

Nordic CCM SH Meeting – meeting minutes

Oct 26, 2023, 9.00-15.30 (Hybrid event -
Radisson Blu Arlanda airport Stockholm and MS Teams)

Participants	
Total physical participation: 34	Total online participation: 105

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

1. Welcome and opening words (9.00-9.15)

2. Go-live process for FB implementation (09.15-09.45)

CCM: The currently communicated go-live date in Q1 2024 is not feasible. New go-live date will be shared with the SHs in early Nov.

SH question: How long is it between the Publication of go-live and the Go Live?

CCM: around a month.

SH question: Is it possible to do an "inverted" EPR after FB go-live, i.e. to show the results if calculated with NTC?

CCM: Probably not, as the resource is limited.

SH comment: As a follow-up to a broadly discussed reform in the market, with actual data.

3. Bi-weekly EPR result presentation (09.45-11.00)

SH question: Why are you apologetic about the negative CS? Have you under political pressure to delay the CCM and / or FBIMP projects?

CCM: the go-live being delayed is not because of methodology development, but the implementation related to the IT systems and processes. We are not under political pressure.

SH question: your EPR does not reflect what will happen after go-live. CS losses in SE3 impact the social lives of the SE consumers, from industrial to household consumers. Do you trust your results?

CCM: TSOs' objective during the EPR is to disseminate FB CC and MC methodology for all, especially for the market participants to adjust their bidding strategy to best adapt to the FB world. It is out of the TSO's scope to protect the welfare of certain category of the market participants in certain bidding zones.

In terms of trusted results, We trust the FB methodology. In other words, the current results reflect the current inputs under the FB mechanism. If the bidding strategy changes after FB go-live, the FB CC MC results will change. In this respect, forecasting the bidding behavior is out of the scope of the CCM EPR.

SH question: Have you done anything to 'correct' the systematic errors of Nordic water values?

CCM: No, as stated in the presentation, adjusting the water values and bidding behaviors would also involve large assumptions that the TSOs cannot be certain of.

SH question: In week 38 it looks like the area with the lowest price (NO5) goes from negative (-0.77 with NTC) to even more negative (-2.51 EUR/MWh with FB). We see a lot more hours around -5 EUR/MWh than in NTC. Have you looked into this? Maybe it could be an interesting case to study?

Nordic Prices – Weekly Average

	FB Price (€/MWh)	NTC Price (€/MWh)	FB-NTC Price (€/MWh)	FB-NTC Price (%)
DK1	45.50	46.38	-0.88	-1.90
DK2	47.35	47.80	-0.44	-0.92
FI	6.37	6.33	0.04	0.60
NO1	2.95	-0.73	3.68	-503.79
NO2	11.49	15.64	-4.15	-26.53
NO3	1.61	2.59	-0.99	-38.09
NO4	3.04	2.60	0.44	16.90
NO5	-2.51	-0.77	-1.74	225.93
SE1	3.12	2.53	0.59	23.52
SE2	3.10	2.53	0.57	22.55
SE3	3.60	2.53	1.07	42.28
SE4	4.10	10.95	-6.85	-62.57

CCM: Part of the reason originates from the previous operational concerns about the large NO1-NO2 allocated border flows. The NO2-NO5 border capacity has been reduced to regulate the NO1-NO2 flows in this case. As it is deemed not necessary by the Statnett operators after investigation, this reduction of NO2-NO5 will be removed in the coming weeks..

Additional SH interaction, each paragraph refers to a statement/comment from each SH:

surely the effects we see in the parallel runs will be even bigger taken into account changed water values.

Price effects you mean? Water values will enforce the current price effects?

yes, I with increased exports and hence production in low price areas water values should increase here leading to higher prices. the opposite in high price hydro-dominated areas. so the expected change in bids will enhance the effects we see.

SH question: NO3 price: a low price area in NTC becomes even lower price area. Why?

CCM: will get back to you later.

SH comment: NO1-NO2: operation on this border requires complicated operation. Please be aware of.

CCM: noted. We are aware of this border.

SH question: Non-intuitive flows are even larger in price spread recently than the summer. Any comments?

CCM: will get back to you. It may be related to the series compensator modelling adjustment in early March.

SH comment: when looking at the costs of whole Nordic, we are worrying about increased price. It also becomes difficult to forecast the daily operation due to non-intuitive flows. SEW in EPR does not include the ID market welfare, thus not complete.

CCM: ID auction is not yet available. Thus, it is not possible to assess the welfare on the ID continuous trades (at the ID gate opening). We don't believe capacity reservation from DA market based on the wind forecast and don't think it is beneficial to the overall SEW. We are open to suggestion, however. The purpose of the EPR is to observe the difference between the two capacity calculation methodologies. Therefore, the EPR results should not be interpreted as price forecast.

SH question: Instead of adjusting the "SEW" calculation with an estimated cost for the increased hydro production, would it be an alternative to present the volume of the increased hydro production in the SEW graphs? The cost could then be estimated by each stakeholder and regulator. Can you provide an aggregated excessive water value?

CCM: for certain bidding zones, it is doable. For other bidding zones, e.g. SE bidding zones, FI, due to hydro and wind injection being mixed, are difficult. Please also check the buy/sell volume data that we are publishing to facilitate your internal assessment. Please note, an aggregated water value is not useful on a weekly level or monthly as it is heavily influenced by the bidding strategy. The TSOs foresee the bidding strategy in FB will be different from the NTC. In light of this, the market participants are advised to zoom into the MTU level to understand that the FB method provides a larger domain (i.e. larger electricity transportation possibilities based on the same physical transmission grids) such that it allows more hydro power to be produced.

SH comment: SE1 and SE2 most flexible production is hydro. If the change occurs, it is likely coming from the hydro production.

Indeed, SE3, SE4 are more complex.

SH question: How much can wind increase?

CCM: we have a self-dispatch market, which means that it's up to each market participant to deliver the power to the DA market. The TSOs don't have the 'wind increase' information.

Additional SH comments:

I believe it will be much more difficult to manage increased wind power in the Nordics and its intermittent fluctuations, partly because capacity/volume in the intraday market is narrowed (the possibility of trading in balance decreases) and partly because the predictability of each price area's prices and flows is significantly reduced.

FB reduces the possibility to balance production changes during the operating day, it is a system which worsens flexibility and plannability in times we are about to double the Nordic electricity production with the help of wind power. However, this aspect is not highlighted in the reports and valued...

Maybe the successful implementation of FB in first CWE (for more than 8 years by now), then Core region might give us an indication that this is well, manageable. All this in countries with less flexibility and much higher wind/solar shares plus some heavy BZ internal congestions.

4. NordPool presentation: Findings in the system price study during the EPR period (11.15-11.45)

CCM comments: can you publish the results easier for the readers? Before March 10, 2023, series capacitor (i.e. at the beginning of the EPR) may be the reason of the price difference fluctuation. Please be careful when reviewing the period from Nov 2022 to March 2023. Also, the TSOs observed about 60% of the MTUs that FB – NTC system price being positive, 30% being negative and the rest 10% being roughly the same. Do you agree?

NordPool: agreed on the comment of the period.

SH comment: Just a factual remark about the day with the highest observed difference between NTC based Nordic System Price and the SP Price calculated based on Nordic EPR (input) results, namely on 29th of NOV the official Nordic SP was 342.23 EUR/MWh, thus among the highest daily SP observed.

SH question: Are the Baltic NRA's among those regulators who should accept flow-based due to the potential high spot price changes in their countries?

CCM: The Baltic NRAs shall not approve and are not entitled to formally approve FB in the Nordics. Moreover, we are way (many years) beyond the point of FB approval. I'm not sure how Baltic NRA's can impact the FB implementation, but the Baltic NRA did have the possibility to submit a response to the 3 month report. For more info I refer to Nordic NRAs.

Additional comment/interaction among SHs:

I think the CCM feedback already quite well described the situation. The entire checkpoint-process with KPIs, as well as the approval of the FB methodology concern Nordic CCR, and thus the Nordic NRAs.

I would however emphasize that the acceptance of flow-based, if this is meant to refer to the decision to start using FB, was made in Nordic CCR already in 2018, and the final confirmation on the level of TSO's technical operations as per the checkpoint-agreement agreed among the Nordic CCR NRAs was given in June 2023.

The discussion on approval of FB as such is at this stage not very relevant, and the focus should be on practical issues such as the ones we are discussing here and now today, as well as understanding the upcoming change.

I believe that at least Baltic competition or REMIT authorities could have a some kind of role if electricity due the FB-model affect in their borders so that against earlier promises flows are sometimes going from high price areas to low price areas

Not being completely sure, but is it not so that the HVDC interconnectors to the Baltics are not part of the actual Nordic FB domain and as such should not end up with counter-intuitive flows. That said, implementing flow-based will have an impact on Baltic prices regardless.

How it was in NP's presentation?

The flows on those HVDC borders can change as a result of Nordic FB (but it doesn't mean that there will be non-intuitive flow on those borders as a result of Nordic FB I believe).

I imagine there may be: a virtual area is modelled as a Nordic bidding zone, and from here an "intuitive" flow will be scheduled to the connected Baltic region. But if the price of the virtual area is not used, but instead the price of the "real" Nordic bidding zone is used, the non-intuitive properties that inherently exist under FB may also propagate on the Baltic HVDCs

Thanks for the update on the modelling! Has anyone from the TSOs looked into if counter-intuitive flow are present/possible on borders to BZ's adjacent

CCM: we will get back to you.

5. Intraday: ATCE updates (11.45-12.30)

SH question: would your illustration be easier to understand if you had translated the domain so your "working point" is at the origin?

CCM: thanks and noted.

SH question: can you elaborate the lock-in situation in RAM relaxation?

CCM: We are working on it and will get back to you on this.

Comment: Intraday markets in CWE and the Nordics are fundamentally different and therefore no conclusions can be made based on CWE/Core. CWE / Core has large liquid bidding zones where most of intraday trading is done WITHIN the BZ whilst the Nordics consists of 12 Bidding Zones and most intraday trade is done across borders. Cross-border intraday trading is of great value for the society and the importance will increase as we integrate more renewables in the system.

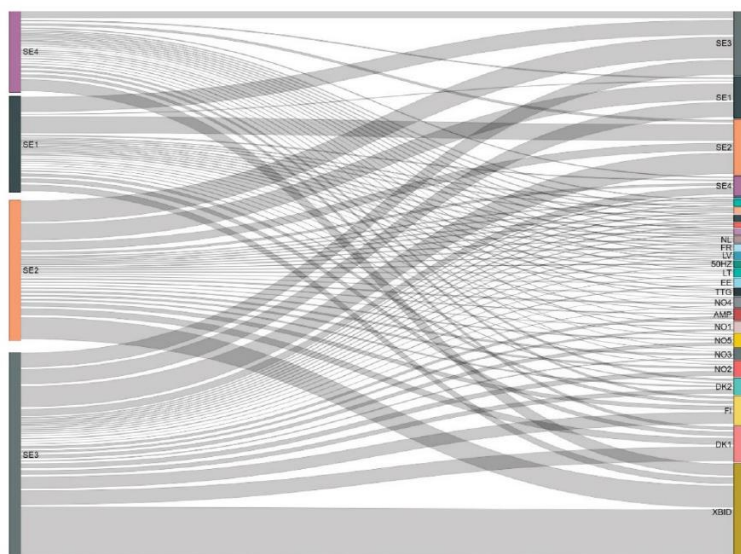


Figure 3: Share of intraday trading between Swedish bidding zones and other bidding zones in 2020. "XBID"

CCM: the 10-week is the KPI evaluation period. The EPR continues until at least Q1 2024 (i.e. the tentative FB go-live date).

SH question: Will you reuse the existing results with new RAM relaxation?

CCM: Yes, we will. Timeline: depends on the IT implementation and other factors. Will keep you updated.

SH question: About the ongoing study of the impact assessment of RAM relaxation on ID, considering the ID continuous trading and ID auction in 2024, could the new study include the IDA into consideration?

CCM: The methodology ATCE does not change, as inputs to the IDA and/or ID continuous trading. Results of IDA will go to continuous trading. Because of this, we cannot give a larger domain to IDA, which will create problems during the continuous trades.

SH question to NRAs: what's your view on the latest ID updates related to the ID capacities and ID 'KPIs'?

No comment from the NRAs during the SH event.

SH question: How to illustrate the infeasibility of finding the ATCE results?

CCM: we will get back to you on this.

SH question: Will the IDA be in the whole flow based domain, so that it could unlock a "locked" situation in case there is need for that?

SH comments/interaction: IDA will be pan-European but based on NTC and not FB.

IDAs at go-live will be ATC based, thus this is very relevant for IDAs.

As discussed/concluded during previous stakeholder-meetings, there's currently no real detailed plans for how to implement FB in the ID market phase for neither IDAs nor IDC

SH comment: I'm surprised the NEMO would communicate with the TSOs via a stakeholder meeting. Wouldn't there be more efficient ways?

We do communicate with TSO via other channels, still, we took the opportunity of an extended presentation on ATCE to raise additional questions.

6. Unavailability information in FB (13.30-14.00)

SH question: will FB parameters on NUCS go live at the same time as the LT FB CC?

CCM: yes.

SH question: Will you continue publishing UMM on NordPool in addition to NUCS?

CCM: we will get back to you later.

Additional TSO comments after the SH event: the plan is that the TSO operators will publish the UMM information on NUCS. NordPool may/can fetch the data from NUCS to their own inside information platform. This setup is already the case today.

SH question: What kind of parallel run for the two-step unavailability publication approach?

CCM: yes, both DA and ID will be consulted in the same consultation.

SH comment: The mockup indicates that it's possibility for others to continue the current practice.

I need clarify when outage occur. They have to publish even the full impact is not available. We need publication instantly/shortly.

CCM: yes, the TSOs are obliged to publish unavailability information as soon as possible.

SH question: In the current mockup example, FB parameters after the outage is not published as UMM. Is it compliant with REMIT?

Any NRA views on this?

CCM: Yes, it is compliant.

NRAs didn't provide any comment on this.

SH comment: Thanks for clarity on the "duality" of messaging processes, e.g. that TSOs secure to (1) provide "Outage Messages" directly (within TR/REMIT time limits) when Planned Outages have been decided and when Unplanned Outages occur (or changes to that), and "separately" (2) reflect such Outages (or changes thereof) in LT, DA, ID CCM calculations/allocations.

7. Data publication in EPR and after go-live (14.00-14.30)

No questions or comments from the SHs and TSOs.

8. Stakeholder comments and expectation of the next stakeholder event (14.45-15.15)

SH question: when do you expect ATCE ID online?

CCM: Today we focused on the operational challenges. We are working on the impact assessment. As soon as we have more info, we will get back to you.

SH comment: the NRAs should join the SH event physically, to answer some questions.

SH comment: Q&As: please indicate the updated dates in each entry of the questions answers on the NRCC website.

SH comment: when the ATCE parametrization is updated, it would be good to have the rerun of old results and invite the NRAs to provide feedback

CCM: it is not possible to cover the ATCE rerun of the whole period. We will ensure a sufficient rerun period, e.g. from July 2023. Also for DA timeframe during the EPR, it is not feasible to cover an extensive period, because operators cannot validate a 3-month-old FB domain. Instead of focusing the rerun of the old period, we can emphasize the difference between the new results and the old results.

SH question: what is the trustworthy simulated period for the market participants to investigate the EPR results?

CCM: after w10 because we fixed a major issue. Minor improvements are captured on the operational learning points document.

SH comment: the data publication presentation indicates some open points that will become clear towards the go-live. Please update the stakeholders on the data publication information.

CCM: Yes, stakeholders will be informed as soon as the open data publication questions are confirmed.

SH comment: the NRA made the decision to continue the CCM EPR based largely on results before week 10. Any comments from the TSOs?

CCM: the modelling of the series capacitor before week 10 in FB yields smaller FB domains. However, we observed that higher SEW gain in FB than in NTC structurally. The capacitor modelling should not alter on the NRA decision. Regarding the ATCE ID results: impact assessment of the RAM relaxation is in progress. The stakeholders will be informed accordingly.

9. AOB (15.15-15.30)

All participants are thanked for their constructive inputs!

The presentations have been uploaded on the Nordic RCC website: <https://nordic-rcc.net/flow-based/documents-presentations/>