

TSO COMMENTS TO ACER'S MACZT MONITORING

1H 2020

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RESULTS* - ENERGINET ANALYSIS

AC borders	Import		Export	
	#Hours	% of time	#Hours	% of time
DK2 – SE4	3	0,069%	0	0%
DK1 – DE/LU	0	0%	14	0,321%

DC borders	Import		Export	
	#Hours	% of time	#Hours	% of time
DK1 – NO2	6	0,137%	2	0,046%
DK1 – SE3	30	0,687%	24	0,549%
DK1 – DK2	31	0,71%	31	0,71%
DK1 – NL	0	0%	0	0%
DK2-DE/LU	0	0%	0	0%

For DC borders, we have identified 87 different hours where compliance cannot be documented or potentially isn't met.

*The results are based on Energinet's own analysis of the 70% requirement compliance and shows the number of hours where compliance cannot be documented or potentially isn't met.

RESULTS –DC BORDERS - ACER

Acer finds same result as Energinet for the DC borders

Method:

Checking whether the capacity given to the market is 70% of each CNE's F_{max} pr. MTU.

Green = Both TSOs gives 70% or more

Purple = The TSO which BZN border is listed gives less than 70% to the market

Red = Both TSO's gives less than 70% to the market

RESULT* –AC BORDERS - ACER

Energinet cannot recognize ACERs results for DK1<>DE

Method:

Unclear. Currently being discussed with ACER

- In an ongoing dialogue with ACER
- Discussions on ENTSO-E level regarding the applied method

* Data was not delivered for DK2<>SE4 due to missing Nordic CGM

SVENSKA KRAFTNÄT COMMENTS TO ACERS 70% MONITORING

Challenging from a safety regulation and data availability perspective

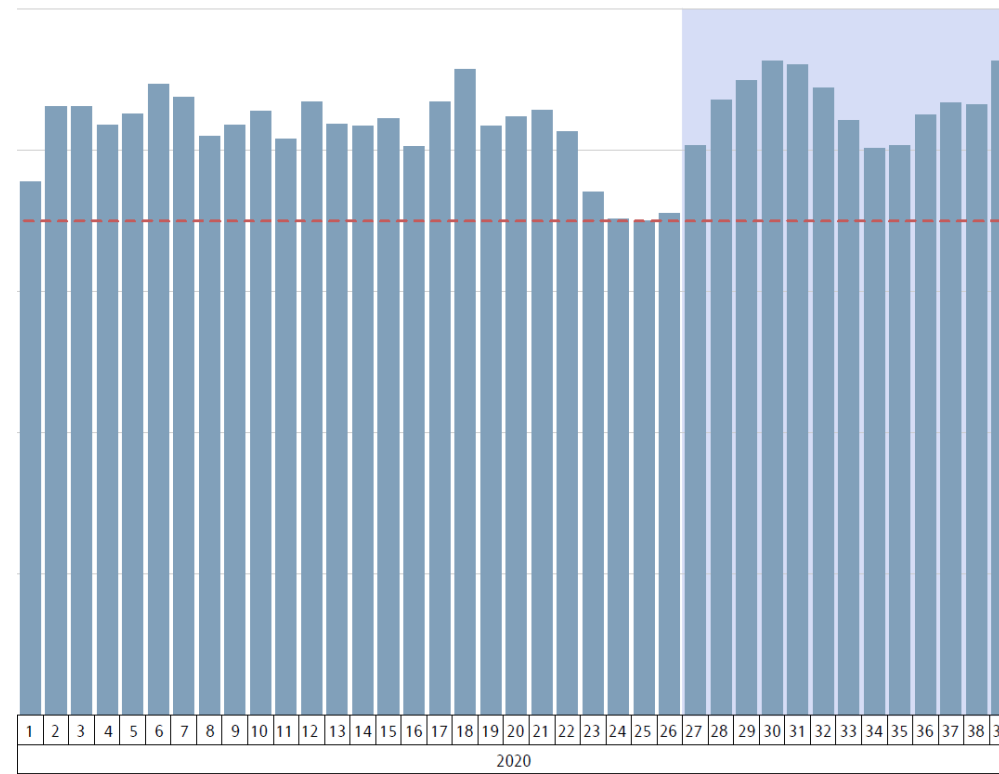
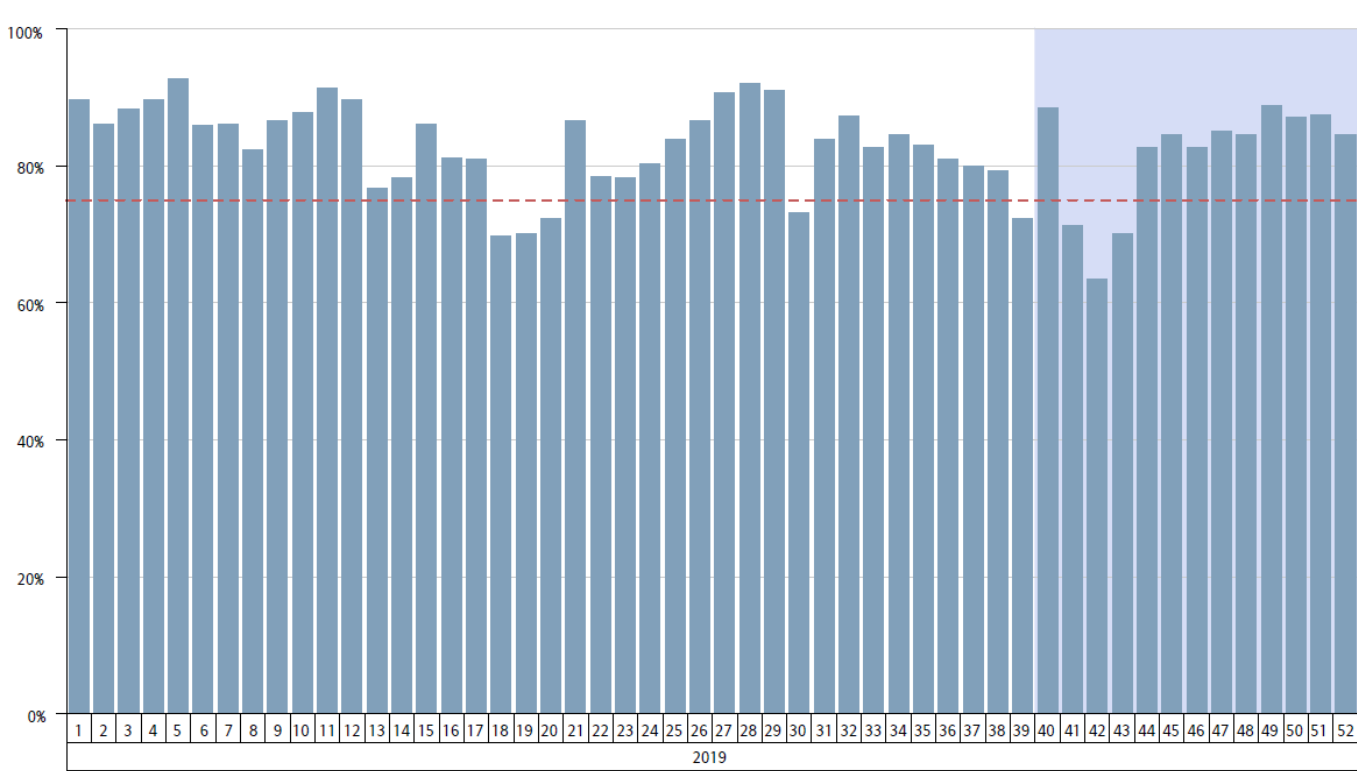
- Obstacle in national regulation that prevents Svk from sharing detailed grid data
- No functioning Nordic common grid model – this means it is not possible to meet ACER's requirements
- Svk are making best efforts to deliver what is possible.

CROSS-BORDER CAPACITIES

Q1-Q3 2020

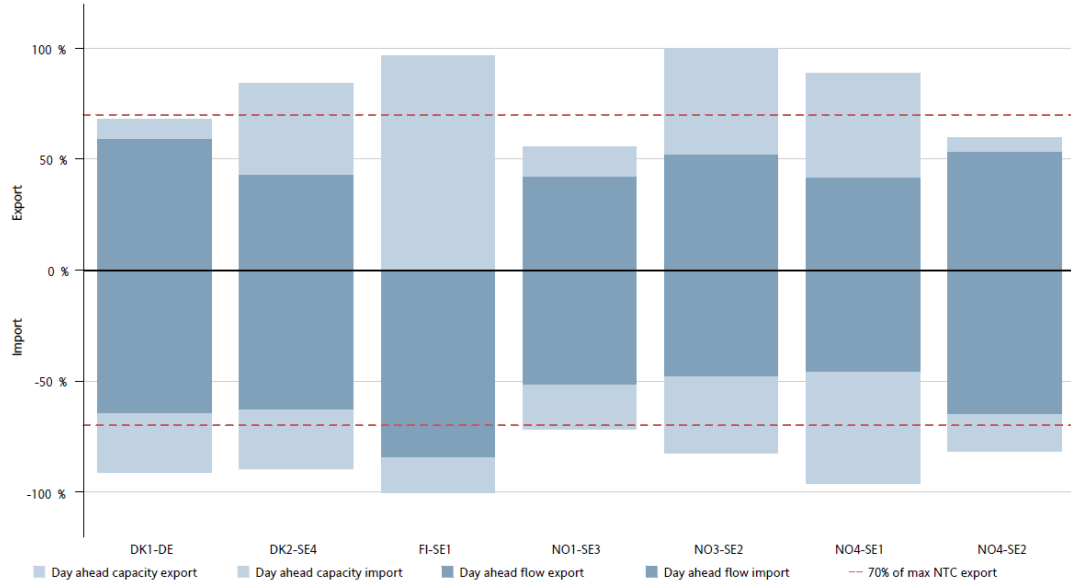
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AVERAGE "NORDIC CAPACITY" AVAILABLE FOR THE MARKET

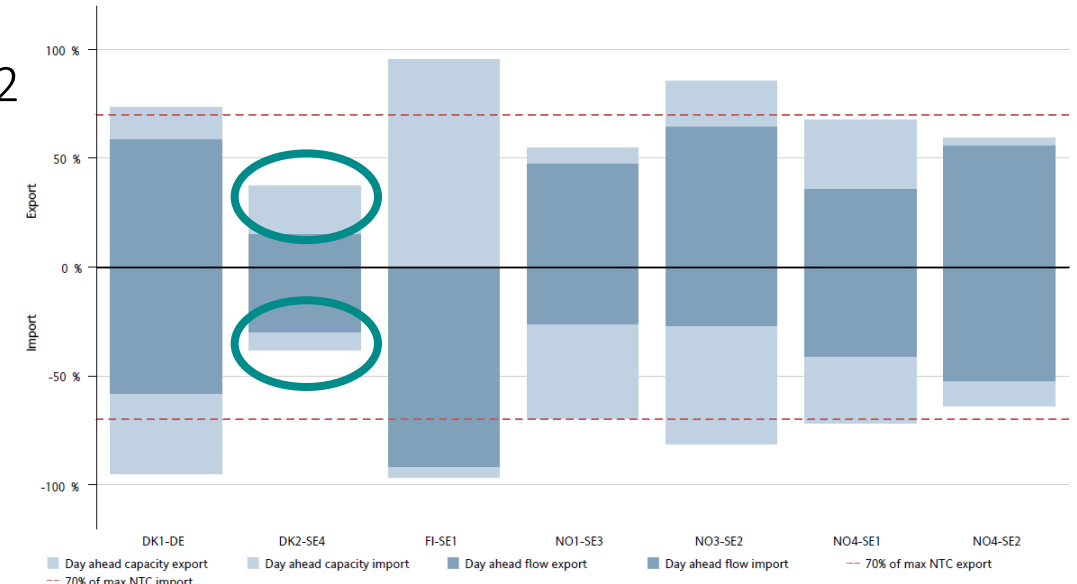


AVERGAE QUATERLY DAY AHEAD CAPACITY AND FLOW (AC BORDERS) **ENERGINET**

Q1



Q2

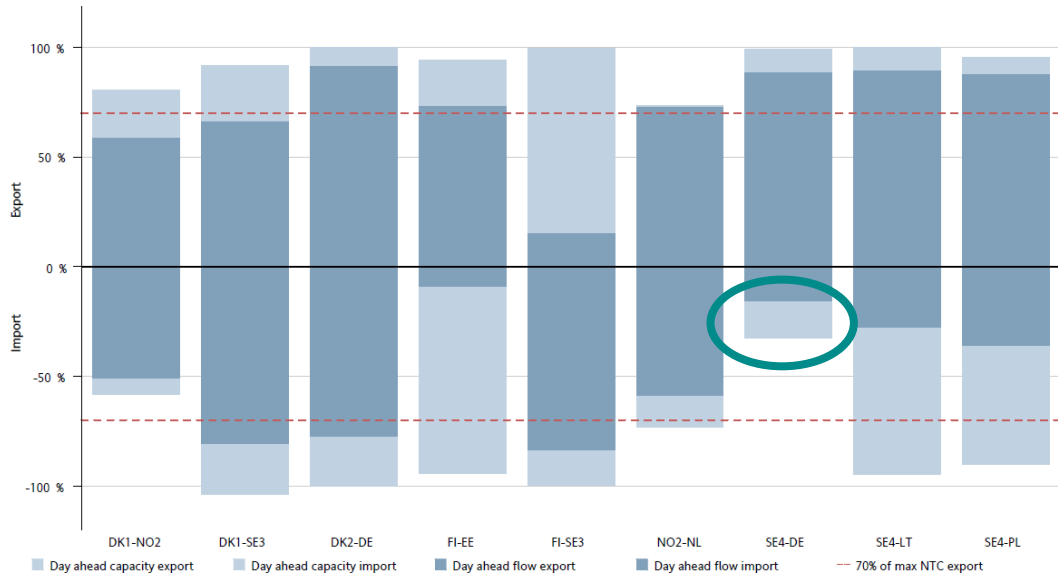


Q3

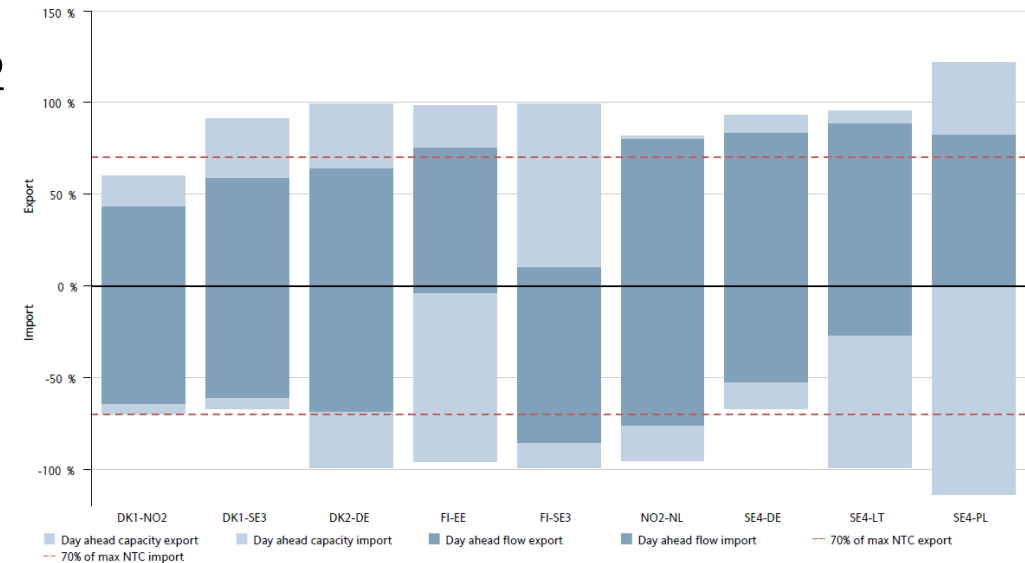


AVERGAE QUATERLY DAY AHEAD CAPACITY AND FLOW (DC BORDERS) **ENERGINET**

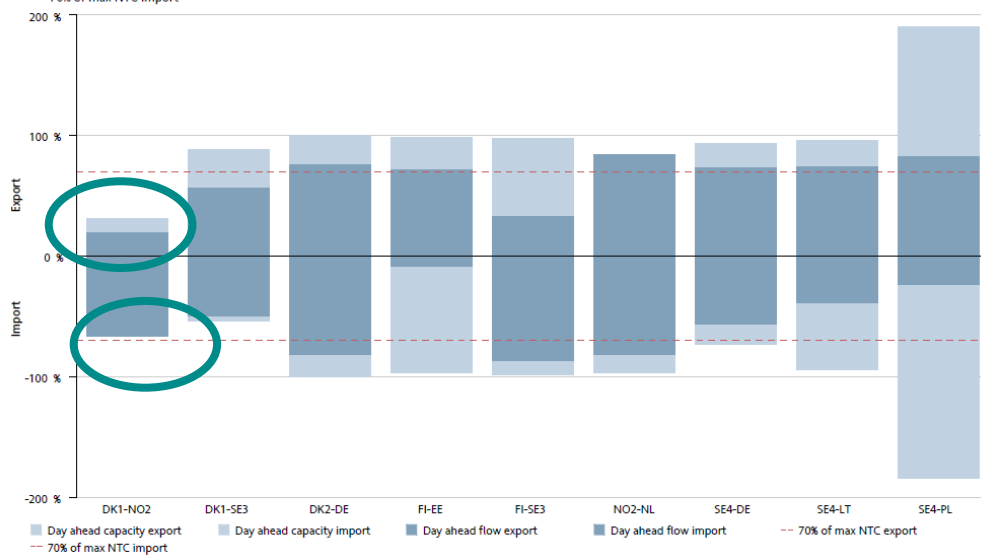
Q1



Q2



Q3



REQUIREMENTS FOR INFORMING MARKET ABOUT UNAVAILABLE TRANSMISSION CAPACITY

Transparency regulation article 10 and REMIT obliges the TSO's to inform the market about unavailable transmission capacity.

Transparency regulation

Article 10

Information relating to the unavailability of transmission infrastructure

1. For their control areas TSOs shall calculate and provide to the ENTSO for Electricity:

(a) the planned unavailability, including changes in the planned unavailability of interconnections and in the transmission grid that reduce cross zonal capacities between bidding zones by 100 MW or more during at least one market time unit, specifying:

- the identification of the assets concerned,
- the location,
- the type of asset,
- the estimated impact on cross zonal capacity per direction between bidding zones,
- reasons for the unavailability,
- the estimated start and end date (day, hour) of the change in availability;

Information on unavailable transmission capacity is published by the TSO's on:

- ENTSO-E Transparency platform
- NUCS
- Re-published on Nord Pool UMM

INFORMATION IN THE MARKET MESSAGES

Transmission (Planned)	DK1 > NO2 NO2 > DK1	Skagerrak 4	946 MW 608 MW	686 MW (VARY) 1024 MW (VARY)	19.11.2019 00:00 (CET)	31.12.2022 23:59 (CET)	3 years, 1 month, 1 week, 5 days, 23 hours, 59 minutes	Energinet.dk	18.11.2020 08:19 (CET)
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Message Validity	Duration	Version	Permalink	RSS Reference ID	Attachment	History
19.11.2019 00:00 (CET) - 31.12.2022 23:59 (CET)	3 years, 1 month, 1 week, 5 days, 23 hours, 59 minutes	10	Permanent link	-yGzssUZ_8qAt5zDTkyDEw_010	Energinet and Statnett give an update on SK4.pdf	Show history

Unavailability Type	Remarks	Reason	Reason Text
Planned	<p>As of 1/1-2020 aFRR will be bought in DK1 the capacity is given to the spot market. More info</p> <p>https://energinet.dk/EI/Systemydelse/Nyheder-om-systemydelse/Opstart-af-indkob-af-kapacitetsreserver-i-Vestdanmark</p> <p>Further info: https://energinet.dk/Om-nyheder/Nyheder/2020/02/27/Energinet-og-Statnett-giver-status-paa-SK4-og-begraenset-kapacitet https://www.statnett.no/om-statnett/nyheter-og-pressemeddelelser/nyhetsarkiv-2020/statnett-og-energinet-gir-status-pa-skagerrak-4-kabelen-og-kapacitetsbegrensninger/</p>	Failure	The transmission capacity is reduced due to a failure on Skagerrak 4 cable in the Danish End. At present time Energinet cannot conclude on the scope of the failure, and consequently the time perspective for the reduced transmission capacity is unknown. Energinet and Statnett has commonly been able to increase transmission capacity by means of technical and operational measures, which will apply until further notice.

Affected Assets	Market Participants
10T-DK-NO-000049 : Skagerrak 4	10X1001A1001A248

MANY CHALLENGES IN 2020

The Nordic TSO's have published 1354 market messages during 2020 with information on unavailable transmission capacity (incl. updates)

Publisher	Planned	Unplanned
Energinet	143	52
Fingrid	32	28
Statnett	444	163
Svenska kraftnät	429	63
Total	1048	306

Transmission (Planned)	SE4 > DK2 DK2 > SE4	Söderåsen-Hovegård-HVE_400_SÅN	0 MW 375 MW	1300 MW 1325 MW	10.12.2020 06:00 (CET)	10.12.2020 17:00 (CET)	11 hours	Energinet.dk	25.11.2020 14:43 (CET)	+
Transmission (Planned)	SE4 > DK2 DK2 > SE4	Söderåsen-Hovegård-HVE_400_SÅN	0 MW 375 MW	1300 MW 1325 MW	10.12.2020 06:00 (CET)	10.12.2020 17:00 (CET)	11 hours	Svenska Kraftnät	27.11.2020 09:41 (CET)	+

Thank you for your attention

Questions?