

Nordic CCM SHG – meeting minutes

DRAFT Version

June 13 2018, 09.30-16.00 (Arlanda Airport, Stockholm - Radisson Blu Sky City)

Participants		
CCM project <ul style="list-style-type: none">Trond Jensen (Statnett)Ulrik Møller (Energinet)Randi Kristiansen (Energinet)Heini Ruohosenmaa (Fingrid)Camille Hamon (Svk)Pieter Schavemaker (E-Bridge Consulting)	NRA <ul style="list-style-type: none">Søren Søndergaard (Energitilsynet)Toril Naustvoll Gange (NVE)Jori Sääntti (Energiavirasto) NEMO <ul style="list-style-type: none">Hilde Rosenblad (Nordpool)	Market representatives <ul style="list-style-type: none">Håkon Egeland (Statkraft)Anders Sivertsgård (Energy Norway)Petteri Haveri (Finnish Energy)Raimo Peltola (Fortum)Carsten Chachah (Dansk Energi)Jens Mortensen (Ørsted)Pasi Kuokkanen (Elfi)Rickard Björström (Vattenfall)

Text in non-italics are statements, questions or claims from the person mentioned.

Text in italics are answers or comments provided by the person mentioned, or the project.

1. Introduction / tour de table (9.30-9.45)

2. Status update on the CCM project and Nordic CCM methodology submitted: main changes (9.45-11.30)

The amended CCM proposal has been submitted to the NRAs; NRAs indicate that a second amendment request is not a real option (but in theory possible): NRAs can either accept it or send it to ACER. Toril indicates that NRAs can ask for more time; this does not change the proposal though.

Jens: why didn't you, and can't you, practically proof that FB is better than CNTC

At the moment, we don't have suitable grid models to run a CNTC capacity calculation. As such, we have used the current NTC as a proxy for the CNTC in the comparison with the FB simulation results.

Petteri: if the proposal goes to ACER, I would expect them to ask for amendments

NRAs indicate that ACER writes the proposal in 6 months (up to now, some proposals have been rewritten, whereas others are changed in a minor way). All European NRAs need to vote (a 2/3 majority is needed) to have it accepted.

Carsten: why do other regions not apply FB?

Core and Nordic propose FB, indeed they have multiple bidding zones in a meshed configuration. Hansa and Channel consist of DC links and radial AC connections where CNTC fits naturally well. Baltics are still part of the Russian synchronous area; the tremendous loop flow that they are facing cannot be managed by FB as it results from the Russian allocation mechanism. Iberian peninsula has three bidding zones only (with France being radially connected).

Petteri: the request to have the intuitive patch applied, is linked to the fact that there is no comparison with CNTC (which forces intuitive flows)

Toril: this is not completely correct, as today negative NTCs are provided in Norway, with non-intuitive flows as a result.

Søren: The impact of the intuitive patch – in combination with the ramping constraints – on DC links is too large. For example, hour 1: 1200 MW from A to B. Hour 2, if the prices turned around, the flow can only be reduced to 600 MW due to the ramping constraint. If the intuitive patch would be applied, hour 1 would be impacted, and the flow would have been reduced to 600 MW in hour 1.

Jens: will non-intuitive flows not cause confusion among consumers at the spot market, as it is so different from today?

It is expected that NTC – and the NTC characteristics – will vanish from the experience and thinking, while FB – and the FB characteristics – will become the new reference.

Jens: how do you overcome national legislation in the data publication?

This is not clear at the moment. Some obvious options: do not apply a full transparency, or amend the national legislation.

Petteri: there was an NRA request to publish the details of the CNEs

Yes, and that is what we propose to do – to the extent possible given the national legislation.

Pasi: how about transparency in case of outages?

Also with FB, REMIT applies, and in case of an outage (also for internal CNEs with cross-border relevancy) the TSOs need to publish a UMM / NUCS message.

Carsten: how about the 75% (CEP) threshold value in the FB world?

Providing 75% of the thermal capacity on the bidding zone borders should not be a major issue in the Nordics in FB, as the Nordics consists of many smaller bidding zones (significantly reducing the volume of loop flows in the Nordics), and the internal constraints can be modelled separately. In an NTC world it is more difficult as the internal constraints are reflected in the NTC value as well.

Carsten: ACER Recommendation states that you cannot move internal congestions to the borders. How does this fit to the FB system?

This seems to be a paradox.

This discussion is linked to the new CCM proposal and the application of costly RAs – this will be touched upon later in the agenda.

Anders: can you give examples on non-costly RAs?

For example topology changes in the grid, thereby re-routing the power flows, or the application of System Protection Schemes (SPS).

Håkon: when will these internal CNEs / costly RA tests be done?

In principle every week the assessment needs to take place. It is the objective to have this on a daily basis though.

Jens: is there a method developed to do this RA assessment?

The framework is there (as described in the CCM proposal); we need to detail it and make it an operational process.

Petteri: will there be transparency on the RAs that are taken into account

Yes, all components of the RAM are intended to be published.

Håkon: what kind of resources are used for mFFR and what for the internal CNEs

This is a completely new proposal, that is not detailed yet. The procedures need to be developed.

Carsten: it is important to bring out the need / request for redispatch resources to the market.

Jens: what is the difference between redispatch and countertrade?

Countertrading is considered a measure with the objective of relieving physical congestions between two bidding zones, where the precise generation or load pattern alteration is not predefined. Redispatching is considered a measure with the objective of relieving physical congestions by altering a particular generation and/or load pattern.

Håkon: European balancing platform may be used for this purpose as well? It is the same resources.

We are looking into this; it is not clear though if those resources can be used for this purpose.

Jens: you will put the query for redispatch resources through a market, so you have a price?

No, we need to do this two days ahead...

Rickard: what happens if the RA is not available and you give too much capacity to the market?

We need to calibrate the process.

Hilde: we would like to see how you assess the internal CNEs and RAs, and come to your choices.

Yes, indeed, but please bare in mind that the process still needs to be developed given the framework described in the CCM proposal.

Jens: lessons learnt - the more you use it, the more volume, and the lower the prices

Jens: on D-2 we only have an estimate of what we think we will be running

Indeed, that is the challenge the TSOs are facing in this respect.

Petteri: consumers could be considered as well for redispatch

Indeed!

Petteri: you are making the application of costly RAs quite complicated. You don't expect N-1 to happen, but you reserve the cheapest resources for it. This drives the cost of RA for capacity calculation.

This has been decided upon in different gremia than this project.

Håkon: How many CNEs do you have in the Nordic system? You would need to apply this methodology on all those elements?

Around 80-120 CNEs. Yes, in principle the process needs to be able to allow for such an extensive approach.

Anders: I am positive towards the proposed approach

Søren: NRAs are looking forward to see how this works out.

Søren: RAs cannot be reserved at D-2, as this may lead to a self-fulfilling prophecy. Indeed, the generator will not run in the DA, and not relieve the congestion on the internal CNE, so that it needs to be activated at day D to relieve the congestion.

Jens: How do you balance the cost of a CNE versus grid expansion

The shadow price of the CNE gives an indication of the welfare loss linked to the scarce capacity on a CNE, and may be used in the grid expansion planning. The signal of the shadow price is blurred though by the application of redispatch (as the capacity of a CNE is artificially increased).

Petteri: you may need a simultaneous auction for the DA market and the reserves market

This suggested approach boils down to a unit commitment methodology.

Anders: NRAs asked for 18 months of parallel run. Why don't you comply to that?

Legislation requires at least 6 months; the 18 months asked for is considered to be too long. The main idea behind the proposed 12 months is to have all seasons covered. Please note that the parallel run period lasts at least 12 months, and that the go-live criteria (KPIs to be defined in dialogue with NRAs and stakeholders) need to be met.

Rickard: will – during the parallel run - the (today's) NTCs be used for the actual power market prices

Indeed.

3. Lunch (11.30-12.30)

4. Status update on the FB simulations (12.30-14.00)

Jens / Carsten: are costly RAs dealt with in today's capacity calculation

Yes sometimes they are, but not on a systematic basis / in a formalized way; this is exactly what is now proposed in the CCM proposal and needs to be detailed.

Petteri: when will the RSC CGM be available

It is expected that by the end of this year, the D-1 CGM should be available.

Petteri: when the D-2 CGMs becomes available, will it be used for the current NTC capacity calculation

No that is not foreseen. The CGM is an integral part of the coordinated capacity calculation methodologies like FB and CNTC.

Jens: I don't understand the increased producer surplus in the simulation results

Please note that the producer surplus is an aggregate number over many hours (4 weeks of data), whereas the price information is an

average over those hours.

Jens: if the FB-handling of the west-coast cut has such a big impact on the results, why don't you apply the west-coast cut in this way already today

In order to have the west-coast cut modelled in the allocation mechanism, we need to have the FB model implemented.

Rickard: FB in ID

Ongoing work: challenging to have FB in a continuous trading setup

Søren: you did not apply the CNE selection tests / costly RA in these FB capacity calculation and allocation simulations

Indeed, the process still needs to be developed given the framework described in the CCM proposal, before it can be applied in the simulation process.

Rickard: you show average prices; for how many hours are the NTC and FB prices roughly the same?

To a large extent the prices are comparable under NTC and FB; the differences materialize mainly in the "extreme" situations.

Håkon: FB gives a better utilization of the grid. Whether you have a lower or higher price is depending on the situation.

Håkon: how will the industrial CGM change the results?

We don't expect a big impact on the results, as the prototype CGM captures the topology of the grids in a proper way. The industrial CGM is expected to solve a lot of error-prone issues encountered with the prototype CGM, allowing us to make more and more stable capacity calculation simulations.

Petteri: the more overloads the more socio-economic welfare?

Indeed, but please do note that it is only the day-ahead market welfare that is simulated. The cost for redispatch or counter-trade is not taken into account in those numbers.

5. Coffee break (14.00-14.15)

6. Presentation and brainstorming on UMMs under FB (14.15-15.00)

The abbreviation NUCS stands for Nordics Unavailability Collection System.

Rickard: We are currently a sender and receiver of UMMs

Yes, that remains unchanged.

Håkon: hydro producer with a portfolio consisting of various type of units (seasonal, and so on). It would be helpful to have the same information for long term (LT) and short term (ST) - compatibility

LT timeframe: transparency regulation requires Y-1, M-1, and W-1 capacity forecasts. Those capacity forecasts are most likely expressed as NTCs.

Rickard: my key message is that it is important to have the correct price for hydro, and to provide the proper information to establish that.

Jens: It would be good to have the W-1 prognosis as FB parameters (being the closest to the DA timeframe)

Håkon: LT UMMs in NTC, and shorter term (W-1, DA, ID) as FB parameters. When a UMM arrives, the W-1 forecast is updated.

Rickard: I agree with this approach: just provide the latest updated forecast FB matrix (given the outage / UMM) and we will upload it in our model. No comparison to an intact grid is needed. W-1 is good; W-2 would be excellent.

Håkon: if an interconnector fails, information needs to be given to the market within one hour.

Indeed, there is a feasibility thingy here: what is feasible given the short time available. We need to find out what is allowed given the regulation, and feasible given the computational power / manpower at the RSC.

Hilde: if an outage remains for a longer period?

This would require to update the short-term and long-term capacity forecasts.

7. Wrap up and next steps (15.00-15.30)

- Thanks for a fruitful meeting, where we had quite some discussion and explanation on the new CCM proposal, mainly on the CNE selection and application of costly RAs
- Invitation to all of you to have a look at the Nordic RSC website where you can download the new CCM proposal (legal document and supporting document): <http://nordic-rsc.net/methodology-proposal/>
- Invitation to all of you to have a look at the Nordic RSC website where you can download the FB simulation reports and data: <http://nordic-rsc.net/simulation-results/>
- Invitation to all of you to share ideas on NUCS / UMMs in the FB world with the CCM project: RKI@energinet.dk or CCM@nordic-rsc.net
- The project – with the ideas received today – will start to work on the first sketches for the UMMs / NUCs in the future situation

8. AOB (15.30-16.00)

Carsten: When will stakeholders be involved?

Now that the public consultation periods have been left behind, the project would like to go back to the original interval: 3-4 times per year a SHG meeting (for stakeholders that have been nominated to participate), and 1 time per year a SHF (in December for all stakeholders). We may have a follow-up SHG meeting in October.

Toril: Nordic NRAs intend to initiate a project to increase the transparency to the market (with a focus first on the current capacity calculation methodology). A kick off meeting with TSOs and Stakeholders is foreseen somewhere in Autumn; this meeting could be combined with the potential October SHG meeting.