

Preparations for Capacity Management on the German-Austrian Border

on behalf of
50Hertz Transmission GmbH
Amprion GmbH
Austrian Power Grid AG
EPEX Spot SE
Nord Pool AS
Tennet TSO GmbH
TransnetBW GmbH

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Disclaimer APG

- Austrian Power Grid AG (APG) values the excellent cooperation and collaboration with the transmission system operators of neighbouring countries as part of the regional initiatives. As the Austrian transmission system operator and control area manager, we are well aware of our responsibility for the uninterrupted transport of electricity in the interests of producers and consumers. For this reason, we have always striven to hold open and in-depth discussions regarding future developments and network-related measures.
- On 28 October 2016, the German Federal Network Agency called upon the four German electricity transmission system operators to introduce, under Regulation (EC) No 714/2009, congestion management at the German-Austrian border by 3 July 2018. Furthermore, in a procedure for determining the capacity calculation regions ACER ordered on 17 November 2016, *inter alia*, that the joint bidding zones of Germany and Austria should be separated and a capacity allocation mechanism implemented.
- APG has thus far not been called upon by the Austrian regulator to prepare congestion management and furthermore for various reasons it considers the agency's decision to be neither lawful nor factually correct and has filed an appeal against the decision. Regardless of the circumstances, APG is in principle available for talks on the future of the German-Austrian electricity market and the management of interconnectors.
- In this respect we wish however to stress that any and all talks concerning the form that congestion management at the German-Austrian border may take should not and cannot anticipate or prejudge the ruling to be issued by the appeal courts with regard to the validity of the CCR decision or of the ongoing bidding zone review, nor can or should such talks prejudice the management of the border in any way whatsoever. Furthermore, APG maintains the legal view that the bilateral introduction of a capacity allocation mechanism at the German-Austrian border prior to the conclusion of the aforementioned proceedings – disregarding, in particular, other configuration options regarding the joint bidding zone – would potentially be in conflict with European Union law and thus the legal validity of a determination made in such a manner would be open to question.
- APG therefore reserves the right to take a final decision with regard to the introduction of a capacity allocation mechanism only after the aforementioned proceedings at the European level have been concluded. All assurances given and actions taken within the context of such talks are consequently without prejudice to our legal opinion set out above.
- In accordance with the usual practices, we further assume that all talks, documents and findings will be treated in the utmost confidence.

Agenda

1. Current Status
2. Preferred Option for Capacity Management
3. Capacity Calculation
 - Required Changes
 - Schedule
4. Capacity Allocation
 - Required Changes
 - Next Steps
5. Cost Recovery
6. Risks
7. Questions and discussion

Recent Developments and Current Status

Date	Milestone
2016/10/28	Bundesnetzagentur sends letter to DE-TSOs
2016/11/17	ACER publishes decision on Capacity Calculation Regions (CCRs)
2016/11/18	DE-TSOs submit first aligned project plan to Bundesnetzagentur
2016/12/12	Workshop at BNetzA with DE-TSOs, APG, E-Control, NEMOs and EEX
2017/01/11	Alignment Meeting of DE-TSOs and APG
2017/01/17	Alignment Meeting of DE-TSOs, APG and NEMOs
2017/02/21	Workshop at Bundesnetzagentur

Stakeholder Management

2017/01/31	Information to all CWE TSOs
2017/02/07	Information to all CWE Joint Project parties and MRC parties
2017/02/28	Information to CWE market parties at CWE Consultative Group meeting

Preferred Option for Capacity Management

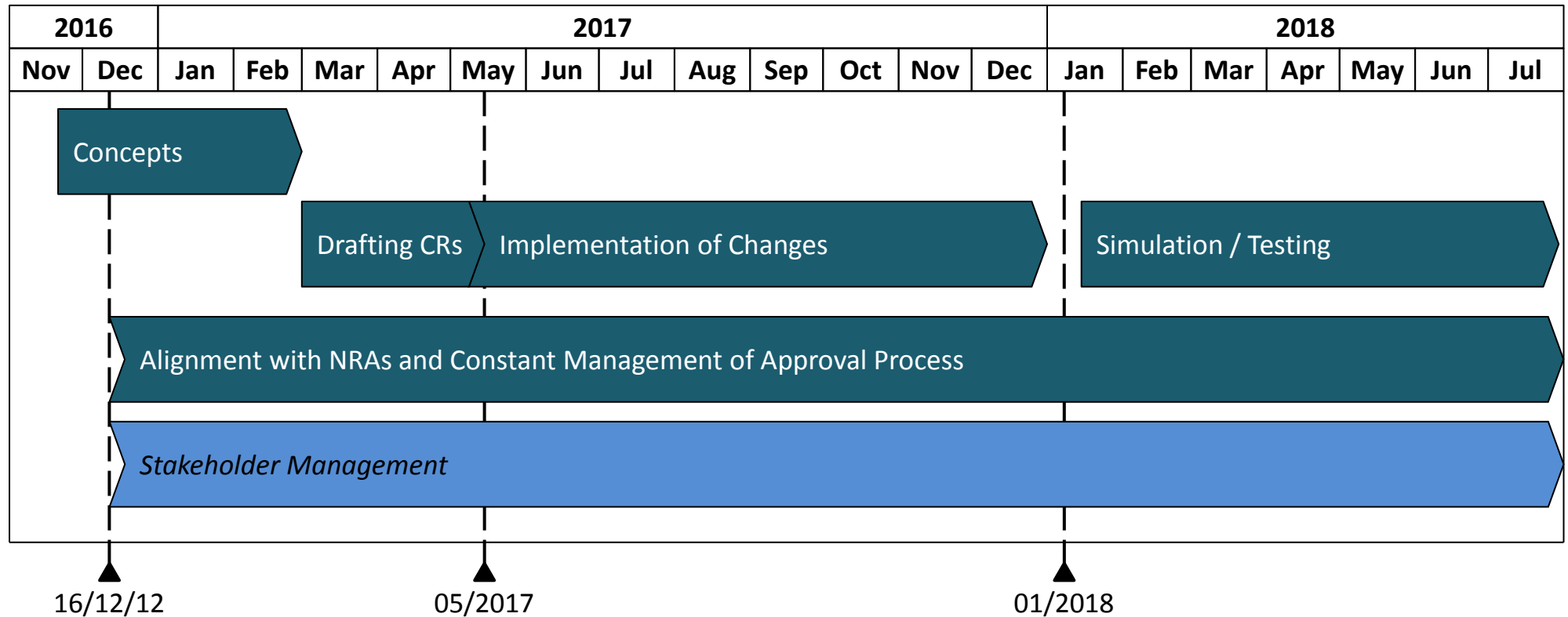
- All project parties see CWE Flow Based Market Coupling as preferred option for capacity management between Germany and Austria
- As long-term solution, ACER foresees a bidding zone border between Germany and Austria as part of CCR Core

		Capacity Calculation	
		Net Transfer Capacity	Flow Based
Capacity Allocation	Explicit (e.g. JAO)	NTC based capacity auctions	
	Implicit (MRC)	NTC based coupling	CWE Flow Based Market Coupling

Capacity Calculation - Required Changes

- Flow Based Experts of DE-TSOs made a first assessment of changes that will be required in day ahead capacity calculation processes
- Changes will be required in almost every sub-process of capacity calculation, e.g.
 - External Constraints
 - Generation Shift Key
 - LTA (LT nominations in case of PTR implementation)
 - PTDFs
 - ATC for Shadow Auctions and Fall-back processes
 - ...
- Detailed changes in day ahead coupling (incl. pre- & post coupling), long-term and intra-day process will be soon discussed
- Regulatory requirements uncertain at the moment (see also slide on risk assessment)
 - Regulatory approval in CWE might be necessary for the specification of some key values

Capacity Calculation - Schedule



- Flow Based Experts of DE/AT-TSOs are drafting change requests
- CWE working groups will finalize change requests
- Standard process to communicate on and assess the impact of significant changes (SPAIC) analysis also to be performed (requires updated simulation facility)

Capacity Allocation – Required Changes

- Implementation of separate bidding zones for Germany and Austria requires changes in PCR
 - Euphemia: new topology
 - PCR Matcher and Broker (PMB): new configurations
 - Extensive Testing is required for Euphemia and PMB
- Interfaces between NEMOs and TSOs need to be amended, or newly created, leading to changes e.g. in:
 - Flow-based common system
 - TSO nomination systems
 - NEMOs shipping systems
- Congestion rent calculation to be amended

Capacity Allocation - Next Steps

Timeframe	Milestone
2017/01	Nord Pool to request observer status in CWE
2017/02	Experts from DE/AT-TSOs and NEMOs to draft change requests
2017/02	Submit change requests to CWE OPSCOM
2017/03	CWE OPSCOM to forward change request to CWE JSC
	CWE JSC to forward change request to MRC and PCR
Q3/Q4 2017	Implementation of changes
Q1/Q2 2018	Simulation and Testing

Cost Recovery Proposition

Identified cost categories at national/regional and common costs level

Type	DayAhead	Intraday
Designphase and defining of change requests	X	X
Implementation & Testing	X	X
Algorithm testing	X	handled in XBID
Changes of operational procedures	X	X
Operations	X	X

Cost Recovery Proposition

- To be discussed with Regulators:
- **Option 1**
 - Project is initiated and requested by German regulator
 - Project is in TSOs understanding out of scope of CACM
 - Existing sharing- and cost recovery rules like in MRC and CWE Flow Based could be reused.
 - **By meaning full cost recovery for EPEX and Nord Pool by German TSOs**
The TSOs are entitled to put through these costs in their tariffs
(costs should be efficient and traceable)
- **Option 2**
 - Project is handled in the Framework of CACM
 - To be noticed: At the moment a clear guidance at European level is missing in relation to cost sharing and cost recovery

Risk Assessment

- Regulatory risks
 - Project parties need a clear understanding of required approval processes
 - Timeframe, requirements and scope of approval process to be clarified
 - Position of further CWE NRAs (ACM, CRE, CREG, ILR) to be clarified
- Political risks
- Overlap with other significant developments
 - Multi Nemo Arrangement
 - Market Coupling Operator
 - Scheduled Exchange Calculation
 - Relevant interfaces between DE/AT-project and these developments need to be correctly identified
- Outcome of the ENTSO-E Bidding Zone Study

Many thanks for your attention!