

DECISIONS

COMMISSION DECISION (EU) 2020/2123

of 11 November 2020

granting the Federal Republic of Germany and the Kingdom of Denmark a derogation of the Kriegers Flak combined grid solution pursuant to Article 64 of Regulation (EU) 2019/943 of the European Parliament and of the Council

(notified under document C(2020) 7948)

(Only the Danish and German texts are authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity ⁽¹⁾ ('Electricity Regulation'), and in particular Article 64 thereof,

After informing the Member States of the Application,

Whereas:

1. PROCEDURE

- (1) On 1 July 2020, the Danish and German authorities submitted to the European Commission a request for derogation of the Kriegers Flak combined grid solution ('KF') pursuant to Article 64 of the Electricity Regulation.
- (2) On 7 July, the European Commission published the derogation request on its website ⁽²⁾ and invited Member States and Stakeholders to provide comments until 31 August 2020. At the Council Energy Working Party of 13 July 2020, Member States were also informed that a derogation request had been submitted and that comments could be provided.

2. THE KRIEGERS FLAK COMBINED GRID SOLUTION

- (3) Kriegers Flak as a geographic area refers to a reef in the Baltic Sea spanning the economic zones of Denmark, Germany and Sweden. The reef creates relatively shallow waters, and in 2007 Denmark, Germany and Sweden were all interested to develop wind farms in the area. Initially, transmission system operators ('TSOs') from all three Member States assessed the possibility to create a joint project connecting developments in the area. As of 2010, the project to build a wind farm connected to two countries (a so-called 'hybrid project') was only pursued by the Danish and German system operators.
- (4) According to the application for derogation, the main goal of designing KF as a hybrid project was to increase the use of the connections between the wind farms and their respective onshore grid, by making available this capacity for cross-zonal trade when it was not fully required for transporting electricity generated from wind farms to shore.

⁽¹⁾ OJ L 158, 14.6.2019, p. 54.

⁽²⁾ https://ec.europa.eu/energy/sites/ener/files/documents/derogation_decisions2020v1.pdf

- (5) In late 2010 Energinet.dk (the Danish TSO) and 50Hertz (the German TSO for this area) signed a grant agreement over a contribution of EUR 150 million from the European Energy Programme for Recovery ('EEPR'). In 2013, KF was also included in the first list of projects of common interest ('PCI') as annexed to the Commission Delegated Regulation (EU) No 1391/2013 ⁽³⁾. The concept of KF, including the concept concerning the envisaged treatment of electricity flows in case of congestion ('congestion management') has been subject to intensive discussions with the involved national energy regulators and was also outlined in contacts with the European Commission.
- (6) KF as a wider project combines the following elements (see also figure 1 below):
- (a) The Baltic 1 and Baltic 2 farms, both located in German areas of the Baltic Sea. Baltic 1 was commissioned in 2011 and has a capacity of 48 MW. Baltic 2 was commissioned in 2015 and has a capacity of 288 MW.
 - (b) The wind farm also called Kriegers Flak, located in Danish areas in the Baltic Sea. This wind farm of 600 MW capacity is planned for commissioning in 2022.
 - (c) The grid connection from the German wind farms to the German shore, with a capacity of ca. 400 MW, using alternating current at 150 kV voltage over a distance of 136 km, commissioned in 2011 and 2015 respectively.
 - (d) The grid connection from the Danish wind farm to the Danish shore (in the Denmark 2 bidding zone), with a capacity of 680 MW, using alternating current at 220 kV voltage over a distance of 77-80 km, commissioned in 2019.
 - (e) A back-to-back converter station in Bentwisch, Germany, asynchronously connecting the Nordic and Continental synchronous areas.
 - (f) Two high voltage alternating current cables linking the Kriegers Flak and Baltic 2 wind farms, with a capacity of 400 MW over a distance of 24,5 km.
 - (g) To link the Kriegers Flak and Baltic 2 platforms, both offshore platforms had to be expanded.
 - (h) A Master Controller for Interconnector Operation ('MIO'). The MIO controls the load flow through the back-to-back converter station in real time, triggers countertrading in case a congestion occurs due to wind generation which is higher than estimated, triggers curtailment of the offshore wind farms where required as a last resort, and adapts set point values for voltage and reactive power at the back-to-back station to ensure voltage stability. It also forecasts, on an hourly basis, the remaining transmission capacity to be made available to the market.
- (7) Of the above assets, the derogation request does not consider the wind farms as formally being part of the KF project (which therefore is considered as limited to the transmission network assets (c) to (h)).

⁽³⁾ Commission Delegated Regulation (EU) No 1391/2013 of 14 October 2013 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure as regards the Union list of projects of common interest (OJ L 349, 21.12.2013, p. 28).

Figure 1

Map of the KF project area and main system elements



- (8) Furthermore, only assets (e) to (h) are directly related to ‘combining’ the national networks. Only those assets (marked as ‘KF CGS assets’ in figures 1 and 2) were therefore co-financed by EU funds.

Figure 2

KF CGS Assets



3. THE REQUESTED DEROGATIONS

- (9) The requested derogations all aim at allocating the capacity of the KF system at the bidding zone border between the Denmark 2 (DK2) and the German-Luxembourg (DE-LU) bidding zones with priority to the offshore wind farms directly connected to the KF system.

- (10) The applicants request derogation for the KF system from a number of requirements described below, all relating to the minimum available capacity for trade under Article 16(8) of the Electricity Regulation.

3.1. Article 16(8) of the Electricity Regulation

- (11) Article 16(8) of the Electricity Regulation sets out that transmission system operators shall not limit the volume of interconnection capacity to be made available to market participants as a means of solving congestion inside their own bidding zone or as a means of managing flows resulting from transactions internal to bidding zones. This paragraph shall be considered to be complied with where, for borders using a coordinated net transmission capacity approach, at least 70 % of the transmission capacity respecting operational security limits after deduction of contingencies, as determined in accordance with the capacity allocation and congestion management guideline, are available for cross-zonal trade. The German and Danish authorities request that this minimum percentage should not apply to the overall transmission capacity respecting operational security limits after deduction of contingencies. Instead, it should apply only to the capacity remaining after all capacity expected to be required for the transmission of production from the wind farms connected to the KF system to shore has been deducted ('residual capacity').
- (12) Thus, if of 400 MW transmission capacity, 320 MW were already needed to transport wind to the shore, pursuant to the derogation request only 80 MW shall be subject to the requirements under Article 16(8). Consequently, if at least 70 % of the 80 MW were made available for cross-zonal trade, this should, in view of the German and Danish authorities, be deemed sufficient to comply with the requirements of Article 16(8) of the Electricity Regulation. The capacity deducted from the total capacity before calculating the minimum capacity made available for trade in the day ahead timeframe shall be based on the wind production forecasts by both TSOs at the day ahead stage. Unused capacity after the day ahead capacity allocation shall be made available in the intraday market.
- (13) It should be noted that this approach is, as outlined in the request, currently included in the capacity calculation methodology of the Hansa capacity calculation region for the day-ahead and intraday timeframes. The Hansa capacity calculation region includes the Kriegers Flak project. The capacity calculation methodology of the Hansa region was agreed between the national regulatory authorities of the Hansa region on 16 December 2018. The capacity calculation methodology of the Hansa capacity calculation region for the forward timeframe and an updated methodology for the day-ahead and intraday timeframes could not yet be agreed between the competent national regulatory authorities of the region, notably because no agreement on the approach for capacity calculation on the Kriegers Flak interconnector could be found. Thus, the deadline for coming to an agreement was prolonged in the hope of getting clarity via the present derogation procedure (*).

3.2. Articles 12, 14, 15 and 16 of the Electricity Regulation

- (14) Articles 12, 14, 15 and 16 of the Electricity Regulation refer in several instances to the minimum level of available capacity as set out in Article 16(8). German and Danish authorities ask for the derogation to the effect that the minimum level of capacity in those articles reflects the minimum level as calculated above, thus 70 % of the residual capacity.
- (15) The Commission does not regard this as separate derogation requests. Importantly, Article 64(1) of the Electricity Regulation does not allow for derogations from Article 12 of the Electricity Regulation. However, in so far as a derogation from Article 16(8) results in a different calculation of the minimum level of capacity, all references to this minimum value in the Regulation are to be understood as referring to the value set out in the derogation decision.

(*) See ACER Decision 6/2020 of 7 February 2020 on the request of the regulatory authorities of the Hansa capacity calculation region to extend the period for reaching an agreement on the long-term capacity calculation methodology, https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2006-2020%20on%20extension%20Hansa_LT_CCM.pdf

3.3. Network codes and guidelines

- (16) Based on the request, the derogation shall also be taken into account in the respective capacity calculation processes pursuant to Commission Regulation (EU) 2015/1222 ⁽⁵⁾ establishing a guideline on capacity allocation and congestion management ('CACM'), Commission Regulation (EU) 2016/1719 ⁽⁶⁾ establishing a guideline on forward capacity allocation ('FCA') and Commission Regulation (EU) 2017/2195 ⁽⁷⁾ establishing a guideline on electricity balancing ('EB'). In so far as derogations from the methodologies adopted under these Commission Regulations are requested, such requests are not considered to be separate derogation requests but intrinsically linked to the request for derogation from the Electricity Regulation. To the extent that, due to a derogation, a provision of the Electricity Regulation does not apply, or applies only in part, to a project, methodologies adopted under lower level legislation referring to the respective provision of the Electricity Regulation or based upon it are not applicable either.
- (17) The derogation request further sets out that the reservation of capacity in the long-term market shall be based on the capacity left over after deducting the installed wind power capacity. The reservation of capacity in the other market time units shall be based on the capacity left over after deduction of the forecasted wind power injection. While the request sets out that the curtailment of offshore wind farms (which is understood to refer only to the Baltic 1 and 2 and Kriegers Flak wind farms) caused by the reservation of cross-border capacity for cross-zonal trade shall be avoided in all market time units, the Commission understands this request to be the intended consequence of the other requested derogations and the described approach to capacity calculation and allocation, and not a request for separate derogations. In particular, the request expressly sets out that allocated capacity should be firm, thus no allocated transmission capacity shall be curtailed to prevent curtailment of the offshore wind farms.

3.4. Duration of the requested derogation

- (18) The derogation request asks for the derogation to take effect with the commissioning of KF expected in Q3/2020 and applying for 'as long as the Baltic 1, Baltic 2 and Kriegers Flak wind farms are connected to KF'. It later refers to a time limitation 'for as long as these OWFs are operational and connected to the system'.
- (19) The Commission understands this to refer to the wind farms as they are currently already existing or, as regards Kriegers Flak wind farm, planned to be operational in the near future. Thus, for new wind farms, even as follow-on investments to the existing farms, their forecasted production would not be deducted from the total transmission capacity before calculating the residual capacity.

4. COMMENTS RECEIVED DURING THE CONSULTATION PERIOD

- (20) During the consultation, the Commission received comments from five different stakeholders as well as from one Member State.
- Four of the six submissions were favourable to or at least expressed understanding for the requested derogation, though two of those submissions requested clear time limitations of the derogation, one with a view to rapidly adapting the project to the EU law framework. Another submission did not comment on the derogation request itself, whereas the sixth submission argued in favour of rejecting the derogation and, as a second-best solution, setting out a short time limitation for it.
 - Regarding the duration of a possible derogation, of the four submissions in favour of granting a derogation, two submissions argued for the derogation to cover the entire lifetime of the connected wind farms, whereas one submission asked for the duration of the derogation to be specified without proposing a concrete duration and another submission asked for the derogation to be temporary, giving the example of a five year time limitation, in view of developing an offshore bidding zone solution for KF.

⁽⁵⁾ Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (OJ L 197, 25.7.2015, p. 24).

⁽⁶⁾ Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (OJ L 259, 27.9.2016, p. 42).

⁽⁷⁾ Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (OJ L 312, 28.11.2017, p. 6).

- Five of the six submissions stressed that while a (conditional) ad hoc derogation decision may be justified due to the unique characteristics in the case at stake, derogations were not a suitable alternative to setting out a wider regulatory framework to ensure an enduring regulatory solution. Such regulatory solution would not only be useful for future hybrid projects, but could also allow to replace the derogation after a certain time which is needed to agree on the regulatory treatment and a possible re-negotiation of KF contracts. The sixth submission recognised that changes in the framework have occurred, but underlined that it was natural for long-term projects to live with certain regulatory changes during their project period.
- As regards the content of such an enduring regulatory solution, which is outside the scope of the present derogation decision, two submissions highlight that support should be given directly in a market based manner (such as via auctions) rather than indirectly via artificially high electricity prices or operational special treatment such as priority dispatch and lack of balancing responsibility. One submission goes into further detail, supporting offshore bidding zones as a promising solution which could also be applied to KF in the future, stressing that market design should not differentiate between onshore and offshore generation, while recognising the need to assess distributional effects of offshore bidding zones in more detail.

5. ASSESSMENT

- (21) According to Article 64 of the Electricity Regulation, a derogation from the relevant provisions of Articles 3 and 6, Article 7(1), Article 8(1) and (4), Articles 9, 10 and 11, Articles 14 to 17, Articles 19 to 27, Articles 35 to 47 and Article 51 of the Regulation can be granted if the Member State(s) (in this case both Denmark and Germany) can demonstrate that there are substantial problems for the operation of small isolated systems or small connected systems.
- (22) Other than in the case of outermost regions, the derogation shall be limited in time and shall be subject to conditions aiming to increase competition and integration with the internal market for electricity.
- (23) Finally, the derogation shall aim to ensure that it does not obstruct the transition towards renewable energy, increased flexibility, energy storage, electromobility and demand response.

5.1. Small isolated or small connected system

- (24) The Electricity Regulation does not provide for generalised automatic derogations for small connected or small isolated systems. The Regulation thus assumes that notwithstanding the large variety in size and technical characteristics of electricity systems in the EU, all such systems can and should be operated in line with the full regulatory framework.
- (25) However, this assumption can be rebutted and thus under Article 64(1) of the Electricity Regulation, a derogation from the application of certain provisions of the Electricity Regulation is possible if Member States show, amongst others, that the application of these provisions to small isolated systems could lead to substantial problems, notably due to the geographical conditions or demand profiles relevant for the systems in question. For example, this has been found to be the case for certain small and isolated Mediterranean islands with very low demand in winter and significant increases of demand during short tourism seasons ⁽⁸⁾.
- (26) In addition to *isolated* systems, the Electricity Regulation envisages the possibility of granting derogations also to small *connected* systems. This raises the question of what constitutes a *system* in the meaning of Article 64 of the Electricity Regulation. To date, all Commission decisions granting derogations for isolated systems concern islands. The fact that the only system expressly mentioned in Article 64 is that of Cyprus, an island the transmission system of which is currently not connected to other Member States' transmission systems, indicates that islands were likely also what the legislator had in mind when including the derogation possibility for small isolated or small connected systems.

⁽⁸⁾ See Commission Decision of 14 August 2014 granting the Hellenic Republic a derogation from certain provisions of Directive 2009/72/EC of the European Parliament and of the Council (OJ L 248, 22.8.2014, p. 12).

- (27) The term 'system' itself is not defined, neither by the Electricity Regulation nor by the Electricity Directive. However, Article 2(42) and (43) Electricity Directive define the terms 'small isolated system' and 'small connected system' respectively. Small isolated systems are defined as 'any system that had consumption of less than 3 000 GWh in the year 1996, where less than 5 % of annual consumption is obtained through interconnection with other systems', whereas small connected systems are 'any system that had consumption of less than 3 000 GWh in the year 1996, where more than 5 % of annual consumption is obtained through interconnection with other systems'.
- (28) First, both definitions thus assume that the system is something within which a consumption of electricity can be measured and defined. Second, it is something which can be interconnected with other systems. The term 'interconnector' in Article 2(39) of the Directive (differing from the Regulation) is also defined as 'equipment used to link electricity systems'. Against this background, it is clear that the 'system' needs to be something which (i) can include consumption points; and (ii) can be linked to other systems by means of electric cables. This seems to exclude an understanding of several overlapping and intertwined systems as a 'system'. Rather, one system needs to be clearly separable from another. The clearest separation, and this is also the one which has been used in Commission case practice to date ⁽⁹⁾, is a topological separation of one geographical area from another, such as a sea separating an island from other islands and the mainland or mountains. Furthermore, it is clear that a 'system' needs to be held together by something and cannot consist of several fully independent and unrelated elements, thus a chain of separate and non-interconnected islands would not form one but several systems.
- (29) In the case at hand, the area connected by the cables as part of KF lies in the middle of the sea. Whereas the Baltic 2 and Kriegers Flak wind farms are situated on or near the Kriegers Flak reef, the Baltic 1 windfarm is situated between the reef and the German shore. The wind farms are thus clearly separated from the mainland by the Baltic Sea. However, the sea also separates the wind farms from each other. While they are connected by cables between themselves, this is not different from their connection to the mainland systems.
- (30) However, the KF system forms an entity held together by the joint operation via the MIO. The MIO acts in many ways like a separate system operator, autonomously calculating capacity, proposing remedial actions in case of congestion, taking measures to ensure voltage stability, and purchasing countertrading services, albeit under the supervision of system operators, the two TSOs owning the network elements. Thus, the KF is *separated from other systems by the sea and bound together as a single system by a joint operational concept and a joint operating function*. Furthermore, it does not overlap with other systems and one could not argue either that the individual wind farms form separate systems. Neither of the two TSOs can unilaterally control the KF system elements.
- (31) Thus, the KF combined grid facility constitutes, together with the connected wind parks, a system in the meaning of Article 64 of the Regulation.
- (32) KF is also clearly a 'small' system. For newly created systems, it is logically excluded to refer to the consumption in 1996. This reference year still dates from the first Electricity Directive 96/92/EC of the European Parliament and of the Council ⁽¹⁰⁾, albeit still with a threshold of 2 500 GWh. It has been maintained as a reference point in later years in order to prevent systems from changing status based on changes to their annual consumption figures.

⁽⁹⁾ See Commission Decision 2004/920/EC of 20 December 2004 on a derogation from certain provisions of Directive 2003/54/EC of the European Parliament and of the Council concerning the archipelago of the Azores (OJ L 389, 30.12.2004, p. 31); Commission Decision 2006/375/EC of 23 May 2006 on derogation from certain provisions of Directive 2003/54/EC concerning the archipelago of Madeira (OJ L 142, 30.5.2006, p. 35); Commission Decision 2006/653/EC of 25 September 2006 granting the Republic of Cyprus a derogation from certain provisions of Directive 2003/54/EC of the European Parliament and of the Council (OJ L 270, 29.9.2006, p. 72); Commission Decision 2006/859/EC of 28 November 2006 granting Malta a derogation from certain provisions of Directive 2003/54/EC of the European Parliament and of the Council (OJ L 332, 30.11.2006, p. 32) and Commission Decision 2014/536/EU of 14 August 2014 granting the Hellenic Republic a derogation from certain provisions of Directive 2009/72/EC of the European Parliament and of the Council (OJ L 248, 22.8.2014, p. 12).

⁽¹⁰⁾ Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity (OJ L 27, 30.1.1997, p. 20).

- (33) However, once a new system has been finalised and become fully operational its consumption at that point in time needs to be used as a basis for determining whether the system is 'small'. This is the case for KF. The KF system has no significant consumption, with a total consumption including grid losses estimated at about 90 GWh. There is also no significant increase of consumption (e.g. through hydrogen production) expected in the near future. While the consumption in Article 2(42) and (43) of the Regulation may suggest that the notion of 'small systems' is linked to 'human' consumption and thus restricted to inhabited islands, the Commission takes the view that the lack of household or industrial demand does not exclude the qualification as 'small system'. Furthermore, as there is no minimum threshold, requiring human consumption inside a system would not provide any meaningful separation criterion. Whereas Commission decisions on small systems are mostly aimed at resolving particular challenges for stable and competitive supplies to the inhabitants of the system, the wording of the Regulation does not limit the derogation possibility to such kind of problems. Indeed, as the Article refers to substantial problems 'for the operation' of a system, those problems can just as well be based in the interaction between the system and production located therein as in the interaction with demand.
- (34) Finally, KF, which itself provides significant interconnection capacity, is clearly 'connected'.
- (35) Thus, KF is a small connected system in the meaning of Article 64(1)(a) of the Electricity Regulation.

5.2. Substantial problem for the operation of the system

5.2.1. What is a substantial problem?

- (36) The wording of Article 64 is very broad, referring to 'substantial problems for the operation of the system'. The term 'substantial problems' is neither legally defined nor has the Commission provided a definition of the term in its decision-making practice. The open formulation allows the Commission to take into account all potential problems related to the particular situation of small systems, provided they are substantial and not only marginal. Such problems can vary significantly depending on the geographical particularities, production and consumption of the system in question, but also on the basis of technical developments (such as electricity storage and small generation).
- (37) In past decisions, the problems to be resolved related to maintaining social coherence and/or equal competitive conditions between the mainland and islands in a situation where system security on the island required additional measures or implied significantly higher costs on an island compared to the mainland. 'Operation' can thus not be understood narrowly, such as requiring that without the derogation, secure system operation would not be possible. Instead, 'problems' have always been considered to also include socioeconomic problems for the users of the system at hand ⁽¹⁾.
- (38) Furthermore, the problems in question need to occur for the operation of the system. It thus appears difficult to imagine a justification which would be based exclusively on impacts occurring outside of the system, e.g. impacts on national subsidy schemes. This does not exclude the relevance of 'indirect' impacts for example on the secure operation of the system.

5.2.2. The KF system as a first of its kind

- (39) The KF system is a first of its kind system combining connection cables between onshore systems and offshore wind parks situated in two different countries, a cable connecting those offshore wind parks enabling thereby electricity trade between both onshore systems, a back-to-back converter station between two different synchronous areas, two different voltage levels connected via an offshore transformer, and the MIO autonomously (under the supervision of operators from both TSOs) controlling the different system elements, triggering countertrading or curtailment where required and setting the set point values of the back-to-back converter.

⁽¹⁾ See e.g. Decision 2014/536/EU which refers to the higher costs of producing electricity on the islands while prices are by law equal to those on the mainland.

- (40) Setting up the first such system is a complex undertaking and was subject to significant challenges. In view of the high complexity of the project, the time from project planning to final realization was very long.
- (41) When in 2010, a grant agreement was signed between the Commission and the TSOs contributing EUR 150 million in EU funds to the KF project, the agreement provided that the start of operation of the KF system was planned for June 2016.
- (42) However, the first of its kind nature brought with it the need to change the configuration of the system in the middle of the project. Initially it was planned to use HVDC cables but, as the planned HVDC offshore platform became about 250 % more expensive than expected ⁽¹²⁾, the system had to be redesigned using offshore AC cables. A revised grant agreement was signed in September 2015.
- (43) This revised structure resulted in a significant reduction of the transmission capacity additional to what is needed to transmit the wind generated by the offshore wind farms to shore. This can be demonstrated by comparing two examples on congestion management given in different presentations by Energinet.dk to the Commission, on 14 November 2012 and 3 September 2014 respectively:

Figure 3

Example based on the 2012 project plan

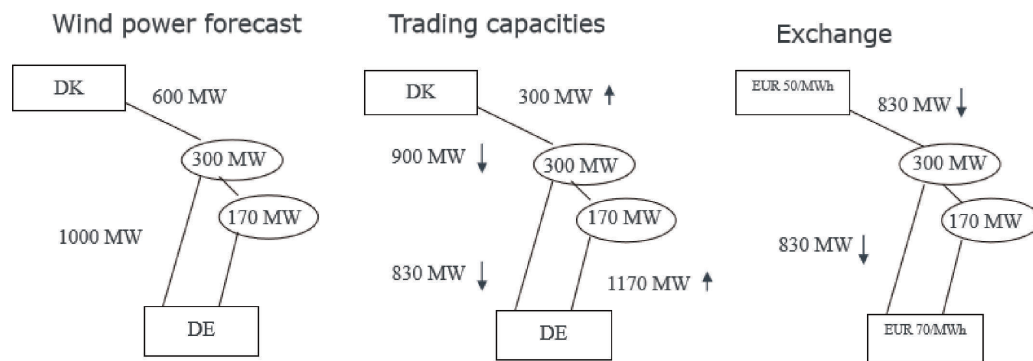
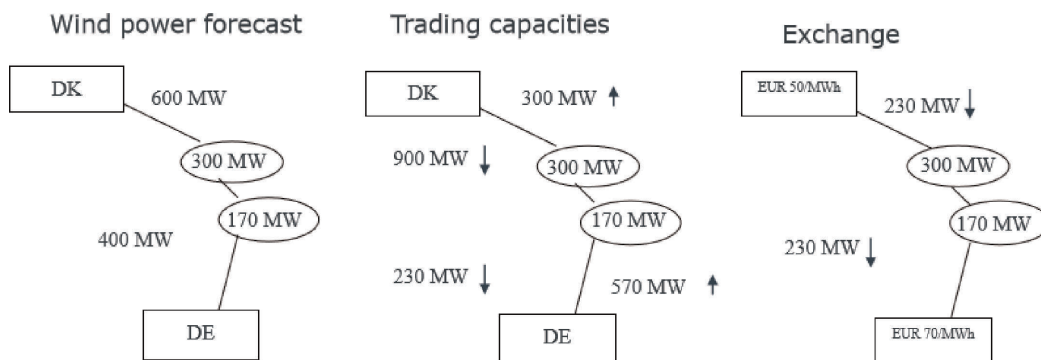


Figure 4

Example based on the 2014 project plan



- (44) Those examples show that, assuming equal wind output in both scenarios, the capacity of the KF system made available to the market for trade towards Germany was 830 MW in the 2012 project and 230 MW in the 2014 project. It should be noted however that the effective difference between both project set-ups strongly depends on the wind situation ⁽¹³⁾.

⁽¹²⁾ Presentation by 50Hertz to the European Commission on 9 May 2014, slide 3.

⁽¹³⁾ Based on the information provided by German and Danish authorities on 11 September 2020, the capacity values compare as follows: In case of the German and the Danish OWFs each having the same utilisation rate, the transmission capacity available to the market towards Germany would have varied under the initial project set-up from 600 MW (in case of no wind power production) to ~ 855 MW (in case of wind power productions being at about 50 % of the respective installed capacities) and then from ~ 855 MW to 661 MW (in case of wind power production being at maximum), whereas under the revised project set-up, it would vary from 400 MW (in case of no wind power production) to 61 MW (in case of wind power production). The transmission capacity available to the market towards Denmark would have varied under the initial project set-up from 600 MW (in case of no production) to 0 MW (in case of production being at maximum), whereas under the revised project set-up, it would be 400 MW (in case of wind power production being between 0 % and 33 %) and then would vary from 400 MW to 61 MW (in case of wind power production being at maximum).

- (45) This significant change in project design shows the particular challenge of this project. The new design uses unusually long AC cables, with a total length of the AC connection exceeding 200 km, a length at which usually DC technology would be used (as initially planned). This creates challenges for voltage stability inside the KF system. To address this challenge, the concept of a MIO has been developed to monitor and control the KF assets and react (autonomously but under the supervision of TSO operators) as required.
- (46) The reactions of the MIO include procuring necessary countertrading volumes in case congestion occurs. In high wind situations, the production from the offshore wind farms would already fill a very large share of the cables. If high minimum trade volumes were required in such situations large countertrading volumes would occur more frequently.
- (47) By way of example: In situations where the price in the DE/LU zone is higher than the price in the DK2 zone, the connection cable between the German wind farms and the German shore would be congested and ensuring a minimum trade volume on this cable would require countertrading in the direction DE/LU towards DK. If, in such a situation, at least 70 % of the 400 MW capacity (thus 280 MW) would need to be made available for trade, this capacity would be used for flowing electricity from the DK 2 zone (perhaps from wind generation in Denmark or other Scandinavian countries) to the DE/LU zone. However, the addition of the 280 MW and the wind from the Baltic 1 and Baltic 2 wind farms, which are located in the DE/LU bidding zone, would exceed the capacity of the connection cable between those wind farms and the German shore.
- (48) Thus, to make available this capacity, either the production from the wind farms would need to be reduced (curtailment/downward redispatching) or the system operators would need to engage in countertrade (trading electricity from the DE/LU zone to the DK2 zone). Both approaches would reduce the physical flow on the cable and prevent overloading. However, as set out also in Article 13 of the Electricity Regulation, non-market-based downward redispatching of electricity from renewable energy sources shall be used only where no other option is available. Furthermore, significant reductions of the running hours of the renewable generation assets could negatively impact their business case or the aims of the renewable support program. Thus, the MIO is set up to reduce output of the wind farms only as a last resort, and to first address congestion via countertrading.
- (49) Therefore, the application of Article 16(8) would increase the amount of countertrading needed. This would, without doubt, increase the complexity of maintaining stable operations of the KF system, as more frequent interventions by the MIO would be required and higher trade volumes would need to be autonomously handled by the MIO. However, based on the available information, it does not appear that this increased complexity would put into question the operational security of the KF system itself, and thereby justify a derogation on its own.
- (50) However, in this respect, it is important to highlight that the Electricity Regulation explicitly recognises the particular challenges of innovative projects in general and hybrid assets combining interconnection and onshore connections in particular.
- (51) Article 3 point (l) of the Electricity Regulation provides that 'market rules shall allow for the development of demonstration projects into sustainable, secure and low-carbon energy sources, technologies or systems which are to be realised and used to the benefit of society'. Thus, the legislative framework aims at facilitating demonstration projects. Article 2(24) of the Electricity Regulation defines a demonstration project as 'a project which demonstrates a technology as a first of its kind in the Union and represents a significant innovation that goes well beyond the state of the art'. This is clearly the case for KF, which is the first such project and, as also demonstrated by the significant challenges in bringing it into existence, required significant innovation going well beyond the state of the art.
- (52) Furthermore, recital 66 of the Regulation sets out that 'offshore electricity infrastructure with dual functionality (so-called 'offshore hybrid assets') combining transport of offshore wind energy to shore and interconnectors, should also be eligible for exemption such as under the rules applicable to new direct current interconnectors as well as, where the costs of the project are particularly high, to alternating current interconnectors. Kriegers Flak is significantly more complex than the average alternating current interconnector project, and thus would have in principle been eligible for an exemption under Article 63. Where necessary, the regulatory framework should duly

consider the specific situation of those assets to overcome barriers to the realisation of societally cost-efficient offshore hybrid assets.’ While this recital expressly mentions exemptions for new interconnectors, thus referring to Article 63, the use of ‘such as’ shows that this is not the only path to specific frameworks for hybrid assets the recital wants to highlight. KF being the first hybrid asset, it is clear that the legislators were aware of this project when drafting recital 66 and considered it a possibility that the project could require a specific regulatory framework.

- (53) While a recital cannot change the legal requirements under the Regulation for granting specific frameworks via derogations or exemptions, and Article 3 point (l) does not set out any specific requirements as to how regulatory frameworks shall deal with demonstration projects, both taken together show the will of the legislator for the Commission to take particular note of the specific situation and challenges for hybrid assets and demonstration projects.
- (54) Against this background, KF as a demonstration project faces increased complexity. The extent of this complexity cannot yet be fully demonstrated as this project is the first of its kind. This could be sufficient to qualify as problems under Article 64. This question could however be left open if other reasons for derogation were to be sufficient, alone or together with the above-described complex operation and set-up of the KF system as a first of its kind hybrid asset.

5.2.3. *Secure operation of the DK 2 area*

- (55) In addition to increased complexity of the operation of the KF system, the increased amount of countertrading would also have impacts on neighbouring bidding zones. Whereas the DE/LU zone is a large zone, the DK2 zone is considerably smaller. This results in more limited resource availability for upward and downward regulation. The derogation application argues that those resources could be fully used already by countertrading for the KF system.
- (56) There could be questions as to whether such a lack of technical availability of countertrading resources would be frequent, as countertrading would usually occur in high wind situations where a large number of wind generation assets are producing in the DK2 zone, but given the large range of possible network situations, this cannot be fully excluded.
- (57) Nevertheless, KF has also other means at its disposal to manage the congestion on its network. For example, in case of a lack of availability of countertrading resources, the KF facility could still be safely operated if the output of the wind farms part of the KF system itself would be reduced. This is, where required to ensure operational security, expressly allowed by Article 13 of the Electricity Regulation.
- (58) Furthermore, it should be noted that increases in system costs alone, be it due to increased countertrading costs or increased costs in procuring reserves for the DK2 area, cannot as such provide a basis for derogations under Article 64. In this regard, it should also be noted that in the recent Commitments Decision in Case AT.40461 *DE/DK Interconnector*, which examined systematic limitations to cross-border capacities under EU competition rules, the Commission deemed that the extra-costs resulting from increased countertrade or redispatch needs could not be accepted as a justification for limiting cross-border flows ⁽¹⁴⁾.

5.2.4. *Legitimate expectations*

- (59) Finally, the derogation request sets out that the first discussions on the KF project started already in 2007, and that the project has since always been planned on the basis of a specific approach to congestion management, which allocates only those capacities to the market which remain after deducting the wind forecasts at the day-ahead stage.

⁽¹⁴⁾ See Commission Decision of 7 December 2018 in Case AT.40461 – DE/DK Interconnector: https://ec.europa.eu/competition/antitrust/cases/dec_docs/40461/40461_461_3.pdf

- (60) The request also sets out that significant changes to the regulatory framework have occurred since 2007, and that notably the Electricity Regulation, by introducing Article 16(8), had set out new requirements compared to the existing legislation. The derogation request argues that the 2016 investment decision was taken on the assumption that the offshore wind farms could benefit from the principle of priority dispatch, based on Directive 2009/28/EC of the European Parliament and of the Council ⁽¹⁵⁾, and that this had as a consequence that capacity for cross-border trade could be reduced.
- (61) The Commission would like to stress against this background that the principle of maximising cross-border capacity is not a new concept and those arguments thus cannot be accepted. First, it is based on the fundamental principles of the EU law and in particular Article 18 of the Treaty on the Functioning of the European Union (TFEU) which prohibits any discrimination on grounds of nationality and Article 35 TFEU, which prohibits quantitative restrictions on exports and all measures having equivalent effect. Second, Article 16(3) of Regulation (EC) No 714/2009 of the European Parliament and of the Council ⁽¹⁶⁾ imposed the obligation to maximise interconnection capacity, requiring that 'the maximum capacity of the interconnections and/or the transmission networks affecting cross-border flows shall be made available to market participants, complying with safety standards of secure network operation'. In addition, Annex 1.7 to that Regulation set out that TSOs 'shall not limit interconnection capacity in order to solve congestion inside their own control area'. Furthermore, on 14 April 2010, the Commission decided in Case AT.39351 *Swedish Interconnectors* ⁽¹⁷⁾ to accept commitments by the Swedish TSO for having, based on the Commission's preliminary assessment, abused its dominant position on the Swedish market by limiting cross-border capacity to solve internal congestion, contrary to Article 102 TFEU. A similar preliminary conclusion resulting in commitments was established in Case AT.40461 *DE/DK Interconnector* ⁽¹⁸⁾ for the border between western Denmark (DK1) and the German/Luxembourg zone.
- (62) Based on the principles outlined above, the market operators should have been aware of the principle of maximising cross-border capacity. In any event, at the latest since April 2010, based on Case AT.39351 *Swedish Interconnectors*, the Commission's interpretation of the existing rules relating to cross-border capacity became clear-cut. Finally, contrary to what is alleged in the derogation request, Point 1.7 of Annex 1 Regulation (EC) No 714/2009 also did not *ad infinitum* allow reducing cross-zonal capacity for reasons of operational security, cost-effectiveness or the minimisation of negative impacts on the internal market in electricity. Instead, where such a limitation may have been exceptionally allowed, it was clearly 'tolerated only until a long-term solution is found'. Thus, creating a whole system relying on a permanent reduction was clearly not allowed for under Regulation (EC) No 714/2009.
- (63) However, the relationship between the obligation to maximise cross-border capacity under the Electricity Regulation and the granting of priority dispatch and priority access to energy from renewable sources under Directive 2009/28/EC was perceived at least by some market participants as not entirely clear and the applicants point out that this issue was raised repeatedly by the project promoters in their contacts with the European Commission as regards this particular first of its kind project. The TSOs working on the KF project also did not simply overlook the possible challenge to their intended approach on congestion management. Rather, they repeatedly presented their planned approach to the European Commission services. In the applicant's view the fact that the European Commission services had in numerous contacts with the project promoters since 2010 not requested to change the structure of the KF project in a way to ensure that the maximisation principle will be applied, contributed to the project promoter's confusion over the applicable rules for this project.
- (64) The 2010 grant application for the KF project ⁽¹⁹⁾ set out that a 'correct interpretation of priority feed-in' needed to be found to ensure viability of the project. The joint feasibility study, which was submitted to the Commission services, stated that the 'basic assumption is that capacity on the interconnections not expected to be required for transporting wind energy can be made available to the spot market'. The expected additional transmission capacity for trade was thus only the capacity remaining after transporting the offshore wind production to shore.

⁽¹⁵⁾ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

⁽¹⁶⁾ Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (OJ L 211, 14.8.2009, p. 15).

⁽¹⁷⁾ https://ec.europa.eu/competition/antitrust/cases/dec_docs/39351/39351_1223_4.pdf

⁽¹⁸⁾ https://ec.europa.eu/competition/antitrust/cases/dec_docs/40461/40461_461_3.pdf

⁽¹⁹⁾ P. 16, risk 7.

- (65) The study also stated that 'Based on the Directive 2009/28/EC all countries have priority access to the grid for renewable energy sources. German national legislation furthermore demands that wind turbines at all times can feed-in to the national German transmission grid. However, in the event of insufficient transmission capacity the formal grid access requirements can be solved by means of counter trading or balancing market measures.' Thus, both the issue of congestion management and the possible solution via countertrading were already being discussed.
- (66) Nonetheless, the approach to congestion management remained under discussion, including with the European Commission services. In very similar presentations on 14 November 2012 and (based on the revised project plan) 3 September 2014, Energinet.DK, the TSO expressly set out that 'the model for congestion management is an essential part of the basis for the investment decision'. Both presentations expressly raised the possible conflicting interpretations of priority access based on Article 16 of Directive 2009/28/EC on the one hand and the maximisation principle under Article 16 of Regulation (EC) No 714/2009 on the other hand.
- (67) Clearly describing the way the TSOs intended to resolve this conflict for the KF project, the presentations described that 'capacity for wind power production to the onshore grid will be reserved based on the day-ahead forecast' and that 'the remaining capacity is to be given to the market coupling [thus defining the capacity available for trade] and used in the same way as the capacity on other interconnectors'. While the 2014 presentation did not highlight (in writing) the reduced capacity for the market compared to the earlier project plan, this was also not hidden. To the contrary, both presentations follow the exact same structure and, if held next to each other, clearly show the difference.
- (68) Thus, since 2010, the importance of the approach to congestion management was repeatedly set out in meetings with national regulators and the European Commission services, highlighting that different legal requirements from secondary legislation might be seen as in contradiction. At least the later presentations also clearly set out the planned approach the project parties intend to take to resolve this issue, and the impact this would have on cross-border capacity. During those years, national authorities and the Commission kept supporting the project, including with significant financial contributions, without requesting changes to the project structure.
- (69) The Commission also notes that the proposed concept has been extensively discussed with the concerned national authorities, and that none of the national regulators involved has raised objections with respect to the envisaged congestion management concept. On the contrary, the concept was approved by all regulators of the concerned 'Hansa' region in the context of the approval of the capacity calculation method of the Hansa Region.
- (70) Of course, the mere fact that national authorities and the Commission have over a number of years not raised legal concerns as regards a project cannot in any way be seen as a justification for granting a derogation to the project. Furthermore, as also highlighted by a reply to the consultation, certain changes in (or clarifications to) regulatory requirements are to be expected for projects with very long implementation periods. However, given the complexity of the topic and the extensive discussions on the regulatory framework, the Commission cannot exclude that the project parties may have reasonably assumed they could go ahead with the project as planned. This is also acknowledged by several submissions to the Commission, including those who see the derogation rather critically. Furthermore, had national regulators, ministries or the Commission raised objections, the project could possibly have been adapted before the start of its operation, e.g. by increasing the connection capacity onshore to accommodate increased flows for trade (as had initially been planned but then dropped when the project was amended).
- (71) The reason that congestion management was mentioned as an *essential* part for the investment decision was that the investment decision had to take into account the interests of all involved parties. This included the role of the offshore wind facilities, which received subsidies via different national support systems. It is clear that if maximum capacity had to be granted for trade, this would result in an increased likelihood for the offshore wind facilities to be curtailed.

- (72) Of course, to the extent that curtailment is non-market based, Article 13(7) entitles those generation facilities to full financial compensation of lost revenues from support schemes and on the day-ahead market. Where lost revenues could be higher than this (e.g. from the intraday market or system services) the Regulation sets out no obligation for compensation (although such an obligation could flow from national law). In any event, a significant increase in curtailment of offshore wind farms would considerably change the basic assumptions of the project, which aimed at increasing the options for offshore wind farms to transport electricity to shore, increase the reliability of electricity supply to the DK 2 zone, and to increase capacity for trade, but without significantly changing the situation of the existing offshore wind farms or the priority given to their infeed under the respective national frameworks. Had the project parties known that maximum capacity needed to be made available for trade notwithstanding the priority access rights of wind farms, the project might thus never have been realised.
- (73) Against the background of regular contacts with national regulators, ministries and the Commission explaining the planned approach, it is plausible that the project parties could have misunderstood the legal situation. Taking this into account, and in view of the specific attention to be paid to the challenges facing this particular demonstration project for hybrid assets, the application of legal requirements which would require major changes to the project fundamentals and which, had they been clear earlier, could have stopped the project from being realised or changed the project fundamentals, could indeed be seen as creating substantial problems for the operation of the small connected system.
- (74) Thus, the Commission can conclude that the full application of Article 16(8) of the Electricity Regulation to the KF system would create substantial problems for the operation of a small connected system.

5.3. Scope of the derogation

- (75) The derogation applies to calculation and allocation of cross-zonal capacity on the KF interconnection, derogating from the requirements of Article 16(8) of the Electricity Regulation in so far as it sets out a minimum threshold of 70 % of the *total* transmission capacity of the KF interconnection. Instead, Article 16(8) of the Electricity Regulation shall apply in so far as at least 70 % of the *residual* capacity shall be made available, meaning at least 70 % of the capacity remaining after deduction of what is needed to transport the production from the wind farms Baltic 1, Baltic 2 and Kriegers Flak to their respective onshore systems, based on daily forecasts of the electricity generation from those farms.
- (76) Where other provisions refer to the 'minimum threshold' as set out in Article 16(8) of the Electricity Regulation, this shall be interpreted as referring to the minimum threshold as set out in this decision. This applies also to electricity network codes and guidelines including CACM, FCA and EB, as well as to the terms, conditions and methodologies based upon those Commission Regulations.
- (77) All other requirements of Article 16 of the Electricity Regulation, in particular the requirement to make available the maximum level of capacity of interconnections complying with the safety standards of secure network operation, shall remain applicable.

5.4. No obstruction to the transition towards renewable energy, increased flexibility, energy storage, electromobility and demand response

- (78) Article 64 of the Electricity Regulation sets out that the decision shall aim to ensure that it does not obstruct the transition towards renewable energy, increased flexibility, energy storage, electromobility and demand response.
- (79) The derogation decision aims to enable a first of its kind demonstration project which aims at better integration of renewable energies into the electricity system. It therefore does not obstruct the transition towards renewable energies. It also has no noticeable impact on electromobility or demand response.
- (80) As regards increased flexibility and energy storage, it is important to note that the possibility for flexibility services (including storage) to support the electric system directly depends on providing exact and clear investment and dispatch signals to those service providers. Where structural congestion exists within a bidding zone, this results in distorted investment signals for location-specific flexibility services. By way of example, investment in hydrogen

generation or battery storage inside the KF system could be more viable in a regulatory framework which correctly reflects the congestion between the KF system and both onshore systems. In view of the significant technological challenges of offshore investments, this does not automatically mean that such investments would be viable in case of a separate offshore bidding zone for the KF system, but it is clear that the approach under the derogation decision can have a negative impact on such investment potentials compared to the establishment of an offshore bidding zone.

- (81) On the other hand, Article 64 of the Electricity Regulation does not require derogation decisions to maximise the potential for flexibility or energy storage, but only to ‘aim to ensure that the derogation does not obstruct it’. In other words, the derogation shall not prevent developments which, without the derogation, would occur naturally. However, it is not certain whether the KF system would, in the absence of a derogation, be operated as a separate offshore bidding zone. As also highlighted by respondents to the consultation, an offshore bidding zone could have significant advantages for market functioning, transparency, and efficient use of network assets, but it also brings with it certain complexities e.g. in the distribution of costs and benefits. Without setting up an offshore bidding zone, it is not clear whether full implementation of Article 16(8) of the Electricity Regulation would in the context of the KF project by itself provide more exact investment signals for flexibility services or storage.
- (82) Thus, while the derogation does not obstruct the transition towards increased flexibility including energy storage, it is important to take into account the need for appropriate investment signals and its impact on possible storage or other flexibility investments as regards the derogation conditions.

5.5. Limitation of the derogation in time and conditions aiming to increase competition and integration with the internal market for electricity

- (83) Article 64 of the Electricity Regulation expressly sets out that the derogation shall be limited in time and that it shall be subject to conditions aiming to increase competition and integration with the internal market for electricity.

5.5.1. Limitation in time

- (84) A limitation of time may thus not only be warranted by the principle of proportionality, e.g. if a shorter derogation could address the problems at stake or if a longer derogation would lead to disproportional burden for market participants. The Regulation provides for a *mandatory* limitation for several purposes. First and foremost, the Regulation assumes that the general regulatory framework can be applied to all situations in the internal market, and that such a general application is beneficial for society. While Article 64 recognises that derogations may be required for specific situations, these derogations are susceptible to increase complexity of the overall system, and can be barriers to integration also in neighbouring areas. Furthermore, the justification of the derogation is generally based on the technical and regulatory framework at the time, and on a given network topology. All these situations are bound to change. Finally, it is important for market participants to be able to predict regulatory changes sufficiently in advance. Thus, all derogations need to be limited in time.
- (85) The only situation where the Regulation provides for general derogation possibilities without time limitations concerns outermost regions within the meaning of Article 349 TFEU which cannot be interconnected with the Union’s energy market for evident physical reasons. This is easily understandable as those regions do not have any impact on the internal market for electricity. As KF is not an outermost region, there thus needs to be a clear and predictable limitation in time of the derogation.
- (86) The derogation request proposes a limitation in time based on the operation and connection of the three offshore wind farms. The wording thus appears not to be unlimited in time. However, this condition is not sufficiently precise as to what still constitutes ‘operation’ of the initial wind farms, and does not allow third parties to predict the regulatory framework sufficiently in advance.

- (87) For the avoidance of doubt, it should be clearly identifiable whether an offshore wind farm connected to the KF system still constitutes one of the initial wind farms or not. Thus, a condition should be added in any event that from the date on which any of the three wind farms stops operating other than for usual maintenance or repairs with a limited duration, or becomes subject to significant modifications, which shall be deemed to be the case at least where a new connection agreement is required or where the generation capacity of the wind farm is increased by more than 5 %, production from this wind farm shall no longer be deducted from the total transmission capacity, before calculating the residual capacity, thereby increasing the available capacity for trade on the interconnector.
- (88) However, if one or two of the wind farms stop operating or otherwise benefitting from the derogation, this shall not negatively impact the commercial situation of the other wind farms or the operation of the system. Thus, the derogation shall not be terminated just because one of the wind farms' production is no longer entitled to *ex ante* deduction from the total transmission capacity, but only if *all* of the three wind farms are no longer entitled to this deduction.
- (89) As concerns the appropriate duration of the derogation, the Commission notes that the immediate application of the rules from which a derogation is requested would require significant modifications to the regulatory and commercial arrangements for KF, with potential negative consequences for the operation of the wind farms.
- (90) On the other hand, the Commission notes that granting the derogation for as long as the wind farms operate and remain connected could mean that the derogation would apply for 20 years or longer, considering the average lifetime of offshore wind farms. Such a long derogation could lead to significant disadvantages for market integration.
- (91) Furthermore, it is important that the derogation for KF does not create an unchangeable and inflexible, somewhat alien, element in the developing offshore regulatory framework. To ensure sufficient flexibility but at the same time give adequate certainty and predictability to all project parties and to other market participants, regular reviews of the framework approved in this derogation decision should be established.
- (92) The Commission thus has to strike a balance between the legitimate interests of the project partners of KF and the neighbouring Member States who have trusted in the legality of the regulatory solution developed for the first-of-its kind project and the interests of EU consumers and producers to benefit from the principle of maximisation of cross-border flows.
- (93) The Commission takes into account that developing and implementing a regulatory solution which does not require a derogation is possible ⁽²⁰⁾ but will need considerable time and would also bring with it considerable complexity. The same is true for the necessary contractual adaptations to the new regulatory treatment compliant with the EU rules. Furthermore, as the regulatory framework for offshore hybrid assets is currently under discussion, sufficient time should be provided to ensure that such adaptations do not have to start before a solid and clear basis has been ensured. It therefore appears appropriate to grant the derogation for a period of 10 years.
- (94) However, it cannot be fully excluded that continuous derogation will still be required to maintain the economic balance and ensure the viability of the KF system even beyond this 10 year period. Thus, the Commission may extend this period where justified. The derogation, including any prolongations, should not exceed a period of 25 years, as this would go beyond the expected remaining lifetime of the wind farms.
- (95) The Commission's review on any prolongation request shall include an assessment as to whether it is possible for the project structure to be changed in a way that would enable full integration of the KF system into the general regulatory framework, e.g. by the definition of offshore bidding zones. Any such change to the project structure would take due account of the economic balance as established under the derogation decision. A detailed procedure for the application and granting of such prolongation is set out in Section 5.5.3.

⁽²⁰⁾ In the consultation, stakeholders pointed notably at the possibility of developing an Offshore Bidding Zone for the project.

5.5.2. *Other conditions*

- (96) As regards further conditions to be imposed, imposing an increase in the minimum capacity available for trade on an otherwise unchanged project would directly contribute to reinstating the problem to be resolved by the derogation in those hours where cables in the KF system are congested. On the other hand, where such cables are not congested, the maximisation principle applies in any case, thus the maximum technically feasible capacity already needs to be made available, up to the total transmission capacity of the transmission system.
- (97) This being said, room for an increase in available capacity cannot be fully excluded in the longer term. In particular, the earlier plans for the project still provided for the construction of additional direct current cables, and these plans were abandoned due to 2,5-fold cost increases of required components (see recitals 40-42 above). Thus, it is not excluded that such investments could be made in the future. Notably, the KF grant agreement provided for the possibility of integrating a Swedish wind farm into the KF system and raised the possibility of increasing the capacity in such a scenario.
- (98) Where new technological or market developments or investments in new offshore wind farms in the proximity of KF make an upgrade of the existing system or the construction of new cables increasing the capacity available for trade financially viable (taking into account the need to ensure safe operation of the KF system and adjacent systems), such investments should be conducted. In case of prolongation requests, the Commission assessment shall also include whether or not such investments into additional capacity could be reasonably expected.
- (99) If providers of flexibility services show concrete interest in realizing projects inside or nearby the KF system which could increase available capacity for trade by making use of flexibility services (e.g. storing excess wind production in offshore batteries), such investments shall be duly considered by the national authorities in question, making use of their potential to increase available capacity for trade up to the minimum value as set out in Article 16(8) of the Electricity Regulation.

5.5.3. *Procedure for eventual prolongation requests*

- (100) In order for the Commission assess whether the derogation is still necessary in view of possible future clarifications and changes to the legal framework for hybrid projects, the national authorities shall report to the Commission sufficiently in advance of the end of the derogation period whether they deem necessary the extension of the derogation. Should the national authorities wish to request prolongation of the present derogation, a joint request shall be submitted sufficiently in advance of the end of the derogation period to allow a thorough analysis of the prolongation request and early information to market participants on the future regulatory framework for KF. Any such request shall include a cost-benefit analysis demonstrating the effects of the derogation both on the KF system and on the regional and European level, comparing at least the possibilities of continuing the derogation in its present form, increasing the available capacity by conducting additional investments, and fully integrating the KF system into the general regulatory framework for offshore hybrid assets as applicable at the time of the prolongation request.
- (101) Whenever deciding on a prolongation request, the Commission shall take due account of the economic interests of the connected wind farms and involved system operators, but also of the wider socioeconomic impact of the derogation at a regional and European level. In particular, the review shall establish whether and how the KF system should be integrated into a wider regulatory framework for hybrid assets.
- (102) In order to take sufficient account of changes to the regulatory framework as well as technological and market developments, any prolongations (if granted) should be limited in time.
- (103) If the Commission comes to the conclusion that, in order to grant a prolongation, changes to the regulatory approach as set out under this decision are required, or that other conditions are necessary to increase competition or market integration, sufficient time shall be given for their implementation, giving also sufficient advance notice to other market participants of possible changes to available cross-border capacity.

HAS ADOPTED THIS DECISION:

Article 1

A derogation is granted to the Kriegers Flak Combined Grid Facility from the provisions of Article 16(8) of Regulation (EU) 2019/943. In calculating whether the minimum levels of available capacity for cross-zonal trade are reached, the capacity basis to be used for calculating the minimum capacity shall be the residual capacity after deduction of the capacity necessary for transporting the forecasted electricity production by the wind farms connected to the Kriegers Flak Combined Grid Facility at the day ahead stage to the respective national onshore systems, rather than the total transmission capacity.

Article 16(1) of Regulation (EU) 2019/943 remains fully applicable, and the maximum level of capacity of the Kriegers Flak Combined Grid Facility and of the transmission networks affected by the cross-border capacity of the Kriegers Flak Combined Grid Facility, going up to the total network capacity of the Kriegers Flak Combined Grid Facility, shall be made available to market participants complying with the safety standards of secure network operation.

Article 2

The derogation under Article 1 shall encompass all references to the minimum capacity to be made available for trade under Article 16(8) of Regulation (EU) 2019/943, in Regulation (EU) 2019/943 and in Commission Regulations based upon this Regulation.

Article 3

The derogation under Article 1 shall be applicable until 10 years after adoption of the Commission Decision. This period may be prolonged by the Commission pursuant to Article 4. The total duration of the derogation, including any prolongations, shall not exceed 25 years.

Where any of the three wind farms connected to the Kriegers Flak Combined Grid Facility stops operating other than for usual maintenance or repairs with a limited duration, or such wind farm becomes subject to significant modifications, electricity forecasts to be produced by this wind farm shall no longer be deducted under Article 1, thereby increasing the available capacity for trade on the interconnector. Interruptions in production due to low market prices or instructions from system operators are not to be considered. Modifications shall be deemed to be significant at least where a new connection agreement is required or where the generation capacity of the wind farm is increased by more than 5 %.

Article 4

The Danish and German authorities may request the Commission to prolong the derogation period set out in Article 3. Any such request shall be submitted sufficiently in advance of the end of the derogation period. Any request for prolongation of the derogation shall include an analysis of the costs and benefits of the regulatory approach chosen under the derogation, including quantitative analysis. It shall also provide analysis on possible alternative solutions, notably the integration of the Kriegers Flak Combined Grid Facility into the general regulated system for offshore hybrid assets applicable at that time, the creation of a separate offshore bidding zone for the Kriegers Flak Combined Grid Facility, and/or conducting additional investments to increase available transmission capacity. If the Commission, following a request for prolongation, comes to the conclusion that changes to the regulatory approach as set out under this decision are required, or that other conditions are necessary to increase competition or market integration, sufficient time shall be given for their implementation, giving also sufficient advance notice to other market participants of possible changes to available cross-border capacity.

Article 5

If providers of flexibility services show concrete interest in realising projects which could increase available capacity for trade in the Kriegers Flak Combined Grid Facility by making use of flexibility services, such investments shall be duly considered by the Danish and German authorities, making use of their potential to increase available capacity for trade up to the minimum value as set out in Article 16(8) of the Electricity Regulation. Where such investments are proposed but not enabled in the Kriegers Flak Combined Grid Facility, the national authorities shall inform the Commission thereof.

Article 6

This Decision is addressed to the Kingdom of Denmark and the Federal Republic of Germany.

Done at Brussels, 11 November 2020.

For the Commission
Kadri SIMSON
Member of the Commission
