

ENTSO-E BIDDING ZONE STUDY

Market Stakeholders Committee (for information)

Presentation to the Stakeholder Advisory Group

DECEMBER 2015



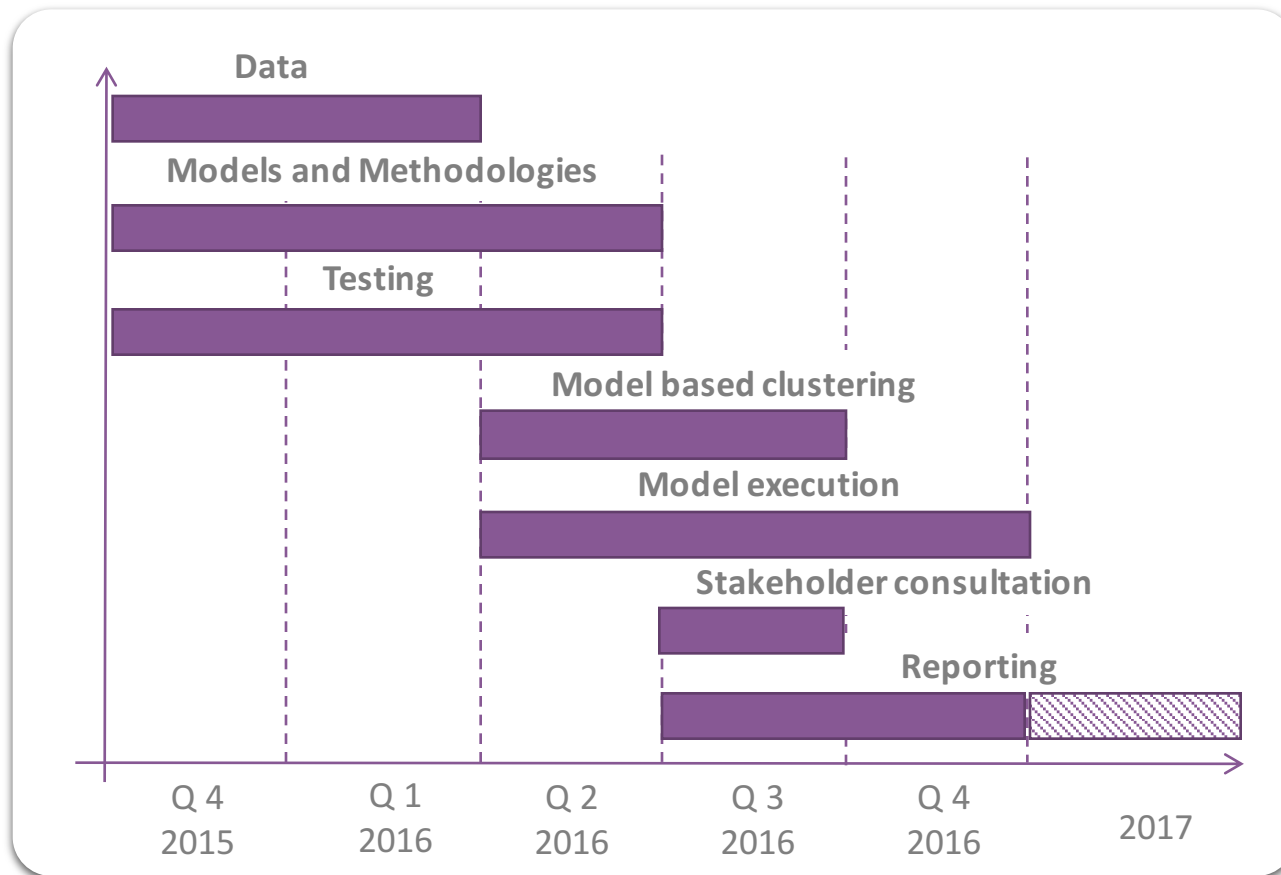
Time Plan

Capacity Calculation

3

Interaction between ENTSO-E
/ TSOs and ACER/NRAs

The current Time Plan

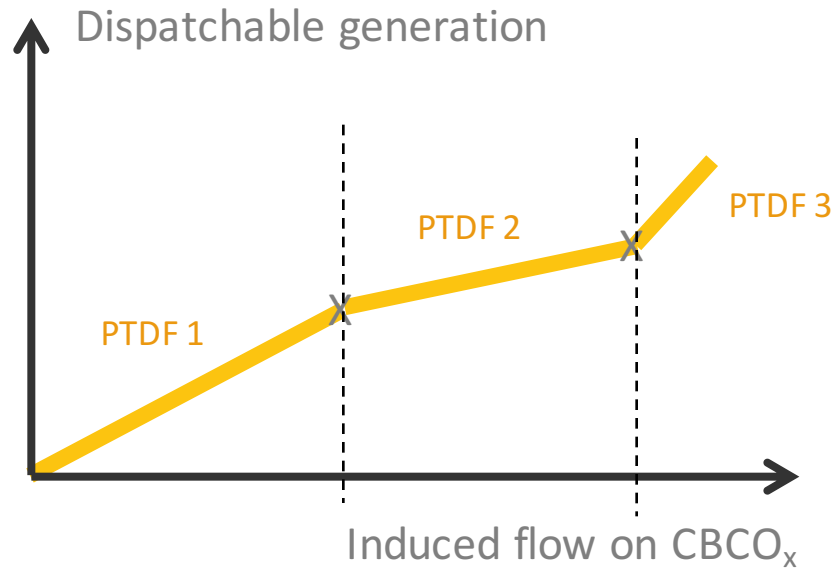


Methodological Complexities

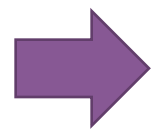
- grid and market models for central Europe
- flow based capacity calculation
- model based scenarios (nodal price calculation, ptdfs, clustering)
- redispatch simulation
- loop flow analysis

Capacity Calculation – the currently envisaged method

The „Merit order approach“ a combination of the explicit and implicit approach

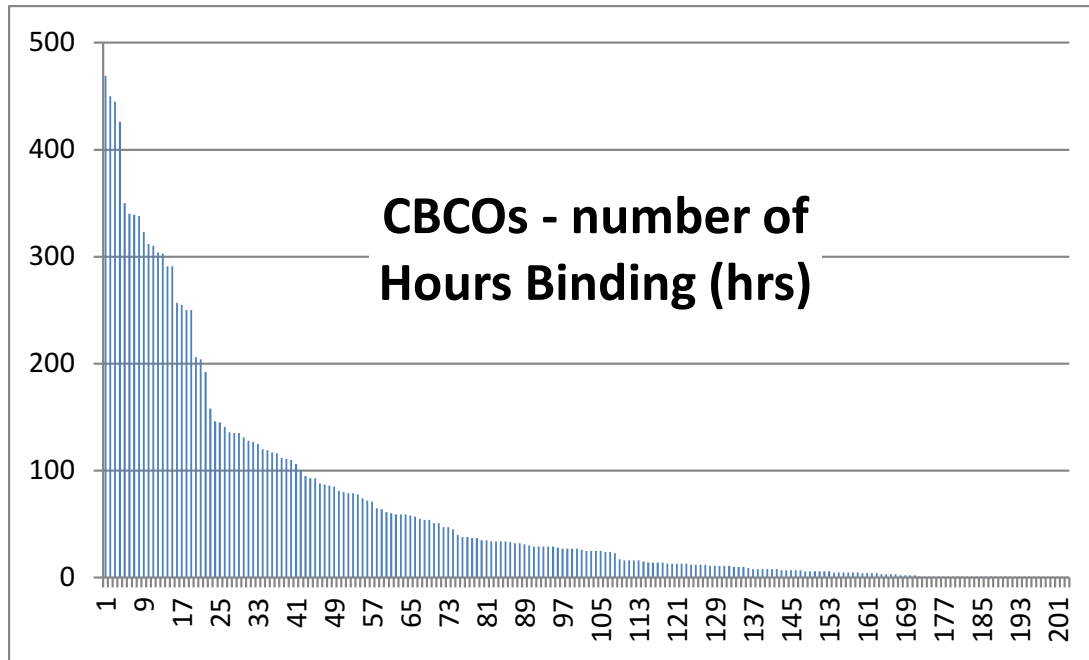


Explicit	Implicit	'Merit order'
✓ Corresponds to status quo	✓ Easiest to implement	✓ Implicitly resembles different base cases
- Selection of base case remains ambiguous	- Continued risk of 'implicit redispatch' (differentiation by technology)	✓ Most complex, but manageable
- Major deviations between 'real' and assumed flow in case of larger variations	- Alternatively, risk of major deviations between 'real' and assumed flow (or RAM) (single PTDF per BZ)	- Requires assumptions on merit order / shift of GSK as a function of local output
- Continued risk of infeasible simulation runs		



Slope of the incremental flow dependent on the ‚merit order curve‘

Capacity Calculation – testing the model



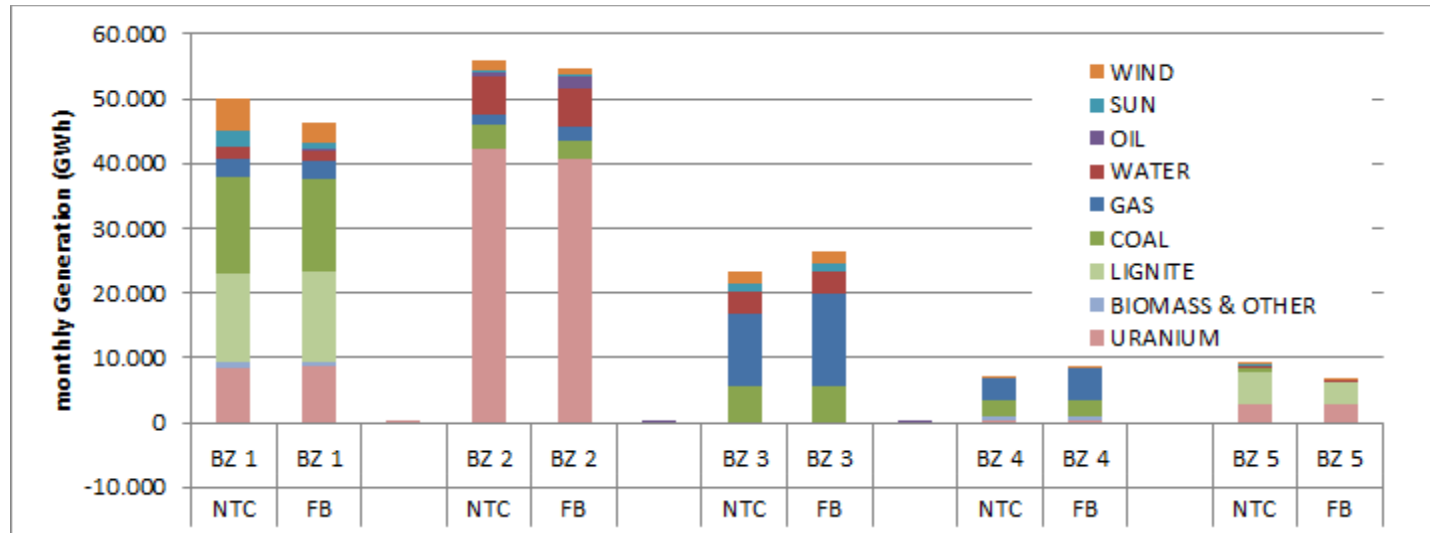
Methodological Complexities

- selection of CBCOs based on NTC runs
- Nevertheless, individual assessments are necessary, e.g. identification of local congestions necessary

Capacity Calculation – testing the model

Comparison between flow based and NTC runs (2013 back testing)

- analysis of observed differences ongoing
- Indicators include: generation patterns, prices, ...



Interaction between ENTSO-E and ACER / NRAs

CACM Guideline, Article 32

4. The review process shall consist of two steps.

- (a) In the first step, the TSOs participating in a review of bidding zone configuration shall develop the methodology and assumptions that will be used in the review process and propose alternative bidding zone configurations for the assessment. **The proposal on methodology and assumptions and alternative bidding zone configuration shall be submitted to the participating regulatory authorities, which shall be able to require coordinated amendments within three months.**
- (b) In the second step, the TSOs participating in a review of bidding zone configuration shall: (i) assess and compare the current bidding zone configuration and each alternative bidding zone configuration using the criteria specified in Article 33; (ii) hold a consultation in accordance with Article 12 and a workshop regarding the alternative bidding zone configuration proposals compared to the existing bidding zone configuration, including timescales for implementation, unless the bidding zone configuration has negligible impact on neighbouring TSOs' control areas; (iii) submit a joint proposal to maintain or amend the bidding zone configuration to the participating Member

Interaction between ENTSO-E and ACER / NRAs

Alternative BZ configurations

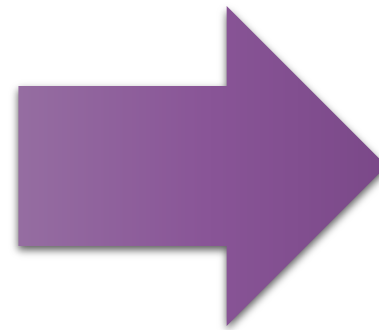
1 The current Bidding Zone delimitation

2 DE/AT Split

3 Big Country Split

4 NL+BE and CZ+SK merge

Model Based Configurations



NRAs

Methodologies and Assumptions

Analytical Framework for Bidding Zone Configurations

Bidding Zone Study Methodology and Assumptions