Nordic CCM SH Meeting – meeting minutes

October 7 2021, 9.00-12.00 (Web Conference, Open Registration)

Participants	
CCM project/Stakeholder Involvement WG	**Attendees (in total 48 attendees)**
• Satu Viljainen (Fingrid) • Ulrik Møller (Energinet) • Trond Jensen (Statnett) • Emil Jansson (Svk) • Susanna Lundmark (Svk) • Ritva Hirvonen (Fingrid) • Jens Stenport Nørgaard (Nordic RSC) • Jakob Glarbo Møller (Nordic RSC) • Zongyu Liu (E-Bridge Consulting)	

Text in non-italics are statements, questions or claims from the stakeholder(s).
Text in italics are answers or comments provided by the Nordic CCM project.

1. Welcome and opening words (9.00-9.10)

2. Status of internal parallel run (9.10-9.25)

Flow-based capacity calculation, pre-coupling
Question: How FIN-NOR problem was solved. Is the capacity still part of SWE-FIN capacity in your model?
Answer: Some commercial and physical flows-related issues were observed in the parallel run results, and have been managed. Solution: Currently FIN-NOR is not a commercial market border. This implies that there should not have scheduled exchanges on this border, as part of the market simulation outcome. In FB calculation, it will be modelled as critical network element, which is an input to the FB capacity calculation.

Question: Is there a description on how the socioeconomic analysis is to be calculated?
Answer: Yes. Regarding the definition of the socio-economic welfare used in the single price coupling algorithm, please refer to the 'Single Price Coupling Algorithm' document (page 5 and 54 of 69). Link: https://www.nemo-committee.eu/assets/files/euphemia-public-description.pdf. The Nordic CCM project uses the simulation facility to simulate the market behaviour during the parallel runs, and the simulation facility adopts the single price coupling algorithm.
In the Nordic CCM context during the parallel runs, the socio-economic welfare difference between FB and NTC, amongst other economic indicators, is computed.

Question: Have you started running market simulations with the preliminary flow-based results created as part of the Internal parallel run? If yes, do you have figures on the impact of using Flow-Based on the socio-economic welfare?
Answer: The market report of the internal parallel run is being produced by the Nordic CCM project. For the market reports from historical simulations of 2017, please refer to the link: https://nordic-rsc.net/flow-based/simulation-results/

Question: How congestion income will increase welfare? in theory increase of bottleneck incomes is something what model will maximise?
Answer: The congestion income itself does not increase the welfare. Please note that the socio-economic welfare is defined in 'Single Price Coupling Algorithm' as the sum of producer surplus, consumer surplus and congestion income. In other words, an increase of congesting income across some cross zonal borders does not as such guarantee an increased overall welfare since it can have a bigger negative impact on producer and consumer surplus among others.

Stakeholder comments:
It is not that straight forward calculating consumer surplus.
And congestion rents are not necessarily negative in the long term as it should be used by the TSOs to reduce grid tariffs and/or finance grid reinforcements.
But you have to take into account that the grid customer collective is not identical with the energy customer collective, hence it is an issue of welfare redistribution
True when it accounts to tariffs, but the market benefits from increased transmission capacity in the longer term (although there is an issue around prioritizing between different reinforcements).

Question: Would model offer wrong results to the market if only producers and consumers welfares would be optimized? ELFi proposes that this issue would be explained with cases in the next meeting.
Answer: The market simulation tool being used in the Nordic CCR, and other CCRs, e.g., CORE, is the simulation facility, which adopts and uses the Single Price Coupling Algorithm developed for Euphemia. The adjustment of the socio-economic welfare definition and its implementation in the simulation facility are not in the scope of the Nordic CCM parallel runs.

3. Relation between NTC and FB (9.25-10.05)

Question: The optimization of the NTC domain, does it take into account that the value of increased capacity will vary throughout the domain? I.e. the benefit of increased capacity will be larger on central congested market borders (such as SE2-SE3 or SE3-NO1).
Answer: No. The capacity of each direction/border is equally weighted in the current formulation. Reasons: On a high level, the increased weight on one or a few border(s) results in a compromise on other border capacities. It is the question whether the TSOs should facilitate the market-favourable/market-realized borders (at the expense of other market-unrealized borders), or to offer an equally-weighted approach to all borders by not favouring or discriminating against any borders. The current implementation of the ATCE opts for the latter approach.

Question: How about non-intuitive flows, i.e. high price to low price in DA, will NTC restrict "correct" price flow? In other words, if *DA is in non-initiative, will the flow be able to change in ID with NTC or will the capacity be limited.
Answer: The extracted DA Net Transfer Capacity (NTC), as an output of the ATC extraction method, is fed into the Intraday allocation platform, to obtain the ID Available Transfer Capacity (ATC) for the ID gate-opening. Because the extracted DA NTC is, by design, to be larger or equal to the DA AAC (result from SDAC allocation), the ID ATC should be always larger or equal to 0 to start the ID continuous trading. In this case, the initial ID trading at gate-opening should follow the DA market direction (if there are still some 'leftover' capacities on the CNECs from the DA market) or 0 (if the DA Remaining Available Margin (RAM) of one or more CNECs are 'used up' by the DA AAC).

Question: Where do "remedial actions" enter the equation (i.e. efforts to mitigate limitations/increase capacity)? In the IGM or the CGM?
Answer: The remedial actions are modelled in accordance with Article 9 of CCM, which includes also the possibility to model the remedial actions as additional MWs to the Fmax of the CNECs. Each TSO is responsible to provide the information towards the Nordic RSC .

Questions related to FB capacity calculation and allocation with the long-term transmission rights
Question: If there are long term nominations on the DC cables that connect the nordic with the continent, these should shift the FB domain, is it right?
Answer: the Nordic CCM project will get back to the stakeholders in the later SH events with more details.

Question: Presuming LTTRs are of the type FTRs then it could not impact the model and if PTRs UIOSI then acquired capacity must be scheduled or otherwise given back to SDAC early in the morning on day D for D+1 period, thus logically no effect on "the domain", right?
Answer: the Nordic CCM project will get back to the stakeholders in the later SH events with more details.

Question: I recall that physical TR were an issue for CWE... that's why they passed to Financial TF, but maybe I'm wrong
Answer: The long-term allocation (LTA) issue experienced in the CWE region does not concern the Nordic TSOs. The CWE/CORE TSOs adopted LTA inclusion approach to cover the situation that the LTA is 'outside' the FB domain. This situation is of little concern of the Nordic TSOs.

Question: Maybe not a question mark at all, but can it be assumed that the NTC/FB rules for min 70% cross zonal capacity will continue to apply for SIDC in the Nordics in a scenario with Nordic SDAC applying FB CCM?
Answer: the Nordic CCM project will get back to the stakeholders in the later SH events with more details.

4. ATC extraction for Intraday gate-opening (10.15-11.00)

Question: But isn't DA NTC in fact a value that is available as a max Cross Zonal limit already given as input to the daily calculation of the FB domain (CNEs, PTDFs etc.)?
*Answer: Please note that the DA NTC, as indicated in the question, does not have the same meaning as the **extracted** DA NTC in the ATCE context. The extracted DA NTC is an output of the ATCE, based on the DA FB domain and the DA MC results in general. The DA NTC, as a max cross-zonal limit, is not an input to the FB CC or ATCE.*

Question: But NTCs are published ex-ante on JAO.EU in CWE FB today so what is that then?
Answer: Please consult JAO.EU website for details regarding the CWE publication. It seems that the published NTC values on the JAO website are indicative DA NTCs extracted based on the FB domain before market coupling.
SH comments: Ok that it can be further evaluated when we have more descriptive clarity of what DA NTC in the future may be something else then what is the case today

Question: Is it correctly understood that the objective function in ATCE values 1 MW SE3->SE4 equal to 1 MW SE4->SE3. I.e., it has nothing to do with welfare - since the welfare is already maximised in the DA.
Answer: The objective function (the optimization formulation in general) of the ATCE is to maximise the total Nordic border capacities. The (increased) socio-economic welfare is the financial outcome of the maximization of the total Nordic border capacities.

Question: In physical sense is there really no physical boundaries between BZs? the former question referred AC networks and as such relevant since most of the Cross Zonal Borders in the Nordics is across (only) AC networks
Answer: the AC borders are modelled as Critical Network Elements with Contingencies (CNECs) They are the inputs to the FB CC and MC. The ATCE does not add any further restrictions as upper bounds on the CNECs.

Question: While I understand the tool will undergo development along the way, can it be assumed that these computations will be made "daily" in the parallel run and results (initial CZ capacities for ID) published for market parties to analyze? Precisely I did not refer to if run 14 days afterwards, but rather that even in that context the weekly batch results will contain initial ID capacities. In other words I was not asking it in terms of the fact that the grace period may be pushed down to 1 week, and by the way in CWE/CORE it is still 3 weeks.
Answer: Given the current grace period of two weeks, set by the simulation facility, the Nordic TSOs consider the weekly publication of the ATCE results. Results will be published for each MTU. Note: FB CC data have been published from Sep 9th onwards. Please refer to the link: https://test-publicationtool.jao.eu/nordic/marketGraph

Question: Any estimate of timeline full FB in ID market?
Answer: No concrete timeline yet. Estimation: not earlier than August 2023.

5. Upcoming consultation (11.10-11.20)
The consultation of the ATCE document is open. Link: https://esmaker.net/nx2/s.aspx?id=0e9fc35396dc

6. Closing remarks (11.20-11.30)
All participants are thanked for their constructive inputs!

The presentations have been uploaded on the Nordic RSC website: https://nordic-rsc.net/flow-based/documents-presentations/