the sector investigation.

<sup>63</sup> “The net prices include energy, use of system and system loss charges, and exclude metering charges, surcharges, levies and taxes.”

See: <http://www.salzburg-ag.at/content/default.asp?Mainid=1&kapitel=79&l3menu=103/>.

<sup>64</sup> <http://www.salzburg-ag.at/content/default.asp?Mainid=1&kapitel=79&l3menu=103/>.

#### 6.1.4 Bundling and tying

In EU competition law making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts constitutes unlawful abuse of a dominant position. True, in the cases investigated supply was not directly made conditional on the acceptance of an additional service from the dominant firm, but in its decision-making practice the European Commission<sup>65</sup> has held that price incentives may have a similar effect. This is so if a company makes the price of two or more services offered as a package so attractive relative to their individual prices that no rational consumer would buy the services separately.

In this context the practice of the dominant “multi-utility suppliers” – which generally provide gas, water, district heating, cable TV or other products and services – of offering more attractive prices for packages of products and/or services than for the individual components raises competition concerns in that it could serve to exclude competitors which are unable to offer bundled services from the market.

This group of issues is closely related to that of the legality of rebates, discussed above. If a dominant firm grants rebates on a number of services taken as a package or grants a separate rebate solely for the acceptance of a number of services this may amplify the effect of the individual rebates and may simultaneously have exclusionary effects on competitors in a number of markets.

Examples of this practice which have come to our notice are:

the multiple bonus automatically accorded to customers of Salzburg AG if they opt for more than one of its products<sup>66</sup>; and the similar “free days” offered by EVN to takers of a combination of energy forms<sup>67</sup>.

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<sup>65</sup> See Digital, IP/97/868 and XXVIIth Report on Competition Policy, 1997. See also AC Nielsen, IP 96/1117 and XXVIth Report on Competition Policy, 1996.

<sup>66</sup> See: <http://www.salzburg-ag.at/content/default.asp?Mainid=1&kapitel=79&l3menu=105/>.

<sup>67</sup> See: [http://www.evn.at/KUNDEN/framset2\\_15.html/](http://www.evn.at/KUNDEN/framset2_15.html/).

## 6.2 Pricing

The first interim report on the sector investigation remarked on the regional variations found in energy prices – often, even those charged by one and the same company – particularly in the residential consumer segment. For instance, the prices billed by the EnergieAllianz sales companies vary from one grid area to another.

It was not possible to ascertain whether these price differentials resulted from incomplete integration of the EnergieAllianz merger companies or were attributable to other factors.

Transportation costs are invoiced separately from energy prices in the form of system charges, and are thus ruled out as a factor. Differing market conditions can also be excluded, since the same market model (balancing group system) applies throughout Austria. Domestic exchanges across control area boundaries must be reported to the control area managers concerned, but these are not associated with any additional costs apart from such administrative expenses as may arise.

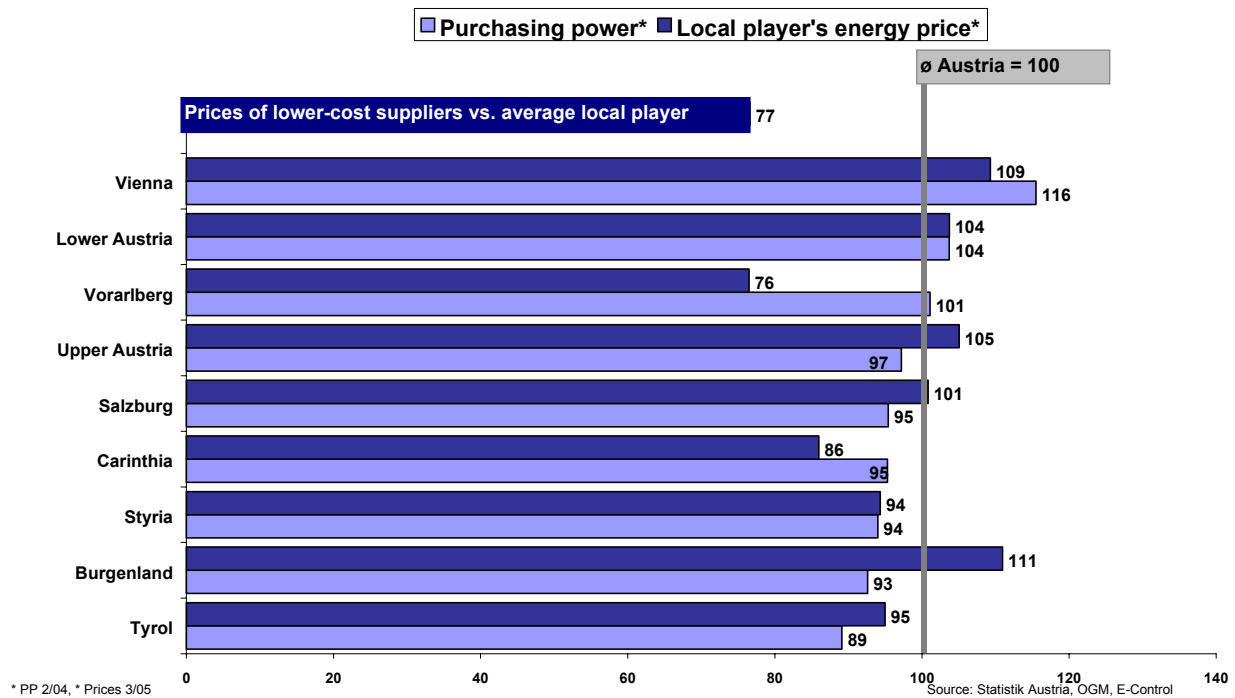
Neither are there any indications of differences between the provinces in terms of the intensity of competition<sup>68</sup>. Consideration was therefore given to regional variations in purchasing power as a possible reason for the regional price differentials.

The following chart shows purchasing power and local players' residential prices by provinces.

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<sup>68</sup> In Austria such foreign alternative suppliers as are present target given consumer groups rather than specific provinces. The incumbents' shares of the small consumer segment are roughly the same throughout the country.

Chart 15: Purchasing power and residential energy prices



Sources: Statistics Austria, OGM and E-Control

Chart 16 shows purchasing power in the various provinces and the energy prices charged to households by the respective local players. The pricing differences are not entirely explained by regional variations in purchasing power. For example, purchasing power in Burgenland is 7% below the Austrian average, yet the energy price is 10% above the average for all Austrian local players and almost 35% above that of the lowest-cost supplier. The energy prices of the two cheapest alternative suppliers<sup>69</sup> are about 23% lower than the national average for the local players.

This implies that the differentials between the prices charged by EnergieAllianz to small consumers, shown in Chart 16, cannot stem from differences in purchasing power.

<sup>69</sup> The alternative suppliers' energy prices for an average household differ only marginally.

It was therefore necessary to investigate whether it is unlawful for companies to charge consumers in their home supply areas (where they are dominant) higher prices than consumers of the same category in other areas where they exercise no market power. As such, the correct interpretation of section 35 Cartel Act, which corresponds closely to Art. 82 EC, is that companies only have special responsibilities in areas where their market power could impair competition. Hence in principle even a dominant firm may apply different prices and contractual terms outside the market dominated by it. This freedom does not extend to cross-subsidisation based on excessive prices in the areas dominated, but the price differentials would have to be glaring, since even a dominant company must have means of entering new markets.

### **6.3 Transparency**

Section 25(10) EIWOG requires electricity companies to itemise the various components of the system charges in their use of system or electricity bills. Apart from this statutory requirement, transparent contractual terms – and particularly itemisation of the energy price – are essential as effective competition is otherwise impaired by lack of comparability of offers. The same applies to all forms of customer information capable of influencing switching behaviour. This includes advertising, offers of agreements, customer magazines and invoices.

It is noticeable that the dominant companies not only fail to strive for transparency, but actively obstruct competition by issuing unclear customer information<sup>70</sup>, making

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<sup>70</sup> A recent example is a story in number 170 of Wienenergie's 24 Stunden für Wien customer magazine, published in December 2004.

This article, headlined "Vienna energy pays off", gives the impression that Wienenergie offers electricity at a lower energy price than other companies including KELAG (one of the few alternative suppliers in Vienna). The information used for the price comparison was correct, but completely unsuitable for the comparison. Thus:

- It was not the energy price alone that was used, but an overall price consisting of the energy price, system charges, taxes, levies and surcharges.
- Two different supply scenarios were compared, namely, those of supply of a consumer in Wienstrom's grid zone and of a consumer in KELAG's grid zone. Since the regulated system charges in Vienna and Carinthia are different, for this reason alone the prices were not comparable.

opaque offers<sup>71</sup> or failing to compare like with like<sup>72</sup>. Such practices risk unlawfully creating market confusion and thereby influencing consumer behaviour.

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The correct comparison would have been between the energy prices of Wienenergie Vertrieb GmbH & Co KG and KELAG for the supply of a consumer under the same legal conditions (system charges, taxes, levies and surcharges).

<sup>71</sup> An example is an offer by Select (a brand used by Stewag-Steg and six partner companies; see: <http://www.selectstrom.at>) for residential consumers which at first sight appeared to be based on all-inclusive pricing, but contained a note in the small print to the effect that it was exclusive of some levies and other charges. The energy price was not identifiable for consumers, and the staff of the call centre used by the company in question was also unable to say what it was.

<sup>72</sup> An example of this is announcements by electricity companies, following reductions in system charges introduced by the regulatory authority, to the effect that its "electricity price" was being cut (particularly where the overall price falls but the energy price is increased).

For instance, in a mailing to customers BEWAG Energievertrieb GmbH & Co KG announced:

"BEWAG is cutting electricity prices by about 8% on 1 February (2005)".

This was misleading to the extent that it was only the system charges that were being reduced, due to an Energy Control Commission order, but not the energy price.

## **7 Assessment of the EnergieAllianz and “Austrian electricity solution” mergers in the light of the findings of the sector investigation**

The findings of the sector investigation to date indicate that the small consumer markets are narrow, being delineated by the boundaries of the various grid areas. Not only typical non interval metered consumers (households, small businesses and farms) but all consumers up to an annual demand of 1 GWh should be included in the definition of the small consumer market. Beyond this level the dividing line from the large consumer segment is fluid and cannot be precisely defined. All the local players still hold shares of well over 90% of the small consumer markets. There is no competition in this area.

There is a degree of competition in the large consumer segment – despite the fact that the switching rates are also low – and this is reflected in largely uniform price levels throughout the country.

### **EnergieAllianz**

The formation of EnergieAllianz led to the merger of the parent companies’ marketing operations.

EnergieAllianz works through five regional limited sales partnerships, each of which focuses on its former monopoly territory and uses its former brand name (EVN, BEWAG, etc.) As is usual with mergers, this eliminated competition between the marketing businesses of the parent companies. Contrary to expectations at the time of clearance of the merger, the arrival of new entrants (including foreign companies) has failed to compensate for this loss of competition which has been particularly marked in the small consumer segment. Instead, foreign suppliers such as Energie Baden-Württemberg AG (EnBW) have withdrawn from the Austrian market.<sup>73</sup> The

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<sup>73</sup> Die Presse, 22 October 2004:

“EnBW cold shoulders Austria

VIENNA (apa). German energy group Energie Baden-Württemberg (EnBW) has had enough of the Austrian electricity market. At the end of the year the last remaining foreign group in the country is closing its Austrian sales subsidiary. The closure will affect 17 employees. In future the Austrian market will be serviced from

continued existence of the entry barriers discussed in section 4.2.5. and the low switching rates make it unlikely that this situation will change in the near future.

EnergieAllianz works through a jointly owned company in the large consumer segment. The comments on the loss of competition in the small consumer segment apply to this segment, too. The effect of the entry barriers tends to diminish in proportion to consumption, but is also of significance in the large consumer segment. EnergieAllianz thus likewise holds a dominant position in the large consumer market, which extends throughout the whole of Austria.

It should be noted that EnergieAllianz has made preliminary proposals for improving some aspects of the competitive situation. In view of the high level of market concentration and dominance, further thought needs to be given to the action urgently needed to stimulate competition and reduce the barriers to entry.

#### **The “Austrian electricity solution”**

Put simply, the “Austrian electricity solution”, in the form approved by the European Commission<sup>74</sup>, would result in vertical integration of EnergieAllianz’s large consumer business with Verbund’s electricity trading business (including generating). As a direct effect of the proposed transaction, Verbund has ceased to supply the large consumer<sup>75</sup> and small consumer<sup>76</sup> markets. In the event of implementation of the merger (which has otherwise not yet taken place), joint electricity trading would link Austria’s largest generator with EnergieAllianz’s retail activities. This alliance would not be limited to the large consumer segment, but would affect the small consumer

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Germany. Most of the subsidiary’s activities have already been transferred to group headquarters over the past few months.

EnBW launched its Austrian operations in 1999, and was one of the most active foreign suppliers. However it constantly criticised the high system charges for electricity transportation, saying that these made business success in Austria impossible.

The German group also holds interests in Austrian power companies. According to the most recent official information available EnBW holds 6.33 percent of Verbund, and over ten percent of EVN. However insiders believe the stake in EVN is much higher.”

<sup>74</sup> In contrast to the transaction as originally planned, Verbund had to undertake to divest its retail activities. This has since taken place.

<sup>75</sup> Sale of Austrian Power Vertriebs GmbH (APC) to Istrabenz Energetski Sistemi d.o.o.

<sup>76</sup> Disposal of Verbund’s holdings in Unsere Wasserkraft and MyElectric.

segment, too. It is probable that this improved access to the upstream trading and generation markets would reinforce the positions of the merger parties in their sales markets, resulting in a further marked reduction in what is already inadequate competition. When assessing the merger today it should be remembered that at the time when clearance was granted both the notifying parties<sup>77</sup> and the European Commission<sup>78</sup> viewed the commitments entered into by the former in the light of anticipated rapid realisation of the European internal market in electricity. Recent developments in competition in the European electricity market<sup>79</sup>, currently the subject of an in-depth review by the European Commission, cast serious doubts on the logic of the “Austrian electricity solution” in the form approved by the Commission from a competition policy point view, and these will need to be examined in detail (see section 8.7).

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<sup>77</sup> See para. 56 of the decision: [http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l\\_092/l\\_09220040330en00910117.pdf/](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_092/l_09220040330en00910117.pdf/).

<sup>78</sup> See paras. 103, 145 and 156 of the decision:

[http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l\\_092/l\\_09220040330en00910117.pdf/](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_092/l_09220040330en00910117.pdf/).

<sup>79</sup> See Commission press release IP/05/11 of 7 January 2005 (“Commission’s report indicates that governments should do more to implement energy market opening measures”):

<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/11&format=HTML&aged=0&language=en&guiLanguage=en/>.

## **8 The logic of retail pricing**

This chapter attempts to clear up points raised in the widespread and often heated public discussion of retail pricing methods and the role of wholesale prices. In essence this involves answering the following three questions:

1. What is the “market price” of electricity and how does it affect retail prices?
2. Are the Leipzig and Graz power exchanges actually representative of the market price, and is price formation on these exchanges fair and transparent?
3. To what extent can the argument that Austria has sufficient hydro power, and that there can thus be no linkage with fossil fuel price trends, be verified or falsified?

This chapter thus takes up the issues raised by section 2.3.5 of the first interim report on the electricity sector investigation.

### **8.1 No one “market price”**

Many market participants use wholesale prices as a guide to their business decisions, whether or not they themselves trade on the wholesale markets. In public discussion these prices are often simply referred to as “market prices”. In order to judge their role – and especially their impact on retail prices – it is first necessary to outline some indispensable basic concepts including the spot, forward, futures and OTC markets, and the electricity exchanges.

#### **8.1.1 Spot and forward markets**

A basic distinction can be drawn between spot markets on the one hand, and forward markets on the other according to timing of the contracts. Most of the deals made on spot markets are for fulfilment on the next day (“day-ahead markets”). Delivery cannot take place immediately, as it has to be notified to the transmission system operator in advance. Electricity for future delivery is traded on forward markets. The

traders agree the price on a given trading day, but delivery does not take place until a pre-agreed time window. Forward contracts are called “forwards” if they are made bilaterally (over the counter [OTC]), and “futures” if they are offered as exchange traded products. Spot and forward markets may be centrally organised and regulated (exchanges) or unregulated (OTC).

### **8.1.2 Electricity exchanges**

Electricity exchanges are state regulated markets. The members must complete certain formalities to be admitted to trading. The trading procedures and price determination method are established by the exchange’s rules, and are known to all participants. The prices are completely transparent and trading is anonymous. Single hours and groups of hours are traded on a spot market. The price of each hour is determined, usually by an auction procedure, but sometimes after the close of trading. In the case of the former method the buyers’ bids and the sellers’ offers are aggregated, and the equilibrium price arrived at from the totals. On many exchanges it is also possible to trade futures. Futures are standardised, exchange traded forward dated contracts. The main difference from forwards lies in the fact that the contracts are generally not for physical delivery but for financial settlement. Futures are chiefly used to hedge future physical spot transactions, but may also be employed for speculative purposes. The exchange or a clearing house named by it is the central counterparty for the transactions (both spot and futures). The seller never finds out who has bought “its electricity”, and *vice versa*. This has two advantages: in the first place, the traders never have to reveal their strategies and in the second, performance risk is eliminated. If the buyer cannot pay for the electricity it has purchased the clearing house stands in for it. Naturally, these advantages come at a cost. The exchange charges a trading fee based on the volume traded.

The oldest and best-known electricity exchange is the Nord Pool, founded in 1993. This now serves the entire Nordic electricity market. The leading exchange in Central Europe is the European Energy Exchange (EEX) in Leipzig. Both these exchanges have spot and futures markets. Since 21 March 2002 electricity traders active in Austria have also been able to use the Graz based Energy Exchange Austria (EXAA). As of now this only has a spot market.

### 8.1.3 The OTC market

Unlike exchanges OTC markets are not subject to direct state regulation. Their rules emerge from trading practice or are deliberately established by the market players. Here, customised as well as standard contracts are traded. The OTC market is a bilateral marketplace. The parties conclude their transactions directly, and there is no central counterparty or clearing house. The parties themselves bear the performance risk. If the electricity buyer defaults the seller cannot require settlement by a third party. In order to mitigate this risk the traders request securities from each other. Creditworthiness is constantly checked, and the traders are subject to limits. The electricity exchanges are also increasingly offering their clearing services to this market segment as a means of minimising performance risk.

Prices on the OTC market are not *per se* transparent. The market price is effectively always the price at which the most recent transaction was concluded. This price and the volume traded is normally unknown to third parties. However, since this information is of vital importance to all participants, price reporting services have grown up. The price reporters are independent, and do not stand to gain from transactions. They know the players well, and constantly ask them about prices and volumes. They produce up-to-date market reports (price assessments) and indices on the basis of the (usually anonymous) information, and offer them to market participants. The best-known price reporter is Platts ([www.platts.com](http://www.platts.com)), which monitors the Austrian wholesale electricity market among others. Platts not only quotes electricity prices but also tracks spot Brent, which oil markets all over the world uses as a benchmark.

The types of spot contracts most frequently traded on the OTC market are so-called baseload and peak load contracts. Baseload contracts are for delivery over a 24-hour, midnight-to-midnight period. In this case a constant load is provided throughout the day. In Central Europe peak load contracts are for delivery of a constant amount of electricity from 8am to 8pm (Monday to Friday only). If an electricity company's trader buys 5 MW of peak load he/she will receive 5 MW of power over the period concerned, i.e. a total of 60 MW. Contracts for deliveries some months, quarters or even years out are traded on the forward market. The price of every contract is

quoted for peak and base load. In practice, the prices of standard OTC contracts, tracked by price reporters, are largely identical with those of the exchange traded products.

## **8.2 Role of wholesale prices as benchmarks**

The rationale of using wholesale prices as benchmarks comes from the assumption that the electricity companies along the supply chain will seek to maximise their profits. According to this logic, for example, a generator operating in a liberalised market, confronted with the decision whether to sell its product to a final consumer or via the wholesale market, will take the course it expects to be most profitable<sup>80</sup>. If it expects to make less profits from retailing than from selling to the wholesale market the generator will refrain from supplying final consumers.

An integrated company faces this basic decision in exactly the same way as a firm that is only active at a given stage in the supply chain. The main difference is that an integrated company's businesses do not operate on the market and maximise their profits as independent units; instead, profit maximisation is at the level of the enterprise as a whole.

## **8.3 Retail pricing**

Wholesale prices and their evolution over time thus play a central role in retailers' pricing policies. However the manner in which wholesale prices are factored into the contractual terms for given consumer groups varies. Industrial consumers typically conclude fixed-term agreements at fixed prices, whereas non interval metered consumers (households and small businesses) are supplied according to standard terms and conditions which normally allow the price to be altered at will during the term of the agreement (which is usually indefinite), subject to consumer protection law.

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<sup>80</sup> Its profit expectations will depend on a number of factors, some of them complex. These include anticipated price volatility and the related risk, long-term strategic objectives and transaction costs.

In practice, offers to industrial consumers are customised, and are based on an analysis of the customer's historical demand profile, and forward or futures prices. The means that on concluding the contract the supplier either actually purchases the customer's forecast offtake in advance on the wholesale market, at the price prevailing at the time, or – if it is an integrated company – bases the price calculation on the relevant market prices and supplies the customer from its own generating portfolio. The much faulted synchronisation of the price quotations often identified by analyses of offers to electricity consumers thus stems from the fact that all the suppliers take their lead from the forward markets rather than from any collusion. Since electricity is supplied to industrial consumers at fixed prices over the terms of their agreements, it would not make economic sense for a supplier to calculate its procurement prices on the basis of spot prices. A supplier selling at fixed prices would be exposed to price risk on the procurement side, from future (and thus unknown) spot prices. Because of this electricity suppliers normally base their pricing for industrial consumers on prices on the forward markets.

The analysis of offers to electricity consumers showed that the above pricing method is not always strictly observed. Local players have repeatedly succeeded in holding on to customers by undercutting their competitors during the final stage of negotiations. This raises the question as to why, in the large consumer segment, incumbents often ultimately manage to submit the lowest bid, but seldom do so in neighbouring supply areas. In particular, it would be interesting to know what calculations lie behind these improved offers and how they are possible<sup>81</sup>.

As has been said, the prices charged to non interval metered consumers are flexible. In this case it would appear that suppliers use a form of mixed pricing oriented to price trends across the entire portfolio of procurement options open to them. This may include internal generating capacity, long-term supply agreements with partners, and spot and forward contracts. However, after examination of the electricity suppliers' responses it remains unclear<sup>82</sup> how the local players price the power

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<sup>81</sup> See the section on insufficient unbundling.

<sup>82</sup> There is no clear pattern in the considerations behind the internal transfer pricing of the vertically integrated companies. Comparisons reveal wide variations.

generated by their own capacity – which accounts for a large part of their total procurement volume.

During the initial post-liberalisation phase wholesale based retail pricing played only a marginal role. This was due both to the relative insignificance of the wholesale markets at the time, and to the fact that the electricity companies' strategies often put customer retention first. With the gradual development of the wholesale markets as reliable alternative sources of supply and selling markets, the prices obtainable on them increasingly became central to the companies' business decisions.

Both exchange quoted and OTC prices are applied to pricing. The main spot benchmarks for Austria are the prices on the EEX and the EXAA, while the EEX sets the tone for futures and the Platts German Forward Assessment for forwards. A frequently heard criticism of exchange driven pricing is the often modest trading volumes of these markets relative to total electricity demand. Yet the fact that turnover is still comparatively low and that some market segments are highly illiquid (e.g. one-year contracts for delivery three to four years ahead) does not, of itself, discredit exchange quoted prices as wholesale benchmarks. The exchange prices correlate closely with OTC assessments. Arbitrage opportunities equalise prices on the various markets<sup>83</sup>. While the futures market takes its lead from OTC prices because of the forward market's larger volumes, exchange quoted prices are increasingly taking over as the benchmarks for the spot. Due to the very similar trends both the OTC and the exchange quoted prices are used as benchmarks. The EEX prices are often used as a reference because they are available free of charge.

While wholesale prices play a key role in retail pricing, suppliers' strategic thinking also plays a part, due to their ability to distribute all their costs among their customers. In the section entitled "Low energy prices accompanied by high system charges" it was demonstrated that, at least in the case of residential consumers, the differences between the local players' retail prices have little to do with those between selling costs and retail market conditions or direct procurement costs.

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<sup>83</sup> According to economic theory, under ideal conditions identical goods should sell for the same price in different markets. Otherwise traders would immediately exploit this opportunity to buy on the "cheap" market and resell on the "expensive" one. They would do this until the prices were equalised, re-establishing equilibrium.

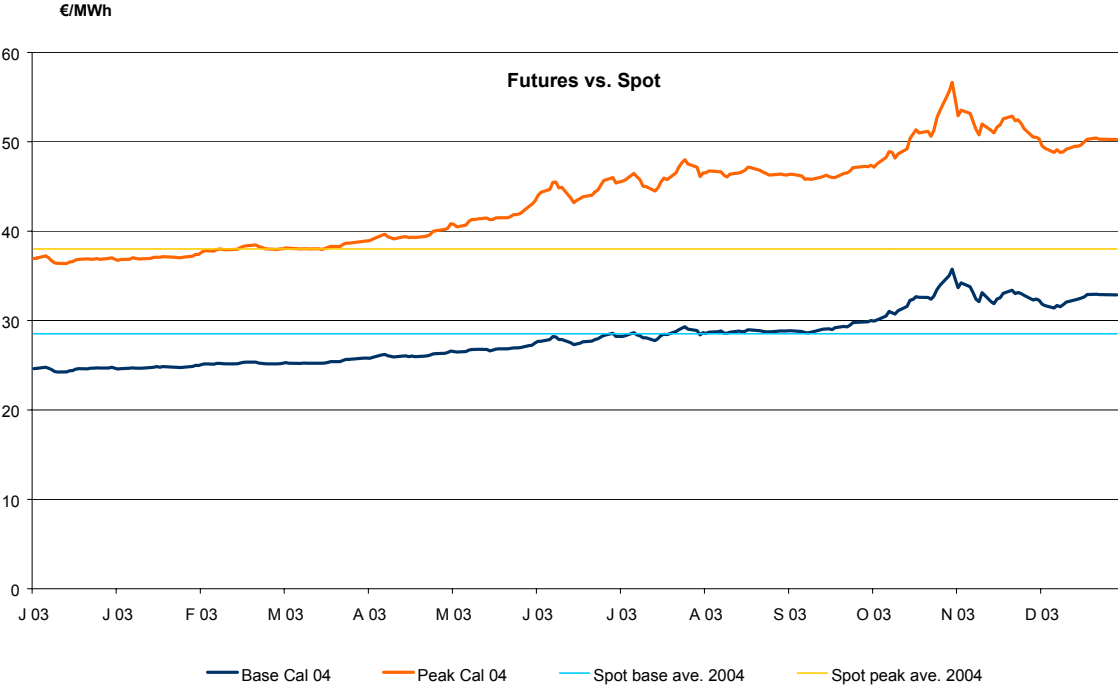
#### **8.4 Price formation on the spot electricity market**

This section starts by explaining the difference between the spot and forward wholesale electricity prices, and illustrating it with an example.

As outlined above, forward electricity deals involve the sale of deliveries at dates in the future at a price set today. For instance, a generator can sell part of its production in 2006 at a price agreed in the present. The alternative is to wait until 2006 and sell the electricity on the spot market, day by day. It goes without saying that the prices of these future spot transactions are not yet known. From the above it is clear that the forward prices cannot be equated with the future spot prices of the electricity. Since companies can buy and sell different products for delivery in the same timeframe at different times, it is not possible to speak of a single market price of electricity that could be used as a benchmark.

The chart below shows that the spot baseload price averaged about €28.50/MWh in 2004, whereas from the summer of 2003 onwards the calendar 04 baseload contract was at times trading at far over €29/MWh.

Chart 17: 2004 futures price vs. spot price, €/MWh

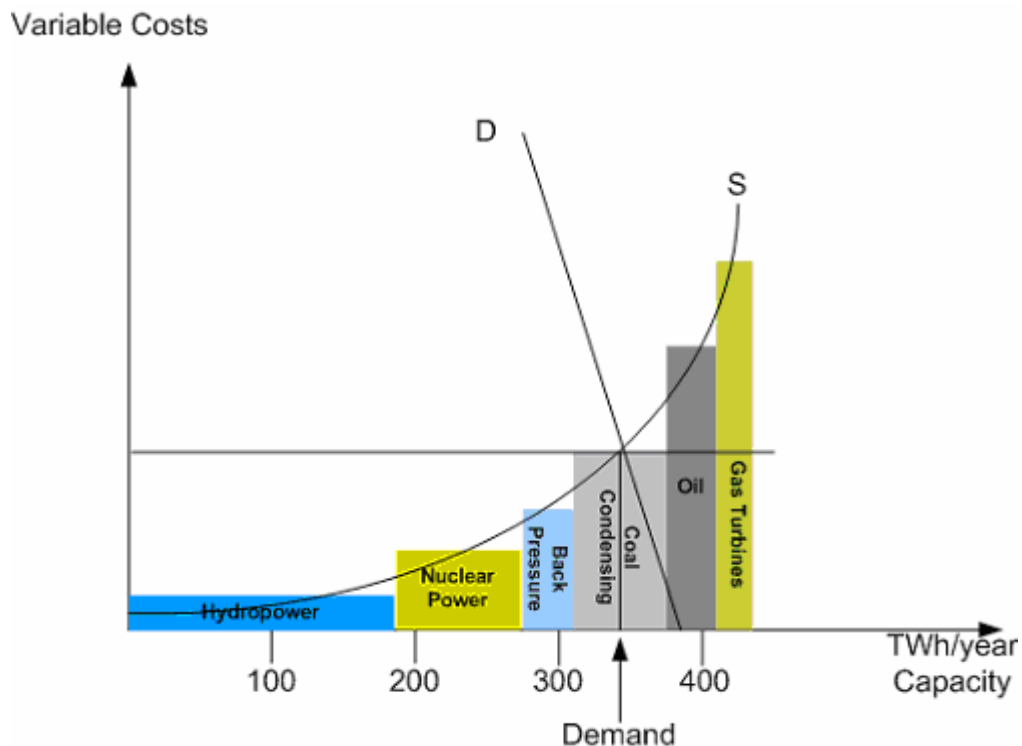


Source: EEX

Chart 17 reveals that a supplier that procured all its electricity requirements on the exchange in the summer of 2003 would have had considerably higher costs than one that met its needs on a short-term basis by going to the spot market.

Under ideal conditions, the equilibrium price on the spot market is determined by the short-term marginal costs of the power station unit that generates the “last” kilowatt hour of electricity required. The amount of electricity that must be provided is determined by consumers’ demand (the load) at a given point in time. Viewed in microeconomic terms, the market will clear at the point where the electricity supply and demand curves intersect. The supply curve is represented by the so-called “merit order curve”, while the demand curve is the load (see Chart 18).

Chart 168: Price formation on the spot wholesale electricity market



Source: Vattenfall, Electricity Market Report 2003

The merit order curve ranks the available generating capacity in order of the short-term marginal cost of calling it off. In the case of a thermal power station the primary energy sources used account for most of the marginal cost, though there are also some other operating expenses. With a conventional coal-fired generating station the marginal cost is about €25/MWh. Run-of-river generating stations, which require no fossil fuels, have very low marginal costs, at about €3/MWh.

In perfect competition, generators will only operate their power stations if the anticipated market price equals or exceeds their short-term marginal costs (in effect, their variable costs). Otherwise they would be making a loss on every unit of power generated. Since run-of-river and nuclear power stations have low variable costs they are used as baseload generating capacity<sup>84</sup> while coal and – to a lesser extent – gas fired stations are employed both as baseload, and as medium and peak load capacity. This also applies to the Central European wholesale market, which includes

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<sup>84</sup> Generating stations that are normally used throughout the year.

Austria as well as Germany. As a result, Austrian wholesale prices are largely determined by the marginal costs of the hard coal fired power stations in this region, most of which are in Germany. The marginal costs of these units are, in turn, influenced by coal prices, which are driven by global primary energy supply and demand.

Unlike spot prices, which are primarily set by marginal generating stations, prices on the forward markets reflect a wide range of factors. These include the forward prices of a variety of primary energy sources and market expectations with regard to future trends in generating capacity. Recently, emission allowance prices have also begun playing a part. Although crude oil is not used for electricity generation it appears to have an impact on forward prices. The reason for this is probably that natural gas, which is playing an increasingly important role in power generation, tracks petroleum product price trends.

### **8.5 Transparency and market power on the wholesale market**

Efficient wholesale markets are a precondition of successful electricity liberalisation. Good investment decisions, and hence the efficient use of resources depend on their existence. They also have a major impact on the retail markets, since many supply agreements are linked to wholesale prices, meaning that the influence on retail prices is far greater than the volumes traded on the wholesale markets would suggest.

Prices on the EXAA are largely determined by German wholesale prices, and in consequence market developments in Germany drive Austrian OTC and exchange quoted prices.

German wholesale prices currently appear susceptible to manipulation because of:

- Lack of transparency;
- A highly concentrated generating market; and
- Lack of comprehensive market regulation.

The first and third weaknesses apply chiefly to the OTC market rather than the exchanges. The volumes traded, prices and players on the OTC market are highly

opaque. Such information as is available comes solely from secondary sources (price reporters and brokers). Moreover the German and Austrian wholesale markets reflect the fact that the electricity generation market is highly concentrated (E.ON, RWE, EnBW and Vattenfall Europe own some 80%<sup>85</sup> of the installed generating). The combination of intransparency and a high level of market concentration creates many opportunities for influencing OTC prices (including the exploitation of insider knowledge of outages and shutdowns, and of load flows).

These problems are compounded by the lack of regulation of the OTC markets.

Price and volume transparency is greater on the exchanges, and they are subject to stricter supervision. However as OTC prices impact those on the exchanges, and the market in long-term futures is highly illiquid, monitoring of both areas would be needed to exclude manipulation.

Developments on the wholesale markets (high degree of concentration and lack of transparency) have prompted the European Commission to make them a focus of the recently launched industry probe. This makes more sense than investigations at national level because these markets extend beyond national borders.

## **8.6 Summary and conclusions**

In essence, the widespread and often heated public debate on retail pricing methods and the role of wholesale prices boils down to the questions of the “right” market price, the influence of the Leipzig and Graz electricity exchanges, and the link between market prices and oil.

Investigation of the first question – namely, whether there is a “right” market price – led to the conclusion that there is no single procurement price which is equally applicable to all transactions. Rather, a variety of products are traded on the wholesale market, meeting different needs with regard to the time of day, the duration of the deliveries and the fulfilment date. Electricity companies go to the

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<sup>85</sup> Lecture given by Dr. Riechmann to the VIK (German Association of the Industrial Energy and Power Industries), in Hanover on 13 May 2004.

wholesale market for specific products, chosen in the light of their customer structure, generating resources and risk management strategies. The prices of these products may be far apart. This means that it is not possible, as is often suggested in public discussion, to speak of a single reference price, but rather of a range of relevant benchmarks depending on the timing of the transaction, and the period and volume of the deliveries.

There are perfectly sound business reasons for the suppliers' practice of basing their offers to industrial consumers on the relevant forward or futures prices. Whether the current levels of these prices are justified is a question that cannot be fully answered by this investigation. Since the Austrian wholesale market is closely linked with those of Germany and Switzerland, as explained in the first interim report, any instances of deliberate price manipulation could only be investigated in an international context. A sector inquiry like the one that the European Commission is launching could shed light on this issue.

The second question, as to the representativeness of prices on the Leipzig and Graz exchanges, can be answered in the affirmative. Other wholesale prices (OTC market) may also be representative, but the exchange quoted prices are preferred as benchmarks because they are quick and cheap to obtain.

The question as to how far generators and suppliers are justified in blaming increased wholesale prices on higher primary energy prices, given the dominant role of hydro power in Austria, can be answered as follows. The level of the wholesale prices at which hydro power generators actually sell or could sell their electricity is ultimately determined not by the costs of Austrian run-of-river power stations but by those of coal-fired and, to a lesser extent, gas-fired stations. Higher wholesale prices are thus justified to the extent that primary energy prices have risen. As has been said, it is not possible, within the limits of the present investigation, to determine whether the current level of wholesale prices is entirely explained by fossil fuel price trends.

## 8.7 Further action and outlook

a) This investigation has identified a number of highly questionable and probably unlawful practices (see Chapter 6). Over the next few months the Federal Competition Authority, in cooperation with E-Control and the other government agencies responsible, will be holding talks with the electricity companies on a one-to-one basis with a view to persuading them to put an end to these activities.

Parallel to the preparation of this second interim report E-Control has drawn up proposals for a package of measures designed to stimulate competition. EnergieAllianz has also made proposals for limited action to this end. The FCA is aiming to implement this package after a round of intensive consultations.

The key elements of the competition policy package are:

- Action to mitigate the negative effects of market concentration:
  - Reduction in switching costs;
  - Reduction in the risk exposure of smaller suppliers.
- Action to reduce marketing costs:
  - Central database;
  - Removal of the administrative hurdles created by the three control areas.
- Action to put consumers in a stronger position:
  - More transparent offers;
  - Fair competition for customers;
  - Right to basic supply.
- Action to intensify competition:
  - Reduction in system charges;
  - Further unbundling.

b) In the opinion of the Federal Competition Authority, E-Control and the Federal Cartel Prosecutor, EnergieAllianz and, still more so, the planned “Austrian electricity solution” merger in the form cleared by the European Commission require further intensive and critical discussion. It is highly likely that the transaction in its present form would no longer be regarded as compatible with competition policy in the light of

what is known today. There are growing indications, including statements to the media by the companies concerned, that due to changed circumstances some of the parties to the “Austrian electricity solution” are no longer seriously interested in the deal approved by the European Commission. This is all the more reason to begin a rethink, and look for an alternative solution that is feasible and acceptable in competition terms.

c) Meanwhile an investigation of the gas sector is under way, and work is proceeding on a further interim – or possibly final – report on the electricity sector investigation. The lively public debate – formalised by the sector investigation – on the electricity market has already brought some benefits for consumers. For instance, suppliers did not raise their energy prices sufficiently to cancel out the effects of the latest reductions in system charges. Moreover, public perceptions of electricity liberalisation and consumer knowledge of it have taken a significant turn for the better in recent months. The Federal Competition Authority and E-Control are working to maintain this trend.

W. Barfuss m.p.

1 April 2005

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