Nordic CCM SH Meeting – meeting minutes

June 29, 2022, 9.30-16.00
(Hybrid event: Clarion Hotel in Copenhagen and Online session)

Participants	
Physical participation: 23	**Online participation: 48 (including some overlapping participants joining both sessions)**

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. Welcome, EPR overview: progress, timeline, evaluation report (9.30-10.00)

Question: As the parallel runs have not yet provided full data - we do not consider the parallel runs as yet initiated? Are we really getting 12 months of external parallel run?
CCM project: *The working assumption is to start the 3-month evaluation period from June 5, 2022. The External Parallel Run (EPR), i.e. the 12 month period, started on March 7. The CCM project will deliver 3 months quality results, subject to the NRA KPIs, with 1 month of the evaluation report preparation, and another month for the NRA review work, plus 6 months of continuous quality results until go-live. The evaluation report will be consulted.*

2. Nordic CCM Steering Committee: Flow-based in a larger context (10.10-10.25)

Question: We were sent a phenomenon report were one figure included data on the "given capacities". In fb the trade capacities, i.e. trading from low price to high prices, are decreased by more than 3 GWs compared to NTC. Isn't the underlying idea with flow based that we overall should give the market MORE trading capacities?
CCM project: *To avoid misunderstanding of the computation performed by the stakeholder regarding the 3 GW, the stakeholder in question has been asked to elaborate the question in a separate email to the CCM project.*

Question: In CCR Core, the SEW difference between FB and NTC is not performed, only the flow difference. How will Nordic TSOs prove that the SEW computation is valid?
CCM project: *Conceptually, the FB methodology should provide higher capacity to the market allocation than the NTC methodology. Thus, the FB methodology should yield at least equal or higher SEW than the NTC methodology. This statement holds true if both FB and NTC market coupling results are of the same operational security. In other words, if the SEW comparison indicates otherwise, it is worth investigating the comparison results, e.g. FB domain is too restrictive or the NTC capacities to the market coupling algorithm does not respect the operational security.*
Also, the TSOs are obliged to explain the negative SEW comparison outcome to the NRAs and stakeholders.

Question: Will you include the continental SEW, given some consideration that the Nordic import/export under FB will be different from the NTC, thus affecting the continental SEW as well?
CCM project: *Currently, the SEW focuses on the Nordic CCR context. The congestion income distribution (CID) may change/shift from Nordic to the continent. The total SEW values of both methodologies are available from the market simulations and could be included in the data publication or market reports. The CCM project will get back to the stakeholders.*

During EPR SEW shall be divided into two components: Nordic CCR region and the rest of SDAC geographic area. TSOs shall publish at least the socio-economic effects for the Nordic CCR during EPR.
Question: Latest simulation results are not published, what is the status?
CCM project: *Please refer to the 'welcome' presentation and the presentation of 'the EPR results of DA and ID'.*

Question: Market participants need to forecast the future, requiring a full year good data. How will the Nordic TSOs facilitate the need?
CCM project: *Please refer to the answer above regarding the starting of the evaluation period and EPR starting date.*

Comment: At least the days with insufficient quality should be labelled.
CCM project: *The upcoming market report will include the substituted days/MTUs in the Appendix.*

Question: The estimation of welfare gains is limited to the DA-market, or?
CCM project: *Yes, only the DA SEW is considered. It is not possible to perform ID SEW comparison as there is no ID auction at this moment. Instead, the ID analysis focuses on the trading space comparison of bidding zones between FB and NTC at the gateopening.*

3. NRA: how to evaluate the report and EPR outcome (10.25-10.55)

Question: We are getting 10% less trading capacity in fb compared to NTC? That must be a problem when comparing the two methods?
CCM project: *Such observation will also appear in the SEW comparison. The TSOs are analyzing the negative SEW topic and will share the outcome with the stakeholders accordingly. It is also worth emphasizing again that the assessment of the DA cross-zonal capacity should be coupled with the operational security.*
Jori: *Negative SEW is part of the evaluation process. As it is observed in the 3 months period, it is also investigated to better prepare the last 6 months of the EPR.*

Question: Do the regulators consider that the parallel runs started? As of now it does not met the stakeholders concerns
Jori: *EPR started on March 7, 2022.*
CCM project: *Please be advised to focus on the quality results of the 3 months evaluation period and the subsequent months. Regarding the duration of the EPR, please also refer to the answer above in section 1.*

Question: How can we have views on runs that are far from performing what we need? So for the biggest change since deregulation we are not even having one year of good try-outs? The stakeholders still consider 1 year is still minimum.
Jori: *The Nordic NRAs are stricter than Core when evaluating the performance of the Nordic CCM EPR. Please focus on 3 months KPI quality results and the last 6 months quality results.*

Question: How do we deliver stakeholder feedback to be included in the report?
CCM project*: The evaluation report is subject to public consultation. Stakeholder comments will be collected and considered by the TSOs. The TSOs will either implement the comments or provide reasons to the rejected comments.*

Comment: It's good to have a form on the internet to provide comments or ask questions, like in Core.
CCM project*: The TSOs will consider this comment and get back to the stakeholders.*

Question: As I understand it, the runs is only done allowing non-intuitive flows. Why not also doing them not allowing non-intuitive flows?
CCM project*: Intuitive patch introduces new constraints to the SDAC algorithm reducing the total SEW of SDAC. ACER and the Nordic TSOs found no justification in terms of improved operational security or market efficiency by introducing the intuitive patch. In the end, ACER made the decision of not allowing the intuitive patch in the FB MC.*

4. RCC: introduction of RCC, and the activities to support FB CC and MC during EPR and beyond (11.10-11.35)

Question: Will the TSOs publish the FB domain at 08:00 as early publication, following the same approach as the Core CCR?
CCM project*: Not by design. 09:30 is the target publication time. However, it is possible to publish earlier than 09:30 if the FB CC process finishes earlier.*

Question: How do you model DK1? Do you see any problem of modelling the continent as an aggregated generation/load, considering intermittent wind from Northern Germany?
CCM project*: DK1 and continental EU are modelled as an aggregated generator in the CGM. No problem is foreseen.*

Question: Do you see any improvement regarding data publication, FB CC and MC? Or there should be no major changes?
CCM project*: There are still finetuning on the input data of the DA FB CC. No major implementation of FB CC is foreseen in terms of industrial tooling. ID ATC is being developed as an industrial tool. Currently, it is performed using a prototype tool.*

Question: Could you elaborate a little on how the CGM alignment (CGMA) is done? For instance if flow between Norway and Sweden is different in the Norwegian and Swedish IGMs.
CCM project*: The Nordic RSC merges the IGMs into a CGM and runs a load flow on the CGM. The outcome of the load flow is the final flow in the CGM. Before/During merging, 200 MW difference between IGMs (e.g. between NO and SE IGMs) is allowed to continue the CGM merging. If the difference is above 200 MW, the CGM merging is considered failed, triggering the CGM fallback.*

5. NEMO: Involvement to facilitate the EPR and foreseen path after go-live (11.35-11.50)

Question: About phase 1: when will you publish difference, i.e. results from the production system (or simulated NTC) against FB?
CCM project*: During the EPR, FB market simulations (performed by the Nordic RSC/NEMOs) vs NTC market simulations (performed by the TSOs) is performed. Production data of NTC is not used directly for the comparison during the EPR. Reason: the production data (publicly available and downloadable from the NEMO or ENTSO-E Transparency Platform website) does not contain the SEW data, which are essential for the NRA KPIs. The simulated NTC in the Simulation Facility ensures all necessary data are available as its output. The TSOs will also consider to perform assessment between the simulated NTC vs. publicly available production NTC results to ensure the consistency between the two.*

Question: How do you compare the Nordic SEW? Do you consider the overall SDAC?
CCM project*: Based on the current observation, the total SDAC FB is always more than the NTC SEW results. In the Nordic CCR context, (postprocessing) computations are performed to get the Nordic level SEW information. Current focus is on the Nordic level analysis. However, the total SEW comparison can also be published. Note: in general, the loss of continent in the SEW is not at the expense of the Nordic SEW and vice versa. Please also refer to the answer in section 2.*

Question: But the problem with the simulated NTC is that Svk and Statnett are effectively trying to avoid counter trade so they are throwing all kind of Critical network elements into the calculations (Svenska kraftnät is of course already doing that) but it will be more exaggerated in fb
CCM project*: In the FB context, all TSO-nominated CNECs will go through a maxz2zPTDF filter in order to be qualified in the FB CC and MC process. The filter is universally applied to all TSO-nominated CNECs. In the (simulated) NTC context, the setting is the same as the production NTC, except minor difference of the last hour flow as described in the market report disclaimer section.*

6. Stakeholder experience on Core parallel run (13.00-13.45)

Comment: Stakeholders expressed concerns on the anonymized SE CNECs and consequently are not able to reproduce the FB CC and MC results. The stakeholders invited Svk and EI to give a presentation about the legal issue of SE CNEC anonymization and way forward. From the stakeholder perspective, de-anonymised CNECs is the only way to make a link between information provided in DA flow-based data and information on, e.g., line outages published on TSOs' websites and ENTSO-E's EMFIP. This was a similar issue that was fixed in CWE (now Core) by the TSOs and NRAs. It is also impossible to monitor whether the TSOs are pushing structural congestion to the borders. A statement not a question.
CCM project*: The CCM project will facilitate the request.*

Comment: Wishlist (proposed by Volue and supported by other stakeholders):
Published data should be present for all days (including weekends and holidays)
The quality of the data must be high
Questions in the Q&A forum should be answered within 2-3 days
Some key analysis/descriptions of deltas between parallel run data/results vs. standard spot results would be very useful
CCM project*: The TSOs will evaluate the wish list and provide feedback accordingly.*

Question: How shall we forecast the FB for the mid and long term?
CCM project*: This is addressed in the LT and NUCS presentation.*

Question: Can the TSOs provide mid-term PTDFs, i.e. not only MTU level PTDFs, but also clustered PTDFs per season, weekday, typical days, like in CWE/Core about the SPAC days?
CCM project*: The TSOs encourage the stakeholders to perform the in-house analysis to better tailor the clusters to one's own needs.*

7. EPR results on DA and ID (13.45-14.30)

Question: Why aren't the flow based prices compared with the real prices for that hour?
***CCM project**: Please see answers above in section 5.*

Question: Physical flow or scheduled exchange have been removed from the data publication, are the complete simulations wrong? When will the next MC results available?
***CCM project**: The physical flow and the scheduled exchanges (SE) are postprocessed results at the Nordic RSC. The overall computation of the FB CC and MC is correct, which are the output of the FB CC industrial tool and of the Simulation Facility. The TSOs plan to publish the physical and SE flows from week 23.*

Question: The stakeholders noticed issues in published domains from the market report disclaimer section and explanations during the SH event, e.g. missing outages. Is it possible to provide a log containing all known issues? After all, do these issues make the current EPR results invalid?
***CCM project**: The TSOs will get back to the stakeholders about the log request. About the issues and how to look at them in the EPR context, there are multiple objectives during the EPR from different parties. From the learning-by-doing perspective, it is worth investigating the 'imperfect' results.*

Question: The TSOs presented high price difference in week 14-15. E.g. SE4: week 14 and 15 are very different from previous weeks. please elaborate in the market report.
***CCM project**: The TSOs will look at this when analyzing the result and creating the market reports.*

Question: Do you have other topics in the phenomenon report?
***CCM project**: Not yet. The TSOs need more data to observe/define a phenomenon. A data scientist is on board for pattern recognition in the CCM project.*

Question: Does this mean that we are also comparing simulated NTC capacities with flow based simulation capacities in the phenomenon report?
***CCM project**: Yes. This topic is parked until the comparison analysis is done between simulated NTC and the production NTC..*

8. NUCS/LT (14.45-15.30)

Question: Will the year-ahead CC results be updated?
***CCM project**: No, it is performed once per year around December.*

Question: How do you define peak and valley scenarios?
***CCM project**: ENTSO-E (TSOs) is responsible for defining the peak and valley scenarios. The discussion is in progress.*

Question: About the timeline of the project: what happens if the new NUCS is not ready at the FB go-live?
***CCM project**: The TSOs are discussing an interim solution that may contain a look-up table to provide the NUCS messages. The discussion is in progress.*

Question: How long will be the interim period?
***CCM project**: 1st version of the new NUCS implementation should be ready by September 2023. The longer term of the NUCS implementation is not known due to the dependency on the LT CC implementation.*

Question: How do you see long-term transmission rights (LTTR) in Nordic in the coming years?.
***CCM project**: Currently, only DK1 and DK2 has LTTR. It is subject to the NRA decision on other borders. The current LT CCM follows the FCA guideline.*

Question: About publication of grid unavailability, how is it related to the current UMM?
***CCM project**: The published information/format will be the same. The computation of the unavailability figures behind the screen will change.*

Question: Will the LT/NUCS computations consider the generator outage or new transmission lines?
***CCM project**: New line: not in the scope. Generator outage: The TSOs will consider it and will get back to the stakeholders.*

Question: System price calculation: will the TSOs provide the system price information?
***NordPool:** System price is a reference price computed by Nordpool, on top of EPR implementation. Currently, EPR implementation is delayed and will be elaborated after summer. This work is not related to CCM and FBIMP.*

Question: In the Nordic RSC Q&A section, is the explanation of applying costly remedial action still valid?
***CCM project**: The TSOs are reviewing the current Q&A section, as some of the answers need updates. Regarding the costly RAs, they will be applied to ensure the 70% rule despite the costs associated with them.*

Question: Can you elaborate the difference between physical flow and scheduled exchange?
***CCM project**: The physical flow of the DA market outcome is computed by zone-to-slackPTDF * Net Position, where the Net Position is the direct outcome from SDAC Euphemia algorithm. In essence, the physical flow is a linearized estimate of the load flow computation based on the physical property of the transmission grid. On the contrary, the scheduled exchange is a postprocessed computation using so-called 'Flow Determination' algorithm, which translates the DA net position into cross-border 'commercial' flows based on predefined cost coefficients. The predefined cost coefficient does not reflect properly the physical property of the transmission grid. Consequently, the scheduled exchange does not reflect the physical property of the transmission grid.*

9. Closing remarks and any other business (15.30-15.45)

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/