

Nordic CCM SH Meeting – meeting minutes

December 16 2021, 9.00-10.30 (Web Conference, Open Registration)

Participants	
CCM project/Stakeholder Involvement WG <ul style="list-style-type: none">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) Excused	Attendees (in total 49 attendees)

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 (9.00-9.15)
2. Status update of internal parallel run (9.15-9.30) <p>Question: Reasons for not publishing the data CCM project: <i>the reason of not publishing the data is mainly because of the process cannot finish or produce the flow-based capacity calculation results, e.g. process timeout, data delivery later than defined deadline, IT instability, domain validation not done properly, amongst others. The available datasets are published on the JAO website at https://publicationtool.jao.eu/nordic.</i></p> <p>Question: external parallel run criteria CCM Project: <i>please refer to the stakeholder event presentation 'Criteria of external parallel run' on Nov 4, 2021, available online at: https://nordic-rsc.net/flow-based/documents-presentations/</i></p>
3. Preliminary observations based on Flow-Based market simulations (9.30-10.15) <p>Question: Why is the total SEW-gain per country not the sum of the surplus parts? Eg. Norwegian SEW gain is much higher than the sum of PS+CS+CI? CCM project: <i>2 different y-axes are used (Total SEW is on the right)</i></p> <p>Question: How does the socio-economic calculation include the impact on losses from the change of the power flows? CCM project: <i>Euphemia and hence the calculation does not take change in losses into account. Losses are not modelled in the FB or NTC. However, they are considered as implicit loss factor for some HVDC links.</i></p> <p>Question: are the production-level NTC used in the FB and NTC comparison? If not, are the SEW results valid from the reality perspective? CCM project: <i>No yet in the market analysis of week 35 and 36 where two HVDC links are not included in the grid models. To ensure 'fair' comparison, both NTC and FB simulations do not contain the missing two HVDC links. For future reference, as soon as the grid models are improved to fully reflect the real-world grid situations, the FB and NTC comparison will be closer to the real-world perspective. Additionally, the FB methodology aims at linking the grid constraints to the offered cross-zonal capacities in a transparent and mathematical way, whereas in the NTC methodology, particularly in Sweden and Norway, the linking of grid constraints to the offered cross-zonal capacities relies on operational experience. For detailed NTC methodology, please refer to https://www.nucs.net/. The comparison between FB and NTC is to compute the 'difference' between the two methodologies. As such, ensuring fair comparison (to ensure an accurate delta) is the first step towards the overall comparison including the full consistency from the reality perspective.</i></p> <p>Question: the DA capacities provided by the TSOs deviate a lot from the actual NTCs, according to the EU regulation. How do you justify the SEW gain of the FB results when using the 'low' DA capacities provided by the TSOs. CCM project: <i>Besides the answers above, it's also worthy mentioning that the NTC values as inputs to the NTC market simulations are from the TSOs with operational security in mind, and the inputs for the FB capacity calculation and market simulations, e.g. CNECs, grid models, are also from the TSOs to reflect the best knowledge of the foreseen grid situations of the energy delivery day. In other words, both 'inputs' aim at reflecting the best operational knowledge and practice. To this extent, the comparison outcome should be considered as the methodological comparison based on the current best practice. Additionally, if the EU regulation in the question refers to the 70% rule, then the rule applies to both FB and NTC. Currently, the SEW comparison is not done based on the 70% rule being applied.</i></p> <p>Question: do the price in the FB methodology structurally lower than the NTC methodology? CCM project: <i>not necessarily. The FB methodology is foreseen and being observed to better utilize the transmission grids to deliver energy from low price bidding zones to high price bidding zones. In general, a low price bidding zone (in the NTC setup) should expect an increase energy price (in the FB setup) because of the additional production that can be transported to the high price bidding zone (e.g. a load center). On the contrary, the high price bidding zone (in the NTC setup) should also expect a reduced price because of the cheaper energy being imported. In other words, the FB methodology introduces a better utilized transmission grid and consequently the bidding zone prices in flow-based will be different from the NTC, with higher price convergence probability.</i></p>

Question: do the non-intuitive flows as the DA market outcome block the ID trades? Important note: Given this example, flex in SE1 and SE2 will be isolated to these 2 individual bid areas after DA - and cannot be used in any way in the Continuous ID-market from DA to the ISP...

CCM project: No, non-intuitive flows and blocking the ID trade have little to do with one another. The non-intuitive flows could be the market allocation outcome given the FB domain as inputs. The FB methodology ensures an efficient use of the grid to provide as much cross-zonal capacity as possible to the DA market without violating the grid security. The market allocation algorithm takes the advantage of the FB inputs and makes the DA allocation to the maximal extent possible using the optimization approach by Euphemia. The 'maximal extent' refers to the exhaust of at least one CNEC's remaining available margin. Consequently, any (ID) trades that may further load this exhausted CNEC are 'blocked'. This is not a FB or methodological problem in general, but the consequence of physical reality that no more available cross-zonal capacities can be further allocated.

Comment from stakeholder:

Just to be sure could you confirm which dates the week 35** consist of? It is key to know because if it refers to the weekdays 30 AUG to 3 SEP it is key to note that Nordic prices essentially were split between "low and largely common" prices for SE1, SE2, NO4, NO3 and with medium high prices in SE3 and FI while higher in NO1, NO2, NO5 and so on. (**since I know that week numbering at times differ, e.g. in SWE reports typically refer to the week of the data while in NOR at times refer to the week after when the report was produced).

I now understand that what is presented is from week 36 (6-10 SEP). However, given that it is said that 2 HVDC links that are applied in SDAC production is missing in these FB simulations then the prices and BZ-to-BZ flows shown for the (C) NTC is not the result seen in production while the UTILIZATION of those two DC-links naturally are part of the considerations market stakeholders make when placing their orders.

Question: By the way can you in the report ensure to clarify that the comparison between FB and NTC results are NOT based on identical set of BZ-to-BZ interconnectors since 2 HVDC links used in SDAC (NTC) production has not been applied in the FB pre-parallel run simulations?

CCM project: Yes. This point is captured in the disclaimer chapter in the market report.

4. Any other business and closing remarks (10.15-10.30)

Question: can you elaborate the progress of the UMM development for FB?

CCM project: the UMM topic will be further detailed in early 2022.

Please help us improve the stakeholder meetings in general by answering our short web survey:

<https://esmaker.net/nx2/s.aspx?id=cc02f457c14a>

If you have questions or comments after this meeting, please e-mail them us at ccm@nordic-rsc.net.

The report including detailed observations of week 35 and 36 will be published soon.

The next stakeholder event is on February 10, 2022.

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/>