ELECTRICITY MARKET DESIGN

Recommendations for a better balance of market power

IFIEC Europe represents the interests of industrial energy users in Europe for whom energy is a significant component of production costs. Energy prices therefore are a key factor for their competitiveness.

This paper addresses possible remedies to the deficiencies of the electricity market design raised in the IFIEC Europe document dated 29/09/04 “An analysis of the current dysfunctioning of the wholesale market in major parts of the EU”, available on the IFIEC Europe website.

The eleventh meeting of the European Electricity Regulatory Forum from September 2004 has concluded that urgent action is needed to bring liberalisation back on track. As the implementation of the existing Electricity Directives will not suffice to create a competitive single electricity market, a new package of measures should be prepared. IFIEC Europe suggests that the following measures should be included in such package.

1. Limit market share of dominant generators

As the degree of concentration in the electricity industry has consistently increased, effective competition in generation has not emerged. However, without competition in electricity generation there will be no competition in the sector at all. To prevent further consolidation of the generation market IFIEC EUROPE therefore demands to limit the growth of the dominant electricity generators in each relevant market.

Any dominant player who controls, directly or indirectly, more than 20,000 MW of installed electricity generation capacity within the EU boundaries should not be allowed to extend the capacity under its control, including imported capacity, beyond a 20 % market share in any relevant market. In this case, such dominant player will not be authorized to extend his generation capacity nor to import, directly or indirectly to the market in which he is in a dominant position.

Extending market share beyond such percentage is considered a serious threat to any competitive developments and may only be allowed by competition authorities under specific conditions. In case the above-mentioned thresholds are already exceeded, power release programmes or other measures would be necessary to stimulate competition.

Taking into account the thresholds above, the dominant generators should not be allowed to take-over further generating capacity. They should be prohibited from bringing any additional generation capacity on stream unless existing capacities are simultaneously replaced or released to other parties; this can be done by various means. Any planned closures of power plants have to be offered to the market to give
competitors an opportunity to further commercialise those capacities. As the dominant generators are limited in growth within Europe, market growth will then come from smaller players and new entrants; this will reverse the trend of increasing concentration.

Today, IFIEC Europe does not consider the EU to be the relevant market yet; in most cases, relevant markets are, in effect, still the national ones. Therefore, IFIEC Europe invites EU Member states to establish similar rules and measures for their national electricity markets in order to limit market power using an appropriate threshold for generation capacity, as long as these markets are effectively still separated from the internal EU market.

One of the critical requirements for new entrants or autoproducers to provide additional generation capacity is access to back-up power and ancillary services at reasonable costs. If the market does not provide such services at reasonable costs than Member States should consider mandatory measures.

2. Fully unbundle the grids

As essential facilities, electricity grids need to be available to all market participants on an efficient and non-discriminatory basis. But as long as grids are not fully unbundled there will be potential for direct or indirect influence by the dominant players. This influence opens the door for numerous cross-subsidies and other means by which dominant generators secure their market position to the detriment of those smaller generators that are not affiliated with grid-management.

To overcome the current deadlock and set the ground for effective competition therefore the present unbundling regime needs to be invigorated. Further to the effective implementation of the present Directive the operational responsibility for transmission and distribution networks needs to be completely transferred to independent entities under regulatory scrutiny (regarding tariffs and access rights etc.). This needs to be applied to all grid operators including small distributors, who will have to find ways to cooperate efficiently. This effective neutrality of the grids could best be guaranteed by complete ownership unbundling.

3. Integrate markets

As long as markets are not integrated EU-wide competition is blocked with the effect that regional and national markets are more easily dominated by the large generators. Within a European market cross-border trading needs to be as feasible as within today’s constricted areas. We need the same economic procedures to buy and sell electricity across borders as they exist today in most national markets.

This aim calls for intensive cooperation by TSOs to improve individual grids and grid interconnections in a coherent way. To overcome constraints needs to become a primary responsibility of cooperating grid operators. As a framework for cooperation, TSOs immediately need to form a competent “Eurogrid Coordinator” organisation. Their duties will be, firstly, to identify bottlenecks, secondly, to impose measures on the different TSOs to overcome these bottlenecks and finally, to finance the relevant measures from a common fund. Coordinated action and financing is necessary because efficient actions to relieve constraints do not always meet with the place where constraints occur. An “Eurogrid Coordinator” needs to be formed as a competent authority with financial resources and TSO have to be obliged to participate.

Existing physical constraints need to be managed according to simple procedures which facilitate cross border transactions and which are subject to “Eurogrid Coordinator” approval and surveillance. Any revenues from congestion management may no longer flow to the TSOs on both sides of a bottleneck, but to “Eurogrid Coordinator” who uses it to finance grid enhancements and other congestion management measures. Within a short period of time, all existing cross-border constraints should be overcome through such practice.
Such organisational cooperation will also improve reliability of the electrical system. TSOs will always be responsible for system security in their control area, however supervision by the “Eurogrid Coordinator” will be a positive contribution to security of supply, preventing major incidents (as that occurred in Italy on 28th September 2003) or mitigate their impact to the rest of the European interconnection.

4. Increase information transparency, surveillance and governance

As substantial economic and technical information relevant for market behaviour is currently available to grid operators, integrated generators and their trading departments, these players enjoy a clear information advantage. The traditional communication channels within integrated utilities are still available. However, grid operators are currently not obliged to provide all market participants with this essential information. The resulting information deficits of other market actors constitute a further important obstacle to effective competition.

Grid operators therefore must be obliged to publish historical, current and future information of the following two main categories:

- Grid data: grid capacity and load from feed-in and demand perspective, capacity constraints, cross-border capacity and load, including detailed assumptions, etc.;

- Generation data: available generation capacity, dispatch schedules/forecasts and capacity out of operation (anonymous figures grouped under base and peak load, nuclear, fossil, renewable, pumping stations), balancing power data, etc.;

- System reserve margin data (difference between available capacity and demand). Despite an analysis of the differences between available capacity and demand a risk assessment of reserve capacities in case of failures, extreme weather conditions or shortages of wind or hydro generation is necessary.

In order to prevent possible insider trading practices, clear rules have to be applied to the electricity market as are provided in financial markets. Ad hoc information on market relevant data must be made available to all players at the same time. Sanctions for breaching these rules must be put into place and enforced.

Vertically-integrated companies have to keep separate accounts for generation, supply and trading businesses, which are available to inspections by the relevant authorities in order to detect possible abuse of dominant positions. A consistent set of criteria and methodologies needs to be developed and applied throughout the EU in order to identify and measure market power abuse.

To implement all four recommendations of IFIEC Europe comprehensive governance of the electricity market by competition authorities, regulatory authorities and by the financial authorities is necessary to prevent market abuse and encourage competition.

4. Conclusion

In its paper from September 29, 2004 IFIEC Europe concluded, that the current market design results in a flawed price signal which has a direct impact on the competitiveness of industrial energy consumers. As a result, IFIEC Europe sees a significant and undue transfer of revenue to the electricity generating sector.

This has a negative impact on the decision-making process for new investment by industry and threatens the long-term viability of existing plants in Europe. The current electricity market structure is therefore a serious threat for achieving the Lisbon strategy to make the EU the world’s most dynamic and competitive economy.
Therefore **IFIC EUROPE** proposes a comprehensive but realistic program to set the shape for developing a really competitive market, which should be implemented immediately. The main components of this program are:

1. Limit market share of the dominant generators
2. Fully unbundle the grids
3. Integrate markets and
4. Increase market transparency