

Nordic CCM Biweekly EPR Results

SH Meeting – Questions and answers

12 October, 2023, 9.00-10.30 CET (Webinar)

Participants	
Total participation (including CCM project members):	37

Text in non-italics are comments, statements, questions or claims from the stakeholder(s).

Text in italics are answers or comments provided by the Nordic CCM project.

1. Updates since last meeting
<p>Q: NTC flow wrong? Can you elaborate? <i>A: The F_AAC for NTC flow that we publish in the appendix and in the market result-file has been wrong due to a process error. It was related to flows in Sweden and it mainly effected SE4-DK4 and doesn't really affect the other borders.</i></p> <p>Q: Is it NTC flows in FB results or the determined utilization in NTC prod? <i>A: The F_AAC for NTC flow that we publish in the appendix and in the market result-file has been wrong due to a process error in week 31 that effect historical values. We will correct and republish as soon as possible. It is not the NTC value that is wrong but how we calculate AAC value/AAF flow.</i></p> <p>Q: Regarding the process error in the F_AAC for NTC flow published in the appendix and in the market result-file on some specific weeks? <i>A: Yes, week 31-35. In the market result files the error start when we published the week 31 version but relates to all weeks in the file. For the appendix the error is week 31-35. We are working on updating the files.</i></p>
2. Flow-based impacts – 7. Consumer surplus impacts in the Nordic CCR
<p>Q: Do you know on average in the Nordics in percentage, how much of the actual generation/ consumption is covered in the spot (so underlined in the bid-ask that we look at?) > meaning... how representative of the total reality the bid-ask are? Q: What is the results of the market, what goes into this calculation of the consumer and producer surplus, Example Belgium, the bid asks was so thin, a tiny deviation can change a lot, even the exchanges at the end of the day. If 95 % that goes into the spot, like Italy, then it would be more or less like the water. <i>A: Historically for many years and still today the average coverage of overall production and consumption in the Nordics is about 90% in Day Ahead (SDAC) market and ALL supply/demand market based utilization of CZC is done via (first) SDAC and subsequently what is remaining is given to SIDC Continuous.</i></p> <p>Q: Will hydro in the North increase in price when massive exporting to the South? Comments from the TSOs after the SH event: <i>In theory, yes, but the EPR is not an impact assessment of FB. Instead, it is a comparison between FB and NTC using the same orderbook.</i></p> <p>Q: I have looked at the volumes and would just like to check my numbers. 30 TW more sales in FB EPR, is it in the right ballpark? <i>A: Yes, in the long term we can see higher sale volumes per hour 220 MW more electricity produced from SE1.</i></p> <p>Q: As it is physical impossible over time, how do you look to that as SEW? <i>A: Not complete, needs adjustment (LT is tricky, but on short term, looking at hour by hour and on weekly basis it would be still be correct... The water value inaccuracies increases the uncertainty when comparing FB with NTC and it is hard to mitigate this kind of inaccuracy.</i></p> <p>Q: A quick pivot table gives me for example 15TWh more sales in FB than in NTC for SE1, but it was very quick so I might be missing something? <i>A: I have no insights into the exact calculation, but looking at the diff in your pivot between FB and NTC - it looks to me like we are closer to 1.5 TWh in difference (not 15?). This would also be closer to the ~200 MW higher flow that was just mentioned.</i></p> <p>Q: Do you have any analysis on total volume of increased sales volumes in per BZ for the period in question? Delta for sales and purchase volumes per BZ in comparison to NTC would be interesting to see. <i>A: We have that data and it is available on the NRCC website, but we have not included it in these slides. We will however look into adding them to the presentations moving forwards.</i></p> <p><i>For now, buy and sell volumes per BZ in both NTC and FB are available per MTU in the Market results files on the RCC website: https://nordic-rcc.net/flow-based/simulation-results/</i></p> <p><i>Please note that the Market results files does not include analysis on the data.</i></p> <p>Q: Did you publish the slides from the last session two weeks ago for weeks 33-34 and will you this week publish the slides presented today for weeks 35-36 plus the other presentations as well? <i>A: Yes and yes. The slides from the last presentation (week 33-34) are published on the RCC website: Documents & Presentations - Nordic Regional Coordination Centre (nordic-rcc.net)</i></p> <p><i>The slides presented today will also be published.</i></p> <p>Q: The EPR results is not valid, is that how we should understand them? <i>A: We can still elaborate the results, even though there are inaccuracies.</i></p>

Q: If you were to consider the real amounts of water in the Nordics? How would that impact prices?

A: *Please refer to the TSO comments after the SH event above.*

Q: Partially that could be true if you don't consider ID. It depends on what you will allow on ID. If you would allow counter intuitive flow, then yes, otherwise... If we consider that there would be more flow in spot that doesn't exist in the real world that would no longer hold.

Comments from the TSOs after the SH event: *It is very difficult to say what would happen if real water was introduced, that would effect a lot more including bidding curves. But the purpose of EPR is not to fully compare FB with NTC but to learn FB and how different it is from NTC.*

Q: The NRAs demanded that you were to be able to show higher SEW with FB, and this you do not do with EPR.

A: *We have demonstrated that on daily and weekly basis, the Flow-based consistently shows better utilization of the Nordic grids compared to NTC.*

Q: We need to see the impact on prices.

A: *If you increase capacity infinitely, you'll end up in the system price.*

Stakeholder comment: That depends on external borders to the Nordics.

Q: What is important from the consumer side, is that the prices here are optimistic as they depend on water values that doesn't exist in the real world.

A: *We stated this initially in the presentation. We cannot include water values as we do not have that data, but you are most welcome to do your own calculations.*

Q: The answer should be somewhere in between the two, the thing that still is worth to comment. Obviously NO2 is the most flexible bz, it has been so historically as well. SE3 is inflexible as a totality. That means that there you have more effect on small shift in volume flow on prices. You mention that both SE3 and NO3 have a consumer loss, suggesting that the price in both zones is higher, the over allocation of hydro in the north would not work in that way in reality. This is suggesting that there is no real value here at all. You should not conclude EPR data as factual results and state it with certainty, supply and demand will change with FB.

A: *Regarding the changes for NO2 and SE3, consumers in NO2 are overall gaining, prices is going down. But the loss in SE3 is higher than the gain in NO2.*

Q: It is difficult that you can say that you would have stored a lot of water with these values. This is not an equation of just southern northern water value. Water value in other bz will also part of the equation.

A: *Water is to be saved in the South. It is not an exact number at it will change over time, also depending on season. But what we can see over time, on day-by-day level with Euphemia, more than 50% of the time we are gaining. And we are gaining more. When we are losing we lose less, when we are gaining we are gaining more. It is however difficult to look at for longer periods.*

Q: The impact of increased hydro generation can be calculated as water value multiplied with volume. This cost can then be deducted from the SEW for flow-based to make the comparison more relevant.

Comments from the TSOs after the SH event: *Please refer to the TSO comments after the SH event above.*

Q: This would be an interesting starting point (I think it was proposed earlier), if we exchange water value with spot price of exporting BZ(?) it could be added by TSOs to the next material.

A: *If a stakeholder can provide water value data it could be done, but that would still not be an easy task or of good quality.*

Comments from the TSOs after the SH event: *Please refer to the TSO comments after the SH event above.*

Q: Average Forward prices can be used.

Comments from the TSOs after the SH event: *Please refer to the TSO comments after the SH event above.*

Q: I liked the proposal using forward prices, can you do that to understand the impact of added hydra production in some bzs?

A: *Need to get back to you on this*

Q: You should just take some kind of prices of water in the future.

Comments from the TSOs after the SH event: *Please refer to the TSO comments after the SH event above.*

Q: Is there any SEW calculation for intraday trading? This could also change the prices.

A: *No there is not. Initial capacities between FB and NTC can be compared.*

Q: Follow on ID trading, big impact if ID trading could be included. They should be included to have comparison. Do you see anything on that?

A: *ID topic is on the agenda of hybrid meeting 26 October.*

Q: You have three slides on consumer surplus, first show we deliver surplus, then flip perspective as it is a problem that consumers are losing, is that correct?

A: *That is due to answer request from stakeholders to help better understanding of the phenomena, reasons for this.*

Q: Increase consumer price with 10 %

A: *Depends on bz*

Comment from SH: You can study the ATC/ATCE starting capacities for SIDC Continuous in the Nordics that is generated as a result of the Nordic SDAC FB EPR simulations and as such part of the EPR requirements.

Q: Last stakeholder meeting I was asking for assessment about how ATCE values are coming out and related to an NTC worlds. Indicated that flows change with FB, interesting to see starting point capacities in NTC, compared to similar flows ...the opportunity to actually trade in id, not only in bz, but between bzs were capacity is very important.

Maybe some changes to be done with this as you indicated. No simulations done speculately how trade would be done id. Capacities a starting point.

A: *We will elaborate on ATCE on the hybrid meeting.*

Q: Observation, one listing of critical network elements, 259 mauri blåfalli no5, wondering, as this is constraining (amount) is there any evaluation on how this actually shift the transit flows east-west, north-south, were is this going, we still seeing higher prices. Is Fb transiting in Sweden? How transit flows. Is it enabling more flow, or how does it shift the flow in the grid?

A: *We will get back to you!*

As there were no further questions, the meeting closed. All participants are thanked for their constructive inputs!

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