

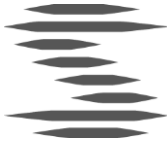
2018-05-25

PROMEMORIA

Swedish Interconnectors

COMP CASE NO 39351

Requested additional information



Introduction

This report is submitted to comply with section 5 (Monitoring provisions) of Svenska kraftnät's Commitments (26 January 2010) under Article 9 of Council Regulation No. 1/2003 in connection with the European Commission investigation in Case COMP/39351 – Swedish Interconnectors. The Commitments were adopted and made binding by decision of the Commission on 14 April 2010. Regarding this, Svenska kraftnät would like to emphasize that that we are continuing to monitor the development of the European Network Codes and how they will relate to our Commitment.

The report is prepared in good faith and aims at providing any additional information the Commission may need in order to judge whether Svenska kraftnät is proceeding in accordance with the Commitments.



Details on background to commitments under article 9 of Council regulation No 1/2003

Affärsverket Svenska kraftnät has been requested by the Commission to provide further details on the document “Background to commitments under article 9 of Council regulation No 1/2003 – Anne 2: The West-coast corridor” from 2009. The Commission asks specific answers for three questions no later than 1st of June 2018. Each question is answered under respective heading.

1 Down-regulation in Ringhals nuclear power station to reduce congestion on the West Coast Corridor

Q1. The Commission asks in what extent downregulation has eased congestion on the West Coast Corridor according to principles stated in the aforementioned document.¹

Svenska kraftnät was not forced to down-regulate Ringhals nuclear power plant during 2017. Henceforth, capacity limitation was not affected by the possibility to down-regulate Ringhals due to reasons mentioned below.

Capacity reduction on concerned interconnectors is applied on basis on the latest forecasts on weather conditions, wind power generation and load patterns in Gothenburg and Malmö areas. Thus, during operation, variations in these forecasts may lead to congestion on the West Coast Corridor – despite applied limitations on concerned interconnectors – where additional remedial actions are required. Svenska kraftnät has several actions available and one of those is to commission down-regulation with 600 MW in Ringhals nuclear power plant within 15 minutes which would reduce the transmission flow on the West Coast Corridor with about 60 percent efficiency. The contract has thus been established in order to alleviate congestion on the West Coast Corridor during operation as a remedial action. This is also important in case of a disturbance on the West Coast Corridor in which the transmission flow has to be reduced. Moreover, down-regulation during planning phase and before day-ahead trading would affect the electricity market in an unmotivated way.

¹ a) Please explain to what extent (in number of hours and in MW) SvK has used the possibility to down-regulate production of the Ringhals power plant in 2017 in order to reduce congestion in the West Coast Corridor?

b) Please explain to what extent the use of down-regulation of Ringhals' generation have enabled SvK to reduce the congestion of the West Coast Corridor without resorting to capacity limitations on the Swedish interconnectors in 2017?



2 Commissioning of the 400 kV-line Stenkullen – Lindome to reduce congestion on the West Coast Corridor

Q2. The Commission asks in what extent commissioning of the 400 kV-line Stenkullen – Lindome has eased congestion on the West Coast Corridor according to principles stated in the aforementioned document.²

The commissioning of the 400 kV-line Stenkullen – Lindome has, as described in Svenska kraftnät's reply 2nd December 2014, increased the capacity on the West Coast Corridor and thus reduced the capacity reduction on concerned interconnectors. The capacity on the West Coast Corridor increased from 2500 MW to above 3000 MW after the reinforcement which has been utilized by the market. The average capacity reduction together with the number of hours with limitations would be much larger up to this date if the commissioning had been stalled. Why restrictions nevertheless might increase between different years depend on a number of factors already stated in our previous reply 10th of May 2018. Below follow extracts from previous replies regarding the effect of Stenkullen – Lindome and what extent congestion on the West Coast Corridor has been relieved.

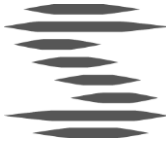
Extract from reply 2nd of December 2014 (page 3):

The Commission asks why restrictions appear to be increasing despite the new transmission line between Stenkullen-Lindome

In accordance with the Commitment, Svenska kraftnät took Stenkullen-Lindome into operation on 10 July 2012 (Q3 2012) and thereby has the capacity in the West Coast Corridor (WCC) increased. After taking Stenkullen-Lindome into operation Svenska kraftnät still needs to limit the trading capacities. As can be seen in table 1 the average reduced capacity during the limited hours, has decreased since Q3 2012 on the interconnection Konti-Skan and the interconnection to Zealand, however the average number of limited hours per quarter has increased.

This can partly be explained by more wind power production and higher average nuclear production the time after Stenkullen-Lindome was taken into operation than before (Q3 2010-Q2 2012). But there are also other factors like domestic consumption, probable exports and imports, current network configuration (e.g. outages), temperatures and weather conditions that periodically have affected the limitation.

² Please explain to what extent the commissioning of the new Stenkullen-Lindome line has alleviated the congestion of the West Coast Corridor.

**Extract from reply 23rd of February 2015 (page 8):**

Answer to question 3:

Svenska kraftnät has previously communicated, in the Final Commitments case No 39351 26th of January 2010 and the memo submitted to Commission 2nd of December 2014 that the reinforcement will alleviate the congestion on the West Coast Corridor. To fully solve the congestion problem is of course an aspiration but depends on other factors that Svenska kraftnät has limited or no influence over such as weather, hydrological situation, continued expansion of wind power, nuclear production, transmission capacity and production in neighbouring countries and market functions like loss compensation. Therefore it's impossible to set a date on when the congestion problem in the West Coast Corridor is fully solved.

3 Commissioning of the South West Link to reduce congestion on the West Coast Corridor

Q2. The Commission asks in what extend commissioning of the South West Link will ease congestion on the West Coast Corridor according to principles stated in the aforementioned document.³

The South West Link was planned to consist of two parts: one “west” link from NO1 to SE3 and one “south” link from SE3 to SE4. The original plan would by definition reinforce the West Coast Corridor by providing an additional HVDC corridor from south to west and vice versa. Although, the western link was excluded after one of the parties withdrew from the project due to high investment costs. Hence, the South West Link⁴ of today has no expected effect on congestion on the West Coast Corridor.

³ Please explain to what extent you expect the commissioning of the South West Link to alleviate the congestion in the West Coast Corridor.

⁴ Northbound flow through the South West Link has a low potential to reduce congestion on the West Coast Corridor and would increase the transmission line losses more compared to alleviated congestion.