



The Brattle Group

Utility mergers and cross-border trade in the EU

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Outline

1. How mergers affect cross-border trading
2. Merger approval, 'national champions' and all that
3. Looking forward: relevant regulatory developments

Why should traders care?

- Future market structure, levels of trade should feed into forward prices for energy and transportation
- Horizontal and vertical integration affect liquidity, risk

Mergers and cross-border trading

A merges with B: effect #1

Increased market power in country 1 can lead to

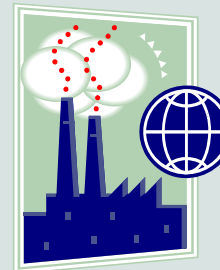
- Higher prices in country 1
- Increased imports from (or reduced exports to) country 2
- Potential for congestion from 2 to 1
- More trade less competition

Country 1

Utility A



Utility B

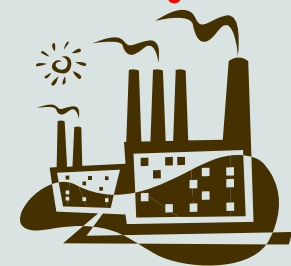


Country 2

Utility C



Utility D



Mergers and cross-border trading

A merges with B: effect #2

Merged A+B has increased incentive to withhold capacity in country 1, so as to increase prices. But also may face increased regulatory scrutiny. Solution: *export more to country 2.*

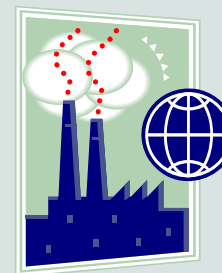
Note this assumes *explicit auctions, no netting of interconnector capacity.* Not possible with market coupling, since C and D can replace reduced sales by A+B in country 1.

Country 1

Utility A



Utility B

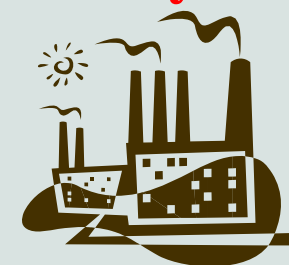


Country 2

Utility C



Utility D



Mergers and cross-border trading

A merges with C

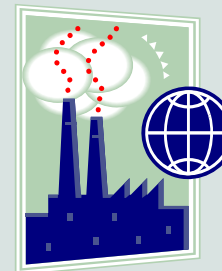
Say pre-merger A exports to country 2.
Post-merger it has incentive to reduce exports, so as to raise prices in country 2.
However, only works if the cross-border capacity is not then used by utility B: so need A to have monopoly power in country 1, or able to hoard interconnector capacity (inadequate use-it-or-lose-it provisions).

Country 1

Utility A



Utility B

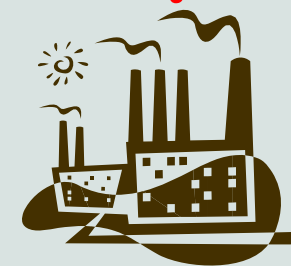


Country 2

Utility C



Utility D



Mergers and cross-border trading

Country 1 and country 2 merge markets

Say utility A has 60% market share in country 1, but only 30% in combined market 1-plus-2.

Before the markets are unified, utility A is clearly dominant (60% market share), worries about competition law and regulatory intervention.

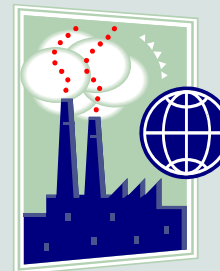
In the combined market, legal dominance is not so clear (traditional “rule of thumb” 40% share test). Utility A may feel more free to raise prices in combined markets.

Country 1

Utility A



Utility B

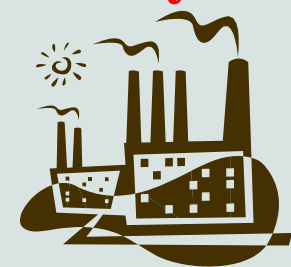


Country 2

Utility C



Utility D



Mergers and cross-border trading

Increase interconnection between country 1 and country 2

Say prices are much lower in country 1, and before increase we see congestion from 1 to 2.

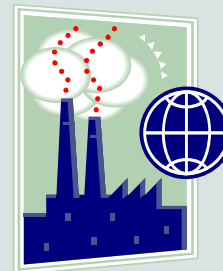
Then increasing interconnection capacity can lead to increased flows from 1 to 2, higher prices in 1.

Country 1

Utility A



Utility B

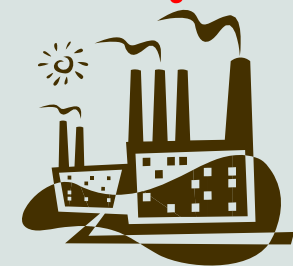


Country 2

Utility C



Utility D



Outline

1. How mergers affect cross-border trading
2. Merger approval, 'national champions' and all that
3. Looking forward: relevant regulatory developments

Merger approval, open borders and national champions

National merger, closed borders

- High existing levels of concentration, difficulty of entry in wholesale power markets mean mergers pose severe problems
- Hence difficulty in getting approval for “national champion” mergers (except where government can and wishes to over-rule)
- Examples: EDP/GDP; Endesa/GN

	National merger	Cross-border merger
Closed borders	Very difficult	Easy, unless “dynamic” issues
Open borders	Generally easy?	???

Merger approval, open borders and national champions

Cross-border merger, closed borders

- Should be easy: under competition law rules, closed borders imply separate markets so no overlap.
- Examples: Electrabel/EPON; Eon/Endesa (“no borders”).
- However, authorities may see potential competition when “borders” open, as in EdF/EnBW.

	National merger	Cross-border merger
Closed borders	Very difficult	Easy, unless “dynamic” issues
Open borders	Generally easy?	???

Merger approval, open borders and national champions

National merger, open borders

- Should be easy: open borders make this part of a larger market, approval should be easier.
- Examples: hard to find, because few borders are sufficiently open! In Scotland post-BETTA project (2005 unification of Scottish, England & Wales market) a hypothetical merger of the two Scottish gencos (SSE, SP) would be much easier than pre-BETTA.

	National merger	Cross-border merger
Closed borders	Very difficult	Easy, unless “dynamic” issues
Open borders	Generally easy?	???

Merger approval, open borders and national champions

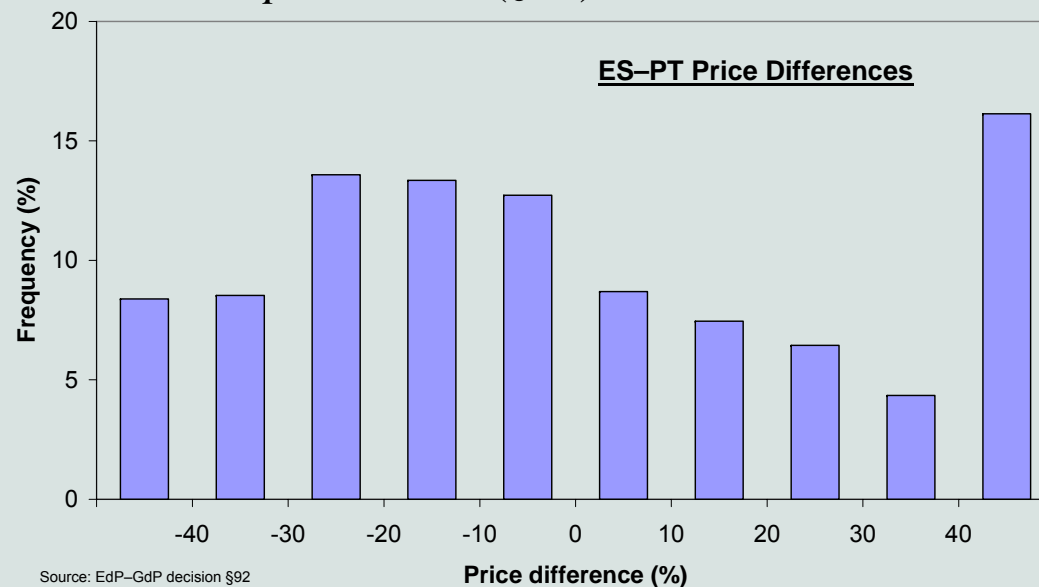
Cross-border merger, open borders

- Depends on specifics of case (merger may make for big companies, but in big markets).

	National merger	Cross-border merger
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Case study I: ENI/EDP/GDP

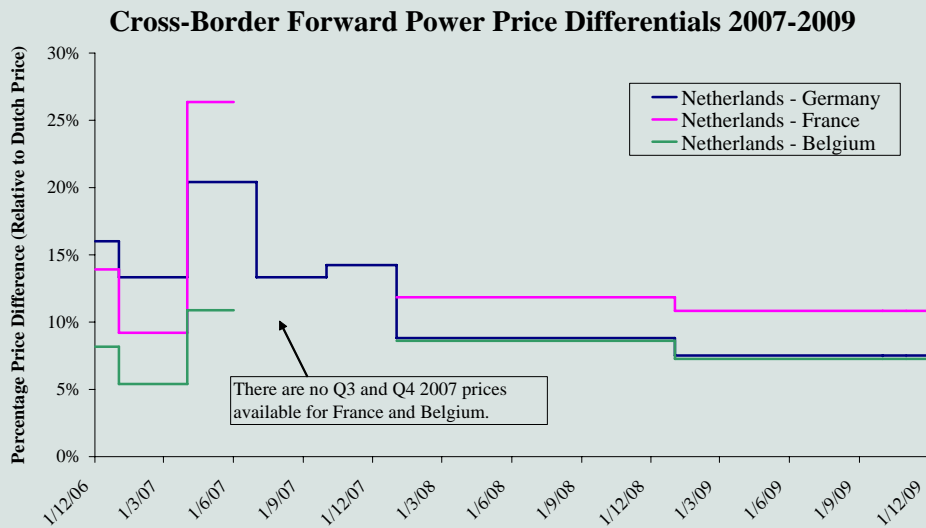
- EDP/GDP a national merger, (largely) closed borders. Rejected by European Commission because
 - “*it will eliminate GDP as a significant potential competitor*” [on the Portuguese wholesale electricity market] (§335)
 - “*the current level of interconnections is clearly insufficient for the establishment of a single market in the Iberian peninsula*” (§78)



Case study II: hypothetical Dutch merger

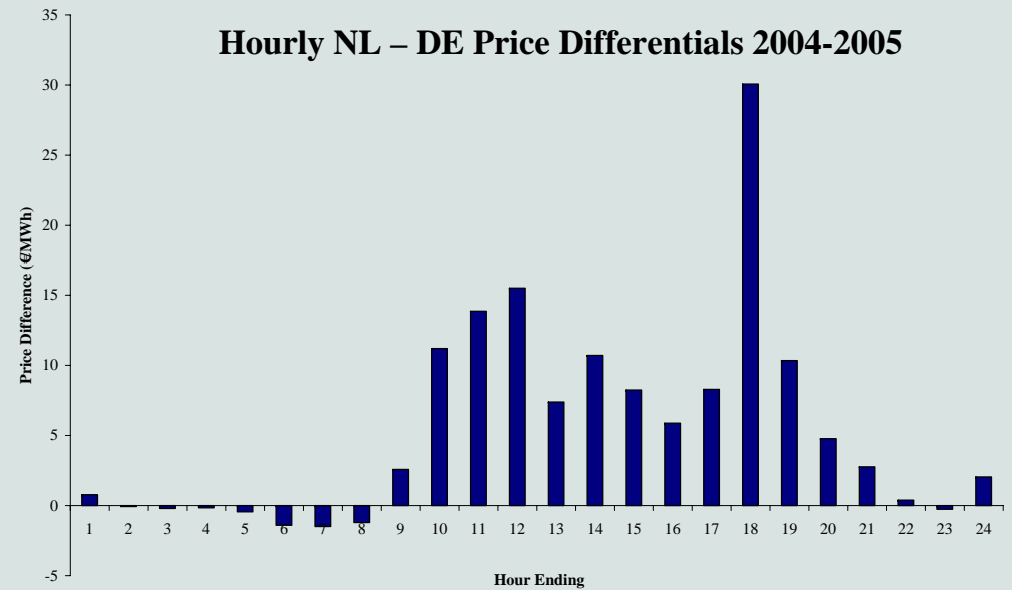
- Treatment of a future merger of two Dutch companies would depend on whether authority thinks NL borders are open or closed
 - Is the “relevant geographic market” national or supra-national (e.g., Benelux or NW European)?
 - Historical data and forward prices suggest NL a separate market, at least at peak

Case study II: hypothetical Dutch merger



Source: Platts European Power Daily, November 16, 2006.

Note: A positive price difference indicates the price in the Netherlands exceeding the price in the neighbouring



Source: APX, EEX.

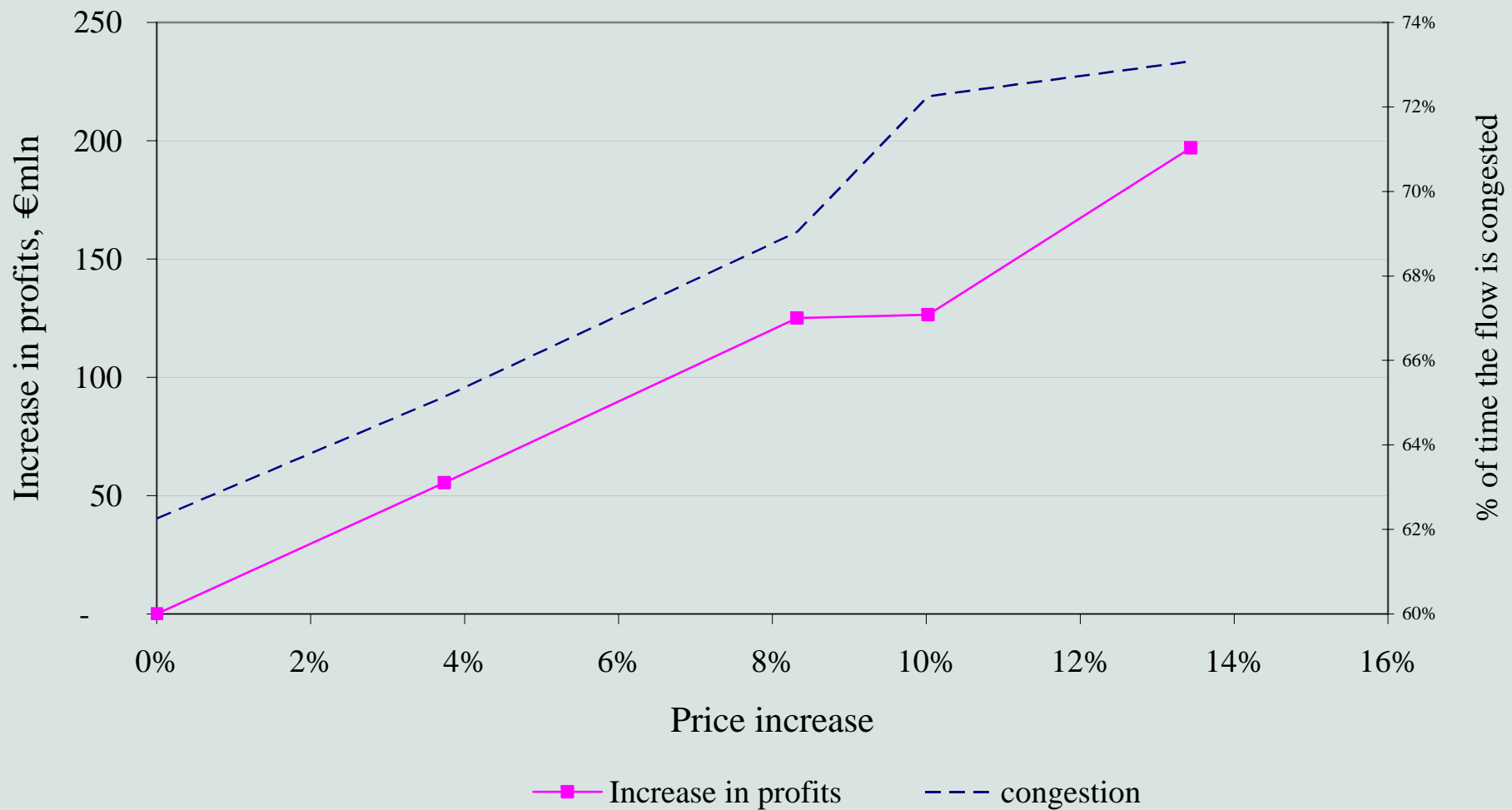
Note: A positive price difference indicates the price in the Netherlands exceeding the price in Germany.

SSNIP test for Dutch market

- Competition authorities apply the SSNIP test
 - ▶ Market is separate if a “hypothetical monopolist” could profitably raise prices
- Logic: if imports are an important source of competition, then even a monopolist can't make money by raising prices, because of loss of market share
- Conversely, if ability to import is limited then loss of market share is also limited, and can profit by raising prices
- Brattle performed a SSNIP test for the NL, using model of European power market (BAM)*

**See Factors Affecting Geographic Market Definition and Merger Control for the Dutch Electricity Sector, June 2006, available at: www.nmanet.nl/Images/Brattle%20Group%20NMa%20Geog%20rapport%20fusies%20energiesector%20June%202006_tcm16-87916.pdf*

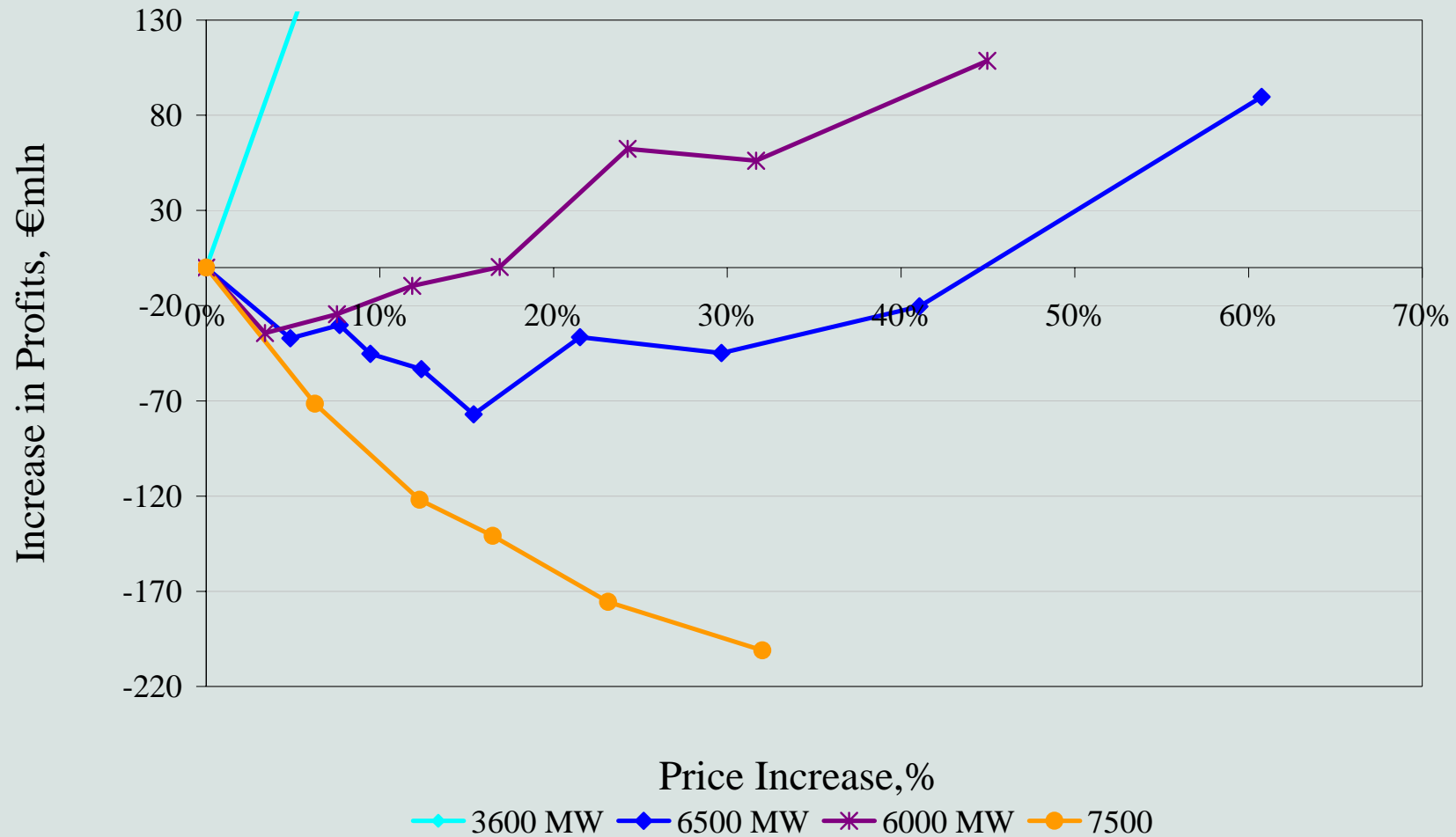
SSNIP test: increase in profit as a function of price increase, 2008



The significance of interconnection

- Post-merger price increases are profitable because of limited interconnection with Germany and France—currently around 3,600MW
- How much additional cross-border capacity is needed to widen the relevant geographic market?
 - At current fuel prices, would need to increase the import capacity available to the market between Belgium/Germany and the Netherlands to around 6,500 MW (in addition to market coupling and 700MW Norned)

Increase in profit vs price increase and interconnector capacity



Case Studies III: E.On-Endesa

- *The Commission's investigation has indicated that pan-European gas and electricity markets are not expected to arise in the near future, in the light of the lack of current interconnection capacity and given that rapid expansion of the available capacity of the existing capacity is not realistic in the short term. (§71)*
- *the market investigation has shown that electricity and gas markets in Spain, Italy, France, Poland and Germany are generally likely to be still not wider than national in scope. (§68)*
- Cross-border merger has no impact on competition in national markets
 - Unless can be viewed as potential entrants in each other's markets (here the Commission said no)
 - Merger cleared without remedies

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Prospects for change

- No change to the framework of merger assessment
 - national markets, except where import capacity is big enough
- Regional Electricity Markets initiative will produce more market integration, along lines of FR-BE-NL market coupling
 - For NL, we estimate market coupling equivalent to approx. 15% additional capacity
 - But progress at variable speed, depending on region
 - Handicapped by weak obligations/powers on TSOs and national regulators for cross-border harmonisation

Prospects for change

- January 2007 Commission will bring forward proposals from strategic energy review, including “third package”. Likely to include
- Stronger unbundling and transparency give
 - More efficient use of existing capacity
 - Stronger incentives to invest in additional capacity
- Powers and obligations on regulators to facilitate interconnection and cross-border trade
 - Can speed up REM process, facilitate investment in additional infrastructure
- Institutions and rules for inter-TSO co-operation

Conclusions

- Medium term direction of power markets in Europe depends on
 - ▶ Developments in market structure (ongoing M&A)
 - ▶ Impact on commercial incentives
 - ▶ Developments in cross-border linkage (physical investment, removal of barriers)
 - ▶ Future regulatory developments
- Reflects interplay of market fundamentals, law, regulation and politics!