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Cross Border Trade in Electricity: Experience of Wholesale Market Participants in Western Europe

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European Federation of Energy Traders

- Aims to facilitate and promote (wholesale) electricity and gas trading in Europe
- 60 members from 14 European countries
- Focus on continental markets in process of liberalisation



EFET Statement* on Energy Sector Liberalization

- Clear commitment and timetable
- Minimize any delay to full opening
- Open access across national boundaries
 - ✓ clear rules established by independent authorities
 - ✓ tariffs that reflect only identifiable costs
 - ✓ adherence to the principles of legal, management and accounts unbundling

***Press release on the occasion of the Pamplona Energy Ministers' Meeting 26 April 2002**



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1. Power trading: Background and obstacles
2. Cooperation across national borders
3. Cross border transmission capacity allocation
4. Conclusions for market reform



Energy Trading is essential for successful market liberalization

- Price transparency and market signals
- Financial risk management
- Physical flexibility
- Innovation and efficiency improvements
- Enhanced security of supply
- Ensuring benefits reach all customers

Trading is not 'money making' alone!

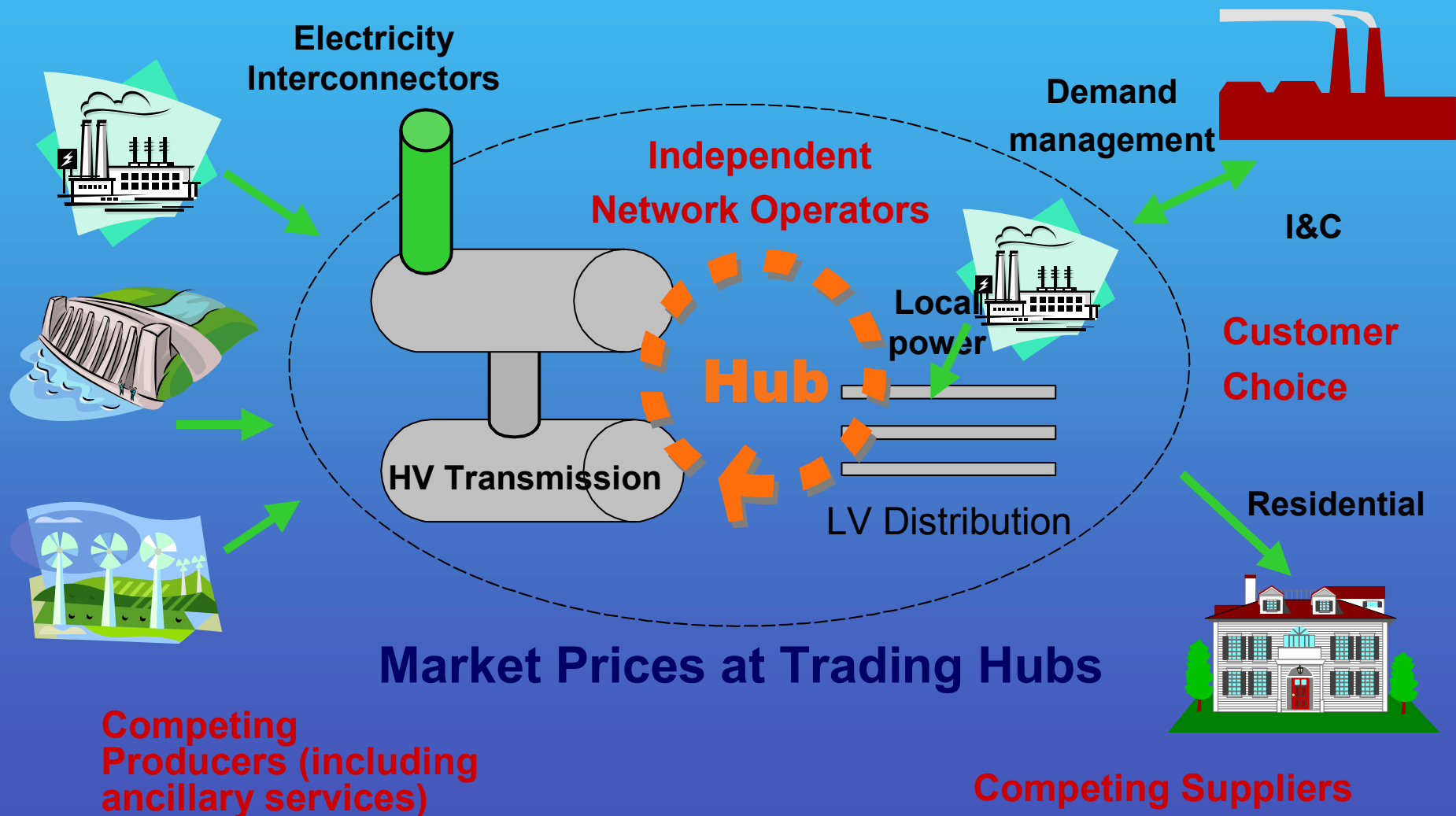
- Captive markets are not efficient
 - No transparency nor competition
 - Dispatch at best based on internal merit order
 - Power transactions between few players
- Open markets allow for optimization
 - Freedom of choice of supplier leads to larger number of participants, transparency and liquidity
 - Trading primarily for portfolio optimization and risk management; only occasionally for 'speculative' purposes

Trading contributes to efficient network management and investment

Traders enhance transparency and liquidity

- Price signals and transparency provide grid operators with a basis for network management
 - Congestion between price areas manageable by market-based allocation of interconnection capacity by grid operators; market can also trigger network investment
- Price discovery in both power as commodity and transport capacity supports market; facilitates risk management and portfolio optimization, thus best use of the grid

Illustration of the developing EU electricity market





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The Traded Electricity Market in Europe

UK

- „NETA“ system
- UKPX - 44 participants
- Elexon - 179 BSC signatories

APX

- daily spot since May 1999
- within-day „adjustment market“
- 36 participants

OMEL

- compulsory pool
- 120 participants (2001)



Norpool

- physical and financial contracts
- hourly block contracts
- 295 participants

EEX

- spot and futures contracts
- 90 participants

GME

- day ahead, adjustment balancing, reserve and congestion markets.
- possible compulsory pool

Critical Interconnections





Unbundled TSOs can help create market transparency

EFET will suggest release of detailed data by TSOs:

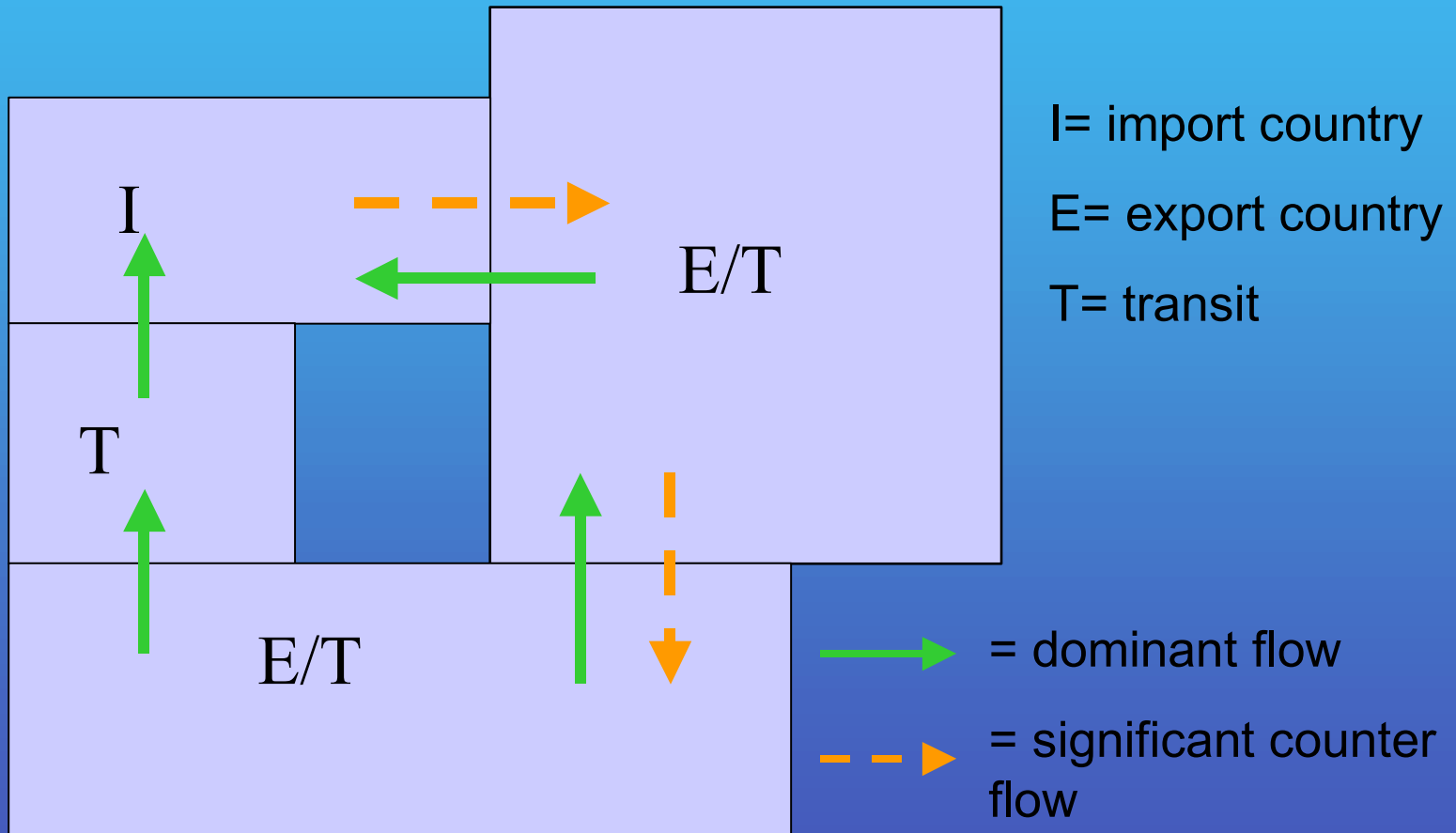
- Aggregated hourly demand
- Physical network and capacity availability
- Harmonised generation output by fuel type
- Network and generation (?) maintenance schedules and availability expectations



Reservation Reduction and Netting

- Critical examination of long term supply contracts
- Minimisation of long term capacity reservation
- Financial resolution of “legacy” deals?
- Net counter flows to dominant flows
- Release capacity against expected loop flows

Expected counter and loop flow netting





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Market based mechanisms for the allocation of optimised capacity

- Explicit auctions may be based on unduly conservative ATC estimates
- Secondary trading of capacity on electricity systems is problematic
- Implicit auctions at border or other constraint points mimic dispatch procedures
- Alignment of commodity market with capacity allocation increases efficiency

Implicit auction/ market splitting: pre-conditions for implementation

- Publication of anticipated interconnection capacity by TSOs for every hour at intervals in advance
- Competition in generation both sides of interconnection
- Freedom to operate for a range of wholesale parties both sides of interconnection
- An electricity exchange or market operator both sides
- Balancing (intraday) markets or mechanisms and harmonisation of nominations both sides



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Conclusions (1)

Liberalization and market structure

- Rapid progression to 100% retail market opening
- Immediate explicit wholesale market opening
- Mandatory regulated TPA both wholesale and retail
- Full legal and functional unbundling of transmission
- Non-discriminatory balancing mechanisms/markets
- Transparency of information at wholesale level



Conclusions (2)

Cross border cooperation

- No import/ export restrictions
- No transaction related cross border transmission tariffs
- Passported supply licenses, retail and wholesale
- Fully coordinated cross border congestion management using market based methods
- (Potentially) constrained transmission capacity to be 'oversold'
- Arrangements to manage congestion away from borders
- Harmonized TSO nomination procedures, timing and blocks



Conclusions (3)

Competitive landscape

- Disaggregation of existing enterprises, or abjuring industry consolidation
- Critical re-examination of any LT physical supply agreements and possible financial resolution
- Formation of single or JV PX to facilitate liquidity
- No State subsidization of fuel categories
- Ultimate merging of national TSOs into one RTO
- Full privatization ASAP (at least timetable set)?