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The Brattle Group

*Exploration of possibilities for applying
market coupling in the CEE region*

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About The Brattle Group

- Consulting firm specialised in energy and finance
- Offices in US (Cambridge, MA; Washington, DC; San Francisco) and EU (London; Brussels)
- Work for private and public sector
 - ▶ Analysis of competition (e.g., mergers: Eon/Ruhrgas, Eon/MOL, GdF/Suez, Nuon/Essent, Gas Natural/Endesa)
 - ▶ Major reports for European Commission, national regulators and competition authorities (UK, Ireland, Belgium, NL, Greece)
 - ▶ Advise investors, utilities, TSOs, PXs etc on energy market issues
- Long involvement in Benelux markets and market coupling, including 2003 “feasibility study” for APX and Dutch TSO TenneT

Why market coupling?

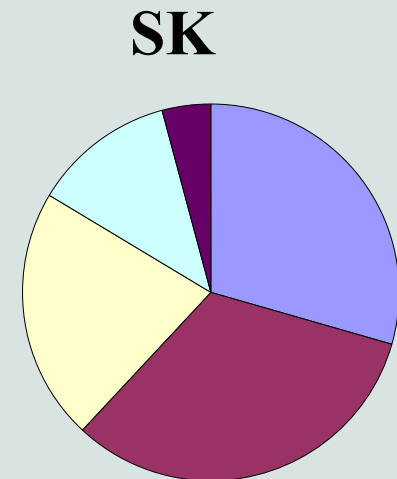
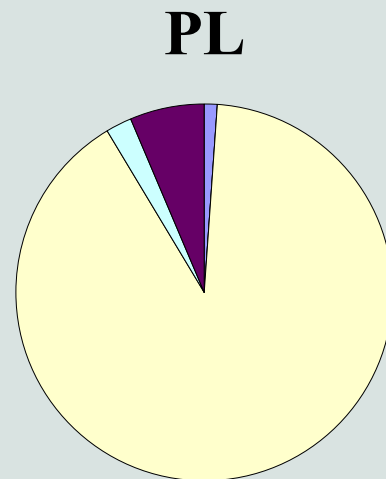
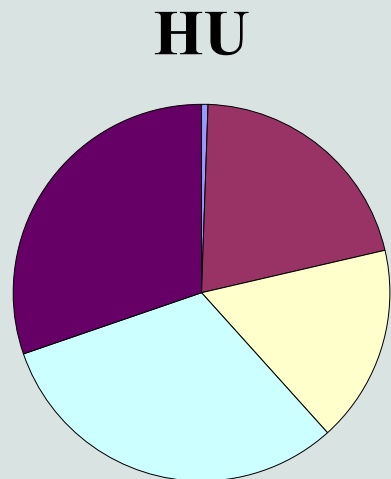
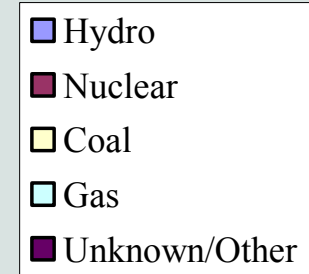
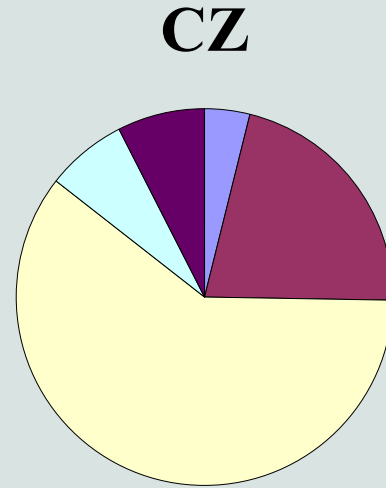
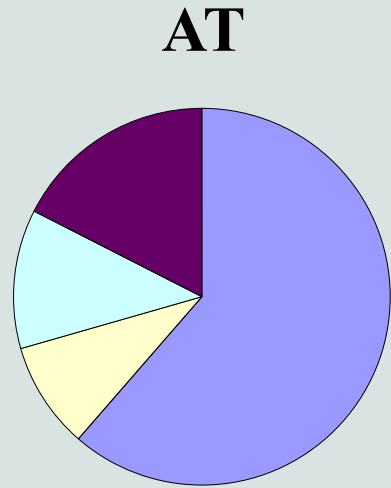
- Enhanced cross-border trade
 - ▶ Essence of market coupling is to make trading easier (reduced “transactions costs”) and more efficient
- Shared and (in long run) increased liquidity on power exchanges
 - ▶ Brings additional benefits to markets
- Complements other harmonisation measures
 - ▶ Put in context of Regional Markets Initiative

Benefits of power trading: efficient despatch

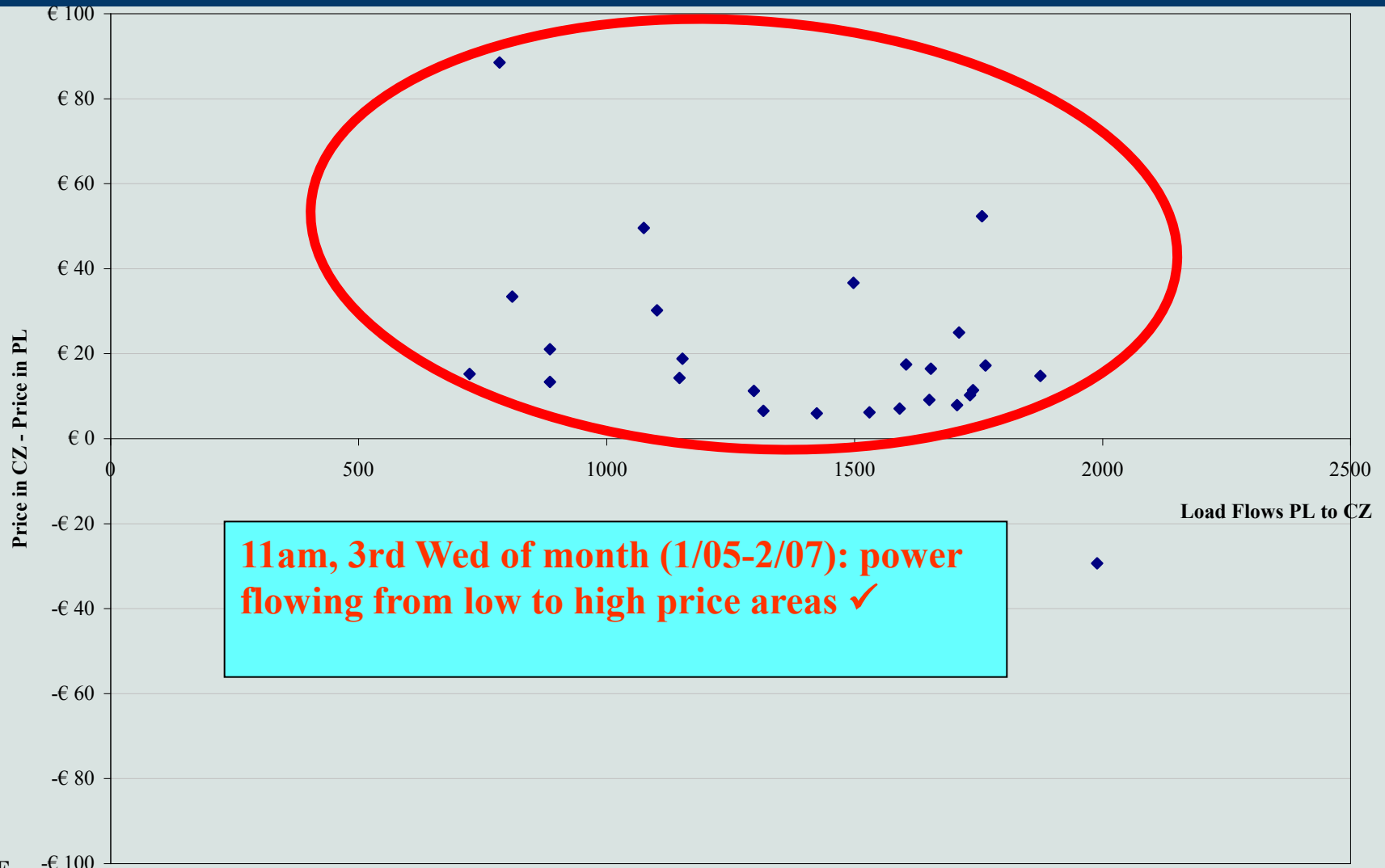
- More efficient trading has short-run efficiency benefits
 - ▶ If need more power in CZ, cheapest available plant in CZ costs €30/hr but cheapest available plant in PL costs €25/hr then trading lowers costs
- In Benelux market prior to market coupling had despatch inefficiencies—power sometimes flowed from high price to low price areas
- For the Dutch competition authority,* we estimated market coupling would increase peak cross-border flows by about 15%
 - ▶ Additional trades reflect more efficient despatch
 - ▶ For CEE, this would be equivalent to a new CCGT

* See www.nmanet.nl/Images/Brattle%20Group%20NMa%20Geog%20rapport%20fusies%20energiesector%20June%202006_tcm16-87916.pdf

Significant intra-regional differences imply likely high gains to trade

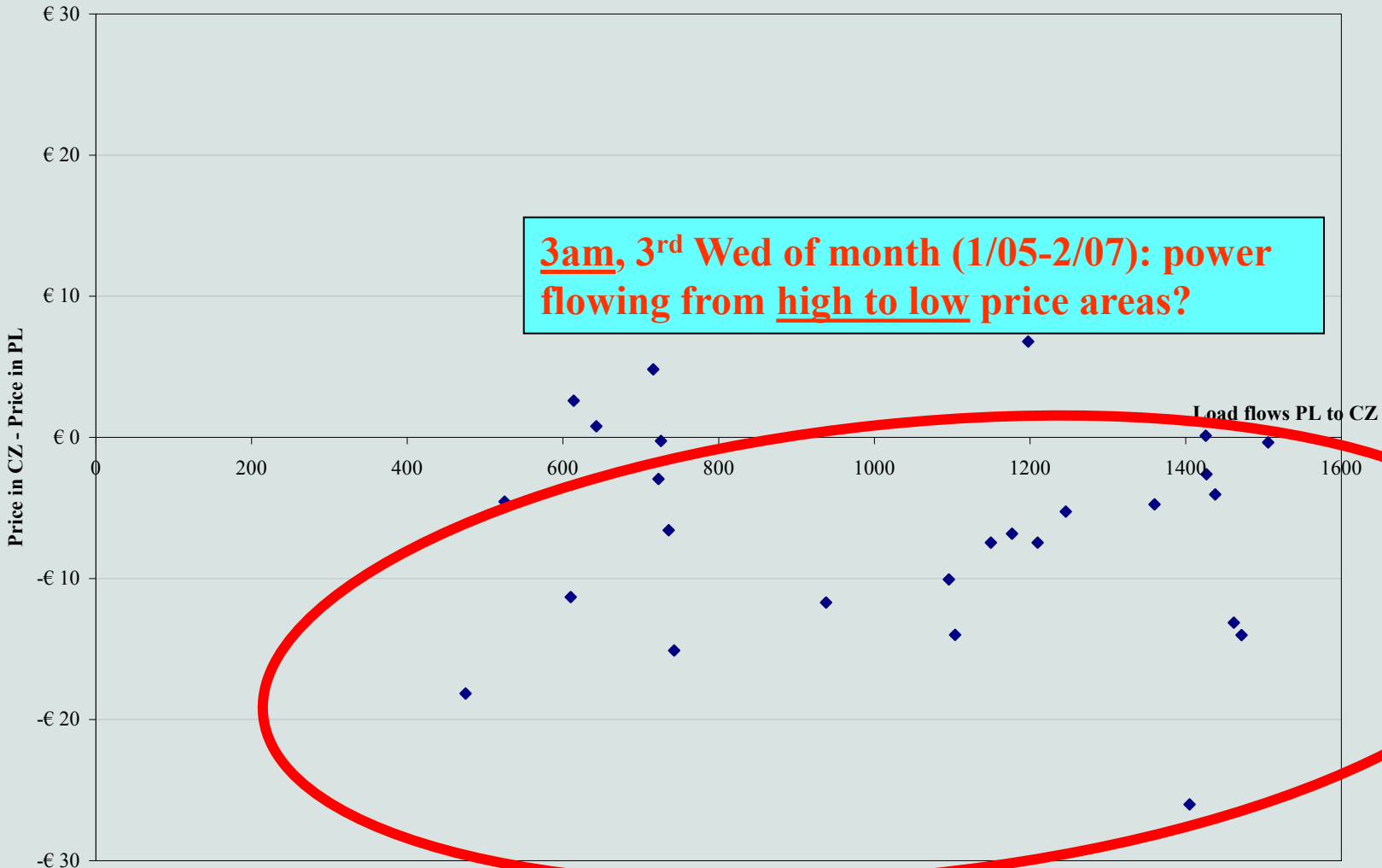


Efficient cross-border despatch (PL to CZ)?



Source: UCTE

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Benefits of power trading: lower capex, enhanced security

- Cross-border trading reduces the need for reserve margin in any one country, because imports become a source of reliability
- Increased liquidity reduces risk of new investment, especially for entrants
- Especially important in context of need for major new generation capacity in CEE

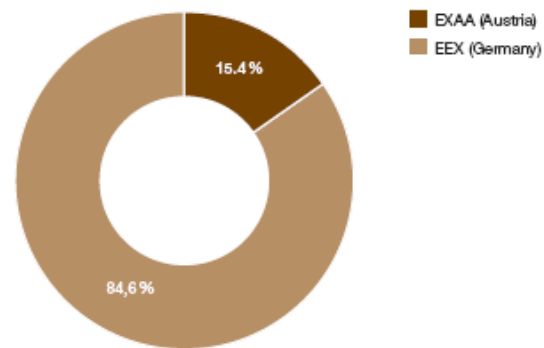
Benefits of power trading: enhanced liquidity

- Market coupling will lead to increased trading, more reliable price index
 - ▶ Shared liquidity across exchanges
 - ▶ Facilitates risk management, development of futures and options
 - ▶ Allows contracting indexed to PX
 - ▶ Improved transparency and risk management enhance investment climate

In terms of liquidity, only two power exchanges, namely Germany's EEX and Austria's EXAA, have been identified as providing satisfactory trade volumes (see Figure 7).

Figure 7

Traders' view: Power exchanges with liquidity satisfactory for trading



Note: Total % of responses
Source: PricewaterhouseCoopers, Traders' Survey 2006

Benefits of power trading: other measures

- Market coupling does not require extensive harmonisation
 - ▶ Different power exchanges can have different rules, credit arrangements, algorithms etc
 - ▶ However, market coupling can be an engine for regional integration
- Complements Regional Markets Initiative
- Complements Eurelectric proposal for Regional System Operators

The Benelux feasibility study

Issues included:

- Electrabel's market power in BE, and its link to different cross-border trading arrangements;
- Reform/harmonization of balancing arrangements in different countries;
- Unbundling of TSOs;
- Distributional impact of different cross-border trading arrangements.

Questions for discussion

1. What is the potential to increase despatch efficiency in this region via enhanced trading?
2. How much evidence is there of inefficient use of interconnectors in the region?
3. Could enhanced trading help reduce needed investments in new generation capacity?
4. Do regional exchanges need more liquidity?
5. What barriers to efficient cross-border trade are there in the region at present?
6. Independently of market coupling, would intra-regional trade benefit from other kinds of harmonisation (e.g., nomination procedures, balancing arrangements and charges)?

Questions for discussion

7. How would changes in cross-border trade arrangements and flows affect different stakeholders:
 - ▶ Generators and suppliers: is market coupling a win-win, or does it create winners and losers?
 - ▶ Governments: do we see price rises in some countries (e.g., if the country becomes a bigger exporter)?
 - ▶ National regulators and competition authorities: would market coupling reduce or increase concerns about market power?
 - ▶ European Commission and ERGEG: how would this project interact with current/ongoing regional markets initiative?
 - ▶ TSOs: relatedly, how would market coupling interact with current TSO proposals for cross-border congestion management?