

Florence Forum

Main challenges on the Flow Based capacity calculation

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The Flow Based capacity calculation: Main Challenges

To deliver FB CCM

- Legislation sets FB as target but leaves room for interpretation: long-lasting alignment between the TSOs, and between the TSOs and NRAs needed
- Unanimity for NRA decisions is a challenge for TSOs
- Framework for congestion management differs in the MS which leads to national interpretations and requirements for CCM methodologies
- CCM to be delivered before IT tools are built (limited time to prototype and test new processes). Hence, test runs and simulation results are not available to back the CCM

To implement the FB CCM

- No one-size fits all: CCR-specific needs need to be an integral part of the CCM (i.e. such as voltage and dynamic stability in the Nordic region)
- To meet the tight deadlines, setting IT requirements runs in parallel with drafting CCM
- Insufficient time to align methods with neighboring CCRs
- Resources are strained on TSO side, since all Guidelines and Network Codes include ambitious deadlines on numerous deliverables

On the Timeline

- Dependency on the regulatory approval process: IT implementation cannot start before CMM approval
- Dependency on the CGM implementation work: industrialized common grid model infrastructure is crucial for parallel runs
- Dependency on Euphemia developments and uncertainties regarding its performances

Back up

Capacity Calculation methodologies

CCR	TSOs involved	CC method	Status
Nordic	Energinet, SvK, Fingrid	FB: DA CNTC: ID	Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
Hansa	Energinet, TenneT DE, 50Hz, PSE, SvK	CNTC: DA/ID	Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
Core	RTE, Elia, TenneT NL, Amprion, Transnet BW, Creos, 50 Hz, PSE, TenneT DE, CEPS, APG, MAVIR, ELES, SEPS, HOPS, TEL	FB DA/ID	Submitted to the NRAs in September 2017. NRAs requested amendments – TSOs to submitted an updated proposal by the 4 June 2018
IT North	TERNA, RTE, APG, ELES	First step: CNTC Second step: FB	Expected date of submission: Q2 2018 (ATC methodology)
GRIT	Terna, IPTO	CNTC: DA/ID	Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
SWE	RTE, REE, REN	CNTC based on CAB analysis	Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
IU	EirGrid, Moyle, NGET, SONI	CNTC shall be computed for each interconnector and for each hour of the day	Submitted to the NRAs in September 2017. Pending NRAs approval
Channel	RTE, NGIC, Britned, Tennet NL, Elia (after inclusion of NEMO link)		Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
Baltic	Elering, AS Augstsprieguma tīkls, Litgrid, Fingrid, SvK, PSE	CNTC methodology based on the FB prefeasibility study results	Submitted to the NRAs in September 2017. Pending NRAs approval – expected March 2018
SEE	IPTO, ESO, Transelectrica	CNTC: DA/ID	Submitted to the NRAs the 17 January 2018. Pending NRAs approval