

## €24 m. lost in June due to missing Skagerrak cables

A few days ago, I published a snapshot from 27<sup>th</sup> June. It showed very low spot prices for the southern Norway. Readers have asked me, if this picture is valid for a longer period. Therefore, I have downloaded monthly spot prices from Nordpool's homepage:

Elspot prices in EUR/MWh																						
2020	SYS	SE1	SE2	SE3	SE4	FI	DK1	DK2	Oslo	Kr.sand	Bergen	Molde	Tr.heim	Tromsø	EE	LV	LT	AT	BE	DE-LU	FR	NL
Jan	24,1	23,3	23,3	23,7	26,4	27,2	25	27,4	24,6	24,63	24,63	23,5	23,5	23,46	30,8	30,8	30,8	40,7	37,9	35	38	37,1
Feb	13,1	14,4	14,4	18,4	18,6	24,4	17,6	18,8	12,5	12,33	12,46	13,74	13,74	13,71	28,1	28,1	27,8	29,1	28,4	21,9	26,3	29,6
Mar	9,01	9,01	9,01	13,8	16	20,4	18,3	20	8,05	8,01	8,05	9,02	9,02	9,02	24	24	24	24,6	24	22,5	23,8	24,7
Apr	5,26	5,13	5,13	9	13,7	19,8	14,5	17,4	4,69	4,69	4,69	4,65	4,65	4,74	23,7	23,5	23,3	18,3	14,7	17,1	13,5	19
May	8,34	9,5	9,5	12,7	14	19,5	16,1	19	7,19	7,17	7,19	8,69	8,69	8,84	25	24,5	24,5	17,5	15,4	17,6	14,9	17,7
Jun	3,15	9,87	9,87	23,7	24,2	28,3	26,3	29,8	1,46	1,46	1,46	3,16	3,16	3,16	37,8	38,7	38,7	26,5	25,6	26,2	25,8	26,2

Table 1: SYS: system price. Price zones: SE: Sweden. FI: Finland. DK: Denmark. Oslo to Tromsø: Norway. EE: Estonia. LV: Latvia. LT: Lithuania. AT: Austria. BE: Belgium. DE-LU: Germany/Luxembourg. FR: France. NL: the Netherlands.

Table 1 confirms increasing price differences and an imminent risk of collapse of the spot market in Norway. At the same time, the Swedes are concerned about the risk of electricity shortage in the southern Sweden (SE3 + SE4) this summer. I have tried to create a graphic overview in fig. 1.

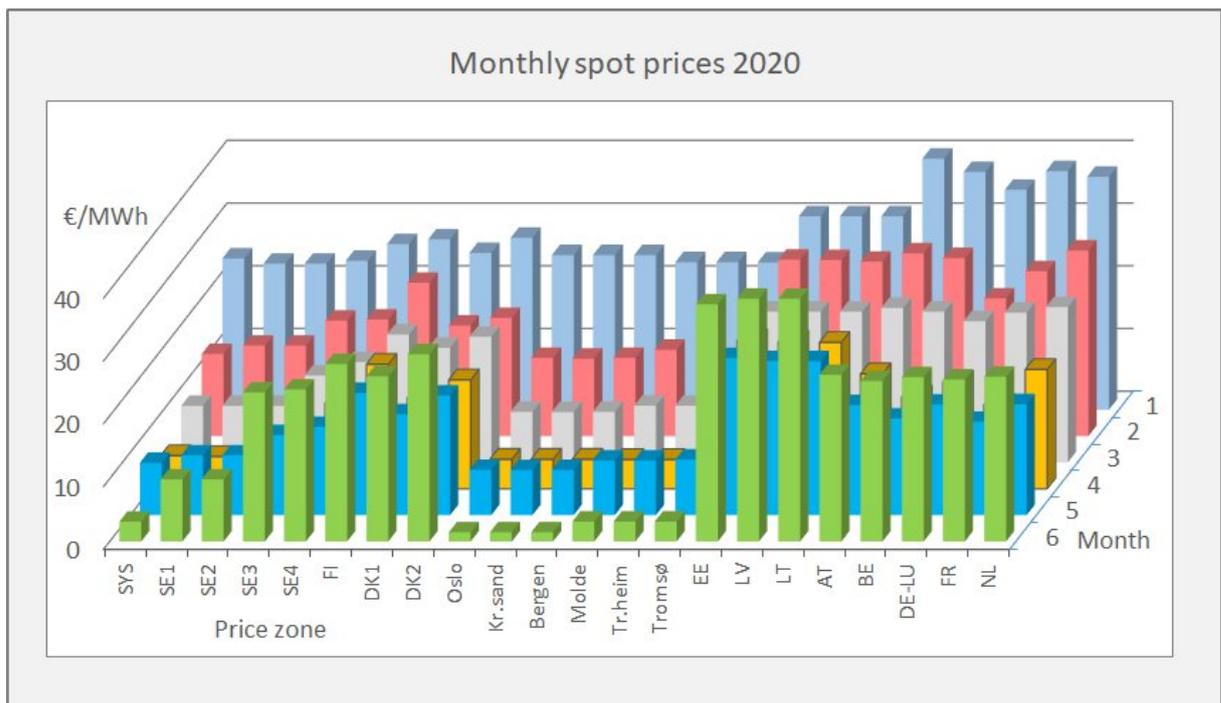


Figure 1 - Monthly spot prices 2020 by Nordpool price zones

Fig. 1 reflects a serious shortage of capacity in the Nordic transmission grid. Energy is trapped in Norway and particularly in the southern Norway, where prices approaching zero suggest a risk of spillage in the hydro systems.

A 1350 MW transfer capability between Norway and Denmark is missing due to cable faults on the Skagerrak interconnection. By assuming that the average price difference between Denmark (DK1) and Norway (NO2/Kristiansand) in June was €25, we can estimate the total loss for the missing 1350 MW to be €33,750 per hour or about €24 million per month.

This amount of money indicates an alarming waste of resources because expensive non-renewable electricity must be produced elsewhere. For comparison: the average monthly congestion income in 2019 for the Skagerrak interconnection was €4 million.

The trend of the water level in the hydro reservoirs in the Norwegian NO2 price zone can help us to understand the expectations in the electricity market.

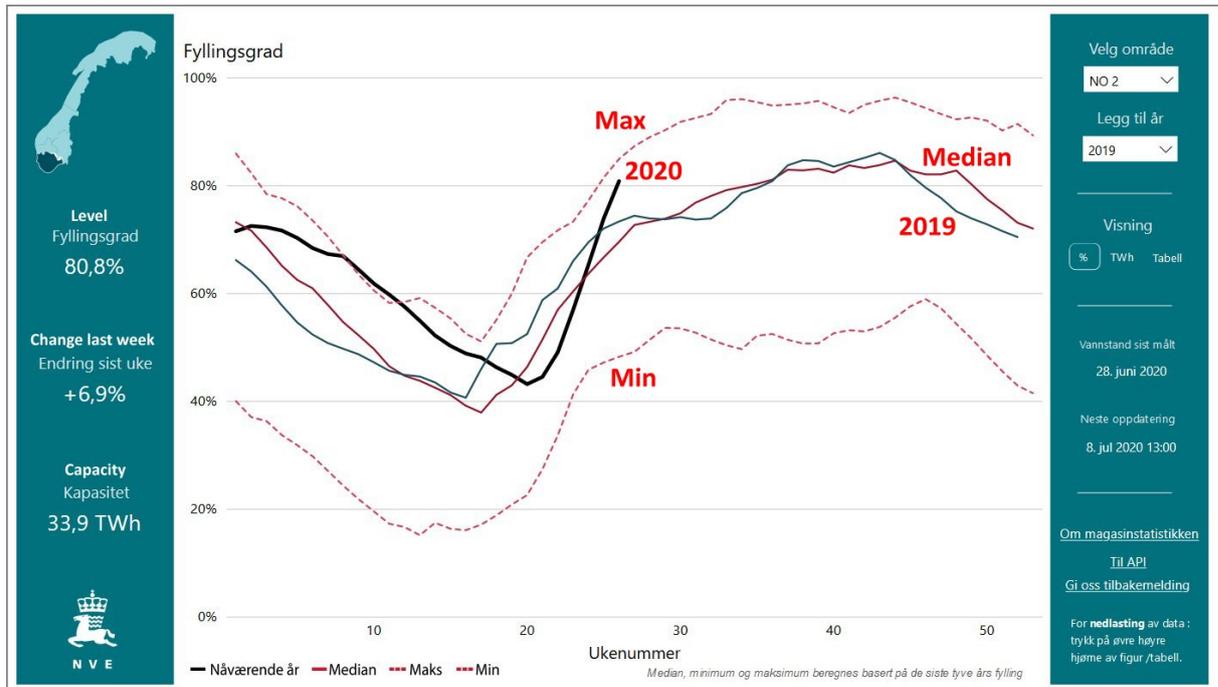


Figure 2 - Hydro levels southern Norway (NO2) Source: [www.nve.no](http://www.nve.no)

The water level in fig. 2 depends on the balance between inflow and use of water. The season with large inflow usually starts between week 15 and 20.

The current rapid increase of the water level is remarkable and the risk of spillage is obvious. The reduced demand from Denmark is a contributing cause, and the prospect of higher export capacity is uncertain. The result is a spot price level about €1 per MWh.