
























































































# Nordic CCM Stakeholder workshop on FB and price forecasting – meeting minutes

DRAFT Version

February 22 2021, 13.00-16.00 (Webinar)

Participants (#50)		
 Pieter Schavemaker Organisator	 Kyllingstad, Vegard Braut Extern	
 Aleksei Seleznev Extern	 Lars Erik Jordet Extern	
 Antti Martikainen Extern	 Ljubov Cherney Extern	
 Cederberg, Arvid Extern	 Magnus Sunnefors Extern	
 Chanpreet Talwar Extern	 Magnus Thorstenson Extern	
 Djupskaas, Ole Tom Extern	 Mathew Creese Extern	
 Eriksson, Marcus Extern	 Max Emil Schackinger Trothe Extern	
 Gisle Tveit Extern	 Michael Bartels Extern	
 Gunnar Aronsen Extern	 Myrgren, Simon Extern	
 Halldin Roger (MO-AP) Extern	 Nansdal Ole Marius Haugene Extern	
 Haveri Petteri Extern	 Nikolaj Nåbo Andersen Extern	
 Høivik, Øivind Extern	 Stagge, Peter Dr.	
 Houweling Sanne Extern	 Torhaug, Eirik	
 Jacob Skovsby Toft Extern	 Nguyen, Giang	
 Jakob Berg Amondson Extern	 Sahajpal, Vedeesh	
 Jim Vilsson Extern	 Preben Dalsgaard Pedersen Extern	
 Jouni Mäenpää Extern	 Rickard Nilsson Extern	
 Jyri Salpakari, UPM Extern	 Ruohosenmaa Heini Extern	
 Knut Skogstrand Gjerden Extern	 Silvia Messa Extern	
 Kyllingstad, Vegard Braut Extern	 Simon Brejnebjerg Jensen Extern	
	 Sletthjell Ida Extern	
		 Sletthjell Ida Extern
		 Stefan Jaehnert Extern
		 Stefan Svensson (Svk) (Gäst)
		 Stig Åhman Extern
		 Stig Rolstadaas Extern
		 Thomas Brouer Extern
		 Ulrik Møller Extern
		 Vegard Bremerthun Svarstad Extern
		 Vegard Viken Kallset Extern
		 Vezentan, Anastasia Extern
		
		
		
		
		
		
		
		
		
		
		
		
		
		
		

Q: Heini Ruohosenmaa (Fortum): There is a risk that the scenarios that are selected for the LT CGMs, impact the results – when the assumptions are not correct?

A: CCM: Yes, indeed, but it is the best guess at that point in time. We update the forecast when we get closer to real-time: from YA to MA.

Heini: The Transparency Regulation (TR) requires the impact on the XB capacity to be estimated. Do you consider this proposal to be compliant?

CCM: We consider this proposal to be compliant, but we are happy to receive other suggestions

Heini: min/max XB flows, min/max bilateral exchanges, but not capacity. Does the TR take into account the FB?

Ulrik: You may be correct that the TR does not properly address the FB approach. That is why we think that compliancy **and** relevancy for market players are key

Q: Ida Slettahjell (Statkraft): YA – one domain or several?

A: CCM: In principle 8 YA CGMs (4 seasons, peak and off-peak), and as such 8 reference domains. Given the implementation process of the CGMs – and the main priority being on the D-2 and D-1 CGMs – it is not clear whether all these 8 YA CGMs are available when the process starts.

Q: Marcus Eriksson: MA domain updated when new UMMs come in?

A: CCM: the reference domain will not alter – the YA CGM remains unaltered, but a MA CGM will be created when we get closer to real-time.

Q: Jyri Salpakari (UPM): Parallel run – Will it cover both the DA CCM and this UMM solution?

A: CCM: In the external parallel run the DA capacity calculation, the FB market coupling simulation, and the DA left-over capacity (being the initial ID capacity) will be assessed. The UMM solution is not foreseen to be part of the parallel run.

Nikolaj (Energinet): This depends on the implementation timeline – we do our best to inform the market on its functioning.

Q: Jyri Salpakari (UPM): Will the wind forecasts be used in the LT CGM, and will this forecast be shared?

A: CCM: This is linked to the CGM creation process; this information is not foreseen to be shared.

Q: Vedeesh Sahajpal (Refinitiv): We use the UMMs from the Transparency Platform (TP), will the format change?

A: CCM: no.

Q: Rickard Nilsson (Nordpool): when there is a line outage, e.g. Norned, when and how will this be shared?

A: CCM: The answer depends on the timing... when does the outage take place? Well before DA; in that case a UMM would be published. If the outage occurs at DA 8.15 – if there not sufficient time, it cannot be included in the capacity calculation (and would require counter trade). In short: no difference compared to today.

Q: Heini Ruohosenmaa (Fortum): I am concerned about the transparency of this UMM. Results are depending on the scenarios. We also need information on CNE level: which CNE is limiting and how much?

A: CCM: The information on the CNE and the amount of RAM will be shared, but not the location (i.e. detailed geographical information) of the CNE. More than eight scenarios will be used: 8 YA, 24 MA, and potentially WA CGMs.

Q: Chanpreet Talwar (Nordpool): Adjustments needed with regard to the unavailability of generation units – do we need to alter Nordpool's UMM platform?

A: CCM: No changes are foreseen; what we present here is only for transmission infrastructure.

#### 4. Stakeholder presentations and discussions (13.55-16.00)

##### Presentation by Ida Slettahjell (Statkraft)

Q: Ulrik (ENDK): What is the MT and LT, ST – what is the time resolution: hourly / weekly?

A: Ida: ST (hourly), 5 years (hourly / 3-hourly) - transmission forecast on an hourly resolution. Grid modelling is very important.

##### Presentation by Stefan Jaehnert (Sintef)

Stefan gives a short introduction on the project Vannfly. The main objective: what is the impact of FB grid information on water values - provide some answers regarding what level of information provides the greatest benefits in price-forecasting and thus socio-economic welfare.

In the next stakeholder meeting, Stefan will give a presentation on Vannfly.

##### Presentation by Gunnar Aronsen (TronderEnergi)

Rolling forecasts are being used by the market (instead of calendar months) – TSOs providing calendar months is problematic

Q: Ulrik (ENDK): how are you using the grid information?

A: Gunnar: ST model – NTC data is embedded for every hour (optimization constraint). In a FB model, it is the FB model that enters the optimization. Continuously-updated dataset as a rolling horizon

Matthew Creese (TronderEnergi): We buy a ST price forecast. Background of the presentation is the reasoning: if we were to build our own forecasting, what kind of information would we need?

Q: Ulrik (ENDK): Why do you need a rolling forecast?

A: Gunnar: Connection between ST and LT models: deterministic price forecast. ST models should give valuable information (min price in the night, price differences, and so on). These values determine the water values and the bids on the spot market. ST model translates the LT model prices down to the hourly/daily resolution.

Matthew (TronderEnergi): the forecasting is a continuous process; the data will be outdated with 29 days old data (in case you don't have a rolling forecast). This will give a step in the forecast values, as soon as the new MA CGM arrives.

Gunnar: Rolling update is important for hydro producers; we want to have a continuous update of the water values.

Q: Jyri Salpakari (UPM): If you have new information on the transmission system, will you update the assumption on the wind infeed as well?

A: Ulrik: The idea is to embed better forecast information the closer we get to real-time: from YA, MA, to DA and ID.

Gunnar: TSOs cannot give out their forecasts, an update of the models and the PTDFs is fine. We don't need a grid model, we just need the PTDFs.

##### Silvia Messa (Volve)

- Power spot – ST model – 90 days forecast – Euphemia proxy – only Volve-model that uses the FB model
- For the forecast, Volve needs the PTDF data from JAO
- All the detailed CNEC information (like names, unique IDs, geographical information) is not used

Wrap-up by the CCM project:

- We take the inputs received (thanks for that!) into account, and see how it may impact the design of the UMMs / NUCs.
- Not sure if we can grant your wish list as of go-live, but it may impact the future development.
- Potentially, we may schedule a new workshop on this topic.
- A more detailed presentation of the NUCs solution is foreseen, including an example of how it could look like

Q: Jyri Salpakari (UPM): Will the information about the grid topology be published? For example: between which BZ and whether is it internal in a BZ.

A: CCM: *we cannot share the physical location of grid components for Sweden (prohibited by national legislation).*

Heini: And permanent identifiers? We don't know anything about your CNEs – you may add new ones every day, and we don't know how they impact the market results? This is an issue from a transparency point of view.

CCM: *To be taken up in the next SHG meeting; but please put pressure on somebody else than the Swedish TSOs – they are bound by legislation.*

Rickard Nilsson (Nordpool): *Is it possible to publish NTC values that are extracted from the FB domain?*

CCM: *In principle it is possible to extract NTC values from the FB domain. Those values are indicative only; indeed, many different NTC domains can be extracted from the FB domain, and they may not resemble the values we are used to today. We need to check whether this is something that can be delivered.*

## 5. AOB