

EURELECTRIC's views on effective capacity allocation and congestion management

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Aspects of effective use of infrastructure

- Effective market functioning
- Effective congestion management
- Effective regulatory scrutiny
- Transparency is a foundation for more effective regulation and incentives



Effective market functioning

- Non discriminatory access
- In an integrated market this means harmonisation to a large extent
- The same treatment for XB and internal trades/flows
 - This means: treating the system as one
- A larger market is a more efficient market through increased competition



About congestion management

- We don't have a copper plate
- Congestion "rents" and redispatch "costs" are both financial redistributions that lead to optimal dispatch
- However, they are treated differently in TSO regulation.



Issues with congestion management

Optimal use of the system: counterproductive incentives for TSOs



- Confusing incentives for TSOs lead to suboptimal calculation and allocation of XB capacity
- XB capacity limitations are used as a non-costly way to deal preventively with potential congestions
- System Operation should aim at social welfare optimisation and not at cost minimisation for specific entities only



Effective congestion management

Key principles for optimal use of the network

No discrimination between XB and internal trades/flows

• No ex-ante limitations of XB capacity released (i.e. be as close as the physical limitations of the system) Efficient dispatch

Cross-border redispatch should be integral part of the optimisation

Efficient XB capacity allocation

- XB redispatching should be considered within the market clearing process (together with non-costly remedial actions) or performed after market coupling (using negative FRMs and FAVs for example)
- Cost allocation of cross-border redispatching need to be addressed in the same framework as distribution of congestion rents
- XB capacities should be revised in the intraday time frame (at least 4 times per ISP*) and increased as soon as possible

Regular recomputation Technical improvements crucial * Each ISP XB capacity is updated before LT, DA, ID, BAL.



Effective regulatory scrutiny

- TSOs are monopolies and have a financial interest
- Incentives are mainly focused on the corporate cost efficiency of the individual TSO
- Benefits TSOs bring to the market are mostly disregarded
- Efficiency gains through international integration are mostly disregarded
- Public transparency improves regulatory scrutiny



Transparency

- Transparency is a foundation for more effective regulation and incentives
- EURELECTRIC supports the data request from ACER to the TSOs and would suggest some additions (especially regarding redispatch)
- All information that is not commercially-sensitive should be made publicly available
- Full TSO transparency improves the efficiency of the market and efficiency of TSOs
- Transparency is already required in several regulations (e.g. REMIT, transparency regulation)
- Definition of optimal use of the grid should be developed and monitored



Backup slides



Congestion rent

- A bidding zone is an ex ante limitation of the market (based on assumptions in the future)
- In case of congestion consumers in one bidding zone pays a higher market price than in the other
- The market value of capacity is the price differential of the two zones
- This congestion rent is a financial flow from generators in the low price zone to TSOs = consumers in the high price area (either through tariffs or investments in interconnection)



Redispatch

- Curative market correction in the DA and ID time frame following market outcomes (assumes a copper plate until the correction and compensates effected market parties)
- Compensates affected market parties for the lack of grid capacity at market value
- Market prices in the relevant zones are not affected
- Redispatch "cost" is a financial flow from compensated market players to TSO, which may or may not be recovered through tariffs

Effective congestion management Technical and regulatory improvements needed

Market improvements

• Efficient dispatch

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 Market clearing with XB capacity equal or close to physical reality (no remedial action taken into account) as starting point and optimised congestion management (incl. XB redispatching)

Technical improvements

 Upgrade of methodologies for capacity calculation and allocation

 Go beyond sharing/compiling individual sets of data across multiple bidding zones

Regulatory improvements

- Efficient monitoring based on increased transparency on TSO
- Better alignment of TSO incentives that lead to true overall regional optimisation



So what does CACM say about it?

- (6) Capacity calculation for the day-ahead and intraday market time-frames should be coordinated at least at regional level to ensure that capacity calculation is reliable and that optimal capacity is made available to the market. Common regional capacity calculation methodologies should be established to define inputs, calculation approach and validation requirements. Information on available capacity should be updated in a timely manner based on latest information through an efficient capacity calculation process.
- (10) TSOs should use a common set of remedial actions such as countertrading or redispatching to deal with both internal and cross-zonal congestion. In order to facilitate more efficient capacity allocation and to avoid unnecessary curtailments of cross-border capacities, TSOs should coordinate the use of remedial actions in capacity calculation.
- (12) TSOs should implement coordinated redispatching of cross-border relevance or countertrading at regional level or above regional level. Redispatching of cross-border relevance or countertrading should be coordinated with redispatching or countertrading internal to the control area.



CACM has significant references to Regulation 714

(3) Regulation (EC) No 714/2009 sets out non-discriminatory rules for access conditions to the network for crossborder exchanges in electricity and, in particular, rules on capacity allocation and congestion management for interconnections and transmission systems affecting cross-border electricity flows. In order to move towards a genuinely integrated electricity market, the current rules on capacity allocation, congestion management and trade in electricity should be further harmonised. This Regulation therefore sets out minimum harmonised rules for the ultimately single day-ahead and intraday coupling, in order to provide a clear legal framework for an efficient and modern capacity allocation and congestion management system, facilitating Union-wide trade in electricity, allowing more efficient use of the network and increasing competition, for the benefit of consumers.

Article 18

3. For each scenario, all TSOs shall jointly draw up common rules for determining the net position in each bidding zone and the flow for each direct current line. These common rules shall be based on the best forecast of the net position for each bidding zone and on the best forecast of the flows on each direct current line for each scenario and shall include the overall balance between load and generation for the transmission system in the Union. There shall be no undue discrimination between internal and cross-zonal exchanges when defining scenarios, in line with point 1.7 of Annex I to Regulation (EC) No 714/2009.



- REGULATION (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity – Annex 1 Regulation 714 sets the rules...
- 1.5. The methods adopted for congestion management shall give efficient economic signals to market participants and TSOs, promote competition and be suitable for regional and Community-wide application.
- 1.7. When defining appropriate network areas in and between which congestion management is to apply, TSOs shall be guided by the principles of cost-effectiveness and minimisation of negative impacts on the internal market in electricity. Specifically, TSOs shall not limit interconnection capacity in order to solve congestion inside their own control area, save for the abovementioned reasons and reasons of operational security (¹). If such a situation occurs, this shall be described and transparently presented by the TSOs to all the system users. Such a situation shall be tolerated only until a long-term solution is found. The methodology and projects for achieving the long-term solution shall be described and transparently presented by the TSOs to all the system users.
- 2.1. Congestion-management methods shall be market-based in order to facilitate efficient cross-border trade. For that purpose, capacity shall be allocated only by means of explicit (capacity) or implicit (capacity and energy) auctions. Both methods may coexist on the same interconnection. For intra-day trade continuous trading may be used.
- 3.1. Capacity allocation at an interconnection shall be coordinated and implemented using common allocation procedures by the TSOs involved. In cases where commercial exchanges between two countries (TSOs) are expected to affect physical flow conditions in any third-country (TSO) significantly, congestion-management methods shall be coordinated between all the TSOs so affected through a common congestion-management procedure. National regulatory authorities and TSOs shall ensure that no congestion-management procedure with significant effects on physical electric power flows in other networks is devised unilaterally.



Network parameters are price sensitive

• **REMIT obligations:**

- EU Regulation No 1227/2011 ("REMIT") has established an general obligation for *all* market participants (including TSOs) to publish inside information relating to wholesale energy products; this includes both the delivery and transmission capacity of power and gas. The scope of 'inside information' to be made public under REMIT is broad and covers *"information of a precise nature which has not been made public, which relates, directly or indirectly, to one or more energy wholesale products an which, if it were made public, would be likely to significantly affect the prices of such wholesale products."*
- REMIT recognizes that publication of inside information in accordance with the Access Regulation constitutes public disclosure. To the extent not covered by the Access Regulation, "any other information relating to the capacity or use of transmission facilities" and "any other information that a reasonable market participant would be likely to use as part of the basis of its decision to enter into a transaction relating to, or to issue an order to trade in, a wholesale energy product" must be made public.

