

2022-01-24

Webinar: Status update East-west energy flows, 20 January 2022

Questions and answers

Here are answers to questions asked at the webinar that Svenska kraftnät did not have time to answer verbally during the meeting.

Question on the increase in capacities for SE3-NO1 the last week. Could you say something about what changed in the system resulting in higher capacities? More production in SE3? Wind? Temperature? More import from DK1 to NO2? What factors changed that the possible capacity?

The capacities west to NO1 depends on production/consumption on the south west side of Sweden. The remaining capacities are used for transit via SE3 and when the expected flow to FI and import from DK1 (also distribution of imp/export out from SE4 but to a smaller extent). When this is stable mainly nighttime/weekends and positive for the east west flow situation it has been used to increase the capacities to NO1. This is similar for other capacities but the question was about NO1.

The numbers in the table with price changes from the power point previously released (slide 10) are quite different from the numbers in the table presented here. Do you refer to different test runs, or is it something wrong somewhere?

There was a small mistake in the calculations that was included in the power point material presented for the consultation. We have updated the material for the consultation and apologies for the inconvenience.

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WWW.SVK.SE REGISTRATOR@SVK.SE With regard to non-intuitive flows - will you in these cases have to reduce export capacity to zero on the importing connection (e.g. SE3-DK1)? Will this mean that you cannot allocate the export capacity to the other connection, e.g. SE3-NO1, but only the transit flow?

Since the physical flow from the DA results relay on the transit flow to maintain operational security the capacities provided to gate opening of ID must respect this. Depending on the state of the Swedish transmission system after DA the capacities to ID could increase on other SE borders.

Can you please show the constraint you will add to the optimization? How will this be published to market? What is difference between a virtual area and you are proposing?

Svenska kraftnät is planning to implement the sum allocation as a line set, see presentation slide 26 for more information. For the usage Svenska kraftnät plan for, there is no difference between Line set and Virtual areas. But virtual areas can be used for a broader range of purposes.

Can you please show the math for line-set/function?

Please refer to previous question.

What is the reason behind not making the sum allocation explicitly visible to market participants? Why not publish the new constraints on a dayahead basis?

It is not a new restriction, rather an optimization function in the market coupling. However Svenska kraftnät will issue an additional NUCS to display the function and NEMOs can chose to publish the sum allocation. The information will be published transparent like all other Virtual areas used today.

It seems you have switched the values for 'Highest increase' and 'Biggest decrease' in the slides shown now and the power point previously released (slide 10). What is right?

Sorry for this, it is correct in the updated material we have published on the webpage.

To confirm, the new methodology will not affect Cut 2 and Cut 4. Is that correct understood?

Yes, that is correct.

Sorry but for sure you (Svk) would in production both publish the individual BZ-to-BZ max capacities AND the line set limit, thus if there are no outages linked to Hasle (NO1) or KontiSkan (DK1) then the market would see both the max limits per interconnector and the SUM limit for the SE Line Set towards DK1 and NO1. That is exactly how Optimization Area (Virtual Area) limitations are published today and has been published for the past 17 years.

NTC capacities for separate borders will be published as today on NUCS. In addition we will have information on the existence of the sum allocation. We will come back with more details on this before the implementation, if the sum allocation is implemented.

The fact that transits will occur via Line Sets just as has been the case for the past 17 plus years with some Optimization Areas (Virtual Areas) does not as such mean that it normally or even for a large percentage will result in what might seem like a price based 'non-intuitive' flow across the given BZs (DK1-SE3-NO1) - while it as such is not the case. Furthermore, the ability to utilize cross zonal capacity to a much higher degree via given Line Set then in production today also in effect means that it can result in usage up to the max NTC capacity. Therefore regardless of models applied for SIDC the starting point would be close to zero capacity since all has been utilized efficiently in SDAC.

Not a question. The gains in capacity in SDAC probably outweighs the restriction of trade in SIDC. This is however not straight forward to conclude and no in depth analysis has been performed.

But what about situations when both NO1 and DK1 compete for the sum capacity? Will the market optimization first prioritize the area with the highest willingness to pay and 'fill up' that corridor, and the other area will get minimum flow?

The optimization in the DA-auction algorithm will be done as always; optimizing the social economic welfare for the entire SDAC area.

Can we rely on the test-results?

Nord Pool has performed the simulations, analyses of the results has been performed by Svenska kraftnät. Svenska kraftnät trusts the values received by Nord Pool. We have also performed in-house simulations in a less detailed tool. These show similar results. The simulations has been made for short test periods. However, capacities with the sum allocation can never become smaller than without the sum allocation.