

COMMISSION DECISION
of 13 June 2000
on the compatibility of a concentration with the common market and with the
EEA Agreement
(Case No COMP/M.1673 – VEBA/VIAG)

(Only the German text is authentic)

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area, and in particular Article 57(2)(a) thereof,

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings¹, as last amended by Regulation (EC) No 1310/97², and in particular Article 8(2) thereof,

Having regard to the Commission Decision of 4 February 2000 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

After consulting the Advisory Committee on Concentrations³,

Whereas:

1. On 14 December 1999 a merger proposal was notified to the Commission under Article 4 of Council Regulation (EEC) No 4064/89 to the effect that VEBA Aktiengesellschaft and VIAG Aktiengesellschaft intend to merge within the meaning of Article 3(1)(a) of the Merger Regulation.
2. On 4 February 2000 the Commission decided, pursuant to Article 6(1)(c) of the Merger Regulation and Article 57 of the Agreement on the European Economic Area (EEA Agreement), to initiate proceedings in this case.
3. The Advisory Committee discussed a draft of this Decision on 24 May 2000.

I. THE PARTIES AND THE PROPOSED TRANSACTION

4. VEBA is a diversified group with businesses in electricity, natural gas, oil, chemicals, telecommunications, water, waste disposal, steel trading, logistics and property management. The group operates at all levels of the electricity industry through its subsidiary PreussenElektra AG (hereinafter:

¹ OJ L 395, 30.12.1989, p. 1; corrected version: OJ L 257, 21.9.1990, p. 13.

² OJ L 180, 9.7.1990, p. 1.

³ OJ

PreussenElektra). PreussenElektra is one of the largest German interlinked power companies; its traditional supply area comprises the northern *Länder* of Schleswig-Holstein and Lower Saxony and large parts of Hessen. With RWE and Bayernwerk AG, which is part of VIAG, it had, in addition, together with the other West German interconnected power companies, taken over Vereinigte Energiewerke AG (VEAG) following German reunification. In any event, PreussenElektra controls VEAG jointly with RWE and Bayernwerk. Outside the interconnected supply area, the VEBA group has further controlling interests *inter alia* in regional supply companies in the new *Länder* (e.dis and Avacon).

5. VIAG is an international conglomerate which operates in the electricity, natural gas, oil, chemicals, telecommunications, packaging, water, waste disposal, aluminium, steel trading and logistics sectors. Its energy activities are grouped together in the affiliate Bayernwerk AG (hereinafter: Bayernwerk), which is also one of the large German interconnected power companies. Bayernwerk too operates at all levels of the electricity industry. Its traditional network and supply territory covers most of the southern *Land* of Bavaria. As well as VEAG (see paragraph 4), Bayernwerk together with Southern Energy, an equity investment company belonging to the American Southern Company, jointly controls Berliner Kraft- und Licht (BEWAG) AG. The East German regional supplier TEAG, which supplies an area outside Bayernwerk's interconnected power territory, is also part of the VIAG group.
6. The parties intend to merge VIAG, as the transferor entity, with VEBA, as the transferee entity, pursuant to Article 2(1)(1) of the Conversion Law (*Umwandlungsgesetz*). This is therefore a merger in the legal sense.

II. CONCENTRATION

7. VEBA and VIAG are two hitherto independent undertakings which intend to merge. This is therefore a concentration within the meaning of Article 3(1)(a) of the Merger Regulation.

III. COMMUNITY DIMENSION

8. The parties had a worldwide combined turnover of more than EUR 5 billion in 1998⁴ (VEBA: EUR 42.8 billion; VIAG: EUR 25.1 billion). VEBA's Community-wide turnover (EUR 33.5 billion) and VIAG's (EUR 18.2 billion) are both more than EUR 250 million. In 1998 VEBA generated two thirds of its Community turnover in Germany. According to its own figures, VIAG did not generate more than two thirds of its Community turnover in any one Member State. The notified merger therefore has a Community dimension.

⁴ Turnover was calculated on the basis of Article 5(1) of the Merger Regulation and the Commission notice on calculation of turnover (OJ C 66, 2.3.1998, p. 25). Turnovers generated before 1 January 1999 were calculated using the average ECU exchange rate and converted into euro on a one-to-one basis.

IV. APPRAISAL UNDER ARTICLE 2 OF THE MERGER REGULATION

9. Both parties operate in many sectors. It must therefore be assumed that the merger would create a dominant position for VEBA/VIAG in the electricity sector in Germany (A) and strengthen dominant positions in the chemicals sector (B). In other sectors the creation or strengthening of a dominant position is unlikely. This holds true for the gas (C) and steel trading (D) sectors.

A. ELECTRICITY

10. The merger proposal leads to the creation of a dominant duopoly for VEBA/VIAG and RWE on the German national market for the supply of electricity at the interconnected level.

1. Relevant product market

11. In previous decisions⁵, the Commission made a distinction between the following relevant product markets in the electricity industry: generation, i.e. the production of electricity in power stations; transmission, i.e. the transport of electricity over high voltage lines; distribution, i.e. the transport of electricity over medium and low voltage lines; and supply, i.e. the delivery of electricity to final consumers. In a further decision⁶, a further product market – trade in electricity – was distinguished, although the market was not conclusively defined.
12. The Commission's previous decisions assessed market relations mainly in the British and French electricity industries. In more recent decisions, which relate to concentrations on the German market, it has largely been possible to leave the definition of the market open. The structure of the electricity industry is important for the definition of the market, since it tells us what the supply side and the demand side consist of.
13. The electricity sector in Germany is subdivided vertically into national interconnected companies, regional power supply companies (regional suppliers) and local distributor companies (in particular municipal electricity undertakings).
14. The electricity generated by the interconnected power companies and that imported by power importers is delivered to different customer groups over the extra high voltage and high voltage networks (380/220 kV), i.e. the transmission system. As well as the regional supply companies, the transmission system supplies the larger municipal electricity undertakings, electricity traders and the larger industrial special customers, who draw their electricity direct from this voltage level.
15. Moreover, the interconnected power companies, because of their vertical integration through affiliates, operate on all downstream markets (see paragraphs 16 *et seq.*).

⁵ Case No IV/M.1346 – EdF/London Electricity; Case No IV/M.1606 – EdF/South Western Electricity.

⁶ Case No IV/M.1557 – EdF/Louis Dreyfus.

16. The regional supply companies deliver electricity via low voltage (under 20 kV) and sometimes medium voltage (20 – 110 kV) lines to municipal electricity undertakings and also to final customers. In so doing, they operate for the most part as distributors of the electricity generated by the interconnected power companies. They also generate electricity themselves on a small scale, but this they sell to their own customers via low voltage and medium voltage lines.
17. At the lowest distribution level, municipal electricity undertakings supply only final consumers over low voltage lines. The municipal electricity undertakings, too, generate some electricity themselves, but they use it to cover their own needs. It is mainly power from combined heat and power stations. How far this market level should be further subdivided by type of final consumer was left unresolved in earlier Commission decisions⁷. There is at any rate reason to suppose that market conditions for the supply of small customers⁸ (household, commercial and agricultural customers with a connected load of less than 30 kW and an annual power consumption of less than 30 MWh) from low voltage networks are different from those for the supply of industrial special contract customers from medium voltage and higher network levels, and that these are therefore to be classified as different product markets.
18. Electricity trading is a market in the process of formation. It was only made possible by customers being given a choice in the wake of liberalisation. Electricity trading is understood as the buying and selling of electricity at one's own risk and for one's own account. It takes place at all voltage levels. Thus, in addition to independent traders with no generating capacity or network of their own, electricity traders include, on the supply side and to some extent on the demand side as well, interconnected companies, other power station operators and electricity importers. Agency activities, i.e. the supplying of electricity by service stations and retail chains which do not bear the marketing risk (this being borne instead by the generator) are not trading activities.
19. The power supplied at interconnected level (see paragraph 14 above) forms a separate market in view of the characteristics of the product (i.e. the voltage level) and of the specific customer groups interested in it. It comprises (in Germany) the generation of power at interconnected level and electricity imports, which are delivered over extra high voltage and high voltage lines to different customer groups, such as regional distributors, the larger municipal electricity undertakings, electricity traders and large industrial special customers. This market will be examined in what follows. Where the parties operate on downstream markets, the effects of the merger on those markets are taken into account in the competition assessment of the effects at interconnected level.

⁷ E.g. Case No COMP/M.1720 – Fortum/Elektrizitätswerk Wesertal.

⁸ The customer group comprises those customers who were described as "tariff customers" prior to liberalisation, since they were supplied in accordance with the General Tariffs (BTOElt) and the General Supply Conditions (AVBEltV).

2. Relevant geographic market

20. The relevant geographic market consists of an area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas.
21. In the notification, the parties assume that the market for the supply of electricity at the interconnected level is a Community-wide market. They base their assessment *inter alia* on the fact that the Community's Electricity Directive created uniform ground rules for generation. In their view, the fact that customers in the European Union were increasingly changing to Community-wide tendering and that the UCPTE network⁹ provides a link between the transmission systems of the large continental Member States was also evidence of a larger than national market.

2.1 The market is not supranational

22. The Commission's investigations have shown, however, that the market for the supply of electricity at the interconnected level is not supranational. This is due chiefly to the fact that the capacity of the interconnectors, i.e. the network links with neighbouring countries, is limited and that therefore, simply for technical reasons, imports are low. Thus, according to the notification, the quantity of electricity imported in 1998 was 38.5TWh, or approximately 8% of German power supply. According to the calculations of the European Transmission Systems Operators (ETSO)¹⁰, imports into Germany in the period 1 October 1998 to 30 September 1999 were about 28 TWh. With electricity consumption at 479.0 TWh, the proportion of imports would thus be just under 6%. On the Commission's estimate, the actual proportion of imports is probably lower still, since some of the electricity imported into Germany is not made available to the German market. Rather, it is transit power, which simply crosses Germany and is delivered to other target countries. Thus, France's EdF, for instance, delivers electricity via the German interconnected network and Switzerland to Italy's ENEL. Consequently, in view of the high import barriers, the markets for the sale of electricity at interconnected level are at best national.
23. Foreign generators are dependent on the interconnectors' available capacities for imports into the German market. According to market participants, however, these capacities are extremely limited. The following table shows the rated capacities of the individual interconnectors available for imports into Germany.

⁹ European Transmission System Operators are represented by the Union for the Coordination of Production and Transmission of Electricity (UCPTE).

¹⁰ ETSO study: Proposal for the implementation of the Cross-border Tariffs for the year 2001, 27 March 2000.

Table: Capacities for connection with other countries

Undertaking	Connection capacity (GW)	
	Capacity	Countries
VEBA	5.0	NL, DK, S
VIAG	6.6	A, CZ
BEWAG	0	---
RWE	13.9	NL, F, L, A, CH
VEAG	7.0	DK, PL, CZ
VEW	3.2	NL
Energie Baden-Württemberg (EnBW)	10.3	F, A, CH
Hamburgische Electricitäts-Werke AG (HEW)	0	---
Other	0	---
Germany, total	46.0	

Source: UCPTE, 1998.

24. The arithmetical addition of the individual transmission capacities of all the interconnectors between other countries and Germany gives a total of approximately 46.0 GW. According to the parties, this rated capacity does not yet include the network connections between Luxembourg and Germany.
25. Even the parties do not assume, however, that this arithmetical transmission capacity reflects the physical reality and that the capacity of the interconnectors for electricity imports into Germany determined in this way is fully available. Rather, they assume that the downstream networks permit a maximum of about 15 GW in imports at any one time. The reason for the clearly lower effective import capacity, they say, is the loop flow associated with simultaneous transmissions to and from other places.
26. Taking account of measured flows, a plan was worked out at international level which provides *inter alia* for calculations of available capacities between countries to be given¹¹. According to these calculations, which on the German side were carried out by RWE on behalf of the Association of German Interconnected Companies (Deutsche Verbundgesellschaft), the maximum import transmission capacity is 13.4 GW.
27. Most of the market participants interviewed, however, regarded even this maximum figure as still too high. As a result of inevitable loop flows and voltage and stability problems, maximum import capacity, in the view of most market participants, is between 7 and 10 GW. The market participants interviewed pointed out, moreover, that interconnector capacity was reserved to a considerable extent, through long-term contracts, for the interconnected power companies, which own the interconnectors. Thus, in particular the interconnector on the German-Danish border, which on the German side is operated by

¹¹ International Exchanges of Electricity, Rules proposal by the European Transmission System Operators.

PreussenElektra, is already 50% blocked by long-term contracts. Of the capacity, which according to the parties is 1 200 MW, only 500 MW are awarded at auction.

28. The parties contend that the interconnectors will be freed up by simultaneous imports and exports of electricity, so that capacity equivalent to the balance of imports and exports is again made available. The measurement of the power flow carried out by the UCPTTE clearly shows, however, that the balance of the power flow to an interconnector clearly points in one direction, so that there is either a clear export surplus or a clear import surplus. Further electricity supplies of equivalent amount and travelling in the same direction as this balance are at all events ruled out as the interconnector's capacity is reserved up to this amount. Thus certain quantities are currently exported from France to Germany, but only limited quantities are imported from Germany into France, since the legal framework necessary for liberalisation has not yet been completed. In the Netherlands, the electricity price level is currently higher than in Germany, so there are deliveries from Germany to the Netherlands, but not the other way around. At other interconnectors too, exports or imports clearly predominate, so that there is currently hardly any freeing up.
29. The possibility cannot be excluded that exports and hence the freeing up of the interconnectors in favour of electricity imports will increase in future, especially in view of the increasing liberalisation of the electricity markets in the countries bordering on Germany. Such an increase in exports depends, however, on many factors. For want of specific pointers to the future development of exports, it is premature, however, at this stage to take account of such an as yet uncertain development in the context of this merger proceeding.
30. What is more, imports especially from foreign suppliers of electricity will be further impeded by the fact that for cross-border electricity supplies into the Federal Republic a transmission charge ("T-component") of 0.125 Pf/kWh becomes payable, provided that the quantity of power transmitted cannot be netted out (see 2.4 below for more details).
31. Accordingly not only the low import ratio but also the limited import capacity of the interconnectors and the additional costs (including those associated with using the interconnectors) show that the geographic market is in no way supranational.

2.2 The competition assessment is predicated on a national market: the market will not be smaller than national in the foreseeable future

32. Given that many energy supply companies are not yet delivering to customers in their competitors' previously protected supply areas, even though they are entitled to do so, it is questionable whether at the interconnected level there is already a national market. Prior to the liberalisation of the electricity markets the activity of every energy supply company was limited to its own supply area. Accordingly, the geographic market for the supply of electricity at the interconnected level was not bigger than the group of customers that could be reached via the generating company's transmission network.

33. In more recent decisions¹², which examined the effects of a merger on already liberalised electricity markets, the Commission found signs that the generation of electricity in Germany could constitute a national market but left the precise definition open. The Commission takes the view that the market for the supply of electricity at the interconnected level in Germany will develop into a national market in the near future. The decisive factor here is that ground rules have in the meantime been adopted for the through-transmission of electricity over third-party networks, to which must be added other factors affecting the market (see 2.3 and 2.4 below).

2.3 Ground rules for through-transmission

34. The German Law updating the legislation on power supply (*Gesetz zur Neuregelung des Energierechts*)¹³ has led to the liberalisation and deregulation of electricity markets. The Law transposes Directive 96/92/EC of 19 December 1996 concerning common rules for the internal market in electricity (hereinafter called the Electricity Market Directive) into national law. In Germany there is no restriction of customers to a particular size, as is allowed under Article 19 of the Electricity Market Directive. Rather, the Law opens up competition to all customer groups, including final consumers of any size. The German Law originally excluded territorial agreements ("demarcations") and exclusive rights of way in "licensing agreements" with municipalities from the prohibition on agreements in restraint of competition (Articles 103, 103a of the old Law on Restrictions of Competition (GWB)). This rule was abolished by the Energy Industry Law as amended (EnWG), with effect from 29 April 1998.
35. Delivery to third parties within the previously closed supply territories is made possible in two ways – either by additional lines and cables or by through-transmission.
36. To ensure non-discriminatory through-transmission, the Electricity Market Directive provides for the grid to be operated as a separate entity and for separate accounts to be kept in respect of grid operation¹⁴. The possibilities are to transfer ownership of the grid to an owned operating company, to operate the grid through an independent company, or to separate grid operation and generation and sales only at the organisational and accounting levels. The German legislator has opted for the last variant.
37. The general right to through-transmission, laid down in Article 6 of the EnWG, is based on the idea of negotiated access to the grid. Under Article 6(1) EnWG, operators of power supply networks must make the supply network available to other undertakings on conditions which are not less favourable than those actually or implicitly applied by them in comparable cases for services within their undertaking or vis-à-vis affiliated or associated undertakings. Under the Law updating the legislation on power supply, it is possible to refuse through-transmission in individual cases, except (a) where there are insufficient powers to protect electricity generated from lignite (lignite protection clause in

¹² E.g. Case No IV/M.1720 – Fortum/Elektrizitätswerk Wesertal.

¹³ BGBl. 1998 I No 23, 730.

¹⁴ Articles 7(6) and 14(3) of the Directive.

Article 4(3)) or electricity from combined heat and power stations (Article 6(3)) and (b) pursuant to the reciprocity clause (Article 4(2)).

38. Article 6(2) EnWG provides that the Federal Ministry of Economic Affairs can, by regulation with the approval of the *Bundesrat* (the upper house of the German Parliament), regulate the form of contracts under Article 6(1) EnWG and can lay down criteria for determining the remuneration for through-transmission. The Federal Ministry of Economic Affairs, however, has not used this power, since rather than use state control it has preferred a voluntary solution by the trade associations concerned. In Associations Agreement I of May 1998, the Federal Association of German Industry (BDI), the Industrial Energy Association (VIK) and the Association of German Power Stations (VDEW) created the basis for freely negotiable agreements between undertakings in the electricity industry and their customers. Associations Agreement I expired in August 1999. Since January 2000, Associations Agreement II, which runs for a period of two years, has been in force.
39. In the Commission's view¹⁵, individual provisions of Associations Agreement II make it more difficult for market participants such as independent electricity traders to operate nationally compared with large energy supply undertakings. Under the Agreement two trading zones are being set up in Germany. The north zone comprises the transmission networks of VEAG, PreussenElektra, VEW, HEW and BEWAG, while the south zone covers the territories of EnBW, RWE and Bayernwerk. If power is delivered from one trading zone to the other or over the border to or from another country, a transmission charge ("T-component") of 0.125 Pf/kWh (0.25 Pf/kWh for crossing the interzonal boundary) becomes payable, provided that the quantity of power transmitted cannot be netted out. Netting out means setting off the quantity which crosses the border in one direction against a quantity which crosses it in the other direction. The relevant balance is determined for each "energy balance group" ("Bilanzkreis"), with several undertakings delivering and drawing electricity via the group.
40. In addition, the accounting procedures for balancing energy make it more difficult for market participants to operate nationally. This includes the electricity which in the event of fluctuations in a customer's offtake is made available by an interconnected power company (see paragraph 122).
41. The imperfections of Associations Agreement II, however, do not alter the prognosis that in the near future the market will be national. In particular, it is not accurate to talk of separate geographic markets, whether in the form of the old supply areas or of the two trading zones. However, the said features of Associations Agreement II will have to be taken into account in the competition assessment.

¹⁵ After a preliminary examination, the Commission has informed the associations that it has reservations about Associations Agreement II from the standpoint of Article 82 of the EC Treaty. It has reached the provisional conclusion that the T-component system leads to discrimination against individual customers of transmission services. In particular, according to the Commission, foreign suppliers of electricity are also discriminated against.

2.4 Other factors

42. The investigations in this case have shown that the through-transmission of electricity still takes place on a limited scale only. In particular, given that the provisions on through-transmission in Associations Agreement II are currently applied by only a small proportion of energy supply companies, market participants still have reservations about the handling of through-transmission requests. Through-transmission requests are, however, still necessary where Associations Agreement II has not yet been implemented. Consequently, electricity is still supplied at present to customers outside the former interconnected areas largely through "provision". According to the Commission's investigations, customers outside the former interconnected areas with a requirement of approximately 90 GWh are supplied by provision, while only customers with a requirement of approximately 60 GWh are eligible for through-transmission. Typically, provision involves the new supplier having a direct relation with the customer, with whom he therefore concludes a power-supply contract, although he buys the necessary electricity "on the spot" from his own local supplier under a separate deal. Several market participants pointed out that the market was going through a shake-up and that provision would be used instead of through-transmission for a transitional period only. As soon as Associations Agreement II takes effect throughout the country, it will, in the opinion of many market participants, be possible to sell generated electricity anywhere in Germany on a through-transmission basis.
43. Even if today, on account of the slow implementation of Associations Agreement II (and the delayed processing of through-transmission requests to the extent that, instead of Associations Agreement II, Associations Agreement I is applied), national competition still means that energy suppliers largely limit their activities to their own supply areas, the initial basic requirements for a national market are satisfied. Accordingly, for the purposes of examining the present merger, the Commission assumes a national market, at least at interconnected level. How far there can be, or continue to be, genuine competition on this market – given the ground rules that first have to be present and the structural change resulting from this merger – is a matter for the competition part of this examination.
44. The restrictions of through-transmission resulting from the preferential transmission of lignite-based electricity – laid down in Article 4(3) of the Law updating the legislation on power supply – or from the establishment of the north and south trading zones under Associations Agreement II (see below) do not lead to the geographical division of the German market for the supply of electricity at the interconnected level along the boundaries thus created. Admittedly, VEAG's lignite protection clause does provide a legal basis for frustrating through-transmission in the new *Länder*, but its application has been challenged in numerous lawsuits currently before the courts. There are also reasons for supposing that the clause is hard to apply successfully in practice.
45. Furthermore, the establishment of the Frankfurt and Leipzig exchanges, on which electricity will be physically traded nationwide, points to the creation of a national market. Because of the delay in adopting Associations Agreement II, which is seen as an essential requirement for the national supply of electricity, the exchanges are not yet up and running. Trading on both will begin this autumn at

the latest. For a transitional period, there will be serious obstacles as a result of certain provisions in Associations Agreement II (see the competition assessment for more details), but these will become less important as time goes by.

46. In what follows, therefore, it is assumed that the market for the supply of electricity at the interconnected level covers the entire territory of the Federal Republic of Germany.

3. Competition assessment

47. It can be assumed that the merger would result in VEBA/VIAG and RWE holding a dominant position on the German national market for the supply of electricity at the interconnected level.

3.1 Present market structure

3.1.1 The German market for electricity supply at interconnected level is already highly concentrated and the potential for competition is restricted by other factors

48. By far the largest proportion of electricity in Germany is generated by the eight interconnected firms. These include those energy suppliers which have at their disposal both their own electricity generation capacities and their own extra high and high voltage networks, i.e. transmission networks. The following interconnected companies operate in Germany: RWE, VEBA (PreussenElektra), VIAG (Bayernwerk), VEW, EnBW, BEWAG, HEW and VEAG. They are grouped into the Deutsche Verbundgesellschaft. The networks of interconnected power companies are connected to one another and to the extra high voltage networks of bordering countries. Interconnection agreements govern the supply of other interconnected firms with electricity. Protection against the possible failure of a power station, and with it the failure of the electricity supply, is ensured across borders and throughout Europe by way of agreements with interconnected companies in neighbouring countries. In addition, electricity importers operate on the market, selling electricity directly from the interconnected system to their customers.

49. The following table gives an overview of the market shares of the interconnected firms on the market for electricity supply at interconnected level.

Table: Market shares for electricity supply at interconnected level (electricity generation at interconnected level) – pre-merger situation

Interconnected firm	Generation ¹⁶ (in TWh)	Market share
VEBA	77.1	21.2%
VIAG	44.5	12.2%
BEWAG ¹⁷	10.3	2.8%
RWE	120.4	33.1%
VEW	19.8	5.44%
VEAG	43.9	12.1%
EnBW	35.3	9.7%
HEW	12.6	3.46%
Total interconnected firms	363.9	100%

50. The above table calculates market shares at interconnected level on the basis of the electricity generated by the interconnected companies in 1998. It is true that electricity generation in itself constitutes not a market, but an industrial activity. The electricity generated by interconnected firms is supplied to the next market level and to a lesser extent to other interconnected firms. Customers at the generation level are essentially electricity re-distributors, large industrial firms as special customers, and recently also electricity traders. The volumes of power generated by the interconnected companies and passed on to these customers thus at the same time also serve as a basis for the calculation of the market shares of competitors at interconnected level. While this method of calculation does not take account of electricity imports, these, as explained above, make up only a marginal proportion of power supplied in Germany. Moreover, most imported electricity is supplied to the interconnected firms, which then sell it on to their customers over the grid. It can be assumed that the imported electricity corresponds in volume terms to the size of the interconnected firm in each case. This was not called into question during the course of the proceeding either by the parties themselves or by third parties. The market shares given above would thus remain much the same even if electricity imports were taken into account.
51. The table shows RWE as the leading interconnected firm with a 33.1% share of electricity supply from the grid, currently well ahead of VEBA with its 21.2% share. Other interconnected companies, including VIAG, generate considerably less electrical energy and none of them have market shares of more than 13%.

¹⁶ Data include jointly owned power stations.

¹⁷ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy.

52. Correspondingly, RWE and VEBA also have a clear lead on the other interconnected firms operating on the market when it comes to structural data on installed power station capacity (see table below: generation capacity in Germany). With 19.8 GW of installed generation capability, RWE has only a slightly larger stock of power stations than VEBA (17.5 GW), but twice as much capacity as the next largest generator VIAG. Most other interconnected companies have installed power generation capacity that does not exceed 10 GW.

Table: Generation capacity in Germany, minus industry and national railway

Interconnected firm	Installed generation capacity (GW) ¹⁸	
VEBA	17.5	17.6%
VIAG	11.0	11.1%
BEWAG ¹⁹	2.9	2.9%
RWE	19.8	19.9%
VEAG	9.4	9.5%
VEW	4.2	4.2%
EnBW	7.7	7.8%
HEW	3.8	3.8%
Total interconnected companies	76.3	76.8%
Other (regional supply companies, municipal electricity undertakings)	23.1	23.2%
Total ²⁰ (Germany as a whole)	99.4	100%

53. In order to clarify structures on the electricity market as a whole, the parties included in their notification data on power supply to final consumers. These data give power supply in 1998 as 479.0 TWh (230 TWh to special customers, 249 TWh to ordinary electricity consumers). The parties attributed this supply to the interconnection companies operating in Germany on the basis of the origin of the power supplied, without considering which firm at which market level, e.g. regional supply company or municipal electricity undertaking, maintained direct contractual relations with customers. The data provided by the parties, based on VDEW statistics, do not therefore represent market shares in the strict sense, but clarify the importance of individual energy supply companies at all market levels taken together and portray the structures of the German electricity sector. The data give the following picture of power supply to final consumers:

¹⁸ Data include jointly owned power stations.

¹⁹ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy.

²⁰ Data do not include installed generation capacity belonging to industry and the national railway.

Table: Power supply on the German market as a whole – pre-merger situation

Interconnected companies	Power supply (TWh)	Shares
VEBA	102.3	21.4%
VIAG	59.5	12.4%
BEWAG ²¹	13.3	2.8%
RWE	151.0	31.5%
VEAG ²²	N/A	---
VEW	43.6	9.1%
EnBW	44.3	9.3%
HEW	15.4	3.2%
Total interconnected companies	429.4	89.7%
Other (regional supply companies, municipal electricity undertakings)	49.6	10.3%
Total for Germany	479.0	100%

54. With the volumes of power calculated in this way, RWE leads with a share of more than 30% of the volume supplied. By comparison, only VEBA (21.4%) and VIAG (12.4%) have shares that clearly exceed 10%. Of the other interconnected companies, only EnBW has a share of as much as 9.3% of the power supplied. The strong position of RWE, VEBA and Bayernwerk (VIAG) on the market for power supply, one which is even stronger than their positions in electricity generation, is also due to their good access to final consumers in the new *Länder*, where these companies operate through regional suppliers which at present mainly distribute the electricity generated by VEAG. What is more, electricity imports, though accounting for only a marginal proportion of the electricity sold in Germany, predominantly benefit the interconnected companies.
55. Moreover, account must be taken of the shareholding structure of VEAG and BEWAG, listed as independent suppliers in the table. BEWAG is controlled jointly by Southern Company and VIAG. VEAG is controlled jointly by VEBA, VIAG and RWE²³. Accordingly, in calculating the market position of the parties, account must be taken of the fact that neither VEAG nor BEWAG is in competition with the interconnected companies jointly controlling them.
56. The situation with regard to VEAG is significant in yet another respect, namely that of competition between VEBA, VIAG and RWE. The latter cannot be expected to enter into competition with VEAG, as they might otherwise render their joint investment in that company worthless. In practice this means that, as far as VEAG's traditional supply area in eastern Germany is concerned, no competition is likewise to be expected from VEBA, VIAG and RWE *as between one another*.

²¹ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy.

²² Data for VEAG are proportionally contained in the figures for the relevant interconnected companies.

²³ See point 2.2 of the consortium agreement between Bayernwerk AG, PreussenElektra AG and RWE Energie AG of 22 August 1990.

57. If all power generation in Germany including that generated by industry is taken into consideration, it can be seen that the eight interconnected companies generate about 71% of electricity in Germany. However, it should also be taken into account that the electricity generated by industry is essentially used by the firms concerned and thus is not widely available to the free market. If firms were to sell the electricity they generate, this would require the establishment of a sales and customer services structure, which would not be economical for most industrial firms, given the small amounts that could be sold. Since the electricity generated by industrial firms is essentially consumed by these firms themselves, it cannot be classed as being available to the free market. The figures for electricity generated by energy suppliers also have to be qualified. The 700 or so regional and local energy suppliers account for some 10% of electricity generated in Germany. This enables them to cover a proportion of their own requirements and reduce their dependency on the interconnected firms. However, in view of the investment required for the establishment of a sales outfit and of the limited amounts that could be sold, they can be considered as market participants only to a limited extent.
58. Lastly, it should be noted that, although the market seems to admit of competition, as can be seen from events after the beginning of liberalisation, a number of factors limit the potential for competition. These factors are examined more closely in the assessment of the merger. Attention will be drawn here especially to the following factors: the homogeneity of electricity as a product and the transparency of the (highly concentrated) market (see 3.2.2.1 below); the strong position of the interconnected firms in the old demarcation zones and the opportunities for basing competitive behaviour on the original market allocation (see 3.2.2.4 below); the expected small growth in demand and the low price elasticity of demand (see 3.2.2.5 and 3.2.2.6 below); the barriers to entry to the market (see 3.2.3.4 below); and the interconnected firms' holdings in undertakings at the downstream market stage and the terms of Associations Agreement II (see 3.2.3.5 and 3.2.3.6 below).

3.1.2 The extra high voltage transmission network, which is likewise of importance to competition at interconnected level, is over 80% controlled by the four largest power generators

59. As few as eight companies together own 93% of the transmission network in Germany. RWE together with VEBA and VIAG own 52% of the extra high voltage network, or 81% if VEAG, controlled by these three companies, is included. They thus essentially control the resources which, in the electricity market, are necessary to competition based on transmission over the networks of third parties. Moreover, on the basis of their existing networks, VEBA and VIAG already cover an uninterrupted area from Scandinavia to the Alps as well as all the new *Länder* via their controlling shares in the east German company VEAG. Since they also own the interconnectors linking each extra high voltage network to the extra high voltage networks of neighbouring countries, they control most of the infrastructure on which their competitors are dependent if they are to enter the market successfully. The importance of ownership of the network, especially in the light of Associations Agreement II, is examined in greater depth below (see 3.2.3.3).

Table: Transmission network in Germany (Source: VDEW, 1997)

Company	Length of the transmission networks (in km), extra high/high voltage 380/220 kV	
VEBA	6 569	16%
VIAG	5 500	14%
BEWAG	136	<1%
RWE	9 000	22%
VEAG	11 500	29%
VEW	2 000	5%
EnBW	2 100	5%
HEW	360	1%
Others	3 121	7%
Germany as a whole	40 150	100%

3.2 Effects of the merger: creation of a dominant duopoly

60. Following its investigations the Commission has come to the conclusion that the notified merger would create a situation of joint market dominance by the two leading suppliers VEBA/VIAG and RWE on the German market for electricity supply at interconnected level.
61. The German market for electricity supply from the grid presents numerous characteristics which would be likely to lead, in a situation of greater concentration resulting from the merger of VEBA and VIAG, to conscious parallel behaviour by VEBA/VIAG and RWE and thus to joint market dominance. The merger would create two strong vertically integrated blocks, which in every respect would have a strong lead on competitors on the market. This lead would be even stronger if the planned merger of RWE and VEW were to go ahead.
62. On 30 December 1999 RWE and VEW notified their intention to merge to the Federal Cartel Office, responsible for carrying out investigations. A decision will be taken on this merger at about the same time as on the planned merger between VEBA and VIAG. Since, according to the Federal Cartel Office, the firms have offered commitments in respect of the electricity sector, and thus it is conceivable, not to say probable, that this case will be declared exempt within the applicable forecast period, this change in market structure must be taken into account in the assessment of the planned merger of VEBA and VIAG.
63. In the Commission's view, however, what matters is not whether the merger between RWE and VEW goes ahead or not. The addition of VEW would, of course, strengthen the position of RWE and hence of the duopoly overall. And as a member of the duopoly the new entity would have a slight edge on VEBA/VIAG. But this edge would be too small to invalidate the finding that there is a dominant duopoly. RWE alone is already in a comparable position to VEBA/VIAG. While VEW would strengthen RWE's position even further, the sizes of VEBA/VIAG and RWE would remain comparable after any merger of RWE with VEW.

3.2.1 On the German market for electricity supply at interconnected level, the merger would create two comparable blocks that would have a substantial lead on the other suppliers

64. VEBA/VIAG and RWE would have broadly similar market shares, i.e. turnover on the market for power supply from the interconnected system in Germany, and similar power generation capacity. Their combined position in both areas would place them well ahead of their competitors. This suggests that they may have a common interest in anticompetitive parallel behaviour. Aggressive competitive behaviour in a situation characterised by a balance of power affects the income of all concerned without significantly increasing sales volumes. Peaceful parallel behaviour, on the other hand, not only avoids all these disadvantages but also allows symmetrical oligopolies to maximise the profits of all involved to much the same extent. The equivalent market positions held by VEBA/VIAG and RWE suggest that such a situation obtains in the present case.
65. The following table gives an overview of the market positions of the interconnected companies on the relevant product market as they would be if the merger took place.

Table: Market shares for power supply at interconnected level (electricity generation at interconnected level) – post-merger situation

Interconnected company	Generation ²⁴ (TWh)	Market shares
VEBA	77.1	21.2%
VIAG	44.5	12.2%
BEWAG ²⁵	10.3	2.8%
VEBA + VIAG	131.9	36.3%
RWE	120.4	33.1%
VEAG	43.9	12.1%
Total duopoly VEBA/VIAG and RWE	296.2	81.5%
VEW	19.8	5.44%
<i>RWE+VEW</i>	<i>140.2</i>	<i>38.5%</i>
<u>Total duopoly VEBA/VIAG and RWE/VEW</u>	<u>316.0</u>	<u>86.8%</u>
EnBW	35.3	9.7%
HEW	12.6	3.46%
Total interconnected companies	363.9	100%

²⁴ Data include jointly owned power stations.

²⁵ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

66. From the above table it can be seen that VEBA/VIAG would have a market share of 36.3%. This includes BEWAG's market share of 2.8%, since BEWAG, as explained above, is controlled jointly by VIAG (and would be controlled jointly by VEBA/VIAG following the merger). Between them, VEBA/VIAG and RWE would have a market share of 69.4%. Since, in addition, VEAG is already controlled jointly by VEBA, VIAG and RWE, its market share should also be added to that of the duopoly, giving the two blocks a combined market share of 81.5%. If in view of the intended merger the market share of VEW is included, an aggregate market share of 86.8% is obtained for the duopoly.
67. The post-merger situation on the entire German market for electricity supply would be as follows:

Table: Electricity supply on the German market as a whole – post-merger situation

Interconnected company	Power supply (TWh)	Market share
VEBA	102.3	21.4%
VIAG	59.5	12.4%
BEWAG ²⁶	13.3	2.8%
VEBA+VIAG	175.1	36.6%
RWE	151.0	31.5%
VEAG ²⁷	N/A	---
Total duopoly VEBA/VIAG and RWE	326.1	68.1%
VEW	43.6	9.1%
<i>RWE+VEW</i>	<i>194.6</i>	<i>40.6%</i>
<u>Total duopoly VEBA/VIAG and RWE/VEW</u>	<u>369.7</u>	<u>77.2%</u>
EnBW	44.3	9.3%
HEW	15.4	3.2%
Total interconnected firms	429.4	89.7%
Other (regional supply companies, municipal electricity undertakings)	49.6	10.3%
Total for Germany	479.0	100%

68. The above table shows that the duopoly would have a 77.2% market share of total power supply in Germany.

²⁶ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

²⁷ Data for VEAG are proportionally contained in the figures for the relevant interconnected companies.

69. The following table shows post-merger generation capacities in Germany.

Table: Generation capacities in Germany – post-merger situation

Interconnected company	Installed generation capacity (GW) ²⁸	
VEBA	17.5	17.6%
VIAG	11.0	11.1%
BEWAG ²⁹	2.9	2.9%
VEBA+VIAG	31.4	31.6%
RWE	19.8	19.9%
VEAG	9.4	9.5%
Duopoly VEBA/VIAG and RWE	60.6	60.9%
VEW	4.2	4.2%
<i>RWE+VEW</i>	<i>24.0</i>	<i>24.1%</i>
<u>Total duopoly VEBA/VIAG and RWE/VEW</u>	<u>64.8</u>	<u>65.2%</u>
EnBW	7.7	7.8%
HEW	3.8	3.8%
Total interconnected companies	76.3	76.8%
Other (regional supply companies, municipal electricity undertakings)	23.1	23.2%
Total ³⁰ (for all of Germany)	99.4	100%

3.2.2 Numerous structural factors mean that, after the merger, a significant degree of competition between VEBA/VIAG on the one hand and RWE on the other could no longer be expected

70. VEBA/VIAG and RWE would in future no longer compete significantly against one another. This prediction is made on the basis of the following market characteristics, which basically favour oligopolistic parallel behaviour.

²⁸ Data include jointly owned power stations.

²⁹ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

³⁰ Data do not include installed generation capacity belonging to industry and the national railway.

3.2.2.1 Electricity is a homogeneous product, which is sold on a transparent market

71. Electricity is a homogeneous good, and as such is not subject to further technological development. Homogeneous goods, unlike heterogeneous goods, largely possess the same physical or subjective features. Price is the main factor of competition that influences a customer's choice between various power suppliers. Other factors such as quality, research, services, reliability, etc. are of no more than secondary importance when it comes to decisions about purchases. There is also a tendency towards further standardisation of traded electricity. This is taking place, for example, against the background of the Central European Power Index (see following paragraph).
72. The market is subject to far-reaching transparency of production costs and selling prices. There are numerous publications which collate current electricity prices offered by the power suppliers operating in Germany³¹. Despite differences in the price components, e.g. price per kWh, or yearly or monthly charges, and differing durations of contracts or periods of notice, these overviews serve as a quick guide and allow customers to identify the most favourable offers. Although the abovementioned publications and electricity price guides are aimed first and foremost at final consumers, market prices are sufficiently transparent for customers at interconnected level. The interconnected companies try themselves to promote market transparency³². For example, PreussenElektra, together with Dow Jones and other market participants, has developed the Central European Power Index (CEPI). CEPI is an index which reflects the price level in PreussenElektra's territory. The aim is to make the electricity market more transparent. The parties have, moreover, expressly referred to the practice whereby special contract customers often present competitors' price quotations in order to obtain more favourable prices from a company. Associations likewise provide their members with price comparisons. The market is made even more transparent by the fact that VEBA/VIAG and RWE can make good estimations of the market positions of all suppliers on the market for power generation on the basis of their vertical integration. Production costs and network use costs, which determine the variable costs and hence essentially the prices quoted, are thus known throughout the industry, or at any rate among the vertically integrated companies.
73. It is true that where price is the main factor of competition on a concentrated market, this does lead to very intense competition in the first instance. However, at the same time, this also increases the interest of the market participants in avoiding competition, since every time a company undercuts a competitor's prices, this also means a reduction in its own profits. A situation of hidden competition, in which each market participant cannot be certain about the success of its offer, is different. In such a situation, a company is more inclined to make competitive moves, in the hope of winning contracts. The circumstance of competitive moves on prices being immediately felt by all market participants is a factor which in the medium term may reduce price competition. This holds true at all events for the relationship between companies with similar market shares and

³¹ E.g. IWR-Stromtarifrechner at www.Stromtarife.de; Focus Heft 39/99, pp. 319 *et seq.*

³² Cf. the website of PreussenElektra (www.preussenelektra.de) on the Central European Power Index.

cost structures (i.e. similar retaliation potential) (on cost structures in the present case, see 3.2.2.2 below).

74. The drop in electricity prices, that, according to the information contained in the notification, has reached between 10% and 50% since liberalisation of the electricity markets, does not contradict this expectation. Although it shows that price competition is possible on the German electricity market, it must be viewed in context. First, the market is still in the initial phase of the liberalisation process, in which firms are positioning themselves on the German market described above. This phase is limited in time. Second, the abovementioned drop occurred within the market structure as it was before the merger. A market structure such as would exist after the notified merger would considerably reduce the potential for competition and with it the incentive for price competition between VEBA/VIAG and RWE.

3.2.2.2 VEBA/VIAG and RWE have comparable cost structures owing to a similarly composed stock of power stations and a number of jointly operated large power stations

75. Future parallel behaviour is further favoured by the fact that VEBA/VIAG and RWE have similar corporate structures. They are vertically integrated at all levels of the electricity industry. They have both comparable financial strength and comparably large transmission networks, together with a comparably large stock of power stations covering all load ranges, as can be seen from the table below. Other interconnected power companies, on the other hand, are, owing to their limited capacities either in the base load range or in the medium and peak load range, dependent on the purchase of electrical energy from other producers for the load range in respect of which they are under-represented.

Table: Stock of power stations by load range
(VDEW statistics: capacity and work, 1998)

Undertaking	Load range (GW)			
	Base load ³³	Medium load	Peak load	Total
VEBA	12.0	2.3	3.6	17.9
VIAG	4.0	2.6	3.4	10.0
BEWAG ³⁴	1.1	0.9	0.8	2.8
VEBA+VIAG	17.1	5.8	7.8	30.7
RWE	15.3	4.2	1.7	21.2
VEAG	8.0	0.1	2.8	10.9
Total duopoly VEBA/VIAG and RWE	40.4	10.1	12.3	62.8
VEW	2.5	0.8	2.1	5.4
<i>RWE+VEW</i>	<i>17.8</i>	<i>5.0</i>	<i>3.8</i>	<i>26.6</i>
Total duopoly <u>VEBA/VIAG and</u> <u>RWE/VEW</u>	<u>42.9</u>	<u>10.9</u>	<u>14.4</u>	<u>68.2</u>
EnBW	4.7	0.8	1.5	7.0
HEW	2.2	0.2	1.7	4.1

76. No less than some 25% of the electricity produced in Germany is generated by power stations operated jointly by more than one interconnected company. Many base load power stations, and in particular nuclear ones, are operated jointly by the interconnected companies VEBA/VIAG and RWE.

The power stations jointly operated by VEBA/VIAG and RWE include:

- Kernkraftwerke Grundremmingen Betriebsgesellschaft mbH, Grundremmingen: the company operates the Grundremmingen Block B and C nuclear power station; the energy that is produced belongs to the shareholders RWE Energie AG and Bayernwerk in proportion to their shareholdings of 75% and 25%.
- KNG Kraftwerks- und Netzgesellschaft mbH, Rostock: the company operates a hard-coal power station in Rostock, of which RWE Energie AG owns 24.6%, VEBA 24.6% and Bayernwerk 21.1%. The electricity produced belongs to VEAG, which also holds an interest in the company.
- Kernkraftwerke Lippe-Ems GmbH: KLE GmbH operates the Emsland power station; RWE Energie AG owns 12.5% of the company, and VEBA owns a further 12.5%. The company is controlled by the majority shareholder VEW Energie AG (75% of the shares). The electricity generated belongs to the shareholders in proportion to their shareholdings.

³³ Including hard coal.

³⁴ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

- Bayerische Wasserkraftwerke AG: Lech-Elektrizitätswerke AG, a member of the RWE group of companies, and Bayernwerk directly and indirectly hold 50% of the capital of the company that operates hydroelectric power plants in Bavaria. The company is controlled by Bayernwerk. The electricity purchasing rights are essentially vested in the shareholders.
- Rhein-Main-Donau AG: 22.5% of the company that operates hydroelectric power plants on the Rhine-Main-Danube Canal is held (indirectly) by Lech-Elektrizitätswerke AG as a member of the RWE group; Bayernwerk has a 77.49% stake and controls the company. Lech-Elektrizitätswerke also holds 40% of a subsidiary of RMD, Mittlere Donau-Kraftwerke AG.
- Untere Iller AG: the company operates hydroelectric power plants. It is owned 40% by Lech-Elektrizitätswerke and 60% by Bayernwerk AG.
- Hochtemperatur Reaktor Gesellschaft mbH: the company does not operate any operational companies, but instead serves study purposes. RWE Energie AG has a 20.3% stake in it, and member companies of the VEBA group 36.5%.

77. Besides having a comparable stock of power stations, both groups of undertakings are comparably assured, through long-term supply contracts, of import capacities from abroad which are imported via the captive interconnectors which are reserved in the long term.

3.2.2.3 There are interrelationships between VEBA/VIAG and RWE which might encourage parallel behaviour

78. VIAG has a direct shareholding in the interconnected power company VEW, so that, through the proposed merger between RWE and VEW, VIAG would obtain a direct shareholding in RWE/VEW.

79. Moreover, the two groups of undertakings have the following joint shareholdings:

- VEAG AG: the interconnected power company VEAG generates electricity from lignite in the new *Länder*. RWE Energie AG owns 26.25% of VEAG, VEBA 26.25% and Bayernwerk 22.5%. These three shareholders control VEAG jointly. The remaining shares are held by the other interconnected power companies VEW, EnBW, BEWAG and HEW. VEAG also operates the transmission system in the new *Länder*. Price moves by a member of the oligopoly would, owing to the resulting loss of custom, have a negative impact on the joint enterprise and hence on the income earned by that oligopoly member from the joint enterprise. A single oligopoly member cannot by itself determine policy in VEAG (see also paragraph 56 above).
- LAUBAG AG: LAUBAG is owned as follows by the seven west German interconnected power companies: PreussenElektra 30%, Bayernwerk 15%. BBS-Braunkohle-Beteiligungsgesellschaft mbH holds 55% of the shares. BBS is owned 18.2% by Energiebeteiligungs-Holding (consisting of BEWAG, HEW, VEW and EVS, which belongs to EnBW), 71.8% by Rheinbraun AG, a subsidiary of RWE, and 10% by RWE Energie. LAUBAG is the largest lignite producer in eastern Germany and, as VEAG's supplier, forms an economic unit with VEAG.

- Rhenag Rheinische Energie AG: Rhenag is 54.1% owned by RWE Energie AG and 41.3% by Thüga AG, in which the VEBA group has a shareholding of 56.29%. Rhenag's main business is the supply of gas, but it also supplies electricity as a regional supplier. It has numerous minority shareholdings in municipal electricity undertakings which in addition to gas also supply electricity. The VEBA group has a substantial interest in the success of this RWE subsidiary to the extent of its abovementioned shareholding. It is represented on Rhenag's supervisory board and therefore has inside knowledge of its corporate strategy.
- In addition, there are joint shareholdings in STEAG and shareholdings owned by Envia in municipal electricity undertakings in the *Land* of Saxony.

STEAG AG: STEAG's main business is the generation of electricity from lignite, and it sells most of its output to RWE Energie AG and VEW Energie AG. STEAG is 26% owned by Gesellschaft für Energiebeteiligung mbH, which in turn is owned 49.7% by RWE Energie AG and 50.3% directly and indirectly by VEBA. The largest shareholder is RAG AG, with 71.5%.

Envia, a RWE group member company, has several minority holdings in municipal electricity undertakings in Saxony in which the VEBA group member company Thüga also has a minority holding.

- Further joint shareholdings exist in base load power stations in which both VEBA/VIAG and RWE own electricity purchasing rights. The joint operation of these power stations hardly calls, however, for concertation between the operating companies. Instead, base load power stations are operated on a constant supply basis so that no concertation is required between the operators regarding the increasing or decreasing of output, each operator obtaining electrical energy according to its reserved capacity. The importance of the jointly operated power stations, at least in the base load range, as regards the possibility of one duopolist gaining an insight into the commercial policy of the other, is therefore negligible.

3.2.2.4 The possibility of continuing to share customers along the lines of the former geographical monopolies facilitates parallel behaviour

80. VEBA/VIAG and RWE were – like all German interconnected power companies – for decades up until the time of liberalisation monopolists protected by law in a supply zone demarcated from other neighbouring suppliers. The entrenched practice of maintaining closed supply zones facilitates parallel behaviour inasmuch as a suitable behaviour pattern is available. Each interconnected power company continues to occupy in its traditional supply zone a leading position with a market share of well over 50%. The existence of the old demarcation zones accordingly eases the way for the abovementioned type of parallel behaviour on the part of the interconnected power companies.

3.2.2.5 The expected small growth in demand in turn reduces the incentive for the duopolists to engage in active competition

81. The forecasts are for a slight increase in demand for electricity. According to an IEA study³⁵, electricity consumption is likely to rise only slowly. The IEA foresees an annual increase in electricity consumption of the order of 1% between 1992 and 2010 and a 0.7% increase between 2010 and 2020. The forecast of slow demand growth is endorsed by all market participants including the parties.
82. Stable demand and other conditions of competition make it easier to implement parallel supply strategies. Whereas strong structural change means as a rule that coordination is much more difficult to achieve and that behaviour has to be constantly adapted and renewed, this is not necessary where market conditions are stable. In the case of market conditions which change at most slightly, adjustments are relatively simple to make. With stable market conditions, competitive moves will mainly be directed against existing players as new customers are few and far between. The sales volume attained can at most be divided up among the established suppliers. The established suppliers will therefore defend their share of sales and existing customer relations. In these circumstances, the long-term benefits to be gained from avoiding effective competition will be preferred to short-term successes flowing from engaging in competition. The small forecast demand growth accordingly favours parallel behaviour on the part of VEBA/VIAG and RWE given the level of market concentration attained.

3.2.2.6 The low price elasticity of demand likewise favours parallel behaviour

83. Price elasticity means the ability and willingness of buyers to resort to substitute products or to withhold their custom as soon as suppliers increase the price of a good to above the competitive level. Low price elasticity encourages parallel behaviour in an oligopoly. For it can then happen that an appreciable price increase to above the competitive level leads to a growth in income despite a decline in sales.
84. Estimates by market participants point to there being very little short-term elasticity on the relevant market, which makes oligopolistic behaviour seem likely. They refer to the limited alternatives available to buyers. Whereas other goods are substitutable or dispensable, electricity is not, in-house production or switching to other energy sources being possible only to a limited extent, very costly and extremely time-consuming. The parties have by and large not contested this assessment. They simply maintain that in the event of high electricity prices customers can switch to building small plants for in-house generation. Such plants can, however, replace only a small part of the requirements of customers at interconnected level. Building larger power stations is, on the other hand, very costly and as a rule takes longer.

³⁵ IEA, Energy Policy of IEA Countries: Germany 1998 Review, www.iea.org/pubs/reviews/files/germany/02-germ.htm.

3.2.2.7 VEBA/VIAG and RWE are not faced with any significant buyer power

85. The supply side of the electricity sales market at the interconnected level is highly concentrated. The eight German interconnected power companies account for no less than 79.8% of the installed power station capacity. They supply nearly 100% of the electricity sold at the interconnected level. Of this, VEBA/VIAG and RWE account for 81.5% or 86.8% (taking into account the RWE/VEW merger).
86. Users, who are mostly regional suppliers (approximately 80%), municipal electricity undertakings and large industrial customers, have no buyer power with which to oppose them. This is due to the fact that, with a large number of users at the high voltage level, the demand side is fragmented. Threatening to change supplier is therefore not likely to produce any substantial competitive pressure. The parties refer in their reply to the Statement of Objections to the combined buyer power which results *inter alia* from the "numerous cooperative purchasing ventures" involving several further distributors. Although it is true that during the course of the liberalisation process a few companies are availing themselves of the opportunity to form purchasing pools, it can also be said that the combined demand is leading to more favourable price quotations than the separate demand from individual companies. The existing cooperative purchasing ventures cover, however, only a part (the size of which is not specified, moreover, by the parties) of the demand. The fact that such pools have been formed shows, moreover, that individual buyers do not have a degree of market power such as would enable them to influence prices to an appreciable extent. The concentration of the supply side continues to bear no relation to that of the demand side. The number of regional suppliers alone comes to 80, to which must be added further buyers. The regional suppliers and municipal electricity undertakings have so far had little incentive, moreover, to engage in tough price negotiations. They still occupy a strong position in their traditional supply zones and can charge their customers high purchase prices as run-through costs.
87. A further circumstance to be taken into account is the fact that the companies at the production level have sizeable stakes in companies at the subsequent market level, in the form of either a majority or a minority holding. In the case of majority holdings, there is no risk of a change of initial supplier. In the case of minority holdings, the opportunity to change initial supplier is likewise very rarely made use of in practice (see 3.2.3.5 below).

3.2.2.8 Summary

88. On the evidence of all market structure data, i.e. market shares, production capacities and grid size, VEBA/VIAG and RWE would tower above their competitors. Both groups would have a comparable market position and after the merger would, according to the Commission's estimates, no longer stand to gain anything from competing with one another.
89. On the basis of the future symmetrical market positions and largely concordant corporate structures of the duopolists, the product homogeneity, the market transparency, the low price elasticity of electricity demand, the stagnant overall demand for electricity and the existing interrelationships, price competition on the part of one oligopolist is not to be expected because any such moves are readily

identifiable and unpromising owing to the corresponding potential for retaliation on the part of the other oligopolist.

90. The price fall ushered in by liberalisation and the price competition that has been evident even between the three market leaders do not militate against this analysis (see paragraph 74 above).

3.2.3 The duopoly of VEBA/VIAG and RWE or RWE/VEW will not face any significant competition from outside

91. After the merger VEBA/VIAG and RWE would face significant competition neither from other generators nor from traders. Apart from the limited potential for competition from other generators and the limited opportunities for market entry, the underlying legal conditions governing the pursuit of business on the German market are generally unfavourable.

3.2.3.1 In addition to the extremely high market share of the duopoly, interrelationships exist with all the other interconnected power companies apart from EnBW which increase the market power of the duopoly

92. In order to be able to estimate the extent to which the other interconnected power companies may restrict the duopoly's operational scope, the holdings which both groups have in a number of these competitors must also be examined.

- VEAG/LAUBAG: it should first of all be pointed out that VEAG cannot be regarded as a competitor of the duopoly. The company is owned 26.25% by RWE Energie AG, 26.25% by VEBA and 22.5% by Bayernwerk. The remaining shares are held by the other interconnected power companies VEW, EnBW, BEWAG and HEW. As already indicated (paragraph 4), VEAG is controlled jointly by RWE, VEBA and VIAG. LAUBAG is the largest lignite producer in eastern Germany and as a supplier to VEAG forms an economic unit with VEAG. As already indicated (see 3.2.2.3), LAUBAG is owned by the seven west German interconnected power companies.

VEAG generates electricity using almost exclusively east German lignite and is dependent for its supplies on LAUBAG, which in turn is dependent on the duopoly. The latter therefore exerts a decisive influence over VEAG's production costs. Owing to the fact that it predominantly converts lignite into electricity, the company is, moreover, hardly in a position to cover the medium and peak load ranges using its own production capacities. And on the customer side, VEAG is dependent on the seven east German regional suppliers, which in turn are owned by one of the west German interconnected power companies.

- BEWAG: the interconnected power company generates electricity in Berlin. The company is owned approximately 26% by Southern Company, approximately 26% by VIAG and 23% by VEBA, which has 20% of the voting rights. The company is currently controlled by VIAG and Southern. BEWAG does not possess any base load power stations and therefore has to purchase base load electricity.
- HEW: VEBA holds a 15.4% share in HEW directly and another 15.4% share indirectly through Sydkraft, in which it has a 17.6% interest. HEW is a small

interconnected power company with limited production capacities and only a small transmission grid. All of its base load power stations are operated in conjunction with its competitor PreussenElektra. Vattenfall has acquired joint control of HEW by pooling its 25.1% interest with that held by the municipality of Hamburg.³⁶ Although HEW will be jointly controlled by Vattenfall and the municipality of Hamburg, as a minority shareholder with a seat on the supervisory board VEBA is privy to HEW's main decisions and strategies. Its shareholding enables it to obtain information on HEW's price strategy and on any quantities purchased, together with the prices, through, for example, VEBA's interconnector with Denmark. A strengthening of HEW's competitive position through Vattenfall's shareholding, owing, for example, to the availability of cheaper electricity generated in Scandinavia, is, irrespective of the infusion of fresh capital, unlikely for the time being. HEW's high voltage grid is not linked up to any grids abroad, as a result of which HEW's access to imported electricity is largely subject to the same restrictions as access by foreign suppliers to the German market (see above). Vattenfall is dependent when it comes to supplying its affiliate HEW from Scandinavia on free capacities of the interconnectors between Germany and Denmark or Sweden. On the German side, the link-up between Germany and Denmark is operated by the duopolist PreussenElektra. However, the interconnectors have only limited free capacities, with the result that Vattenfall will be able to supply HEW only with negligible quantities. What is more, the interconnector capacity with Sweden is useable to only a relatively small degree.

- VEW: VIAG also has (direct and indirect) shareholdings in VEW. As in the case of HEW, VIAG has by reason of this shareholding a seat on VEW's supervisory board and hence is privy to its corporate strategy. Following the proposed merger with RWE, VEW will, moreover, cease to be an independent supplier on the market.

93. EnBW is currently the only supplier at the interconnected level in which no interest is held by another German interconnected power company. The acquisition by EdF of a minority holding in EnBW is still at the planning stage. EdF intends to acquire joint control of EnBW by pooling its minority rights with the shares held by another shareholder. At all events there are linkages between EnBW and the duopoly in the area of power-station operation.
94. Even allowing for EdF's strength in terms of resources, there are no grounds for maintaining that EnBW would be in a position to limit effectively the duopoly's freedom of behaviour. In the first place, it is to be expected that, since other powerful external competitors are lacking, EnBW will refrain from strong competition in the duopoly's area, which covers almost the whole of Germany, and will fall in with the duopolists' behaviour. This seems obvious given the knowledge of the retaliatory potential of the market-leading interconnected power companies belonging to the duopoly. Secondly, stepping up the procurement of cheap electricity from EdF is scarcely possible in view of the limited capacity of the interconnectors.

³⁶ Case No COMP/M.1842 – Vattenfall/HEW.

95. Moreover, VEBA/VIAG and RWE hold interests in electricity generators in neighbouring countries which confer on them rights to generating capacities. They can make use of these capacities at least to a limited extent via the interconnectors they control. RWE thus holds a 40.31% interest in SEO, a pumped storage station operator. In the Netherlands PreussenElektra holds an 87% interest in EZH, one of the four major generators. PreussenElektra also holds 10% of the Swiss generator BKW. And Bayernwerk and EnBW each hold 24.5% of Watt AG, which is already active on the German market in the importing sphere. RWE and EdF also each hold 20% of the shares in Motor-Columbus, which in turn holds 56.5% of ATEL. BKW, Watt and ATEL own about 23% of Swiss electricity generating capacity.
96. After the merger, VEBA/VIAG and RWE would therefore have a long lead over their nearest competitors. The position of these interconnected power companies is even weaker than is apparent from their market shares as VEBA/VIAG and RWE hold substantial interests in most of their competitors. Meaningful competition is not therefore to be expected from these interconnected power companies.

3.2.3.2 The duopoly will control by far the greatest part of installed generation capacity and almost all free generation potential

97. After the merger VEBA/VIAG would control about 30% of total generation capacity in Germany. VEBA/VIAG and RWE together have about 50% of generation capacity. If account is also taken of the capacity of VEW, VEAG and BEWAG, the duopoly would, after the proposed RWE/VEW merger, control over two thirds of total installed generation capacity (see above).
98. As has been explained above (paragraph 57), electricity generated by industry is in any case available to the free market only to a limited extent. Likewise, electricity generated by regional and local energy suppliers is mainly intended to meet their own requirements. The main factor for competition is therefore the share of installed generation capacity at interconnected level; at this level the duopoly will control about 60-65% (including VEW) of total capacity.
99. In this connection it is also significant that there is a close, historical link between generation and network. As a result of this link the existing network architecture does not allow the complete substitution of all power stations in an interconnected area through supplies of electricity from outside. It follows that interconnected companies have to some degree non-substitutable generation capacity and thus assured markets. The greater the generation capacity that is tied into existing networks through a merger, the bigger the electricity markets will be that are protected from competition for structural reasons.
100. It can also be perceived on an examination of the enterprises' stock of power stations that the free generation potential or overcapacity for all load ranges is predominantly held by members of the duopoly. The following survey provides an overview of overcapacity of the individual interconnected generating companies.

Table: Free generation potential of power stations by load range

(VDEW statistics: capacity and work, 1998)

Undertaking	Free generation potential (TWh) – 1997			
	Base load ³⁷	Medium load	Peak load	Total
VEBA	21.2	2.3	2.8	26.3
VIAG	4.1	1.1	3.2	8.4
BEWAG ³⁸	2.3	1.7	0.4	4.4
VEBA+VIAG	27.6	5.1	6.4	39.1
RWE	12.1	4.2	1.6	17.9
VEAG	17.8	0.0	1.1	18.9
Total for duopoly VEBA/VIAG and RWE	57.5	9.3	9.1	75.9
VEW	2.2	0.2	1.1	3.5
<i>RWE+VEW</i>	<i>14.3</i>	<i>4.4</i>	<i>2.7</i>	<i>21.4</i>
<u>Total for duopoly VEBA/VIAG and RWE/VEW</u>	<u>59.7</u>	<u>9.5</u>	<u>10.2</u>	<u>79.4</u>
EnBW	5.7	1.8	0.5	8.0
HEW	3.4	0.1	1.2	4.7

101. Although the parties have asserted that VEBA/VIAG and RWE have no overcapacity in the base load range, they have not backed up this assertion with any evidence.
102. The members of the duopoly have it in their power to leave the abovementioned overcapacities unused or even to reduce them in parallel in order to stabilise the price level.
103. At the oral hearing the parties stated that these overcapacities would stimulate competition. During by far the larger part of an assessment period, there was more to be gained, they stated, from utilising them than from increasing prices.
104. No written evidence was produced, however, to support these statements. The Commission is accordingly not in a position to verify the figures. In their arguments the parties also assume that the duopoly's capacity remains unchanged. They thereby ignore the possibility for the duopoly to extend its parallel behaviour to the closure of capacity.

³⁷ Including hard coal.

³⁸ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

3.2.3.3 The duopoly will control by far the greatest part of the transmission network in Germany

105. Without including VEW and leaving aside VEAG, which they control, VEBA/VIAG and RWE by themselves will control 52% of the German transmission network. The duopoly's competitors are dependent on it for use of this network in order to compete with it. In addition, the transmission network as a whole covers the greater part of Germany.

Table: Transmission network in Germany (source: VDEW, 1997)

Undertaking	Length of transmission networks (in km), extra high/high voltage 380/220 kV	
VEBA	6 569	16%
VIAG	5 500	14%
BEWAG ³⁹	136	<1%
VEBA+VIAG	12 069	30%
RWE	9 000	22%
VEAG	11 500	29%
Total for duopoly VEBA/VIAG and RWE	32 569	81%
VEW	2 000	5%
<i>RWE+VEW</i>	<i>11 000</i>	<i>27%</i>
Total for duopoly <u>VEBA/VIAG and</u> <u>RWE/VEW</u>	<u>34 569</u>	<u>86%</u>
EnBW	2 100	5%
HEW	360	1%
Others	3 121	8%
Germany as a whole	40 150	100%

106. In addition, the network, by reason of its scope, and the ownership of the network links within Germany and interconnectors enable the members of the duopoly to steal a significant march in information matters over their competitors.
107. Through their ownership and operation of the network links/interconnectors and the network, the interconnected companies obtain information on load flows and quantities supplied by competitors and an outline of loads used by suppliers. Although, in organisational terms, network operation is separated from the electricity trade and distribution, there is evidence to suggest that in individual cases sensitive network operation data concerning competitors of the interconnected companies come to the knowledge of interconnected companies' sales divisions. Such claims were also made by competitors of the parties at the hearing.

³⁹ BEWAG is listed as an independent electricity supply company. It is controlled jointly by VIAG and Southern Energy. For purposes of examining the duopoly, BEWAG's figures were included among those of VEBA/VIAG.

108. A further advantage over competitors that ownership of the network confers on members of the duopoly is the settlement procedures for balancing energy that are fixed for transit operations under Associations Agreement II (see 3.2.3.6).
109. The general point should be made that in Germany the transmission network is not operated by an independent undertaking. Instead, it is owned by various interconnected companies and operated by them. The interconnected companies have set up subsidiaries to operate the network. In doing so they had regard for the minimum requirements contained in the Electricity Market Directive and carried out management unbundling and unbundling of accounts to separate operation of the transmission network from their activities as electricity producers and suppliers. However, this measure has not been accompanied by any economic separation and network operation and electricity production and supply remain in the same vertically integrated group so that discrimination remains possible against competitors who rely on through-transmission via the network. By virtue of the negotiated network access, it is possible to harm the competitive opportunities of competitors, especially traders, in favour of the interconnected companies' own production companies by way of combined costing through high through-transmission charges and correspondingly low electricity supply prices. In such circumstances there is little incentive to apply transparent tariffs which can be checked to see how they stand in relation to costs and to the rules of Associations Agreement II on through-transmission. This holds true especially where – as would be the case once the planned merger was completed – by far the greatest part of a national network is dominated by only two groups which, as indicated, can be expected to engage in parallel behaviour. It must also be borne in mind here that both blocks operate on downstream markets where they can fend off competitors through a lack of price transparency and use income for competition purposes at the interconnected level.

3.2.3.4 There are significant barriers to entry to the market, as regards both the creation of new capacity and imports. Imports, which are possible only to a limited extent and are mostly effected via interconnectors controlled by members of the duopoly, cannot restrict the duopoly's operational scope

110. Potential suppliers are unable to present an effective challenge to the parties' strong position on the market. This is because of the high barriers to entry to the German market.
111. Entry to the market in the supply of electricity at the interconnected level in Germany entails considerable investments. These to a large degree form sunk costs, i.e. they are applicable to one product market only and have no application to activities on other markets. These costs include the production-level investments in power stations. Even after the liberalisation of the German electricity market, market entry at the production level entails incurring considerable costs over a long period because of the necessary investment in power stations. Given the statutory right of through-transmission, however, the development of an independent transmission network is no longer necessary since production companies are able to use the transmission networks of other market operators on non-discriminatory terms. Since VEBA/VIAG and RWE hold the major part of German generation capacity, any market entry entails the risk that the members of the duopoly will apply their overcapacity so as to force the

newcomer off the market by lower prices. This also makes it more difficult *de facto* for electricity traders to enter the market.

112. Consequently, even after liberalisation, market entry entails high costs so that the previously existing substantial barriers to entry to the German market in the supply of electricity at the interconnected level remain. This is shown clearly by the fact that market entry at production level has in general proceeded by an enterprise taking a holding in an existing production company. Thus the Swedish enterprise Vattenfall took a holding in the interconnected company HEW. The Finnish enterprise Fortum took over the Wesertal electricity plant. However, entry to the market through the construction of a company's own generating capacity remains the exception. The Commission knows of few cases where suppliers have tried to secure access to the market by building their own generating capacity. Thus Fortum has established a power station in the new *Länder* to strengthen its electricity-generation base in Germany; likewise, the American company NRG Energy has taken a holding in a power station.
113. Moreover, it should be borne in mind that opportunities for importing electricity are limited because the available capacity of interconnectors is extremely limited. An increase in interconnector capacity is unlikely in the years ahead, at least in the present political climate, owing to the related costs and the requisite authorisation procedure. As the parties stated at the hearing, it takes up to two years just to build the overhead lines, to which must be added the time it takes for the official authorisation procedure and the requisite analysis of the load on the downstream networks.
114. To conclude, barriers to access to the market in the supply of electricity at the interconnected level in Germany are very high. The amount of the necessary investment and the lack of access from abroad because of the limited capacity of the interconnectors restrict competition for the VEBA/VIAG and RWE groups. In view of the two blocks' significant resources and their resulting retaliatory powers, and the wide gap between them and the other operators on the market, there is no reason to expect robust competition from current or potential suppliers, whose room for manoeuvre could be effectively controlled by the two groups.

3.2.3.5 With their numerous holdings, the members of the duopoly enjoy a strong position on downstream markets enabling them to secure their market base at the expense of their competitors

115. The market position of VEBA/VIAG and RWE is further strengthened by numerous holdings in undertakings at the downstream market stage. These holdings give the members of the duopoly decisive influence on the purchasing policy of the undertakings so that the two groups can secure their market base and at the same time seriously impair their competitors' marketing opportunities. The following survey provides an overview of the holdings of the members of the duopoly.

Table: Sample of holdings of the interconnected companies VEBA, VIAG, RWE and VEW in regional supply companies (RVU) and municipal electricity undertakings (SW)

Company	RVU/SW	Level of holding	Interconnected company
Avacon	RVU	55.0%	VEBA
Badische Gas-u.Elektrizitaetsversorgung		47.6%	VEBA
e.dis	RVU	69.0%	VEBA
EAM	RVU	46.0%	VEBA
Energieversorg. Potsdam		35.0%	VEBA
EWE	RVU	27.0%	VEBA
Fraenk.Ueberlandw.	RVU	67.1%	VEBA
Freib.Energie-u.Wasserversorgung		35.9%	VEBA
PESAG	RVU	54.7%	VEBA
Prevag Provinzialsaechsische EnergieVersorg.		25.0%	VEBA
SCHLESWAG	RVU	65.0%	VEBA
St.werke Magdeburg	SW	29.0%	VEBA
Stadtwerke Frankenthal	SW	10.0%	VEBA
Stadtwerke Garbsen	SW	24.9%	VEBA
Stadtwerke Geesthacht	SW	24.9%	VEBA
Stadtwerke Halberstadt	SW	20.0%	VEBA
Stadtwerke Schwedt	SW	37.0%	VEBA
Stadtwerke Weißenfels	SW	24.5%	VEBA
Stadtwerke Zweibruecken	SW	25.1%	VEBA
Staedtische Werke Brandenburg	SW	24.5%	VEBA
Stromversorgung Osthannover		26.0%	VEBA
Thüga	RVU	56.5%	VEBA
Rhenag	RVU	42%/54%	VEBA/RWE
Contigas	RVU	95.0%	VIAG
IAW Isar-Amperwerke	RVU	84.6%	VIAG
OBAG	RVU	96.0%	VIAG
REWAG Regensburger Energie-u.Wasserversorgung		35.5%	VIAG
TEAG	RVU	75.0%	VIAG
Ueberlandw. Unterfr.	SW	54.3%/40.1%	VIAG/VEBA
ELE	RVU	79.0%	RWE
Envia	RVU	63.0%	RWE
EWR	RVU	50.0%	RWE
KAWAG	RVU	30.0%	RWE
KEVAG	RVU	57.0%	RWE
LEW	RVU	40.0%	RWE
MKW	RVU	27.0%	RWE
NVV	RVU	50.0%	RWE
OIE	RVU	100.0%	RWE
Pfalzwerke	RVU	25.0%	RWE
VSE	RVU	41.0%	RWE
ELEKTROMARK	RVU	10%/10%	RWE/VEW
AVU	RVU	50.0%	VEW
MEAG	RVU	61.0%	VEW

116. In many cases, these are majority holdings in distribution companies and the various members of the duopoly, as controlling undertakings, are able to determine their purchasing decisions directly. Even where the members have minority holdings they can nevertheless exercise substantial influence on the purchasing policy of the companies whose shares they hold.
117. The majority shareholders in those associated companies are one or more municipalities, which are usually represented on the company boards through municipal office-holders. However, from the undertakings' standpoint the interest is solely in energy-supply companies with minority holdings. Because of the particular skills of PreussenElektra, Bayernwerk and RWE in the energy and management fields, the holdings of members of the duopoly in redistributors and their representation on their boards have in fact significantly greater weight than the extent of each holding and their quantitative presence on the company's governing bodies would indicate.
118. Energy and management know-how is in large part introduced into the enterprise through the interconnected company. The interconnected company and the other company are normally linked by a supply contract that covers the total outside supplies required by the regional supply company or municipal electrical undertaking. The Commission's investigations have shown that distribution companies in which an interconnected company has a holding have hitherto scarcely exploited the opportunities afforded them by liberalisation and have remained with their previous suppliers. It is correspondingly difficult for other operators, such as importers, electricity traders or other interconnected companies to acquire customers in this category. The minority holdings that are held by VEBA/VIAG and RWE in particular in distribution companies thus strengthen the duopoly's position and create additional difficulties for other operators trying to establish themselves on the German market.
119. In those circumstances, the parties have comprehensive means of bringing influence to bear on the decisions concerning electricity purchases made by many regional and local supply enterprises. Even if in future competitors developed significant electricity-generating capacity in Germany, they would have to operate that capacity in severely restricted competition with members of the duopoly. Given the existing close links between the abovementioned regional and local suppliers and the interconnected companies, the duopoly's competitors lack adequate access to the market at production level that would enable them to offer significant and, above all, geographically comprehensive competition. This affects the market in electricity supplies at the interconnected level since it does not make economic sense to generate considerable quantities of electricity in competition with the duopoly unless there is an adequate opportunity of marketing it.

3.2.3.6 The terms of Associations Agreement II, particularly concerning the T-component and balancing energy, give the duopoly further advantages over competitors

120. The provisions of Associations Agreement II, which appear to indicate a significant improvement over those of Associations Agreement I, contain certain clauses that, particularly for competitors of the interconnected companies, create serious barriers to through-transmission and thus mainly serve to further

consolidate and strengthen the position of the market leaders, the interconnected companies.

121. Foreign suppliers must continue to pay the T-component at the rate of 0.125 pfennig/kWh when they import electrical energy into the Federal Republic of Germany. The T-component also applies within Germany (at the rate of 0.25 pfennig/kWh) for all electricity traders and electricity generators that are unable to achieve a balance in supplies between the north and south trading zones. According to information obtained from electricity traders, in certain circumstances payment of the T-component can reduce traders' margins to zero. Only those companies that can offset the quantities of electricity supplied by them against the quantities of electricity which cross the trading zone boundary in the other direction need not pay the T-component. In this respect the members of the duopoly enjoy significant advantages. VEBA and VIAG will have available an extensive supply area covering both trading zones. Although RWE operates in only one trading zone at present (the same applies to VEW), its status as a major interconnected company gives it an advantage in offsetting electricity with other interconnected companies operating in the other trading zone. After the proposed merger, the supply area of the merged entity will also cover both trading zones. By contrast, smaller interconnected companies and electricity traders find it relatively more difficult to offset energy supplies.
122. Under Associations Agreement II, the offsetting arrangements for balancing energy confer a further advantage on the members of the duopoly. Since final consumers' energy consumption fluctuates, in the course of long-term supplies the level of energy purchased is frequently above or below the contractual amounts. The technical rules mean that the balance, i.e. the deficit or excess, must be balanced by the network operator for his balancing area. This means that balancing energy is bought in or sold. Associations Agreement II applies in principle to systemic services that are necessary for the transmission and distribution of electrical energy and determine the quality of electricity supplies, for example demands on balancing energy, to within tolerances of +/- 5%. Additional payments are required if a standard tolerance of +/- 5% of the reference value is exceeded. On payment of a higher through-transmission charge an applicant can choose a wider bracket of +/- 10% or 20%. Balancing energy can generally be provided only by transmission network operators within their balancing areas or by suppliers operating a power station in the balancing area to which electricity is supplied. According to market operators, the price charged by transmission network operators for supplying balancing energy under Associations Agreement II is considerably higher than under Associations Agreement I. The market operators consulted by the Commission claim that the price for supplying balancing energy under Associations Agreement II significantly exceeds the cost of providing the energy. The fact that balancing energy is constantly kept ready for cases where it is necessary plays a relatively important role in the calculation. For example, if the 5% tolerance band is exceeded just once, the amount charged is based on an assumption that it was exceeded for one month. This is liable to prove a burden, especially for suppliers with comparatively low quantities of sales of electricity. In those circumstances, with this method of calculation electricity traders risk losing their profit margins.

123. By contrast, the prices for balancing energy entail scarcely any burden for members of the duopoly. This is mainly because, with their prominent position on the market and large sales volume they can much more easily offset consumption fluctuations within their balancing areas and thus incur significantly lower costs for balancing energy. Also, interconnected companies, which – as network transmission operators – are in fact the main suppliers of balancing energy, usually supply each other with balancing energy against payment in kind, according to market operators. The parties state that the interconnected companies provide each other with energy on a reciprocal basis to a limited extent, at all events where there is an unintentional exchange of energy or a power station failure, so that no costs arise for balancing energy. Competitors that are not interconnected are often dependent on interconnected companies for supplies of balancing energy. They are naturally dependent on members of the duopoly in particular since they cover a large part of the area of the Federal Republic of Germany.
124. In addition, Associations Agreement II does not contain any provisions on management of bottlenecks where the network is subject to restrictions in Germany. The result is that transferor companies sometimes give priority to requests for transfers from their own group, invoking network-safety issues and technical difficulties, and merely offer competitors the use of any remaining free capacity.
125. Any competitors of members of the duopoly that do not have their own transfer network available are therefore adversely affected by the arrangements on use of the network. The prominent position on the market held by VEBA/VIAG and RWE is therefore consolidated by the arrangements on use of the networks belonging to them.

3.2.3.7 Control of by far the major part of generation capacity, the transmission networks and network-link capacity with neighbouring States give the duopoly decisive influence over the electricity trade that is developing in the wake of liberalisation

126. According to the Commission's current information, the electricity traders already operating on the market are likewise unable to restrict the operational freedom the market structure allows the parties.
127. Since the liberalisation of the German electricity market in 1998, all consumers have been entitled to choose their suppliers. This situation has influenced the operations of both producers and independent electricity traders. The existing interconnected companies have in large part extended their operations beyond the traditional interconnected areas. Independent wholesale electricity traders, such as Enron, Fortum and Vasa Energy, have newly entered the market. Those traders have so far concentrated on short-term spot supplies and have concluded long-term contracts only in exceptional cases. Their own capacity for electricity generation is negligible, so that they correspondingly depend on access to free capacity.

128. The operators on this market consider that an essential condition for a market in electricity trade which will have a decisive impact on the duopoly's ability to determine prices is that adequate liquidity should be present on the market. The overcapacity available to independent electricity traders is mainly owned by VEBA/VIAG and RWE, as has been pointed out above. They therefore have a large measure of freedom to determine prices since other producers are unable to meet demand fully. Both groups of companies would therefore be able to determine how much electricity independent electricity traders on the German market receive and to exercise permanent control on prices.
129. The same consideration applies to the trade through the German electricity exchanges, which are intending to begin operations in the autumn of this year. In the LPX's view, it is a condition for a properly functioning exchange performing the essential task of price formation that 15-25% of national physical consumption can be traded on the exchange. In view of the high concentration of generation capacity held by VEBA/VIAG and RWE, the two groups can determine the success of the exchanges and thus determine whether their competitors succeed and make profits.

4. Conclusion

130. In summary, the Commission has come to the conclusion that the merger of VEBA and VIAG would considerably deteriorate the structures on the German market for the provision of electricity from the grid. Competition would be critically weakened as a result of the emergence of a duopoly, (VEBA/VIAG and RWE or RWE/VEW). Because of their dominant market position and access to resources such as power stations, transmission grids and grid transfer points, the duopoly could largely shield the German market from competition and, in addition, prevent the emergence of a properly functioning market for trade in electricity. The merger would therefore lead to the creation of a joint dominant position.

B. CHEMICALS

131. VEBA operates in chemicals through its subsidiaries Degussa-Hüls AG and VEBA Oel AG (petrochemicals). The chemical interests of the VIAG group are handled by its subsidiaries SKW Trostberg AG and their subsidiary Goldschmidt AG. The Commission has come to the conclusion that the merger will strengthen further a dominant position on the markets for sodium dicyanamide and cyanuric chloride.

B.1. Sodium dicyanamide

1. Relevant product market

132. Sodium dicyanamide is a product of hydrocyanic acid /chlorine cyanide chemistry which arises from the synthesis of (highly-poisonous) chlorine cyanide and cyanamide. As chlorine cyanide is an unusually dangerous substance, the production of sodium dicyanamide is closely linked geographically to that of chlorine cyanide.
133. Sodium dicyanamide is used chiefly as an intermediate product for the production of the active substances polyhexamethylene biguanide (PHMBG), chlorhexidine

and proguanil. PHMBG is used for preservation and sterilisation in the technical field. By volume the most important use is as a chlorine-free biocide for swimming pools. PHMBG is also used in the food industry, for example in meat processing and brewing, to clean vats and pipes, as it is non-toxic and does not corrode sealing. In the oil industry it is employed in pressure tests on pipelines, as it kills off unwanted organisms, but not sulphur-decomposing bacteria, such as those added to petroleum with high-sulphur content. Chlorhexidine is a disinfectant used on humans and on animals forming part of the human food chain, for example in human medicine (surgery) and veterinary medicine (disinfecting udders), in the manufacture of cosmetics and in contact-lens cleaning fluid. Proguanil is used as a remedy against malaria. Sodium dicyanamide is also used in the agri-chemicals industry as a herbicide.

134. The customers asked for their views stated in unison – and unchallenged by the parties – that sodium dicyanamide is for them a key intermediate product, which cannot be replaced by any other intermediate product. Even if another intermediate product were available in the foreseeable future, its use would imply considerable adaptations to the production process and the re-registration of products manufactured hitherto from sodium dicyanamide and all other subsequent uses – a lengthy and expensive process. The Commission therefore assumes that sodium dicyanamide should be regarded as the relevant product market.

2. Relevant geographic market

135. The parties base their arguments on a worldwide market for sodium dicyanamide. The firms asked to submit their views make the same assumption. The assessment can therefore be based on a worldwide market.

3. Competition assessment

3.1. Present market situation

136. At present, only two firms in the world produce sodium dicyanamide in large quantities – Degussa and SKW. The parties also cite Avecia Ltd., Manchester (UK). However, its production process does not yield isolated sodium dicyanamide, but an intermediate product (HMBDA), which is used in turn to obtain chlorhexidine and PHMBG. This intermediate product is manufactured only by Avecia and is not available on the market, as Avecia does not trade in HMBDA. The Swiss firm Lonza AG (Lonza) produced sodium dicyanamide up to 1998, but then closed down production and since then has been selling on goods it obtains from [...] ⁴⁰. The parties expect Lonza to resume production in the second half of the year.

* Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk.

137. The capacity of the plant at which SKW produces sodium dicyanamide has been increased from [...] tonnes (1996) to [...] tonnes (1999). Degussa manufactures it at a multi-product plant for which it quotes an annual capacity for sodium dicyanamide production of around [...] tonnes. Degussa uses sodium dicyanamide to produce chlorhexidine in the form of chlorhexidine base and chlorhexidine digluconate. [...] obtains from Degussa a product of sodium dicyanamide, hexa-methylene biscyanoguanidine (HMBCG), which it processes further to produce chlorhexidine base und chlorhexidine salts. [...] also purchases sodium dicyanamide.
138. The parties estimate that world production of sodium cyanamide comes to somewhere between around 900 and 1300 tonnes per annum (tpa), including between [...] and [...] tpa attributed to Avecia. They disregard the fact that Avecia produces no isolated sodium dicyanamide. The estimated figures for Asian producers cited by the parties have not been confirmed by Commission investigations.
139. Subtracting the parties' production estimates for Avecia from their estimates for total world production leaves a remainder of no more than [...] tonnes, which is roughly equivalent to the entire production of the parties in 1998 (around [...] tonnes). On the basis of the parties' estimates, this leaves no more than [...] tonnes for production by other firms. If one starts from a world production figure of around [...] tonnes, SKW has a share of around [50-60%] and the parties together have a share of [<100]%. If one subtracts from this figure the amounts produced by the parties for their own use, this leaves a market volume of around [...] tonnes, of which [...] tonnes, or [60-70]%, is accounted for by SKW.
140. Degussa states that it does not actively market sodium dicyanamide, but manufactures it for use within its business group for the production of chlorhexidine. However, in the past, it has provided occasional, supplementary supplies to [...], in some cases even delivering the goods direct to [...]'s customers.
141. At present, buyers of sodium dicyanamide have two suppliers to choose from – Lonza and SKW. Even a cautious analysis shows that SKW supplies over two-thirds of the market. In these circumstances SKW can be said to have a dominant position on the market.
142. Nevertheless, the presence of Lonza does at present provide customers with some scope for responding to excessive price demands on the part of SKW by reducing the amounts they order. In this respect, the extent of Lonza's operations on the market depends on the amount of sodium dicyanamide which Degussa is prepared to supply. For its part, Degussa contributes to the supply of the market by its deliveries to Lonza. Before the merger Degussa could also be seen as a potential competitor in the market in question.
143. With the exception of AstraZeneca, all the firms which require large quantities of sodium dicyanamide are small and medium-sized businesses. AstraZeneca uses sodium dicyanamide to produce proguanil, which is marketed under the Paludrin brand, and requires only comparatively small quantities of sodium dicyanamide for this purpose.

3.2. Effects of the merger

144. First of all, the merger will eliminate Degussa, which is now also in contact with Lonza's customers, as a potential competitor. Similarly, the new market-dominant entity will have no interest in supplying Lonza, its only competitor. From this angle the merger will mean, at the very least, a further weakening of Lonza's position as competitor. Furthermore, Degussa already operates in a downstream market (chlorhexidine), where it is a potential competitor for PHMBG, as the HMBCG produced by Degussa can be processed further to produce chlorhexidine or PHMBG. Degussa/SKW would be able to decide whether, overall, it would be more advantageous to market sodium dicyanamide or use it itself. In the latter case, it could largely cut off the supply of sodium dicyanamide to Degussa's competitors on the downstream market for chlorhexidine or make supplies more expensive, thus reducing their long-term competitiveness.

3.2.1 Submission by the parties regarding the possible re-entry of Lonza to the market

145. The parties mention the possibility that Lonza might enter the market with its own production. However, this does not change the assessment of the merger from a competition angle. If the merger did not take place, Lonza would cease to be a customer of Degussa, in so far as it would manufacture amounts itself. This would create an incentive for Degussa to sell the amounts it produces elsewhere, in competition with the amounts manufactured by SKW. Such competition would be eliminated by the merger and SKW's dominant position (which could in no way be called into question by Lonza's probable trade volume of around [...] tpa⁴¹) would be strengthened accordingly.

3.2.2. Entry of further competitors is unlikely

146. There is also no prospect of the parties being faced with the threat of new market entrants in the event of a substantial rise in prices. At present only Avecia could be considered as a potential candidate. But even if Avecia wanted to put sodium dicyanamide supplies on the free market, it would first have to undergo an extensive reorganisation of its production in order to obtain isolated sodium dicyanamide. It is worth bearing in mind here that Avecia obtains the cyanamide it needs for its HMBDA production from [...]*. As cyanamide is not a stable product, Avecia cannot transport it over long distances and would therefore find it difficult to switch to another supplier.

4. Conclusion

147. For the reasons stated above, the Commission considers that the merger would lead to a permanent strengthening of a dominant position on the market for sodium dicyanamide.

⁴¹ This figure can be estimated on the basis of the amounts supplied by Degussa to Lonza during the period in which the latter no longer produced sodium dicyanamide. Taking into account Lonza's own consumption, its volume of trade would be less than [...] tpa.

B.2. Cyanuric chloride

1. Relevant product market

1.1. Cyanuric chloride and its four main uses

148. Cyanuric chloride (CC) is an intermediate chemical product in hydrocyanic acid chemistry. It has a simple structure and has not enjoyed patent protection for some time. Besides hydrocyanic acid, the most important raw material for manufacturing CC is chlorine gas.
149. CC is a commodity product which is sold as a powder and in molten form. There is no major degree of product differentiation. Apart from price, the most important aspects from a competition point of view are product quality (purity and – in the case of powder – flowability) and packaging. The relevance of packaging concerns not only the size of the packages. CC is classified as a "less dangerous" substance, so that certain official conditions are laid down concerning its transport.
150. CC is distributed predominantly by the manufacturers themselves and by importers. According to the parties, trade plays no role in distribution.
151. CC is used mainly in the production of weedkillers, optical brighteners, reactive dyes and UV-absorbers.
152. [$>50\%$] of CC production is used in the manufacture of weed control agents for maize cultivation (maize herbicides).
153. [Considerable quantities] are processed into optical brighteners, which are used to whiten paper and textiles and in detergents. Optical brighteners alter the reactive properties of these materials with regard to certain light components and give the products to which they are applied a particularly white appearance.
154. CC is also used in the manufacture of reactive dyes. The addition of CC improves the durability of textile colours by intensifying the link between the dye and the fibre. The parties estimate that [a certain proportion] of CC production is used for this purpose.
155. Finally, significant amounts of CC ($<10\%$ of world production) are employed in the production of UV-stabilisers for the manufacture of plastics. CC protects plastic surfaces from fading and decay.
156. The competitors and customers asked to give their views have cited CC as the relevant product market, although two customers make a distinction between powdered CC and molten CC. Degussa is the sole manufacturer of molten CC, producing around [...] tpa in Europe and around [...] tpa in the USA. The question whether the two product variants represent a single or two separate product markets can remain open, as the competition assessment does not hinge on this point.

1.2. The parties regard CC as interchangeable in all its applications

157. The parties argue that CC is in keen competition with other intermediate products that are used to manufacture products sold in the above consumer markets.
158. The parties also consider that CC is an intermediate product which cannot be used by the final consumer and that its competitive environment should be assessed not only with regard to competition between manufacturers, but above all from the point of view of the four consumer markets for the abovementioned applications. They argue that, on these markets, products manufactured from CC compete with CC-free products. Accordingly, they ask the Commission not to examine the conditions of competition with regard to the manufacture and sale of CC, but to consider the abovementioned consumer markets as the relevant markets. They justify this request by stating that, as an intermediate product, CC faces keen competition on the consumer markets from other intermediate products which are also used in end-products offered on those markets. They argue that the manufacture and sale of CC is not relevant for the examination of this aspect of the planned merger from a competition angle, as it does not constitute the "affected market" within the meaning of form CO. In so doing, the parties confuse the delimitation of the relevant product market, which "comprises all those products... which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use"⁴² with a statement of the factors determining the conditions of competition on those markets.

1.3. There is, however, a lack of substitutes for CC as an ingredient and for processed products

159. The parties' claims regarding the many possible substitutes in all four of the main applications of CC have not been borne out by the Commission's investigations. Indeed customers have stated that, at present, they have no possibility of replacing CC with other chemicals in the products they manufacture.
160. As regards pesticides, the ban on atrazine can in no way be seen as equivalent to a ban on all maize herbicides containing CC; indeed the parties do not make such a claim. Even after atrazine containing CC has been banned in Germany, 13 other herbicides which are used in maize cultivation and whose active ingredient is synthesised using CC are still permitted in Germany, according to the Federal Office for Forestry and Agriculture in Berlin and Braunschweig. But even a ban on all maize herbicides containing CC would mean only that the market for CC would decrease. It cannot be assumed that CC could be replaced by another active ingredient within a short time and without higher costs for the firm concerned. This observation is lent further weight by the fact that any reformulated product first requires permission.
161. Optical brighteners are used in the production of paper, textiles, plastics and detergents. In the paper industry CC-based brighteners cannot be replaced by CC-free brighteners, while in the textile industry this depends on the fibre used. Only CC-based brighteners are used on cotton, by far the most widely used textile

⁴² Commission notice on the definition of relevant markets for the purposes of Community competition law (OJ C 372, 1997, p. 5).

fibre, while only CC-free brighteners are used on synthetic fibres. In the case of detergents, CC-based brighteners are not interchangeable at high washing temperatures. Thus, the final application of CC in this field generally rules out any replacement.

162. As regards the replacement of CC in future, it is true for all areas of application that buyers of CC will first have to develop new products and adapt their production process accordingly, not to mention the generally time-consuming licensing procedures which may have to be gone through before a new product can be put on the market.

1.4. CC is therefore the relevant product market

163. CC is therefore to be regarded as the relevant product market.

2. Relevant geographic market

164. The parties produce CC at various locations in Europe and in the USA (VEBA). CC is also manufactured in Europe by the Swiss firm Lonza AG, which belongs to the Algroup-Lonza group, and in the USA by Novartis. These firms market CC worldwide, except Novartis, which produces it solely for its own use [...]*.

165. The firms that were asked for their views and the parties assume a worldwide market, pointing to growing imports to the EEA from China. Transport costs come to [<7]% of the full price, depending on the country of destination, so that CC can be exported anywhere. Nor are there any major restrictions on imports, in particular on supplies from China. On the other hand, the firms asked to submit their views point out that the transport (and processing) of CC entails considerable risks. Hydrochloric acid is formed on contact between CC and air/atmospheric humidity, while hydrocyanic acid is formed in the event of heat being applied (fire). Users of CC therefore take particular care as soon as CC is delivered, ensuring that it is delivered in road tankers and stored in silos or tanks. However, for the purposes of the assessment, the question can remain open as to whether, in view of these risks, the relevant product market covers only Western Europe (the EEA and Switzerland) or is worldwide.

3. Competition assessment

3.1. In view of its market shares, Degussa enjoys a dominant position on the European market; the merger would lead to an increase in its market shares

166. The parties estimate that the various manufacturers of CC have had the following capacities over the last three years:

Table: Total capacity in tonnes

	SKW	Degussa	Lonza	Novartis	Japan	China
1996	[...]* 000	[...]* 000	[...]* 000	[...]* 000	[...]* 000	[...]* 000
1997	[...]* 000	[...]* 000	[...]* 000	[...]* 000	[...]* 000	[...]* 000
1998	[...]* 000	[...]* 000	[...]* 000	[...]* 000	---	[...]* 000

167. With the help of the parties' estimates for capacity utilisation, the following picture emerges for CC production in the last three years:

Table: Production in tonnes

	SKW	Degussa	Lonza	Novartis	Japan	China	Total	Total, excluding Novartis
1996	[...]*	[...]*	[...]*	[...]*	[...]*	[...]*	[...]*	70 000 – 80 000
1997	[...]*	[...]*	[...]*	[...]*	[...]*	[...]*	[...]*	90 000 – 100 000
1998	[...]*	[...]*	[...]*	[...]*	----	[...]*	[...]*	80 000 – 90 000

168. Lonza's estimates of the volume of the world market are significantly lower than those of the parties, the difference arising solely from the estimate of the Chinese share of production, which Lonza puts at 10% and parties at around 30%. On the basis of Lonza's estimate, the parties have an even bigger share of the market. Moreover, China's production is divided between a number of firms.
169. On the basis of the parties' estimates, the market shares (in %) for the worldwide market are as follows:

	SKW	Degussa	SKW + Degussa	Lonza
1996	[<20]	[50-60]	[70-80]	[<10]
1997	[<20]	[50-60]	[60-70]	[<10]
1998	[<20]	[50-60]	[60-70]	[<10]

170. Using as a basis the data submitted by the parties, the EEA market shares for 1998 are: Degussa [60-70]%, SKW [20-30]% and Lonza [<10]%. The picture would be similar for the EEA plus Switzerland. Imports from China still play no role here.

3.2. Novartis's position as market leader for the most important application of CC by volume does not seriously reduce Degussa/SKW's room for manoeuvre on pricing

171. The parties claim that the most important factor preventing them from pursuing an uncontrolled pricing policy is Novartis's dominant position on the downstream market for herbicides. Novartis's activities, mainly on the US and South American markets, are said to be a crucial factor for the price of CC in the field of triazine herbicides (i.e. maize herbicides based on CC). Any increase by Degussa/SKW in the cost of using CC would immediately put their customers at a considerable competitive disadvantage vis-à-vis Novartis, which has an estimated [...]*% spare capacity. This argument cannot be accepted. It may well be that, as the parties claim, Novartis's strong position on the downstream market for maize herbicides imposes certain limits on Degussa's room for manoeuvre in setting prices, in so far as CC is sold to herbicide manufacturers. This limit would coincide with a price increase for the intermediate product CC which would be so high that Degussa's customers could no longer manufacture and sell their herbicides at a competitive price. However, such a limit on Degussa's room for manoeuvre on pricing, which would in any case be confined to a specific group of customers, does not stand in the way of the assumption that it has a market-dominant position for CC. First of all, it must be stated that, in general, market domination

is not equivalent to complete freedom to set prices. Even a monopoly must and will be guided to some extent by the elasticity of demand from its customers. If prices go beyond a certain level, the drawbacks of falling demand may outweigh the benefits of the price increase. In the case at hand, consideration must first be given to the fact that CC accounts for only around one third of total maize-herbicide production costs. Therefore, an increase in the price of CC would not necessarily lead to a similar increase for the finished product, nor have the parties made any such claim to date. Furthermore, it has not been demonstrated that price is the only parameter of action open to maize-herbicide producers. Quality and customer advice also play an important part here. Nor should one rule out the possible advantage of having on offer a variety of products the effects of which complement one another. It must therefore be assumed that, in this area of application, which is the most important by volume, buyers of CC do still have room for manoeuvre to protect their own customers from increases in the price of CC.

3.3. Novartis, the world's biggest CC producer, uses CC only in its own manufacturing processes and is not a potential competitor on the world market

172. Although Novartis is the world's biggest producer of CC, it processes its entire production itself and sells no CC to third parties. In the Commission's view, such sales are unlikely in the future, in view of Novartis's own special production set-up in the USA and the fact that [...]*

3.4. Chinese production of CC is not in a position to reduce Degussa/SKW's room for manoeuvre in setting prices

173. The parties point to the growing importance of CC production in China. Besides supplying the domestic market, various Chinese firms sell CC worldwide, in particular on the USA and EEA markets. Supplies to the EEA are said to be sold at [...] more cheaply. However, to date only very small amounts of Chinese-produced CC have reached Europe, so that its significance appears to be less than described by the parties (Lonza estimates the European market share at 1%). The answers given by customers point in the same direction. Only one firm had tested – initially with a very small amount – whether the problems of transport, availability and quality associated with Chinese CC production could be overcome. All the other firms, except one, which had no detailed information, ruled out such supplies on the grounds of insufficient quality or availability and transport problems.

3.5. The merger rules out a continuation of customers' second-supply policy

174. The parties' state that their sales are concentrated on a few large customers, whose professional purchasing departments would immediately seek out competitive bids in the event of any price increase by suppliers. But this statement disregards the fact that there would be no competitors able to provide such supplies.

175. This applies in particular to the statement that a large proportion of customers apply a second-supply policy. A merger would reduce the number of CC suppliers from three to two. Lonza's production capacities are so low that it can be considered only as a supplementary supplier in addition to Degussa and SKW, not as a replacement supplier. Moreover, if customers applied such a strategy, this would not force Lonza to charge a lower price than Degussa/SKW in order to make better use of its capacity.

3.6. Degussa's dominant position will be strengthened by the merger

176. For these reasons, then, it can be concluded that Degussa already enjoys a dominant position in the market for CC. The merger would strengthen this position permanently. In view of Lonza's insignificant market position and low capacity, the new entity would achieve a virtual monopoly of the market for CC, irrespective of whether CC as a whole is regarded as the relevant product market or whether a distinction is made between powdered CC and molten CC, as the latter is manufactured only by Degussa. Nor is it of any relevance whether the market in question is Western Europe or the world.

4. Conclusion

177. For the reasons stated above, the Commission considers that the proposed merger will lead to a strengthening of a dominant position.
178. The notified merger would lead to the creation or strengthening of dominant positions, as a result of which effective competition would be impeded in a substantial part of the Community. Accordingly, it is incompatible with the common market and with the operation of the EEA.

C. GAS

179. The parties are also active in gas distribution and the supply of gas to final consumers through affiliates which are either regional gas supply companies (VEBA: Avacon) or suppliers to final consumers (VEBA: Avacon, Schlesweg, Gelsenwasser, Thüga; VIAG: Contigas, Fränkische Gas-Lieferungsgesellschaft, Gasversorgung Oberbayern).

1. Relevant product markets

180. The parties draw a distinction between the market sectors for long-distance gas operations (import, storage and transport and sale of natural gas to bulk buyers) and the supply of gas to final consumers (as regional supplier and local distributor), and submit these as the relevant product markets.
181. In a recent decision⁴³, the Commission investigated the gas sector, in particular the conditions on the markets for long-distance gas. It found that a distinction should be drawn in the long-distance gas sector between two relevant product markets – supra-regional gas transmission and regional gas transmission. The market for supra-regional gas transmission includes the import of natural gas from foreign gas producers and its subsequent transport through overland

⁴³ Case No COMP/M.1383 – Exxon/Mobil.

pipelines to regional gas companies. Like the regional gas companies, the supra-regional gas companies mainly supply special-rate industrial customers, electricity generators and local gas distribution companies. Supra-regional gas transmission forms a separate market. The peculiarity of this activity, which is undertaken by supra-regional gas companies, is that it entails the import of large quantities of gas from producer countries. These companies have correspondingly long supply contracts with producers and the installations required for import, long-distance transport and services to customers (e.g. storage).

182. The Commission also considered as separate the relevant downstream market – gas supplies to the final consumer⁴⁴. Here local gas distribution companies supply business customers and households through a system of narrow low-pressure pipelines.
183. Since investigations in this case have given no cause to question this approach to dividing up the markets, it is this division which is used below in the competition assessment.
184. The parties state that the activities of the two groups overlap only in the field of gas supplies to final consumers, so that this should be regarded as the relevant product market. However, in the course of the procedure, the Commission received a submission that the proposed merger would result in the strengthening of Ruhrgas AG's dominant position in the market for supra-regional gas transmission. The grounds given for this statement were that the merger would block off important sales channels to Ruhrgas's competitors in the long-distance gas sector, as both VIAG and VEBA have a direct interest in Ruhrgas and are active on the downstream market through their subsidiaries. Following the merger, Ruhrgas could permanently enjoy better access to customers in which VIAG group companies held an interest. Accordingly, the competition assessment also investigates the implications of the merger for Ruhrgas's position on the market for supra-regional gas transmission.

2. Relevant geographic markets

185. In the past the Commission considered that gas markets were – at least in Germany – regional markets whose boundaries were defined by the demarcated areas reserved for each supply company. With the entry into force of the new version of the Energy Industry Law (see above), the original agreements on market boundaries have now expired. However, unlike in the electricity sector, liberalisation has not yet led to any noteworthy structural changes on the German gas markets. Under the EC Directive on the internal gas market, the Member States must open up their markets by 10 August 2000⁴⁵. By that date, operators of gas power stations – irrespective of their annual consumption – and final consumers who consume more than 25 million m³ per year ("eligible customers") must be free to choose their suppliers. In all, at least 20% of the market must be opened up; this figure rises to 28% by 2005 and 33% by 2010. The annual minimum consumption threshold falls to 15 million m³ in 2005 and 5 million m³ in 2010. An associations agreement is now being negotiated for the gas sector along the lines of the voluntary agreement regulating

⁴⁴ Case No COMP/M.1383 – Exxon/Mobil.

⁴⁵ OJ L 204, 21.7.1998, p. 1.

through-transmission in the electricity sector. The negotiations are being conducted between the *Industrieverband der Kraftwirtschaft*, the *Bundesverband der deutschen Industrie* and the *Bundesverband der Gas- und Wasserwirtschaft*. Unlike in the electricity sector, where there was already access to lines and scope for competition in through-transmission, these important prerequisites for competition have not yet been met in the gas sector outside the traditional supply areas. According to the parties, agreement on a draft associations agreements should be reached in the first half of 2000, although the associations have so far been able to agree only on a rudimentary text, "*Eckpunkte der Verbändevereinbarung zum Netzzugang bei Erdgas* (Key points of an associations agreement on network access for natural gas)", dated 17 March 2000, which leaves open many issues concerning the practical implementation of transmission.

186. All these facts suggest that the geographic market is confined to the previously demarcated regional supply areas in which each supply company also owns the supply pipelines. In the Exxon/Mobil assessment⁴⁶, the question of whether the market for supra-regional gas transmission was still a regional one or already a national one was left open – mainly because of the expiry of the demarcation agreements. In the present case too, the exact extent of the gas markets can be left open to debate, as the competition assessment remains the same no matter which conceivable boundaries are applied.

3. Competition assessment

(1) Supply of gas to final consumers

187. VEBA is active in Lower Saxony and adjacent areas through its affiliate Avacon. Among its other subsidiaries, Schleswig operates in Schleswig-Holstein, Gelsenwasser operates in Ost-Westfalen-Lippe and Mecklenburg-Western Pomerania and the affiliate Thüga is active in Bavaria – through two of its own companies – and has a holding in Gasbetriebe Emmendingen in Baden-Württemberg.
188. VIAG controls the Bavarian gas distribution companies Fränkische Gas-Lieferungsgesellschaft and Gasversorgung Ostbayern. It is also represented in South Germany, via the affiliate Contigas, in the form of fully owned companies or majority holdings.
189. Taking the national market as a basis, VEBA had a market share of [<5] % in 1998 (sales of [35-40] TWh according to the parties), assuming a market volume of around 925 TWh⁴⁷. On the same basis, VIAG's market share in the Federal Republic as a whole would have been only [<5] % (sales of [10-15] TWh). Given this aggregate market share of [5-10] % and the large number of companies competing to supply final consumers, the creation or strengthening of a dominant position in this market sector is not to be expected, taking the national market as a basis.

⁴⁶ Case No COMP/M.1383 – Exxon/Mobil.

⁴⁷ Source: BEB business report 1998; BGW statistics.

190. If the assessment is based on regional markets confined to the supply areas of the gas supply companies, it is true that the subsidiaries of VEBA and VIAG still enjoy dominant positions in their supply areas.
191. However, the Commission considers that neither of these market positions would be strengthened by the merger, as the supply areas of the VEBA group companies are for the most part located far away from those of the VIAG group companies. It is only in the Harz region that this is not so. Here, VEBA-owned Avacon and Thüga have minority holdings in individual municipal undertakings whose supply areas border on that of Gasversorgung Thüringen, in which the VEBA affiliate Contigas has a minority holding. But there are no grounds for supposing that these minority holdings amount to a controlling interest.
192. The merger between VEBA and VIAG will not therefore lead to the creation or strengthening of dominant positions on the markets for the supply of gas to final consumers.

(2) Supra-regional gas transmission

193. Given its present company structure, VEBA cannot exercise a dominant influence on Ruhrgas, which is formally controlled by the "Bergemann Pool". This term is used to describe Bergemann GmbH – or its shareholders, including an RAG subsidiary which holds around 51% of its capital – and Gelsenberg AG. Gelsenberg AG has pooled its shares in Ruhrgas with the shareholders of Bergemann GmbH. Because of this pooling arrangement, Gelsenberg controls around 41% of votes at Bergemann's AGM. The votes of Bergemann's own shareholders are reduced accordingly in so far as voting in Ruhrgas is concerned; RAG's share of votes falls to 30%. However, Bergemann GmbH plus Gelsenberg (the "Bergemann Pool") decides on the exercise of voting rights at the Ruhrgas AGM.
194. The majority requirements in the Bergemann Pool are laid down in Article 7 of Bergemann GmbH's shareholders' agreement, which provides that decisions relating to voting at the AGM of an affiliated company require a qualified majority when a qualified majority is necessary in that affiliated company. As a rule, the Ruhrgas AGM takes decisions by a simple majority, save where the law or the articles of association provide otherwise (Article 19 of the articles of association). This means that, on account of Bergemann GmbH's shareholder structure, changing majorities are possible. There are therefore no grounds for considering that VEBA enjoys sole or joint control of Ruhrgas, whether directly or indirectly.
195. In order to assess the importance from a competition angle of VIAG's participation in companies supplying final consumers, the Commission also investigated VEBA's position. Even before the merger, VEBA had holdings both in Ruhrgas and in suppliers to final consumers.
196. The Commission's investigations show that, at least in 1998, the gas supply companies operating in Germany in the final consumers market obtained their gas from the company in whose traditional supply area they were located. The Commission therefore considers that it makes no difference whether the public utility supplying final consumers is a company in which VEBA has a holding. Where such companies are located for example in the former demarcation area

reserved for Thyssengas, they have also – as far as one can see – obtained the gas they need from Thyssengas, under supply contacts extending over more than ten years. Thus, because of the demarcation agreements, alternative gas suppliers found it difficult in the past to gain access to companies serving final consumers which did not operate in their supply area. In the time since the agreements expired the position has remained basically unchanged. Where alternative gas suppliers have succeeded in winning customers, these are supplied via spur lines linked to the suppliers' own pipelines. Evidence of competition in the form of transit arrangements is so far lacking. Where VEBA had an equity participation in a municipal undertaking supplying final consumers, Ruhrgas did not derive any discernible advantage from it vis-à-vis its competitors (other than the traditional suppliers in the supply area). When asked by the Commission, some of the companies in which VEBA has a holding and which operate in the former demarcation area of Ruhrgas said they obtained gas for sales to final consumers from Ruhrgas's competitors, such as WINGAS GmbH, regardless of VEBA's holding. Even regional supply companies in which Ruhrgas has a direct holding have in the past obtained supplies from WINGAS.

197. In these circumstances there is insufficient evidence to suggest that gas suppliers in which VEBA has a holding are closed off from Ruhrgas' competitors because of the links between VEBA and Ruhrgas. This assessment is based on an assumption that the geographic market in which Ruhrgas operates covers only its former demarcation area. If it is assumed that the market is actually larger (e.g. on a national scale), similar considerations apply and concerns about competition are equally unjustified.

4. Conclusion

198. It is not expected that dominant positions on the market for gas supplies to final consumers or supra-regional gas transmission will be created or strengthened.

D. Steel distribution

199. The business activities of the parties include steel distribution, in which VEBA is active via the Interfer group, part of the Stinnes group (“Stinnes”), and VIAG via its subsidiary Klöckner & Co. AG (“Klöckner”). Distribution of rolled steel products (flat and long steel products), stainless steel, hot-rolled wide strip, wire rod and semi-finished products falls within the scope of the Treaty establishing the European Coal and Steel Community of 18 April 1951 and is thus subject to special proceedings (see Case No COMP/ECSC.1321 – VEBA/VIAG). The present proceedings are concerned with the distribution of other product groups (tubes, bright steel, wire products, reinforcing steel, roofing and wall products, aluminium and non-ferrous metals).

1. Relevant product market

200. Steel distribution forms a separate product market from the manufacturing of steel products and the direct selling of them by the manufacturers⁴⁸.
201. Furthermore, the market for the distribution of steel products can be broken down by type of distribution, i.e. into agency distribution, stockholding, *Streckengeschäft* and non-stockholding distribution. *Streckengeschäft* is a particular distribution channel in Germany, whereby the final purchaser concludes a contract with the trader but the goods ordered are delivered directly by the producer to the final purchaser. The precise market definition can be left open since no competition concerns arise with respect to any of the possible market definitions.
202. In accordance with previous Commission decisions, the most widely sold steel products must be divided into separate product markets⁴⁹. In this case the product groups are tubes, reinforcing steel, bright steel, wire products, roofing and wall products, non-ferrous metals and aluminium.
203. In a previous Commission decision⁵⁰, tube distribution was further subdivided according to the type of tube. However, the market investigation conducted by the Commission showed that the vast majority of customers and competitors did not consider such a subdivision to be appropriate. It can be left open as to whether the individual types of tube – in this case, commercial, boiler, structural and precision tubes – form separate product markets since no objections to the planned merger arise on competition grounds on any of the possible markets.

2. Relevant geographic market

204. In accordance with previous decisions⁵¹, it is assumed that the relevant geographic markets for the distribution of steel products are at least national markets. The investigation of this case gave no reason to suppose any differently. It is, however, unnecessary to clarify whether the markets extend beyond national markets, since the merger gives rise to no competition concerns with respect to any of the possible definitions.

3. Competition assessment

205. The parties are active in stockholding and *Streckengeschäft* distribution only, and not in agency distribution or non-stockholding distribution. There is no overlapping of their activities as regards wire products since Stinnes has no turnover for this product group.

⁴⁸ Decision of 21 December 1994, Case No IV/M.484 – Krupp/Thyssen/Riva/Falck/Tadfin/AST; decision of 20 August 1996, Case No IV/M.760 – Klöckner/ARUS; decision of 4 February 1999, Case No IV/M.1329 – Usinor/Cockerill Sambre; decision of 7 April 1999, Case No IV/M.1369 – Thyssen Handel/Mannesmann Handel.

⁴⁹ Decision of 4 February 1999, Case No IV/ECSC.1268 – Usinor/Cockerill Sambre; decision of 7 April 1999, Case No IV/ECSC.1292 – Thyssen Handel/Mannesmann Handel.

⁵⁰ Decision of 7 April 1999, Case No IV/M.1369 – Thyssen Handel/Mannesmann Handel.

⁵¹ Decision of 4 February 1999, Case No IV/M.1329 – Usinor/Cockerill Sambre; Case No IV/M.1369 – Thyssen Handel/Mannesmann Handel.

206. The parties operate principally in Germany and only to a negligible extent in other Member States. This applies in particular to Stinnes, since the firm's market share outside Germany is at most [<10]% of the entire market for the supply of steel in each Member State and it does not deal in aluminium or non-ferrous metal outside Germany. The activities of the parties overlap in Belgium, France, the United Kingdom, the Netherlands, Austria and Spain only, where their combined share of the entire market for the supply of steel is in each case less than 7%.

(1) Tubes

207. The parties have a combined market share on the total German market for tube stockholding distribution of [<20]% (Stinnes: [<10]%; Klöckner: [<20]%). If the tube distribution market is broken down by tube type, the combined market share of the parties is [<20]% for commercial tubes (Stinnes: [<10]%; Klöckner: [<10]%), [<20]% for boiler tubes (Stinnes: [<20]%; Klöckner: [<10]%), [<30]% for structural tubes (Stinnes: [<10]%; Klöckner: [<20]%) and [<30]% for precision tubes (Stinnes: [<20]%; Klöckner: [<10]%).

208. As regards *Streckengeschäft* distribution of tubes in Germany, the parties have a combined market share of [<10]% of the market as a whole (Stinnes: [<10]%; Klöckner: [<10]%). If the entire tube market is subdivided into tube types, the parties' combined market share is [<10]% for commercial tubes (Stinnes: [<10]%; Klöckner: [<10]%), [<10]% for boiler tubes (Stinnes: [<10]%; Klöckner: [<10]%), [<10]% for structural tubes (Stinnes: [<10]%; Klöckner: [<10]%) and [<20]% for precision tubes (Stinnes: [<10]%; Klöckner: [<20]%).

209. On the tube distribution market the parties face numerous powerful competitors, some of which are vertically integrated, such as Carl Spaeter GmbH, Hoberg & Driesch GmbH & Co., Löwe & Jaegers GmbH, Röhren- und Stahllager GmbH & Co. KG, Salzgitter Stahlhandel GmbH and Thyssen Schulte GmbH. Given this market structure, it is unlikely that a dominant position would be created for the parties.

(2) Reinforcing steel

210. On the German market for stockholding distribution of reinforcing steel, the parties have a combined market share of [<10]% (Stinnes: [<10]%; Klöckner: [<10]%), and for *Streckengeschäft*, of [<30]% (Stinnes: [<30]%; Klöckner: [<10]%). The merger would thus neither create nor strengthen a dominant position as regards reinforcing steel.

(3) Bright steel

211. The parties' combined share of the - presumed - overall German market for the distribution of bright steel is [<20]%, with Stinnes's market share at [<10]%. The parties estimate the volume of the market for stockholding distribution of bright steel to be about 180 000 tonnes. Against this background, the parties' aggregate market share comes to [<30]% (Stinnes: [<10]%; Klöckner: [<20]%). As regards *Streckengeschäft* distribution of bright steel, where the volume of the market has been put at 145 000 tonnes, Klöckner has a market share of about [<20]%, while Stinnes has a share of [...]*. The aggregate market share of – depending on how

the market is defined – at most 20% is, given the large number of partly vertically integrated competitors, not suited to creating a dominant position for the parties.

(4) Roofing and wall products, aluminium and non-ferrous metals

212. Stinnes has only a marginal presence in the distribution of roofing and wall products and aluminium in Germany, with sales of well below [...] * tonnes. Klöckner, for its part, is scarcely present in the distribution of non-ferrous metals (approximately [...] * tonnes in 1998). Stinnes therefore has a barely measurable share of the market for the distribution of roofing and wall products, as has Klöckner in the market for the distribution of non-ferrous metals. At all events, the aggregate market shares of Klöckner and Stinnes do not exceed 15%, irrespective of how the markets are defined. The merger would therefore neither create nor strengthen a dominant position in the above areas also.

4. Conclusion

213. In view of the extremely small market shares and market share combinations in some cases and the keen competition faced by the parties, especially in Germany, the planned merger would give rise to no competition concerns in the area of steel distribution.

V. SUMMARY

214. In the light of the above, the proposed merger would in its notified form lead to the creation or strengthening of dominant positions on the markets for electricity and chemicals, and would, accordingly, be incompatible with the common market and with the operation of the EEA.

VI. COMMITMENTS OFFERED BY THE NOTIFYING PARTIES

A. ELECTRICITY

1. Commitments

215. To allay the Commission's concerns regarding the proposed merger, VEBA and VIAG have made the following commitments:

The parties undertake to divest their shareholdings in VEAG. VEAG is owned 26.25% by VEBA and 22.5% by VIAG. RWE also has a 26.25% shareholding and Energiebeteiligungsholding (consisting of BEWAG, HEW, VEW and EnBW) has a 25% shareholding. The parties also undertake to divest their shareholdings in the east German lignite producer LAUBAG and to transfer the rights which the latter owns in the mining of east German lignite to the acquirer of the shareholdings in VEAG. VEBA holds 30% of the shares in LAUBAG, and VIAG 15%. BBS Braunkohle-Beteiligungsgesellschaft mbH holds the remaining 55%. BBS is in turn owned 18.2% by Energiebeteiligungsholding, 71.8% by Rheinbraun AG (which belongs to RWE) and 10% by RWE Energie AG.

216. The parties undertake furthermore to guarantee VEAG's electricity sales as follows. From the time the merger is cleared up until 31 December 2007, the parties will purchase electricity at the market price from VEAG to the extent that it is not already purchased through the parties' east German regional suppliers

TEAG, e.dis and Avacon-Ost (formerly EVM). Up until 31 December 2003 the purchasing guarantee will include the obligation to purchase 100% of the reference quantity of the abovementioned regional suppliers [...] and also correspond to the load distribution [...]. This is equivalent to a guaranteed take of approximately [...] TWh. As from 1 January 2004 the purchasing obligation will relate to a quantity 10% smaller than the quantity taken [...]. In the event of an increase in sales by the regional suppliers compared with sales in [...], the parties will offer to procure [a larger part] of this additional quantity from VEAG. In the event of a loss of sales by the regional suppliers, the purchasing obligation will not be reduced. A price of [corresponding roughly to the current market price] (energy and network component) will in principle be guaranteed as the market price up until 31 December 2001. From 1 January 2002, the [market price] will form the basis of the price of the energy component [...].

217. The parties undertake to divest their shareholdings in BEWAG. VIAG holds 26% of the capital and 28.7% of the voting rights, while VEBA holds 23% of the capital and 23.8% of the voting rights, the latter being, however, limited to 20% of the voting rights by virtue of a commitment given by VEBA to the Federal Cartel Office on 17 September 1997. A further 26% of the capital and 28.7% of the voting rights are held by Southern Energy Holding.
218. VIAG undertakes to divest the shares it holds directly and indirectly in VEW and RWE should the merger between RWE and VEW be completed before the divestment of its shareholding in VEW. VIAG currently has a direct shareholding of 11.13% and in addition it has a 30% shareholding through its subsidiary Contigas in a ballast company, Energie-Verwaltungsgesellschaft (EVG), which holds a further 24.7% of the shares.
219. VEBA undertakes to divest its direct shareholding in HEW. VEBA indirectly holds 15.4% of the capital and 14.2% of the voting rights in HEW. It also has a 15.4% holding in HEW through the Swedish company Sydkraft, in which it has a 17.6% interest.
220. VEBA undertakes to terminate its existing alliance with RWE within Rheinische Energie AG (Rhenag). Rhenag is owned 54.1% by RWE and 41.3% by VEBA.
221. The parties undertake, moreover, to amend, within one month of their merger being cleared, their charges for network use in Germany in such a way that the price component for the national T-component comes to 0 Pf/kWh. If RWE/VEW have already issued a waiver by the time the VEBA/VIAG merger is cleared, the parties undertake to follow suit forthwith.
222. The parties further undertake to indicate, within two months of their merger being cleared, the electricity prices for special contract customers (re-distributors and industrial customers) who are supplied in their own network area at 110 kV and above, broken down by network-use charge, energy price, metering/reading, etc. (Law on renewable energy sources, Law on cogeneration, licensing agreements, turnover tax). In respect of special contract customers who are supplied in their own network area at the medium voltage level (20 kV), the parties enter into this commitment as of 1 January 2001.

223. The parties undertake to amend, within one month of their merger being cleared, their charges for the supplying of balancing energy in such a way that either the price per kilowatt is levied on a daily basis or only kilowatt-hour rates are charged.
224. The parties further undertake to make available to the interconnector on the German-Danish border additional capacity amounting to 400 MW. VEBA holds on the overland route from Denmark to Germany *inter alia* a proportionate transport right amounting to 400 MW out of a basic transmission capacity of 1 200 MW. In order that it might be able to offer outsiders additional transmission capacity amounting to 400 MW, VEBA undertakes to conclude an agreement with Eltra and Statkraft by which:
- Eltra buys back the 400 MW transport right,
 - the part of the 400 MW agreement signed with Statkraft is converted into a financial agreement without affecting its value,
- so that third parties can use this capacity as from 1 January 2001.
225. The commitments also contain the following provisions (see point VIII. 4. of the commitments on electricity). As regards the commitment to divest their shareholdings in VEAG and LAUBAG, the Commission and VEBA/VIAG are agreed that this commitment will be deemed to be fulfilled only if RWE/VEW have met an obligation imposed on them by the Federal Cartel Office in proceeding B 8 – 309/99 according to which they must divest the shares and voting rights they hold in VEAG and in LAUBAG and the lignite mining rights they hold in the new *Länder*, and if the Federal Cartel Office has imposed obligations to safeguard VEAG's sales and preserve that company's liquidity and these obligations have been met. As regards the commitments in respect of the Associations Agreement (see point VI 1. – 3. on electricity), the Commission and VEBA/VIAG are agreed that these commitments will be deemed to be fulfilled only if the Federal Cartel Office has imposed corresponding obligations in proceeding B 8 – 309/99 and these obligations have been met.

2. Assessment of the commitments

226. The proposed package of commitments, linked as it is to the abovementioned commitments given by RWE to the Federal Cartel Office, ensures that no dominant duopoly consisting of VEBA/VIAG and RWE or RWE/VEW is created on the German market for the supply of electricity at the interconnected level. The commitments also ensure that the major corporate links between the members of the duopoly are severed. This eliminates one of the factors that might encourage parallel behaviour. Further commitments concerning the divestment of shareholdings to *inter alia* competing interconnected companies increase the number and significance of competitors operating independently of VEBA/VIAG and RWE/VEW. The commitments concerning market conditions and access to the German market improve the initial position for existing and potential competitors of both groups.

227. The German market for the supply of electricity at the interconnected level was already highly concentrated before the merger. The further increase in the level of concentration resulting from the merger would mean that the two groups of enterprises would no longer compete effectively with one another. Underlying market conditions such as the homogeneity of the product, the transparency of the market and the limited growth in demand likewise favour the parallel behaviour that is to be expected with a fair degree of certainty from the new market structure, of which the corporate links between the two blocks form part.
228. The divestment of the shareholdings in VEAG means, therefore, that the most important link between RWE and VEBA/VIAG will be dissolved. As indicated above (paragraph 64), the situation with regard to VEAG has contributed to the two blocks having a common interest in peaceful parallel behaviour. It has meant in particular that the west German interconnected companies, and RWE, VEBA and VIAG especially, have stopped competing in VEAG's traditional supply area (i.e. the new *Länder*, where VEAG's transmission network is situated). Looked at from this angle, by divesting their shareholdings in VEAG the two blocks lose an essential tool with which to keep the eastern part of Germany free of competition, a tool which could at the same time contribute to maintaining the balance in the West and ultimately therefore throughout the entire German market.
229. The divestment by VEBA/VIAG and RWE of their shareholdings in VEAG means at the same time that VEAG becomes an independent competitor. VEAG's competitive potential is no longer to be included in those of the two blocks. The divestment signifies in fact that, post-merger, the level of concentration in the market will remain basically the same. Although following the VEBA/VIAG merger VEBA's market share will increase by 12.2% (excluding the BEWAG and VEAG positions), VEAG occupies a similar market position to VIAG with a share of 12.1% and will, once the commitments have been fulfilled, operate on the market as an independent supplier.
230. LAUBAG is the largest lignite producer in eastern Germany and as supplier to VEAG forms an economic unit with the latter. In order that VEAG might attain its full significance as an operator independent of the two blocks, it is essential that control of LAUBAG should be in the hands of this new independent entity.
231. Through its shareholding in Rhenag, VEBA has an interest in the success of this RWE subsidiary commensurate with its holding. VEBA is represented on Rhenag's supervisory board and therefore has privileged access to information about the corporate strategy of a subsidiary of the other member of the duopoly.
232. The divestment of the abovementioned shareholdings eliminates the essential corporate links between the two groups of companies. There are other mutual interests in the form of the holding in STEAG and in municipal electricity undertakings in which both Envia in its capacity as a RWE subsidiary and the VEBA group company Thüga have a minority interest. But these links are of somewhat lesser importance from the point of view of the risk of parallel behaviour on the part of the two blocks at the interconnected level. STEAG is in fact an electricity producer for RWE and, furthermore, is majority-owned by RAG.

233. VEAG will at the same time, as a result of the divestment of the shares held by VEBA/VIAG and RWE/VEW, become an independent supplier on the market which *inter alia* by reason of its extensive traditional supply area in the new *Länder* has the potential for limiting the parties' and RWE's freedom of manoeuvre by giving them stiff competition. The other commitments take account of the fact that VEAG is not yet vertically integrated either on the supply side or on the demand side. They ensure that, despite this, VEAG can operate from the outset as a serious competitor.
234. There is a need first of all for guaranteed access to the primary product, lignite, which is obtained mainly from LAUBAG. The linking of the disposal of the shares in VEAG and LAUBAG, including the mining rights needed for the mining of lignite, to one and the same acquirer accordingly safeguards the generation of electricity by VEAG.
235. On the demand side, the quantitative purchasing guarantee safeguards a large but declining part of VEAG's current sales to regional suppliers up until 31 December 2007. Up until 31 December 2004 the purchasing guarantee covers approximately [...] % of current electricity sales.
236. The Federal Cartel Office will in proceeding B 8 – 309/99 impose corresponding supplementary conditions with a view to safeguarding sales (otherwise the present commitments are to be deemed not met). A sufficient proportion of current sales is therefore guaranteed for a number of years to come. And that is not to mention the present contractual supply relationships with other regional suppliers which do not belong to the VEBA/VIAG or RWE/VEW groups. Sales to these regional suppliers, which include ESAG and WEMAG, and to the interconnected power company BEWAG, which itself has hardly any base-load generating capacity, extend VEAG's sales basis still further. VEAG is free, moreover, to enter into direct business relationships with local suppliers or industrial special customers.
237. The safeguarding of sales for a period of seven years with a progressive reduction starting in 2004 is in the Commission's opinion, and in that of the operators whose views were sought, sufficient in order to help VEAG through the difficult initial period. Over the next seven years VEAG's position will still be weak owing to the scale of its commitments, these being predominantly in the area of investment in power-station capacity. VEAG's power stations are, however, among the most modern in Europe and will provide VEAG with a low-cost production base once the debt burden has been reduced and as depreciation increases.
238. These commitments appear reasonable and adequate as a means of safeguarding the conversion of lignite into electricity by VEAG and sales by VEAG. The commitment to divest the shares in VEAG and the supplementary commitments mean, taken as a whole, that that link between the two blocks which gives rise to the greatest risk of parallel behaviour is cut. At the same time, there comes into being a significant new competitor which can place limits on the two blocks' pricing behaviour. Hence, although the merger between VEBA and VIAG removes one operator from the market, thanks to the commitments a further independent operator with a market position comparable to that of VIAG minus its holdings in BEWAG and VEAG is placed at the market's disposal. Since VEAG has an up-to-date stock of power stations and import facilities via the

interconnectors between Germany and Poland, this also creates new opportunities for electricity traders.

239. The commitment to divest the shares in VEW will prevent VEBA/VIAG from gaining an insight into the corporate strategy of this large interconnected company or into that of the other duopoly member RWE.
240. The divestment of the shares in BEWAG, which VIAG currently controls together with Southern Energy, likewise makes the company into an independent supplier on the market for the supply of electricity at the interconnected level. At the same time, the divestment of BEWAG – like the divestment of the shares in VEAG – reduces VIAG's competitive potential, which passes during the course of the merger to VEBA.
241. The divestment of the direct shareholding in HEW also strengthens the position of this last interconnected company in which the duopolists have a shareholding as an independent supplier. The fact that VEBA has, through its minority interest in the Swedish company Sydkraft, a minority interest in HEW does not alter this competition assessment. The indirect minority interest does not give any entitlement to representation on the boards of HEW, which is controlled jointly by the Swedish company Vattenfall and the City of Hamburg. The minority shareholder's position does not therefore afford any privileged access to information or any leverage over HEW.
242. The divestment commitments accordingly improve the structure of the market for the supply of electricity at the interconnected level. They sever the most important corporate links between the members of the duopoly, and hence those links which are most relevant from the point of view of their competitive position. At the same time they create a competitor with considerable potential, namely VEAG, and other competitors are removed from VEBA/VIAG's sphere of influence. Through the divestment of shareholdings which enable a dominant influence to be exercised over companies at the same market stage, the degree of concentration of the market, which would increase following the merger, actually decreases.
243. The overall conditions of competition for the supply of electricity at the interconnected level are improved still further by the commitments. The two blocks VEBA/VIAG and RWE/VEW currently enjoy certain advantages by dint of their being present in both trading zones set up by Associations Agreement II. VEBA/VIAG and RWE/VEW can thus offset electricity supplies and hence avoid the obligation to pay the T-component. Other interconnected companies whose supply areas are in only one trading zone and electricity traders do not have such scope for offsetting supplies within the group but instead have to seek out individual opportunities for offsetting supplies with other electricity suppliers. As a result of VEBA/VIAG and RWE/VEW renouncing payment of the T-component, competitors of the two blocks will no longer suffer from this disadvantage. They will henceforth be able to supply electricity throughout most of Germany, corresponding to the interconnected supply areas of VEBA/VIAG and RWE/VEW, without having to pay the T-component. It is likely, moreover, that waiving the T-component in so large a part of Germany will lead to its becoming a dead letter in the other network areas.

244. The obligation to break down electricity prices according to network-use charge, energy price, metering/reading, etc. will greatly increase transparency in the case of through-transmission. The showing of cost items separately inhibits any cross-subsidising of energy prices by companies which also own networks. The separate showing of network and energy prices in particular makes it easier to compare the pricing of the parties and of RWE/VEW with that of other operators who do not own networks. This makes for freer access by the latter suppliers in particular to all market stages and at the same time counteracts any consolidation of the parties' market position at the interconnected level.
245. With regard to customers supplied outside their network area, VEBA/VIAG will ensure that the relevant network operator furnishes the corresponding data to them in broken-down form so that they can be suitably broken down for these customers also.
246. As transmission network operators, the parties enjoy further advantages by reason of the fact that they supply balancing energy. Balancing energy can generally be provided only by transmission network operators within their balancing areas or by suppliers operating a power station in the balancing area to which electricity is supplied. The price charged by transmission network operators for supplying balancing energy under Associations Agreement II is, according to market operators, considerably higher than under Associations Agreement I and exceeds by a significant margin the cost of providing the energy. For example, if the 5% tolerance band is exceeded just once, the amount charged is based on the assumption that it was exceeded for one month. As a result of the offer to calculate, for the supply of balancing energy, either the price per kilowatt on a daily basis or the kilowatt-hour rate, the price calculation reflects more closely the costs arising from recourse to balancing energy. VEBA/VIAG therefore no longer have, in the event of consumption fluctuations, any appreciable advantage over competitors who do not number among the transmission network operators.
247. The interconnector on the German-Danish border has a capacity of 1 200 MW, of which 700 MW are reserved by contract for VEBA. The remaining 500 MW are currently sold by auction to anyone who wishes to buy them. Because of the much lower price of electricity in Scandinavia, the German-Danish interconnector is one of the few interconnectors to experience capacity bottlenecks. The releasing of 400 MW facilitates access for imports from Scandinavia and, because of the favourable price level in Scandinavia, increases the competitive pressure on the large German interconnected companies.
248. The commitments thus improve conditions on the market for the supply of electricity at the interconnected level in such a way that all market operators are placed on a comparable footing.

B. CHEMICALS

1. Commitments

249. To allay the Commission's concerns about the proposed merger as regards the markets for cyanuric chloride (CC) and sodium dicyanamide, the parties have made the following commitments:

250. The parties undertake to offer for sale a company to which SKW Trostberg's production plants for making hydrocyanic acid and CC will be transferred. If no purchaser comes forward within a period of [...] from the date of clearance of the merger (phase I), the parties will offer for sale, as an alternative, a company to which only the CC production plants will be transferred, hydrocyanic acid production remaining with VEBA/VIAG (phase II). If after a total of [...] from the date of clearance of the merger no purchaser has been found for either alternative, the parties will offer for sale as a further alternative the CC business minus the production facilities (phase III). The business will comprise the entire commercial know-how for CC, including all customer lists and orders on hand. The increase in capacity in phases II and III will, however, require the Commission's consent.
251. The parties have also undertaken, during an initial phase lasting [...] from the date of clearance of the merger, to offer for sale a company to which the sodium dicyanamide production plant and the entire commercial and technical know-how for the manufacture and sale of sodium dicyanamide will be transferred. If no purchaser is found within this period, the sodium dicyanamide business will as an alternative be offered for sale together with all customer lists and orders on hand.
252. Where a purchaser is dependent on supplies of either hydrocyanic acid, chlorine cyanide, CC or sodium dicyanamide, deliveries to it will be guaranteed for a period of [...] years. Reductions will be made especially in the event of a statutory ban on hydrocyanic acid production or of drastic cuts in the quantities of upstream products, CC or sodium dicyanamide procured by the purchasers.

2. Assessment of the commitments

253. The proposed commitments eliminate in one way or another the overlapping which the merger would otherwise have caused on the markets for CC and sodium dicyanamide. They are therefore likely to prevent the strengthening of dominant positions on these markets.
254. Ultimately the commitments offered in respect of CC ensure that potential customers have alternative sources of supply which can make at least as big a contribution when it comes to supplying the market as SKW does now. Transferring the entire hydrocyanic acid production unit together with the plant for processing the acid into CC would be the best way of ensuring that Degussa continues to have a viable competitor because it guarantees that competitor the greatest possible degree of independence. It is therefore to be preferred to the other solutions proposed in the commitments.
255. The divestment of the sodium dicyanamide production plant or of the sodium dicyanamide business rules out any cooperation between SKW Trostberg and its potential competitor Degussa and hence any strengthening of SKW's dominant position. The staggering of the commitments over time enables an appropriate solution to be found should the sale of the assets which are first in line for divestment prove impossible,

HAS ADOPTED THIS DECISION:

Article 1

The notified merger between VEBA AG and VIAG AG is, on condition that the commitments given by the notifying parties as set out in the Annex to this Decision are fulfilled (with the exception of the commitment referred to in Section VI.2, second subparagraph, concerning the electricity sector), compatible with the common market and the EEA Agreement.

Article 2

This Decision is addressed to:

- (1) VEBA Aktiengesellschaft
Bennigsenplatz 1
D – 40474 Düsseldorf
- (2) VIAG Aktiengesellschaft
Briennerstrasse 40
D – 80333 München.

Done at Brussels, 13 June 2000

For the Commission
Mario MONTI
Member of the Commission

PUBLIC VERSION

EC merger control proceeding VEBA/VIAG COMP/M.1673 Commitments in respect of electricity

I. VEAG / LAUBAG

VEAG is owned 26.25% by VEBA (PE) and 22.5% by VIAG (BAG). RWE also has a 26.25% shareholding and Energiebeteiligungsholding (consisting of BEWAG, HEW, VEW and EnBW) has a 25% shareholding.

LAUBAG, a lignite producer, is one of VEAG's suppliers. VEBA (PE) holds 30% of the shares in LAUBAG, and VIAG (BAG) 15%. BBS Braunkohle-Beteiligungsgesellschaft mbH holds the remaining 55%. BBS is owned 18.2% by Energiebeteiligungsholding (consisting of BEWAG, HEW, VEW and EVS), 71.8% by Rheinbraun AG (which is wholly owned by RWE) and 10% by RWE Energie AG. The mining interests which are leased to LAUBAG are co-owned by LAUBAG's west German shareholders in proportion to their holdings in LAUBAG. [...]*

1. If the planned merger between VEBA and VIAG is granted clearance under the merger control legislation and goes ahead, the parties undertake to divest all the shares they hold in VEAG and LAUBAG either themselves or through affiliates to one and the same acquirer (see (a) below) within the time limit specified at (b). At the same time as they divest their shares in LAUBAG, the parties will divest the lignite mining rights which either they or their affiliates hold either to LAUBAG direct or to the acquirer of the LAUBAG shares.

If LAUBAG and VEAG merge before the shares in LAUBAG are divested, VEBA/VIAG undertake to dispose of the resulting interests within the period specified at (b) to the acquirer of the VEAG shares.

- (a) The acquirer must be a viable existing or prospective competitor of VEBA, VIAG and RWE. It must be independent of and unconnected with the three groups. Its financing must be assured in the long term and it must have a track record which points to its being able to build up and develop the subject of divestment, VEAG and LAUBAG, if necessary in already merged form, into an active force rivalling VEBA and VIAG at all market stages. Any acquirer will have to have the Commission's express prior approval. If the acquirer is a consortium of several undertakings, each member of the consortium will have to be approved by the Commission in advance. In accordance with the provisions of VEAG's privatisation agreement, and in particular Article 5(1) thereof, up until 30 June 2013 any complete or partial resale of the parties' shares in VEAG by way of a singular or universal transfer to third parties will require the prior approval of the Treuhandanstalt or its successor, the Bundesanstalt für vereinigungsbedingte Sonderaufgaben.

- (b) Should the shares in VEAG and LAUBAG not be sold within [...] of the merger being cleared, VEBA/VIAG will irrevocably transfer the power of disposal over the subject of divestment to a trustee (known as the divestment trustee) who will within a further [...] effect the sale for the account of VEBA/VIAG according to sound commercial principles [...]. The divestment trustee will be subject to the same obligations as VEBA/VIAG, especially when it comes to choosing the acquirer of the shares in VEAG and LAUBAG. He should be the same person as is appointed by RWE/VEW in accordance with the obligations imposed in the merger control proceedings before the Federal Cartel Office. He must be appointed within [...] of the VEBA/VIAG merger being cleared. The choice of divestment trustee and of his mandate will have to be approved in advance by the Commission. The divestment trustee will monitor compliance by VEBA/VIAG with their divestment obligations in relation to VEAG/LAUBAG as entered into vis-à-vis the Commission. He will report to the Commission [at regular intervals] about the progress being made with the sale, participate in the sales negotiations and take a position on individual matters at the Commission's request. He will make suggestions to the parties to the sale as to how to speed up the process and will agree the list of potential acquirers in good time with the Commission.

The Commission may at any time during phase I ([...] from the date of clearance of the VEBA/VIAG merger) irrevocably transfer to the divestment trustee the power of disposal over the VEAG and LAUBAG shares which are to be divested if the divestment of these shares within a period of [...] is unlikely for reasons cited by the parties. The parties will be heard before any such decision is taken.

The parties may apply to the Commission for an extension of the divestment periods, subject to their furnishing proof [of exceptional circumstances beyond their control]. The Commission will then exercise its discretion in deciding whether or not to allow such an extension, the total divestment period being limited to [...]. Applications for an extension must be submitted not later than one month before expiry of the relevant period.

2. Within one month of their merger being cleared, VEBA/VIAG will renounce all rights arising under the Bayernwerk/PE/RWE consortium agreement of 22 August 1990.
3. VEBA/VIAG undertake to appoint, within [...] of their merger being cleared, in agreement with the Commission another trustee (known as the security trustee). Exercise of VEBA/VIAG's voting rights in VEAG and in LAUBAG will be transferred to this security trustee, whose terms of reference must also be agreed with the Commission. In exercising the voting rights transferred to him the security trustee will in principle be bound by his instructions. Where measures are involved, however, which would result in a substantial financial burden being placed on VEBA/VIAG, such as, for example, in the event of a capital increase, the trustee may exercise the voting rights only in agreement with VEBA/VIAG. Within [...] of clearance being granted, the members of the supervisory boards of VEAG and LAUBAG appointed by VEBA and

VIAG will resign apart from one representative on each board. [...] * Once the shares in VEAG and LAUBAG have been divested, the remaining supervisory board members will also resign. The new members of the supervisory boards of VEAG and LAUBAG will be appointed forthwith, VEBA/VIAG's rights of proposal and voting rights being exercised by the security trustee. The newly chosen supervisory board members may not also be members of the managing boards or employees of VEBA/VIAG or RWE or of any company affiliated therewith. Members of the managing boards of VEAG and LAUBAG may likewise not also be members of the managing boards or employees of VEBA/VIAG or of RWE or of any company affiliated therewith. An exception will be made in the case of the real property company BPR Energie Geschäftsbesorgung GmbH, Berlin.

4. Under a May 1999 loan agreement VEAG's shareholders placed financial resources at VEAG's disposal in order to guarantee its liquidity. VEAG's continued existence is therefore assured for the time being. VEBA/VIAG will give up their special termination rights under the abovementioned agreement. [...] *.
5. VEBA/VIAG declare that they are prepared to guarantee VEAG's electricity sales as follows:
 - (a) To the extent that the corresponding purchases are not already effected through their east German regional suppliers TEAG, e.dis and Avacon-Ost (formerly EVM), VEBA/VIAG will up until 31 December 2007 obtain either themselves or through third parties electricity from VEAG at the market price (see (c) below). The guaranteed annual amount and it's breakdown over the year will be determined by the purchases of the regional supply companies [...]. * Up until 31 December 2003 the parties undertake to purchase 100% of the reference quantity of the abovementioned regional suppliers [...]. * In subsequent years, starting on 1 January 2004, the purchasing obligation will be reduced – irrespective of the rule at (b) – by 10% a year compared with the initial quantity [...]. *

Quantities of electricity which VEAG supplies to the companies by way of balancing under the Law on renewable energy sources will not count towards the sales volumes promised here.

- (b) In the event an increase in sales by the abovementioned regional supply companies compared with sales in 1999, VEBA/VIAG will offer to procure [a larger part] of this additional quantity from VEAG. This additional take will also be subject to the abovementioned adjustment. This rule will apply only to increases in those areas in which the abovementioned east German regional supply companies currently operate their electricity networks.

In the event of a loss of sales by the abovementioned regional supply companies, the above obligation will not be reduced.

- (c) Any shortfalls in the purchasing obligations will be added to the purchasing quota for the following quarter.
- (d) The market price is defined as follows:
 - (i) For the year 2000 and up until 30 June 2001, an electricity price (energy cost and network cost component) of [corresponding roughly to the current market price] will be guaranteed. This electricity price will also apply for six months after the shares in VEAG have been transferred to a third party, that is to say for at least six months from the conclusion of the corresponding contract of acquisition, but at all events not beyond 31 December 2001. The network cost component may, however, not be counted twice by VEAG. The price of [corresponding roughly to the current market price] is accordingly to be adjusted by the network cost component where corresponding costs of VEAG's are already otherwise accounted for under Associations Agreement II for electricity sales in the areas covered by the east German regional supply companies.

From the time of VEAG's transfer to its new owner to the expiry of the purchase price rule [corresponding roughly to the current market price], the following will also apply:

In so far as a fall in sales by the abovementioned regional supply companies in those areas in which they currently operate their electricity networks to below the level of sales in 1999 is due to direct or indirect supplies by VEAG or by companies affiliated with VEAG, the price of [corresponding roughly to the current market price] will be adjusted for a corresponding quantity of electricity in accordance with the rule subsequently applicable (see (ii)).

- (ii) After the initial phase (see (i)) the following shall apply:

The electricity purchase price will be split into an energy component and a network cost component.

The charge for the network cost component will be determined by VEAG's published network use tariffs and will be collected in accordance with the principles of Associations Agreement II or any subsequent agreements and the applicable statutory provisions.

The charge for the energy component will be determined as follows:

For the period after the expiry of the price rule [corresponding roughly to the current market price] (see (i)) the price of the energy component will be adjusted in line with the market price. [The market price will then apply.]. This [market price] must be notified to VEAG during the following quarter. The reimbursement or additional payment resulting from the price

adjustment will then be accounted for retrospectively. VEBA/VIAG will be required to have the notified price certified by an auditor.

VEBA/VIAG may depart from the above price adjustment rules if they reach a different agreement with the acquirer of the shares in VEAG or LAUBAG.

- (iii) The balancing and remuneration rights and obligations under the Law on renewable energy sources and the Law on cogeneration will remain unaffected throughout the purchasing period. In calculating the average price weighted according to the quantity concerned, offsetting supplies under the Law on renewable energy sources do not have to be taken into account.

II. BEWAG

VIAG (BAG) holds 26% of the capital and 28.7% of the voting rights in BEWAG, and VEBA (PE) holds 23% of the capital and 23.8% (20%) of the voting rights. Southern Energy Holding (SEI) holds 26% of the capital and 28.7% of the voting rights. The 20% limitation of voting rights is based on the commitment given by PE in its letter of 17 September 1997 to the Federal Cartel Office. Ownership of the remaining capital (25%) and voting rights (18.8%) is widely dispersed.

1. If the planned VEBA/VIAG merger is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake, within the period referred to at (b), to divest to a third party their shareholdings in BEWAG (see (a) below).
 - (a) The acquirer must be an existing company independent of and unconnected with VEBA, VIAG and RWE and possessing the financial resources and proven expertise enabling it to maintain and develop BEWAG as an active force in competition with VEBA and VIAG. Any acquirer will have to have the Commission's express prior approval. If the acquirer is a consortium of several undertakings, each member of the consortium will have to be approved by the Commission in advance.
 - (b) If the divestment does not take place within [...] of their merger being cleared, VEBA/VIAG will irrevocably transfer the power of disposal over the subject of divestment to a trustee (known as the divestment trustee). The choice of divestment trustee and of his mandate will have to be approved in advance by the Commission. The divestment trustee will effect the sale for the account of VEBA/VIAG within [...] according to sound commercial principles [...].
2. VEBA/VIAG undertake to appoint, within [...] of their merger being cleared, in agreement with the Commission a trustee (known as the security trustee). Exercise of VEBA/VIAG's voting rights in BEWAG will be transferred to this security trustee, whose terms of reference must be agreed in advance by the Commission. Under the consortium agreement, this appointment is subject to SEI's consent. VEBA/VIAG will, moreover, empower the security trustee, subject to SEI's consent, to exercise their rights under the consortium

agreement. In exercising the voting rights transferred to him the security trustee will in principle be bound by his instructions. Where measures are involved, however, which would result in a substantial financial burden being placed on VEBA/VIAG [...]*, the trustee may exercise the voting rights only in agreement with VEBA/VIAG. Such agreement must be given if it is essential to fulfilment of the commitment at VIII. 1. Within [...]*, the members of BEWAG's supervisory board appointed by VEBA and VIAG will resign apart from one representative. [...]*. Once the shares in BEWAG have been divested, the remaining supervisory board member will also resign. The new supervisory board members will be appointed forthwith, VEBA/VIAG's rights of proposal and voting rights being exercised by the security trustee. The newly chosen supervisory board members may not also be members of the managing boards or employees of VEBA/VIAG or RWE or of any company affiliated therewith. Members of BEWAG's managing board may likewise not also be members of the managing boards or employees of VEBA/VIAG or of any company affiliated therewith.

3. The parties may apply to the Commission for an amendment of the commitment concerning divestment of the shares in BEWAG if they can prove that a divestment [is not possible despite their best efforts]. But even in this case the appointment of the new members of the supervisory board must proceed as indicated above and no member of BEWAG's managing board may also be a member of the managing board or an employee of VEBA/VIAG or of any company affiliated therewith.

III. VEW

VIAG currently holds (through BAG/IAW) 11.13% of the shares in VEW and, through its subsidiary Contigas, 30% of the shares in a ballast company, Energie-Verwaltungsgesellschaft (EVG), which in turn holds a further 24.7% of the shares in VEW. Within EVG, reciprocal pre-emption rights have been agreed in favour of the shareholders or of VEW.

1. If the planned merger between VEBA and VIAG is granted clearance under the merger control legislation and goes ahead, the parties undertake to sell to a third party (see (a) below) the abovementioned direct and indirect shareholdings in VEW within the time limit specified at (b). If VEW merges with RWE before the expiry of the time limit specified at (b), the parties undertake to dispose of the resulting shares within that period to an acquirer (see (a) below).
 - (a) The acquirer must be an existing company independent of and unconnected with VEBA and VIAG. Any such acquirer will have to have the Commission's express prior approval. If VEW does not merge with RWE, the Commission will be particularly vigilant in ensuring that the company remains an active competitor.
 - (b) If a sale does not take place within [...]* of their merger being cleared, VEBA/VIAG will irrevocably transfer the power of disposal over the subject of divestment to a trustee (known as the divestment trustee). The choice of divestment trustee and of his mandate will have to be approved in advance by the Commission. The divestment trustee will

effect the sale for the account of VEBA/VIAG within [...] according to sound commercial principles [...].

2. If the divestment does not take place within [...] of their merger being cleared, VEBA/VIAG undertake to transfer the exercise of the voting rights conferred by the direct and indirect shareholdings in VEW to a trustee (known as the security trustee). The choice of security trustee and of his mandate will have to be approved by the Commission. In exercising the voting rights transferred to him the security trustee will in principle be bound by his instructions. Where measures are involved, however, which would result in a substantial financial burden being placed on VEBA/VIAG [...], the trustee may exercise the voting rights only in agreement with VEBA/VIAG. Such agreement must be given if it is essential to fulfilment of the commitment at VIII. 1. Within [...], the members of VEW's supervisory board appointed by VIAG will resign. New supervisory board members will be appointed forthwith, VEBA/VIAG's rights of proposal and voting rights being exercised by the security trustee. The newly chosen supervisory board members may not also be members of the managing boards or employees of VEBA/VIAG or of any company affiliated therewith. Members of VEW's managing board may likewise not also be members of the managing boards or employees of VEBA/VIAG or of any company affiliated therewith. This provision concerning the composition of VEW's supervisory and management boards will also apply to RWE if the merger of RWE and VEW is completed before the shares in VEW are divested.

IV. HEW

VEBA (or PreussenElektra/PE) holds 15.4% of the shares and 14.2% of the voting rights in HEW.

1. If the planned merger between VEBA and VIAG is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake to sell to a third party (see (a) below) the abovementioned shareholding in HEW within the time limit specified below.
 - (a) The acquirer must be an existing company independent of and unconnected with VEBA, VIAG and RWE. Any such acquirer will have to have the Commission's express prior approval.
 - (b) If a sale does not take place within [...] of their merger being cleared, VEBA/VIAG will irrevocably transfer the power of disposal over the subject of divestment to a trustee (known as the divestment trustee). The choice of divestment trustee and of his mandate will have to be approved in advance by the Commission. The divestment trustee will effect the sale for the account of VEBA/VIAG within [...] according to sound commercial principles [...].
2. If the divestment does not take place within [...] of their merger being cleared, VEBA/VIAG undertake to transfer the exercise of the voting rights conferred by the direct shareholding in HEW to a trustee (known as the security trustee). The choice of security trustee and of his mandate will have to be approved by the Commission. VEBA/VIAG will, moreover, empower the security trustee, subject to the consent of HGV and Sydkraft, to exercise

their rights under the consortium agreement. In exercising the voting rights transferred to him the security trustee will in principle be bound by his instructions. Where measures are involved, however, which would result in a substantial financial burden being placed on VEBA/VIAG [...]*, the trustee may exercise the voting rights only in agreement with VEBA/VIAG. Such agreement must be given if it is essential to fulfilment of the commitment at VIII. 1. Within [...]*, the member of HEW's supervisory board appointed by VEBA will resign. A new supervisory board member will be appointed forthwith, VEBA/VIAG's rights of proposal and voting rights being exercised by the security trustee. The newly chosen supervisory board member may not also be a member of the managing boards or an employee of VEBA/VIAG or RWE of any company affiliated therewith. Members of HEW's managing board may likewise not also be members of the managing boards or employees of VEBA/VIAG or of any company affiliated therewith.

V. Rhenag

RWE Energie AG holds 54.1% of the shares in Rhenag Rheinische Energie AG and VEBA AG (through Thüga AG) holds 41.3%. RWE Energie AG and Thüga AG have concluded a consortium agreement in respect of their interests in Rhenag.

1. If the planned merger between VEBA and VIAG is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake to ensure that the existing corporate relationship between RWE Energie AG and Thüga AG, on the one hand, and Rhenag, on the other, is dissolved within [...]* of the merger being cleared. One way of doing this would be for the shares held by RWE to be acquired by VEBA/VIAG or Thüga. In the event of a division of ownership, a time limit of [...]* will apply. If it is done by selling the shares to a third party, the acquirer must be independent of and unconnected with VEBA and VIAG. Any such acquirer will have to have the Commission's express prior approval.
2. If the corporate relationship is not dissolved within [...]* of the merger being cleared, the Commission may require VEBA/VIAG to transfer the exercise of the voting rights conferred by the shareholding in Rhenag to a trustee (known as the security trustee). The choice of security trustee and of his mandate will have to be approved by the Commission. Subject to the consent of RWE, VEBA/VIAG will also entrust to such trustee as may be appointed the task of exercising their rights under the consortium agreement. In exercising the voting rights transferred to him the security trustee will in principle be bound by his instructions. Where measures are involved, however, which would result in a substantial financial burden being placed on VEBA/VIAG [...]*, the trustee may exercise the voting rights only in agreement with VEBA/VIAG. Within [...]* of the appointment of the security trustee, the members of Rhenag's supervisory board appointed by VEBA will resign. New supervisory board members will be appointed forthwith, VEBA/VIAG's rights of proposal and voting rights being exercised by the security trustee. The newly chosen supervisory board members may not also be members of the managing boards or employees of VEBA/VIAG or RWE of any company affiliated therewith. Members of Rhenag's managing board may likewise not also be members of the managing boards or employees of VEBA/VIAG or of any company affiliated therewith.

VI. Associations Agreement II

1. VEBA/VIAG undertake to amend, within one month of their merger being cleared, their charges for network use in Germany in such a way that the price component for the national T-component, which is provided for by Associations Agreement II for crossing the interzonal boundary, comes to 0 Pf/kWh. They will publish this in an appropriate form within the abovementioned period. If, by the time the VEBA/VIAG merger is cleared, RWE/VEW have already notified their renunciation, VEBA/VIAG will immediately follow suit.
2. VEBA/VIAG undertake to indicate, within two months of their merger being cleared, to their special contract customers supplied in their own network area at 110 kV and above, the electricity prices broken down by network-use charge, energy price, metering/reading, etc. (Law on renewable energy sources, Law on cogeneration, licensing agreements, turnover tax). For special contract customers supplied in their own network area at the medium voltage level (20 kV), this will apply as of 1 January 2001. The parties will publish this information in an appropriate form within the abovementioned two-month period.

With regard to customers supplied outside their network area, VEBA/VIAG will ensure that the relevant network operator furnishes the corresponding data to it in broken-down form so that they can be suitably broken down for these customers also.

3. With regard to the charges for supplying balancing energy, the parties undertake to amend, within one month of their merger being cleared, their prices in such a way that either the price per kilowatt is levied on a daily basis or only kilowatt-hour rates are charged. They will publish this information in an appropriate form within the abovementioned period.

VII. Germany/Denmark interconnector

VEBA (PE) currently holds on the overland route from Denmark to Germany *inter alia* a transport right amounting to 400 MW (allowing for losses) out of a total interconnector capacity of 1 200 MW. Outsiders may be offered additional transmission capacity out of these 400 MW (over and above the capacities already sold by auction) only if the existing physical exchange of electricity from the electricity business Statkraft/PE is abandoned and replaced by an offsetting system.

If the planned merger between VEBA and VIAG is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake to conclude with Eltra and Statkraft an agreement whereby:

- Eltra may buy back the 400 MW transport right which currently serves to underpin the Statkraft/PE electricity supply agreement for the price previously paid by PE, less a certain amount for the use made of it in the meantime;
- the part of the 400 MW agreement signed with Statkraft is converted into a financial agreement without affecting its value,

so that third parties can use this capacity [in the near future]. If for reasons not attributable to VEBA/VIAG the agreement has not been concluded by [...]*, VEBA/VIAG may apply to the Commission for an extension of the time limit. The Commission will decide on the application to the extent that corresponding capacity is available [in the near future].

VIII. Common supplementary provisions

The following supplementary provisions will apply:

1. The parties undertake to safeguard the full economic value of the subject of divestment until the divestment is completed. In the case of VEAG, LAUBAG and BEWAG in particular, the parties will behave in such a way that the corporate assets are not reduced in value other than through the normal course of business. This relates in particular to maintenance of the fixed assets, know-how and technical and commercial competence of staff.

The security trustee will exercise the voting rights transferred to him in accordance with the above principles and ensure that the parties do not keep any confidential information obtained in the course of the market-related business activities of the undertakings in which shareholdings are to be divested, unless it is essential for purposes of fulfilling the present commitments, *inter alia* when it comes to determining the undertaking's value and for the purchase price negotiations.

2. The Commission and VEBA/VIAG are agreed that the latter will have observed the time limits in relation to the divestment obligations if within the relevant time limit binding contracts concerning the subject of divestment have been concluded with the acquirer.
3. Unless provided otherwise in these commitments, they apply in full even where the operation concerned can be carried out only with the consent of third parties [...] *.
4. As regards the commitment to divest their shareholdings in VEAG and LAUBAG, the Commission and VEBA/VIAG are agreed that this commitment will be deemed to be fulfilled only if RWE/VEW have met an obligation imposed on them by the Federal Cartel Office in proceeding B 8 – 309/99 according to which they must divest the shares and voting rights they hold in VEAG and in LAUBAG and the lignite mining rights they hold in the new *Länder*, and if the Federal Cartel Office has imposed obligations to safeguard VEAG's sales and preserve that company's liquidity and these obligations have been met. As regards the commitments in relation to the Associations Agreement (see VI.1 - 3), the Commission and VEBA/VIAG are agreed that these commitments will be deemed to be

fulfilled only if the Federal Cartel Office has imposed corresponding obligations in proceeding B 8 – 309/99 and these obligations have been met.

5. The trustee's task will be completed when the divestment of the subject of divestment concerned has been implemented.

PUBLIC VERSION

EC merger control proceeding VEBA / VIAG COMP/M.1673 Commitments in respect of chemicals

I. Cyanuric chloride

If their planned merger is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake to divest the existing worldwide cyanuric chloride business of SKW Trostberg AG within [...] of the merger being cleared, as follows:

1. VEBA/VIAG undertake to offer for sale during a first phase [...] after clearance of the merger exclusively the subject of divestment defined below. They will submit to the Commission at least two weeks before the expiry of [...] a report on the steps taken to effect a sale and on the stage reached in or outcome of the sales negotiations.

The subject of divestment is a company to which will first have been transferred the hydrocyanic acid production plants and the cyanuric chloride production plants of SKW Trostberg, together with the necessary staff and all the technical know-how needed for the manufacture of hydrocyanic acid as well as all the commercial and technical know-how needed for the manufacture and sale of cyanuric chloride. The purchaser will procure the technical and auxiliary services (electricity, steam, water supply, sewage disposal, workshops, waste disposal) made available by a pool in the Münchsmünster industrial park on the same terms as the other pool members. VEBA/VIAG will require this purchaser to supply hydrocyanic acid to the purchaser of the sodium dicyanamide plant referred to at II.1; if the sodium dicyanamide plant is not sold, this obligation will be agreed in favour of VEBA/VIAG.

2. If despite all the efforts made during the first phase VEBA/VIAG do not succeed in finding a purchaser for the subject of divestment defined at 1, they will with the Commission's agreement offer for sale during a second phase starting [...] after the merger is cleared and ending upon the expiry of a period of [...] after the merger is cleared exclusively both the subject of divestment defined at 1 and the subject of divestment defined below:

The other subject of divestment is a company to which will first have been transferred the cyanuric chloride production plants, the necessary staff and all the commercial and technical know-how needed for the manufacture and sale of cyanuric chloride. VEBA/VIAG undertake to supply the company for a period of 15 years with hydrocyanic acid to the extent necessary to make full use of the available CC production capacity at a price corresponding to the annual weighted average of the prime costs of the existing [...] cyanuric chloride production plants of [...], plus [...]. The purchaser will be entitled to have the prime costs verified by an independent auditor, who will communicate to the purchaser and the seller the verified weighted annual average value of the prime costs while remaining bound by a duty of

discretion vis-à-vis the purchaser as regards the cost components. If either the purchaser or the seller challenges this value, it will be established with binding force by an arbitrator should one of the parties submit, within three months of communication of the value by the auditor, to the President of the Cologne Chamber of Trade and Industry an application for the appointment of an arbitrator, notifying the other party of the application two weeks in advance. The arbitrator will decide on the value conclusively, there being no right of appeal from his decision. If no application is submitted within the abovementioned period, the value communicated by the arbitrator will be deemed to bind the parties. The supply obligation will cease to apply if hydrocyanic acid production has to be stopped by virtue of the law. It will also cease to apply at the earliest after expiry of a period of [...] if during [...] consecutive years the annual take of hydrocyanic acid by the purchaser falls below [...] tonnes a year and at the same time the rate of working of the hydrocyanic acid plant falls below [...]%. The purchaser will accept the obligation mentioned at II.1 to supply the purchaser of the sodium dicyanamide plant with hydrocyanic acid. If the sodium dicyanamide plant is not sold, this obligation will apply in favour of VEBA/VIAG. The purchaser will procure the technical and auxiliary services (electricity, steam, water supply, sewage disposal, workshops, waste disposal) made available by a pool in the Münchsmünster industrial park on the same terms as the other pool members.

VEBA/VIAG will submit to the Commission no later than two weeks before the end of the second phase a report on the steps taken to effect a sale and on the stage reached in or outcome of the sales negotiations.

3. If, despite all their efforts, after the merger has been cleared VEBA/VIAG do not succeed in finding a purchaser for the subject of divestment defined at 1 or 2, the subject of divestment may with the Commission's agreement also be the cyanuric chloride business described below. The subject of divestment will consist of all the commercial know-how for cyanuric chloride, including all customer lists and orders on hand. VEBA/VIAG undertake to supply the purchaser on a commission order basis for a period of [...] years with up to [...] tonnes of cyanuric chloride a year at a price corresponding to the production costs plus [...]. The costs of the hydrocyanic acid needed for the production process will be fixed using the weighted annual average of the prime costs for hydrocyanic acid in the three existing production plants of [...]. The purchaser will be entitled to have the prime costs verified by an independent auditor, who will communicate to the purchaser and the seller the verified weighted annual average value of the prime costs while remaining bound by a duty of discretion vis-à-vis the purchaser as regards the cost components. The fifth sentence of point I. 2 will apply by analogy. The supply obligation will cease to apply if hydrocyanic acid production has to be stopped by virtue of the law. It will also cease to apply at the earliest after expiry of a period of [...] if the purchaser's CC take falls below [...] tonnes a year and at the same time the rate of working of the hydrocyanic acid plant falls below [...].

II. Sodium dicyanamide

If their planned merger is granted clearance under the merger control legislation and goes ahead, VEBA/VIAG undertake to divest the existing sodium dicyanamide business of SKW Trostberg AG within [...] of the merger being cleared, as follows:

1. VEBA/VIAG undertake to offer for sale during a first phase [...] after clearance of the merger exclusively the subject of divestment defined below. They will submit to the Commission at least two weeks before the expiry of [...] a report on the steps taken to effect a sale and on the stage reached in or outcome of the sales negotiations. The subject of divestment will consist of the sodium dicyanamide production plant and all the commercial and technical know-how needed for the manufacture and sale of sodium dicyanamide. If the hydrocyanic acid production plant has not been sold in accordance with I., VEBA/VIAG undertake to supply the purchaser of the sodium dicyanamide plant for a period of [...] years until [...] with the hydrocyanic acid requirements (in the form needed for current sodium dicyanamide production) of the existing sodium dicyanamide production plant, at a price corresponding to the annual weighted average of the prime costs of the three existing [...] production plants of [...] plus [...]. The purchaser will be entitled to have the prime costs verified by an independent auditor, who will communicate to the purchaser and the seller the verified weighted annual average value of the prime costs while remaining bound by a duty of discretion vis-à-vis the purchaser as regards the cost components. The fifth sentence of point I. 2 will apply by analogy. The supply obligation will cease to apply if hydrocyanic acid production has to be stopped by virtue of the law. It will also cease to apply at the earliest after expiry of a period of [...] if the purchaser's annual hydrocyanic acid take falls below [...] % of the 1999 quantity and at the same time the rate of working of the hydrocyanic acid plant falls below [...] %. The purchaser will procure the technical and auxiliary services (electricity, steam, water supply, sewage disposal, workshops, waste disposal) made available by a pool in the Münchsmünster industrial park on the same terms as the other pool members.
2. If, despite all their efforts during the first phase VEBA/VIAG do not succeed in finding a purchaser for the subject of divestment defined at 1, VEBA/VIAG will with the Commission's agreement offer for sale immediately thereafter the subject of divestment defined at 1. and the subject of divestment defined below.

The other subject of divestment consists of all the commercial know-how for the sodium dicyanamide business, including all customer lists and orders on hand. SKW Trostberg undertakes to supply the purchaser on a commission order basis for a period of [...] years with up to [...] tonnes of sodium dicyanamide a year at a price corresponding to the production costs plus [...]. The costs of the hydrocyanic acid needed for the production process will be fixed using the weighted annual average of the prime costs for hydrocyanic acid in the [...] existing production plants of [...]. The purchaser will be entitled to have the prime costs verified by an independent auditor, who will communicate to the purchaser and the seller the verified weighted annual average value of the prime costs while remaining bound by

a duty of discretion vis-à-vis the purchaser as regards the cost components. The fifth sentence of point I. 2 will apply by analogy. The supply obligation will cease to apply if hydrocyanic acid production or sodium dicyanamide production has to be stopped by virtue of the law or if the purchaser's sodium dicyanamide take falls below [...] tonnes a year.

3. The purchaser may also be a company set up with a view to a management buy-out.

III. The subjects of divestment referred to at I and II may be acquired by one and the same purchaser.

IV. 1. VEBA/VIAG undertake to ensure that the subjects of divestment referred to at I and II are managed in the same way as before the merger. They also undertake to ensure that the corporate assets are not reduced in value prior to the sale other than through the normal course of business. This relates in particular to maintenance of the fixed assets, know-how and technical and commercial competence of staff. In agreement with the Commission VEBA/VIAG will appoint within [...] an independent trustee whose mandate will require the Commission's approval and who will monitor the fulfilment of the above obligations on the Commission's behalf. The trustee will ensure in particular that both the CC and the sodium dicyanamide businesses continue to be operated independently, exactly as before the merger but separately from the CC and sodium dicyanamide activities retained by VEBA/VIAG, and that they are not subject to any influence on the part of VEBA/VIAG. To this end the trustee will be invited to all general meetings and meetings of the supervisory and management boards of SKW Trostberg and its successors dealing with the CC and the sodium dicyanamide activities of SKW Trostberg. The trustee will report to the Commission at its request or where he considers it necessary about what he has observed and will suggest additional measures where appropriate.

2. If not all the commitments concerning CC and sodium dicyanamide have been fulfilled by then, VEBA/VIAG will appoint within [...] of the merger being cleared in agreement with the Commission an independent trustee whose mandate will require the Commission's approval. VEBA/VIAG will keep him informed about their attempts to effect a sale in accordance with I and II. The trustee will report to the Commission within [...] of the merger being cleared. He and the trustee appointed in accordance with IV.1 may be one and the same person.

3. VEBA/VIAG will ensure that, if no sale of the subjects of divestment referred to at I and II has taken place within [...], the power of disposal over the remaining subjects of divestment will be transferred irrevocably to the trustee appointed in accordance with IV.2, who will within [...] do his utmost to carry out the divestment on the owner's behalf according to sound commercial principles, autonomously and above all without being committed to any predetermined minimum price.

4. The choice of purchasers, who must be independent of and unconnected with VEBA/VIAG, will require the Commission's approval.
5. The Commission and VEBA/VIAG are agreed that VEBA/VIAG will have observed the time limits relating to the divestment obligations where binding contracts in respect of the subjects of divestment have been concluded within the time limits laid down with the acquirer concerned.
6. The trustee's task will be completed when the divestment of the subject of divestment concerned has been implemented.