COMMISSION DECISION

of 28.5.2018

ON AID SCHEME
SA.34045 (2013/c) (ex 2012/NN)
implemented by Germany for baseload consumers under Paragraph 19 StromNEV

(Text with EEA relevance)

(Only the German version is authentic)
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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular the first subparagraph of Article 108(2) thereof,

Having regard to the Agreement on the European Economic Area, and in particular Article 62(1)(a) thereof,

Having given notice to the parties concerned to submit their comments¹ and having regard to their comments,

Whereas:

1. PROCEDURE

(1) By complaints submitted by the Bund der Energieverbraucher e.V. on 28 November 2011, by the GWS Stadtwerke Hameln GmbH on 8 December and by citizens since December 2011, the Commission was informed that Germany had implemented since 2011 a full exemption from network charges for certain large electricity consumers. By letter dated 29 June 2012, Germany provided the Commission with further information on that aid scheme.

(2) By letter dated 6 March 2013 (‘the Opening Decision’), the Commission informed Germany that it had decided to initiate the procedure laid down in Article 108(2) of

¹ OJ C 128, 4.5.2013, p. 43.
the Treaty on the Functioning of the European Union (hereafter: TFUE or Treaty) in respect of the aid scheme. Germany submitted its comments on the Opening Decision on 8 April 2013.

(3) The Opening Decision was published in the *Official Journal of the European Union*\(^2\). The Commission invited interested parties to submit their comments on the aid scheme.

(4) The Commission received comments from interested parties. It forwarded them to Germany, which was given the opportunity to react; its comments were received by letter dated 5 November 2013.

(5) During a meeting of 17 October 2013 and by letters notified on 7 April 2015, 20 July 2016, 6 July 2017, 18 September 2017, 3 October 2017 and 23 October 2017, the Commission requested Germany to provide information.


2. **Detailed Description of the Aid**

2.1. **Network Charges in Germany**

(7) The system of network charges in Germany is governed by the German Energy Act (*Energiewirtschaftsgesetz*, ‘EnWG’). For the purposes of this Decision, only the EnWG as modified by Article 1 of the Law of 26 July 2011 on the review of provisions governing the energy market\(^3\) (‘the Law of 26 July 2011’) and before the amendments introduced by Article 1 of the Law of 26 July 2016 on the further development of the electricity market\(^4\) (‘EnWG 2011’) is relevant.

(8) Paragraph 21 of the EnWG 2011 requires that the charges that the network operators\(^5\) charge to their end users are *proportionate* ("angemessen"), non-discriminatory, transparent and are calculated on the basis of the costs of an efficient network management. Paragraph 24 of the EnWG 2011 empowers the federal government to lay down detailed rules on the methodology for the calculation of network charges by ordinance. Point 1 of the first sentence of Paragraph 24 of the EnWG 2011 empowers the federal government to determine the general methodology of calculating network charges. Point 3 of the same sentence empowers the federal government to determine in which cases of atypical network use individual network charges can be approved.


\(^3\) BGBl. I p. 1554.

\(^4\) BGBl. I p. 1786.

\(^5\) A network operator is the operator responsible for the operation and safe management of an electric network. Network operators are generally distinguished between transmission system operators and distribution system operators depending on whether they operate a transmission network or a distribution network.
Adopted on the basis of Paragraph 24 of the EnWG 2011, the Ordinance on Electricity Network Charges (Stromnetzentgeltverordnung, ‘StromNEV’\(^6\)) contains detailed provisions on the determination of network charges. Paragraph 3(2) of the StromNEV clarifies that network charges are paid for the services provided by the network operator at the network level to which a user is connected as well as all for the use of all upstream network levels. Paragraph 16(1) of the StromNEV establishes the guiding principle according to which network charges need to reflect the costs actually caused by network users.

Against this background and in line with the empowerment laid down in point 1 of the first sentence of Paragraph 24 of the EnWG 2011, the StromNEV provides for the general methodology that network operators have to follow for calculating network charges. This calculation methodology is laid down in Paragraphs 4 to 14 of the StromNEV 2011.

This methodology consists of first taking the various annual cost elements of all networks together. Those are the construction costs of the electricity network (transmission and distribution lines, substations), the maintenance and the costs for operating the network, including the costs linked to so-called system services (primary, secondary and minute reserves\(^7\), re-dispatching\(^8\) and electricity to cover

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\(^6\) While the StromNEV had been first introduced in 2005, it has been amended various times. This decision refers to "StromNEV" in general, where the relevant provision has not been modified by the various amendments. However, where a quoted provision has been modified, this decision explicitly refers to the relevant version of the StromNEV as follows:
- "StromNEV 2010" refers to the version of the StromNEV as amended by Article 6 of the Law of 3 September 2010 (BGBl. I p. 2074);
- "StromNEV 2011" refers to the version of the StromNEV as amended by Article 7 of the Law of 26 July 2011 (BGBl. I p. 1554);
- "StromNEV 2014" refers to the version of the StromNEV as amended by Article 1 of the Ordinance of 14 August 2013 (BGBl. I p. 3250).

\(^7\) An electric grid needs to be constantly in balance between the electricity injected and consumed. Imbalances can occur when the consumption is different from what had been forecasted, or in case of a power plant failure or the sudden drop of wind or sun. The Transmission System Operators (TSOs) have the responsibility to keep the network in balance and to inject electricity when consumption is higher than electricity effectively injected and to obtain that production is reduced or consumption increased when consumption is lower than injection. As electricity cannot easily be stored, a TSO must ensure that he can very quickly (within seconds or minutes) resort to positive or negative energy. TSOs therefore contract reserves (also called "Regelleistung"). In Germany a distinction is made between three main network reserves: a) the primary reserve under which energy must be made available to the TSO within 30 seconds after request; b) the secondary reserve under which the energy must be made available within five minutes and the minute reserve (also called tertiary reserve) under which the energy must be made available within 15 minutes (see BNetzA website: https://www.smard.de/blueprint/servlet/page/home/wiki-article/446/396).

\(^8\) Re-dispatching measures are linked to network congestion management. Network congestion occurs when the electricity generated exceeds the capacity of the network elements that connect the generation facilities to the consumption points. By lowering the real power output of one or more power plants at one end of the congested area and at the same time increasing the real power output of one or more other power plants at the other end, it is possible to relieve congestion while keeping the total real power in the grid close to constant. Redispatch is a request issued by the transmission system operator to power plants to adjust the real power they inject in order to avoid or eliminate network congestion. The TSO has to compensate the power plants for the redispatching order (https://www.bundesnetzagentur.de/DE/Sachgebiete/ElektrizitaetundGas/Unternehmen_Institutionen/Versorgungssicherheit/Engpassmanagement/Redispatch/redispatch-node.html).
network losses\textsuperscript{9}). Their annual amount is calculated based on the profit and loss account of the network operators (Paragraph 4 of the StromNEV 2011). They include not only material costs and personnel costs but also loan interests (Paragraph 5 of the StromNEV), depreciation (Paragraph 6 of the StromNEV 2011), a remuneration for the network operator's own capital (Paragraph 7 of the StromNEV 2011) and taxes (Paragraph 8 of the StromNEV 2011). Revenues like connection costs and subsidies have to be deducted (Paragraph 9 of the StromNEV). Metering costs, however, are not included in the network costs and are also subject to separate metering fees. The costs linked to the purchase of balancing energy\textsuperscript{10} are not included in the network costs as it is invoiced separately to the users responsible for the imbalance.

(12) The total annual costs of the networks are then allocated to the different network and network levels (high voltage, substation levels, medium voltage, low voltage). Annex 2 of the StromNEV 2011 contains the list of those network levels.

(13) The next step in the determination of the network charges will be to convert the total annual costs of the networks into the network charges. They are determined top-down for each voltage level (from high voltage to low voltage). First the so-called specific annual costs of the high voltage level are determined by dividing the total annual costs of the high voltage level by the annual peak load measured on that high voltage level, as the peak load of the network level is viewed as the main cost determining factor. This is expressed in EUR/kW. Via the ‘simultaneity function’ of each grid level described in recital (14) below, the specific annual costs will be converted into a price per connection capacity, in EUR/kW and into a price per unit of electricity consumed, in EUR/kWh. The same exercise is then done for the next voltage level. However the total annual costs of the next voltage level will be composed on its own costs and of rolled-over costs from the upstream voltage level. The rolled over costs correspond to the total costs of the upstream level minus the network charges obtained from network users (final consumers and electricity suppliers directly connected to that voltage level). The following figure 1 shows the roll-over of costs. In a network in which electricity flows top-down, network users will thus have to bear the costs of the network level to which they are connected, as well as part of the costs of the upstream networks as those networks are used to transmit the electricity to them as well.

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\textsuperscript{9} When electricity is transported, part of it is lost in the transmission so that additional electricity must be injected to match the quantity of electricity that was initially fed into the grid.

\textsuperscript{10} Germany has explained that in the case of balancing costs, a distinction must be made between the costs linked to the reserves and the actual supply of the negative or positive balancing energy. Under the reserves, the service providers are remunerated for their availability. However, when energy is actually withdrawn from them based on a call of the TSO, they are in addition remunerated for the energy actually supplied. The costs of the actual (positive or negative) energy supply are directly invoiced to the operator responsible for the imbalance.
In order to ensure an allocation to the various network users reflecting the actual costs caused by an individual network user as required by Paragraph 16(1) of the StromNEV, the simultaneity function is applied for the voltage level being considered. The simultaneity function referred to above under recital (13) is described in Paragraph 16(2) StromNEV and Annex 4 of StromNEV 2011. This function attributes to each network user a ‘simultaneity factor’ between 0 and 1. The simultaneity factor expresses the probability - based on historical figures - that the electricity consumption of the individual network user in question contributes to the annual peak load of the network level concerned. The simultaneous annual peak load of the network is an important cost driver of the network given that this annual peak load is important for the dimensioning of network in which electricity is flowing top-down. The idea behind the simultaneity function is that network users which have a higher probability of contributing to the annual peak load will pay a higher capacity tariff. The users of each network level are the final consumers directly connected to the high voltage level as well as downstream network levels. The simultaneity factors of all network users of the network level considered are then introduced into a graph on the y-axis and put in correlation with the number of annual hours of full use (x-axis). This results into the simultaneity function. This function is linear and continuous but composed of two linear parts which intersect at a kink at 2500 annual hours of full use. Germany has explained that though this kink at 2500 annual hours of full use is now a convention, it is based on empirical figures. Empirically, the simultaneity function is never entirely linear but increases with a softer slope around 2500 full hours of full use while it increases with a steep slope below 2500 annual hours of full use. That leads to two segments in the simultaneity function and therefore also leads to four network tariffs: one consumption and capacity tariff for users below 2500 hours of full use and one consumption and capacity tariff for users above 2500 hours of full use. The only alternative would be to build the simultaneity function as a concave curve but that would result in the necessity to
annual usage hours made. The simultaneity function is then converted into a tariff per connection capacity in €/kW and into a tariff per unit of electricity consumed in €/kWh.

(15) When establishing the network charges, network operators must also take into account the maximum revenue level allowed for each one of them by the Federal Network Agency (Bundesnetzagentur, ‘BNetzA’) (on the maximum revenue level allowed, see also recital (43)). In practice, this maximum revenue level, which is established by benchmarking with other network operators, will have as consequence that high costs resulting from inefficiencies cannot be recovered through network charges. This system aims at improving the efficiency of the network operators. Where a modification of the maximum revenue level authorized would lead to a reduction of network charges, the network operator has to adapt the network charges (Paragraph 17 (2) of the Ordinance on the introduction of efficiency incentives for energy supply networks – Verordnung über die Anreizregulierung der Energieversorgungsnetze, ARegV 2011).

(16) The methodology described in recitals (11) to (15) above implements the ‘principle of cost-causality’ when determining the network charges for the majority of network users. Paragraph 19 of the StromNEV addresses the network charges to be paid in line with the principle of cost-causality by so-called atypical network users, i.e. users with a consumption or load pattern that differs significantly from the consumption or

calculate an individual consumption tariff for each network user in Germany (as the slope of the function changes on each point of the curve). This would have considerably increased the administrative burden linked to the determination of network charges in Germany, delayed the calculation of network charges for network users and reduced transparency and predictability of network charges for network users.


It is obtained by multiplying the specific annual costs of the network level with the value at which the simultaneity function crosses the x-axis at 0 and at 2500 annual hours of full use (respectively for users with annual hours of full use below and above 2500 hours). For instance, for 2017, Amprion applied the following capacity tariff for the high voltage level:

<table>
<thead>
<tr>
<th>&lt; 2500 h/a</th>
<th>≥ 2500 h/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3 €/kWa</td>
<td>36.55 €/kWa</td>
</tr>
</tbody>
</table>

It is obtained by multiplying the specific annual costs of the network level concerned with the slope of the simultaneity function up to its kink at 2 500 hours of full use (for users with annual hours of full use below 2500 hours) and with the slope of the simultaneity function above its kink at 2 500 hours of full use (for users with more than 2500 hours of full use). For instance, for 2017, Amprion applied the following consumption tariff for the high voltage level:

<table>
<thead>
<tr>
<th>&lt; 2500 h/a</th>
<th>≥ 2500 h/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.512 ct/kWh</td>
<td>0.302 ct/kWh</td>
</tr>
</tbody>
</table>

Ordinance of 29 October 2007, BGBl. I p. 2529. The ARegV has been modified several times. This decision refers to “ARegV” in general, where the relevant provision has not been modified by the various amendments. However, where a quoted provision has been modified, this decision explicitly refers to the relevant version of the ARegV as follows:
load profile of the other users as provided for in point 3 of the first sentence of Paragraph 24 of the EnWG 2011. The heading of Paragraph 19 of the StromNEV is ‘atypical network use’.

(17) Paragraph 19(2) of the StromNEV identifies two groups of atypical network users: Firstly, users whose annual peak load predictably and significantly deviates from the simultaneous annual peak load of all other network users connected to the same network (first sentence of Paragraph 19(2) of the StromNEV). Typically this concerns network users who are systematically consuming outside peak load times because for instance they are running equipment at night. This first category of atypical network users is hereinafter designated as ‘non-peak consumers’. Secondly, users with an annual electricity consumption reaching minimum 7 000 hours of use17 and exceeding 10 gigawatt hours (GWh) (second sentence of Paragraph 19(2) of the StromNEV). This second category of atypical network users is hereinafter designated as ‘baseload consumers’.

(18) Before the amendment introduced by Article 7 of the Law of 26 July 2011 and described more in detail below in section 2.2, Paragraph 19 (2) of the StromNEV as amended by the Law of 3 September 2010 (‘StromNEV 2010’18) stated that both non-peak and baseload consumers were to pay individual network charges as also explicitly provided under the empowerment laid down in point 3 of the first sentence of Paragraph 24 of the EnWG 2011 (see recital (7) above).

(19) Such individual network charges were to take due account of the consumption pattern of the atypical network user. More precisely, the third sentence of Paragraph 19(2) of the StromNEV 2010 required that the individual network charge should reflect the contribution of the atypical network user to a reduction of the overall network charges or their contribution to avoiding an increase in network charges. To this end, in 2010, the BNetzA published a guidance paper19 outlining the so-called ‘physical path methodology’ that should be applied to determine the network costs caused by the baseload consumers and thereby their individual network charges. The physical path methodology aims at identifying the stand-alone costs of a particular network user. It measures the costs of a virtual use of an existing direct line from the consumption site to an adequate generation installation by computing the capital and operational expenditures of the part of the network used to connect the baseload consumer to the closest power plant that can cover the entire needs of the baseload consumer and adding the costs of network services20 that the baseload consumer has been using, if any.

(20) The second sentence of Paragraph 19(2) of the StromNEV 2010, however, required both non-peak and baseload consumers to pay a minimum contribution of at least 20% of the published network charge, that is to say the individual network charge calculated based on the contribution of the atypical network user to a reduction of the overall network charges or their contribution to avoiding an increase in network charges.

17 The requirement of 7 000 hours of full use was foreseen by StromNEV 2010 to be applicable as of 1 January 2011 and hence applied already prior to the introduction of the complete exemption of baseload consumers. Prior to that amendment, the requirement had been 7500 hours of full use.
18 See footnote 6.
19 BNetzA, Leitfaden zur Genehmigung von individuellen Netzentgelten nach § 19 Abs. 2 S. 1 und S. 2 StromNEV ab 2011 (29.09.2010).
20 Network services are services delivered by the network operator to keep the network in balance. The main network services are the reserves, re-dispatching measures and energy for network losses.
charges could not be lower than 20% of the published network charge. Germany has explained that this minimum contribution aims at guaranteeing that also atypical network users pay a minimum contribution to the management of the public grid to which they are connected. Concerning baseload consumers in particular, Germany has indicated that if they are located very close to a baseload power plant, the network charges calculated based on the physical path methodology could be close to zero. Those baseload consumers, however, still benefit from the public network and the secured electricity supply that it provides. Germany has moreover explained that the minimum contribution was taking account of the fact that the physical path methodology can only serve as a proxy to determine the individual network costs.

2.2. The full exemption between 2011 and 2013

(21) In the StromNEV as amended by Article 7 of the Law of 26 July 2011, which entered into force on 4 August 2011 but was retroactively applicable as of 1 January 2011 (‘StromNEV 2011’), the system of individual network charges for baseload consumers was abolished and replaced by a full exemption from the obligation to pay network charges. Individual network charges for non-peak consumers remained in place as well as their obligation to pay at least 20% of the published network charge.

(22) According to the second sentence of Paragraph 19(2) of the StromNEV 2011 end users were to be exempted from network charges if their annual energy consumption reaches at least 7,000 hours of full use and exceeds 10 GWh of consumption. That exemption (‘the full exemption’) constitutes the subject-matter of both the Opening Decision and this Decision.

(23) The threshold of 7,000 hours of full use is what characterizes a baseload consumer in the sense that this threshold can only be reached if the end user concerned remains almost constantly connected to the network with the same load. Hours of (full) use are defined under Paragraph 2(2) of the StromNEV as the quotient of the annual power output and the annual peak load of the respective network user.

(24) Pursuant to the third sentence of Paragraph 19(2) of the StromNEV 2011, the exemption provided for in the second sentence of the same paragraph was to be granted only once the competent regulatory authority (either the BNetzA or one of the regional regulators, ‘Landesregulierungsbehörde’) had verified that the legal

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21 A baseload power plant is a power station that usually provides a continuous supply of electricity throughout the year with some minimum power generation requirement. Baseload power plants will only be turned off during periodic maintenance, upgrading, overhaul or service. Several interested parties indicate that baseload power plants generally reach 7,500 hours of full use per year and are typically nuclear power plants, lignite-fired power plants, run-of-river power plants and to a certain extent coal-fired power plants. They can be distinguished from medium load power plants reaching between 3,000 and 5,000 hours of full use per year, typically coal-fired power plants and gas turbines and from peak power plants generally running around 1,000 hours of full use over the year and typically constituted of pumping stations, gas turbines and oil-fired power plants. Also the BNetzA lists the following power plants as baseload power plants: nuclear power plants, run-of-river power plants and lignite-fired power plants. Coal-fired power plants can be considered as baseload power plants only with a derating factor of 0.8 (see Leitfaden zur Genehmigung individueller netzentgeltvereinbarungen nach § 19 Abs. 2 S. 1 und 2 StromNEV, Paragraph 1.3.2.2.1). Coal-fired power plants can be considered as baseload power plants but only up to 80%.

22 See also footnote 6.

23 The BNetzA is a federal government agency of the German Federal Ministry of Economics and Technology. Its core task is to ensure compliance with the Telecommunications Act (TKG), Postal Act (PostG) and Energy Act (EnWG) and their respective ordinances in order to guarantee the liberalisation of the markets for telecommunications, post and energy. It also assumes responsibility for rail
conditions were fulfilled. Once that verification was completed, the BNetzA or the Landesregulierungsbehörde delivered an authorisation that entitled the baseload consumer to the full exemption as of 1 January 2011 (provided all conditions were met at that date) and for an indefinite period (provided that the requirements continued to be met).

(25) The full exemption resulted in a reduction of revenues for network operators. This financial loss has been compensated through a special surcharge as of 2012 (see section 2.4. below). For the year 2011, however, no special surcharge was introduced and the financial loss was borne by the network operators in 2011.

(26) The full exemption was abolished by an amendment to the StromNEV as of 1 January 2014.

2.3. Beneficiaries and aid amount

(27) Germany has provided a provisional list of undertakings entitled to an exemption under the second sentence of Paragraph 19(2) of the StromNEV 2011. Based on this information, more than 200 undertakings were exempted from network charges under the second sentence of Paragraph 19(2) of the StromNEV 2011 in the period 2011 to 2013. The large majority of those undertakings belong to various branches of the manufacturing sector, in particular, the chemical industry (including industrial gases), paper, textile, steel, non-ferrous metal industry, oil refineries and glass manufacturing. Only occasionally have undertakings involved in the service sector (for instance web hosting) obtained a full exemption. Those undertakings were undertakings with large data centres.

(28) The estimates provided by Germany indicate that the losses incurred by the network operators due to the full exemption over the period 2011 to 2013 amount to approximately EUR 900 million compared to a situation in which baseload consumers would have paid the normal charge. The loss is, however, probably lower as in the calculation of the 2011 network charges network operators normally took into account the fact that the baseload consumers would have been eligible for individual network charges under Paragraph 19(2) of the StromNEV 2010. However, the estimation is further complicated by the fact that the threshold for eligibility for individual charges had changed as of 1 January 2011 (7000 hours of full use instead of 4000 hours as before).

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regulation. In all those regulatory areas, it monitors non-discriminatory access to the networks under transparent circumstances, and examines the access charges. To achieve its regulatory aims, the Bundesnetzagentur has effective procedures and instruments at its disposal, including rights of information and investigation along with the power to impose graded sanctions and the right to adopt regulatory decisions. It has an Advisory Council consisting of 16 members of the German Bundestag and 16 representatives of the German Bundesrat; the Bundesrat representatives must be members or political representatives of the government of a federal state. The members and deputy members of the Advisory Council are appointed by the federal government upon the proposal of the German Bundestag and the German Bundesrat (Paragraph 5 of the Act on the Federal Network Agency for Electricity, Gas, Telecommunications, Posts, and Railways of 7 July 2005, BGBl. I p. 1970). The BNetzA is directed by a president and two vice-presidents. They are proposed by the Advisory Council to the Government (Paragraph 3 of the Act on the Federal Network Agency for Electricity, Gas, Telecommunications, Posts, and Railways of 7 July 2005, BGBl. I p. 1970). They are nominated by the President of the Federal Republic of Germany. The BNetzA is however not the only regulatory authority in Germany. In some of the Bundesländer separate regulatory authorities have been established (the Landesregulierungsbehörden).

24 Article 1 of Ordinance of 14 August 2013 amending several ordinances in the area of the energy markets, BGBl. I p. 3250.
of 7500 hours of full use), and that the individual charges may not have been attractive for certain baseload consumers, because it may not have led to a significant reduction of their network charges, depending on their geographical location and other factors influencing the calculation of the individual network charges.

2.4. Financing mechanism

2.4.1. The financing mechanism as described in paragraph 19 of the StromNEV 2011

Given that the exempted baseload consumers were connected to different network levels, the full exemption led to losses in revenue both for the transmission system operators (‘TSO’) and the distribution system operators (‘DSO’). The sixth sentence of Paragraph 19(2) of the StromNEV 2011 obliged the TSO to compensate the DSO for their losses in revenue resulting from the full exemption. However, for the reasons set out in detail under section 2.4.3, such compensation de facto only took place as of 2012. In 2011, the losses were born by the TSO and DSO to whose network the exempted baseload consumers were connected.

Furthermore, pursuant to the seventh sentence of Paragraph 19(2) of the StromNEV 2011, the TSO had to set off the sum of their payments to the DSO and their own losses amongst themselves. For the detailed rules on how to carry out that set-off, Paragraph 19(2) of the StromNEV 2011 referred to Paragraph 9 of the Combined Heat and Power Generation Act (Kraft-Wärme-Kopplungsgesetz, ‘KWKG’)

established the system by which TSOs were compensated through the so-called CHP-surcharge for the extra costs resulting from their obligation to pay support to producers of cogenerated electricity connected to their network under the KWKG and their obligation to compensate DSOs for the support that they also paid to producers of cogenerated electricity connected to their network under the KWKG.

The analogous application of Paragraph 9 of the KWKG implied that network operators could introduce a surcharge to obtain compensation for the financial losses

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25 Law for the Support of Combined Heat and Power Generation of 25 October 2008 (BGBl. I p. 2101). This law has been amended by Article 11 of the Law on the Review of the Legal Framework for the Support of Electricity Production from Renewable Energy Sources of 28 July 2011 (BGBl. I p. 1634). Paragraph 9 of the KWKG has not changed between 1 January 2011 and 31 December 2013. The KWKG was overhauled on 21 December 2015 by the Law for maintaining, modernizing and deployment of Combined Heat and Power Generation (BGBl. I p. 2498); however, the compensation mechanism foreseen by Paragraph 9 was maintained (though more detailed) and was included in Paragraphs 26 to 28 of the KWKG of 21 December 2015. The Law for maintaining, modernizing and deployment of Combined Heat and Power Generation was again amended by law of 22 December 2016 amending the provisions on electricity production from cogeneration and autogeneration (BGBl. I p. 3106).

26 For a detailed description of the compensation system under Paragraph 9 KWKG (which became Paragraph 29 of the KWKG 2016 after the amendments introduced by law of 22 December 2016 amending the provisions on electricity production from cogeneration and autogeneration (BGBl. I p. 3106), see Commission decision of 23 May 2017 on the aid scheme SA.42393 (21016/C) (ex 2015/N) implemented by Germany for certain end consumers (reduced CHP surcharge, section 2.3).
resulting from the full exemption and that the revenues collected from this surcharge had to be transferred from DSOs to the TSOs.27

(31) In addition, Paragraph 19 (2) of the StromNEV 2011 stipulated that Paragraph 20 of the StromNEV 2011 was applicable by analogy. Paragraph 20 of the StromNEV 2011 stated that electricity grid operators had to make sure, prior to publishing their network charges for electricity, that the revenues of the charges were sufficient to cover their expected costs.

(32) Since the entry into force of the ARegV, which establishes a regulatory system that is aimed at incentivising network operators to a more efficient network management, network charges do not need to be approved by the BNetzA anymore (as a result of Paragraph 23a of the EnWG). Instead, point 1 of Paragraph 32 (1) ARegV 2011 provides that the BNetzA approves the maximum revenue level that network operators are allowed to obtain from network users. According to Paragraph 17 ARegV 2011 this authorized maximum revenue level must be respected when network operators determine network charges.

(33) Network operators continue, however, to be obliged to make sure prior to publishing their network charges for electricity, that the revenues of the charges were sufficient to cover their expected costs (but within the limit of the authorized maximum revenue level).

(34) As explained below, the BNetzA adopted a regulatory decision in order to regulate more in detail the surcharge system, which was eventually put in place as of 2012 (see section 2.4.2). By contrast, in 2011, the sixth and seventh sentences of Paragraph 19(2) of the StromNEV 2011 were not implemented and each network operator bore its own costs (see section 2.4.3).

2.4.2. Financing via the ‘Paragraph 19-surcharge’ as of 2012

(35) The legal framework for the compensation and the set-off of the losses in revenue resulting from the full exemption was concretized by a regulatory decision of the BNetzA adopted on 14 December 201128 ('the regulatory decision of 14 December 2011') on the basis of Paragraph 29(1) of the EnWG and point 6 of Paragraph 30(2) of the StromNEV 2011.29 The decision imposed on the DSO the obligation to collect from end users a surcharge called the ‘Paragraph 19-surcharge’. The BNetzA further imposed on the DSO the obligation to transfer the proceeds from this surcharge to the TSO on a monthly basis (as also provided for under Paragraph 9(5) of the KWKG to which the seventh sentence of Paragraph 19(2) of the StromNEV 2011 refers).

(36) The purpose of the Paragraph 19-surcharge was to establish a financing mechanism that distributes the financial burden resulting from the application of Paragraph 19(2)
of the StromNEV 2011 in a transparent and homogenous way and thus to create equal conditions for all electricity consumers across Germany.

(37) The amount of the Paragraph 19-surcharge was not calculated by the BNetzA but needed to be calculated each year by the TSO on the basis of the methodology set out by the BNetzA. This implied that the TSO had to determine on the one hand the forecasted financial losses resulting from the full exemption compared to the full network charge and on the other hand the forecasted consumption in order to determine the Paragraph 19-surcharge per kWh. For the first year of operation (that is to say 2012), however, the BNetzA set the amount that needed to be recovered through the Paragraph 19-surcharge at EUR 440 million. This amount served as a basis for the calculation of the surcharge. Of this amount, EUR 300 million needed to be recovered in order to compensate for the losses in revenue resulting from the full exemption. The remaining EUR 140 million were destined to cover the losses in revenue resulting from individual network charges based on the first sentence of Paragraph 19(2) of the StromNEV 2011.

(38) Before the amendments introduced by Article 7 of the Law of 26 July 2011 in the StromNEV, the loss of revenues resulting from individual network charges for atypical network users were recouped, to the extent that the network operator was an efficient company and hence could under the ARegV recoup its entire costs, through network charges: as network operators knew in advance that some users would pay less, they could already factor that in in the calculation of network charges under Paragraph 20 of the StromNEV. Under the sixth and seventh sentence of Paragraph 19(2) of the StromNEV 2011, however, the loss of revenues resulting from individual network charges for non-peak consumers and the full exemption for baseload consumers had to be compensated through a dedicated surcharge.

(39) In addition, the regulatory decision of 14 December 2011 provided that the TSO had to establish for each year what the real need in terms of financial resources was for the previous year. Where the proceeds from the Paragraph 19-surcharge exceeded the amount actually needed to compensate the TSO for the losses in revenue resulting from the full exemption and the compensation of DSO, the surcharge in the subsequent year would have to be reduced by the difference. Where the proceeds were insufficient, the surcharge was increased accordingly.

2.4.3. Financing mechanism for 2011

(40) The regulatory decision of 14 December 2011 explicitly stated that the losses in revenue incurred in 2011 were not covered by the compensation and set-off mechanism described in recital (30).

(41) As regards the losses incurred in 2011, the DSO were thus not entitled to be compensated by the TSO. Both the DSO and the TSO had to cover those losses in revenue from their own resources.

(42) They could include those losses in their so-called regulatory accounts (‘Regulierungskonto’) established under the ARegV.

(43) As mentioned in recital (32), the ARegV established a regulatory system that is aimed at incentivising network operators to a more efficient network management and under which network operators are subject to a maximum revenue level established by the BNetzA. This authorized maximum revenue level is established for a regulatory period of 5 years the maximum. In order to establish this maximum revenue level, network operators are obliged to provide the BNetzA with various
accounting data (including costs and revenues) prior to the start of a regulatory period. In addition, the maximum revenue level that network operators are allowed to obtain from network users is evolving during the 5 year regulatory period to take into account inefficiencies of network operators in order to induce them to increase efficiency. This implies that the approved maximum revenue will decrease during the regulatory period. The efficiency of a network operator is measured prior to the regulatory period based on a comparison of the network operators by the BNetzA. The first regulatory period was from 2009 to 2013. The second regulatory period started in 2014 to end in 2018.

(44) The positive or negative differences\(^{30}\) between the approved maximum revenue level and the actually obtained revenues are booked on a special regulatory account, which is an accounting tool administered by the BNetzA (Paragraph 5 of the ARegV) in order to steer network operators towards more efficiency.

(45) At the end of the 5 year period 2009-2013, excess revenues were set off against excess revenue reductions. The resulting positive balance or negative balance was transferred to the next regulatory period (Paragraph 5(4) of the ARegV 2011) and spread over the five years of the second regulatory period as a decrease or increase of the otherwise applicable maximum revenue level.

(46) However, if the revenues obtained in a given year of the regulatory period were to exceed by more than 5% the approved maximum revenue level, the network operator concerned would have to adapt its network charges (to avoid that the same situations occurs again in the following year and to avoid that the reduction of network charges would be postponed until the next regulatory period). If the revenues obtained in a given year of the regulatory period were to be below the approved maximum revenue level by more than 5%, the network operator concerned would have the right to adapt its network charges (to avoid that the same situations occurs again in the following year and avoid a sudden increase of network charges in the next regulatory period). The network operator has, however, in the latter case the choice to adapt the network charges or not.

(47) It is in this framework that the losses in revenue incurred by the network operators due to the full exemption in 2011 had to be compensated. At the time of the "Verprobung\(^{31}\)" for 2011 (and which took place in 2010), the full exemption was not known and could not have been taken into account when network charges were established for 2011. As Germany has confirmed by E-mail of 24 October 2017, based on the then applicable ARegV 2011, the losses in revenue incurred in 2011 (that is to say the difference between allowed revenues and actually obtained revenues) could not be recouped by an adaptation of the 2011 network charges given that network charges had to be set in advance in the framework of the "Verprobung" pursuant to Paragraph 20 of the StromNEV and could not be modified over the course of that year. They were actually obliged to set this loss off with profits from

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\(^{30}\) Before being booked, the amounts are first corrected in function of the volume of electricity transmitted to avoid that the difference in revenues results from the mere fact that network users consumed more or less electricity in comparison to the assumptions used for the determination of the approved maximum revenue level.

\(^{31}\) When network operators set network charges, they have to verify in accordance with Paragraph 20 of the StromNEV that network charges that are aimed to be published are suitable to cover the costs listed in Paragraph 4 of the StromNEV. This is designated as the "Verprobung" of the network charges.
other years of the regulatory period. This is also why network operators challenged the full exemption and the BNetzA regulatory decision of 14 December 2011.

(48) The losses in revenue incurred by the network operators due to the full exemption could also not be recouped through an increase in network charges in 2012 given that network charges for 2012 could only be linked to forecasted costs to be incurred in 2012. By contrast, the losses in revenue – if not already compensated by efficiency gains in 2011 – had to be booked on the Regulierungskonto. Where, at the end of the first regulatory period, the losses in revenue for 2011 were set off against additional revenues in other years of that regulatory period, no compensation of the losses would occur. Only where the losses could not be set off against additional revenues in the regulatory period ending in 2013 could the loss of revenues in 2011 lead to an indirect compensation over the next regulatory period by leading to a slight increase of the approved maximum revenue level of the next regulatory period. However, even in that situation, as the ARegV does not compensate full costs, but only costs of an efficient operator, there would normally not be a full compensation.

2.5. Objective of the full exemption

(49) It follows from the explanatory memorandum to the StromNEV 2011 that the full exemption for baseload consumers had been introduced because of the alleged stabilizing effects that baseload consumers have on the network.32

2.6. Grounds for initiating the procedure

(50) In its Opening Decision, the Commission concluded that the full exemption conferred a selective advantage on such baseload consumers that have an annual electricity consumption exceeding 7,000 hours of full use and 10 GWh of consumption. Moreover, the Commission found that the Paragraph 19-surcharge, which was introduced in 2012, constituted a State resource and that the TSO had been appointed to administer it while being monitored by the BNetzA through the Regulierungskonto. As regards the year 2011, the Commission expressed its concerns that the full exemption could have been financed through State resources already before the Paragraph 19-surcharge was imposed. The Commission indicated that the existence of State resources could be derived from the fact that Paragraph 9 of the KWKG entitled the network operators to levy a surcharge from the network users, the proceeds of which would be administered by the TSO. Also, the Commission considered that the losses in revenue due to the full exemption in 2011 could have been compensated via the Regulierungskonto which the Commission found to be monitored by the BNetzA.

(51) The Commission also noted that Germany had not presented any compatibility ground for the aid and had merely referred to the stabilising impact on networks without quantifying that impact. The Commission therefore opened the formal investigation procedure.

2.7. Developments after the Opening Decision

(52) As network operators were not guaranteed that they would recoup the loss of revenues resulting from the full exemption in 2011, several of them challenged exemption decisions of the BNetzA and also directly the regulatory decision of 14 December 2011.

32 BT-Drs. 17/6365, p. 34.
December 2011. By order of 8 May 2013, the Higher Regional Court of Düsseldorf \(^{33}\) concluded that the full exemption in place between 2011 and 2013 was illegal and revoked the full exemption granted to the undertaking concerned by the procedure before that Court. The Higher Regional Court found that the full exemption granted under the second sentence of Paragraph 19(2) of the StromNEV 2011 did not respect the limits of Paragraph 24 of the EnWG 2011 which entitled the federal government merely to define the modalities of calculating individual network charges, but not to introduce a full exemption from network charges. The Higher Regional Court further observed that network charges are the price for a service supplied to them (that is to say the access to and the use of the network) and that the full exemption could not be seen as an individual network charge or a price for a service but corresponded to a privilege, an exception to the principle that a proportionate network charge should be paid to network operators for the use of the network. It noted that the stabilising effect of baseload consumers could at most justify a reduced network charge but not a full exemption given that also those baseload consumers were using the network. Finally the Higher Regional Court observed that the Paragraph19-surcharge did not correspond to a network charge but to a surcharge that is collected in addition to network charges; it did not correspond to the price for the use of the network but merely corresponded to a surcharge introduced to cover the financial losses caused to network operators by the full exemption.

\(53\) By judgment of 6 October 2015 \(^{34}\), the Federal Court of Justice confirmed the order of the Higher Regional Court of Düsseldorf of 8 May 2013. The Federal Court of Justice confirmed that the full exemption granted under the second sentence of Paragraph 19(2) of the StromNEV 2011 did not respect the limits of Paragraph 24 of the EnWG 2011 which entitled the government merely to define the modalities of calculating individual network charges, but not to introduce a full exemption from network charges. The Federal Court of Justice further observed that the first and the third sentence of Paragraph 24(1) of the EnWG 2011 were based on the principle that network operators are entitled to a compensation for the use of their networks and that the stabilising effect of baseload consumers could not be seen as a compensation to the network operator for the use of the network given that this stabilising impact was not a compensation paid in exchange of the use of the network but simply the consequence of the use of the network. The Federal Court of Justice also observed that while this stabilising impact could be of economic interest to network operators and could justify reduced network charges, it cannot automatically be assumed to justify a full exemption simply based on the number of hours of full use, in particular given that also baseload consumers are contributing to the peak load of the network. Reductions will have to take account of the specific impact of each baseload consumer on the network. Finally, the Federal Court of Justice also confirmed that the Paragraph19-surcharge did not correspond to a network charge but to a surcharge that is collected in addition to network charges; it did not correspond to the price for the use of the network but merely corresponded to a surcharge introduced to cover the financial losses caused to network operators by the full exemption.

\(^{33}\) VI-3 Kart 178/12 (V). On 6 March 2013 the Higher Regional Court had rendered a similar judgment after having been seized by a network operator challenging the regulatory decision of 14 December 2011.

\(^{34}\) EnVR 32/13.
Both the Higher Regional Court of Düsseldorf and Federal Court of Justice declared the full exemption in the second sentence of Paragraph 19 (2) of the StromNEV 2011 and the individual exemption granted on that basis for void. However, it appears from German Administrative Law that the German State could de facto not ask for reimbursement by the beneficiaries due to prescription rules. Moreover, as described in recital (55), the new Paragraph 32(7) of the StromNEV 2014 provides that the exemption decisions adopted on the basis of the second sentence of Paragraph 19(2) of the StromNEV 2011 stopped being valid only on 1 January 2014.

By ordinance of 14 August 2013 Germany abolished the full exemption as of 1 January 2014 and reintroduced as of that date individual network charges for end users with an annual electricity consumption reaching 10 GWh and at least 7 000 hours of full use. The BNetzA was required to lay down detailed rules on the methodology for determining the individual network costs under the StromNEV as amended by Article 1 of the ordinance of 14 August 2013 (‘StromNEV 2014’). To this end, the BNetzA reintroduced the physical path methodology by a regulatory decision adopted on the basis of Paragraph 29 of the EnWG. Although slightly modified, the methodology corresponds in substance to the physical path methodology as it was applied for the calculation of individual network charges under the StromNEV 2010 (see recital (19) of this Decision). The regulatory decision on the physical path methodology was upheld by order of 13 December 2016 of the Federal Court of Justice. The Federal Court of Justice specifically acknowledged that the physical path methodology ensures an assessment of the network costs caused by baseload consumers in line with the cost-causality principle.

Both the order of 8 May 2013 of the Higher Regional Court of Düsseldorf and the order of 6 October 2015 of the Federal Court of Justice had an effect only on the parties to the procedure and did not lead to a general revocation of all exemption decisions. Paragraph 32(7) of the StromNEV 2014 therefore provides that exemption decisions adopted by a regulator on the basis of the second sentence of Paragraph 19(2) of the StromNEV 2011 would stop to be valid as of 1 January 2014. Pending requests for exemption decisions adopted by a regulator on the basis of Paragraph 19(2) of the StromNEV 2011 as well as cases in which the exemption decision was revoked by a Court would be subject to the second sentence of Paragraph 19(2) of the StromNEV 2014 (with retroactive effect as of 1 January 2012. For 2011 in those same cases, the StromNEV as predating the introduction of the full exemption was applied (i.e. the individual network charges based on the physical path – if relevant).

By order of 12 April 2016, the Federal Court of Justice annulled the regulatory decision of 14 December 2011 (see recitals (35) to (39) of this Decision). The Court found that that decision was not covered by the empowerment laid down in Paragraph 24 of the EnWG. In the aftermath of that judgment the German legislator amended Paragraph 24 of the EnWG and thereby retroactively remedied the lack of an empowerment for the Paragraph 19-surcharge.

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35 Ordinance amending several Ordinances in the field of Energy Law (BGBl. I p. 3250).
36 BK4-13-739.
37 EnVR 34/15.
38 EnVR 25/13.
3. COMMENTS FROM INTERESTED PARTIES

The Commission received comments from Ahlstrom GmbH, AlzChem AG, Aurubis AG, Bender GmbH, Fitesa Germany GmbH, Evonik Industries AG, Hans Adler OHG, Lindes Gas Produktionsgesellschaft, Norske Skog Walsum GmbH, Oxxynova GmbH, Ruhr Oel GmbH, Saalemühle Alsleben GmbH, Sasol Wax GmbH, SETEX-Textil GmbH, Bundesverband der Energieabnehmer e.V., Currenta GmbH & Co. KG, Air Liquide Deutschland GmbH, InfraServ GmbH & Co. KG, Naturin Viscofan GmbH, Wirtschaftsvereinigung Stahl, Wirtschaftsvereinigung Metalle, Hydro Aluminium Rolled Products GmbH, Norsk Hydro ASA, Papierfabrik Schuefelen GmbH & Co. KG, ThyssenKrupp Steel Europe AG, Trimet Aluminium AG, UPM GmbH, Verband der Chemischen Industrie e.V., Verband der Industriellen Energie- und Kraftwirtschaft e.V. and Xstrata Zink GmbH/Glencore. All comments received argue that the full exemption does not constitute State aid. The arguments put forward by the various comments in order to support this view are summarized in the following recitals.

The interested parties consider that the full exemption did not confer an advantage on the exempted baseload consumers. According to the interested parties, the full exemption was a compensation for the baseload consumers' contribution to the overall stability of the electricity network. One interested party considers that the full exemption corresponds to the compensation of a service of general economic interest within the meaning of the Altmark judgment. In particular, it is put forward that the baseload consumption qualifying for the full exemption was a prerequisite for a continuous electricity generation from power plants equipped with synchronous generators. The latter are considered necessary for the stability of the network as they help to avoid frequency shifts. Several interested parties refer in this respect to a study of 20 January 2012 into the minimum generation by conventional power plants needed in Germany to ensure a secured network management in the context of high renewable penetration (the ‘2012 Study’). Alternatively, several interested parties consider the advantage not to be selective but to be justified by the logic and nature of network charges in Germany. They explain in this respect that the predictability of the consumption pattern of the baseload consumers leads to a significant reduction of network costs as it would reduce the need for balancing energy and reserves. Moreover, the continuous consumption pattern would conserve the network equipment longer and thereby reduce material costs. The aforementioned costs would otherwise have to be borne by the TSO as part of their network responsibilities defined in Paragraph 11 of the EnWG. Some of the interested parties also argue that baseload consumers contribute to voltage control and the prevention of black-outs and that the full exemption compensates them for that. Finally, the comments consider the exempted baseload consumption to guarantee the feed-in of electricity produced from intermittent renewable energy sources. Thereby, both grid

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41 Conventional power plants are generally opposed to power plants like wind turbines and solar panels that developed in recent years. The following power plants are generally considered as conventional power plants: nuclear power plants, coal, oil, lignite and gas-fired power plants and hydro power plants.
expansion costs and compensation payments under the Renewable Energy Act (Erneuerbare Energien Gesetz, ‘EEG’\(^{43}\)) would be reduced.

(60) Furthermore, the interested parties consider the full exemption not to be financed through State resources. According to the interested parties, the second sentence of Paragraph 19(2) of the StromNEV 2011 was part of the overall system of network charges and therefore constituted a mere price regulation. The fact that the full exemption is dependent on an authorization to be delivered by the BNetzA is considered to be a purely formal act which in itself would not suffice to establish that the full exemption is financed through State resources.

(61) The interested parties argue in particular that the full exemption could not be regarded to be financed through State resources following the introduction of the Paragraph 19-surcharge in 2012. The Paragraph 19-surcharge is considered to be part of the overall system of network charges. Accordingly, the interested parties reject the qualification of the Paragraph 19-surcharge as a parafiscal levy. By way of explanation, the interested parties submit that the amount of the Paragraph 19-surcharge was not determined by the State, but was rather calculated by the network operators on the basis of the losses in revenue resulting from the full exemption. The Paragraph 19-surcharge would serve the mere purpose of equalising the financial burden resulting from the full exemption for all network users in Germany. Also, the proceeds of the Paragraph 19-surcharge would neither accrue to the State budget nor be under State control. In this regard, the interested parties explain that the TSO had a discretion as to the use of the proceeds of the Paragraph 19-surcharge. The interested parties reject the finding that the TSO centralised the proceeds of the Paragraph 19-surcharge and thereby acted similarly to a fund. It is explained that the joint project group "Horizontaler Belastungsausgleich" (PG HOBA), to which the Opening Decision refers, was created on a voluntary basis and merely served the purpose of a technical coordination between the TSO.

(62) The interested parties also submit that the Paragraph 19-surcharge was not hypothecated to the financing of the exemption from network charges. The advantage of the exemption would have also materialized without the Paragraph 19-surcharge in which case the losses in revenue resulting from the full exemption would have to be borne by the network operators. The compensation mechanism described in section 2.4 of this Decision needed to be regarded independently from the advantage granted to baseload consumers. Without the compensation mechanism the network operators would have simply taken the losses in revenue into account when calculating the network charges for the non-exempted undertakings as in 2011.

(63) The interested parties submit that the exemption from network charges did not distort competition or affect trade between Member States, as it only reduced the financial burden and competitive disadvantage that result from network charges in Germany, which are considered to be significantly higher than in other Member States.

(64) Only a limited number of interested parties argue that the exemption from network charges is compatible with the Internal Market. Their arguments essentially refer to the contribution of baseload consumers to the stability of the network and hence to security of supply in Europe. Moreover, they argue that in light of the Union's climate policies the exemption would strengthen the competitiveness of energy-intensive undertakings and therefore prevent them from shifting their activities to

\(^{43}\) BGBl. I p. 2074 and BGBl. I p. 1634.
outside of the Union, which would result in negative consequences for the Union's economy, as it would e.g. lead to a loss of value chains and increase the Union's dependency on imports.

(65) Finally, a limited number of interested parties claim that any recovery would be in violation of the principle of the protection of legitimate expectations. To this end, they argue that by finding that the full exemption was financed through State resources, the Commission would deviate from the interpretation of the State aid notion applied prior to the full exemption both in its own case practice as well as the case-law of the European Court of Justice, in particular its interpretation of State resources in the PreussenElektra-judgement.

(66) After expiry of the deadline for interested party comments, the Commission received comments from two additional interested parties (Wacker Chemie AG and Koehler Kehl GmbH). Wacker Chemie AG submitted comments on the physical path methodology developed by the BNetzA to determine individual network charges of baseload consumers as of 2014. Wacker considered that the physical path method was not an adequate way to determine individual charges because the network charge would depend on whether the baseload consumer would be located close to a baseload power plant or not. Wacker also criticized the fact that hydro plants were not considered as baseload plants and that the plant in question had to be able to cover the entire potential load of the baseload consumer. Wacker considered that the full exemption had been a simpler principle adequately reflecting the contribution of the baseload consumer to the stability of the network. Wacker, however, did not provide any elements describing the stabilizing effects of baseload consumers. Koehler Kehl GmbH submitted comments on a report published by the BNetzA on 20 March 2015. Koehler Kehl GmbH refers to statements in the report, which confirm the contribution of baseload electricity consumption to the network stability in the period of 2011-2013. On that basis, Koehler Kehl GmbH argues that a different treatment of baseload consumers does not amount to a selective advantage. To the extent that the evaluation report suggests that stable baseload electricity consumption is becoming less relevant for network stability, Koehler Kehl GmbH however questions the validity of the report. To this end, its comments challenge the methodology applied to establish the report as being inaccurate, as the report relies e.g. on statements made by low voltage network operators to which, however, no baseload consumer is connected. The report therefore would not contain any valid statement that would reject the stabilizing effect of baseload consumption. In addition, the comments highlight the continuous need for baseload generation plants and thus baseload consumption for providing network stabilizing.

4. COMMENTS FROM GERMANY

(67) Germany considers the full exemption subject of the Opening Decision not to be State aid, as it neither conferred a selective advantage nor was financed through State resources. Alternatively, they consider the exemption to be compatible with the internal market. In this regard, they also stress the need of keeping a level-playing field for energy-intensive industries in Europe while the share of electricity from renewable energies increases.

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Germany considers that the full exemption was within the logic of the system of network charges in Germany, in particular with the principle that network charges should be proportionate (to costs) and non-discriminatory. They submit that the principle of cost-causality enshrined in Paragraph 16(1) of the StromNEV as well as the requirement set out in the second sentence of Paragraph 17(1) of the StromNEV, according to which network charges have to reflect the actual hours of use, made it necessary to treat baseload consumers differently than other end consumers. They added that the exemption should be viewed as an adequate compensation for the baseload consumers' contribution to the stability of the network.

Germany explains that baseload consumers are very different from "typical consumers". While typical consumers had a volatile consumption that cannot entirely be predicted, baseload consumers were consumers that are constantly withdrawing the same amount of electricity from the grid. The high predictability of baseload electricity consumption reduced the need for balancing electricity and reserves as well as the need for re-dispatching. In general, the high predictability facilitates network planning and maximized the use of the generation fleet (provided that the generation fleet is mostly composed of conventional plants). However, if they were subject to the network charges calculated according to Paragraph 16 and Paragraph 17 of the StromNEV, baseload consumers would have to fully contribute to all those costs while they are not causing such costs. As baseload consumers were generally located in the vicinity of electricity generation capacities, they were using a smaller portion of the grid and there were less grid losses connected to their consumption. Moreover, the exempted baseload consumption would not contribute to an increased need for grid development (unless they are themselves the reason for the grid expansion) as only the variation of load on top of the constant baseload consumption were to be taken into account for capacity reinforcement of the grid. Finally, baseload consumers also had a positive impact on frequency regulation given that a constant load of a certain size could mitigate frequency disturbances and give the network operator more time to react.

Germany further explains that the general system of network charges did not adequately reflect the network costs caused by the exempted baseload consumption in comparison to consumers with variable consumption patterns. In particular, the simultaneity function was based on historical figures but could not guarantee that variable consumers would consume at the same time as they did in the past. Hence, while variable consumers with a low amount of hours of full use were empirically also characterized by a low simultaneity factor, their electricity consumption nevertheless could (due to the unpredictability of the consumption) fluctuate around the annual peak load. This obliged network operators to build in a safety margin when they develop the network. This safety margin was not needed for baseload consumer. As a consequence, the simultaneity function would overestimate the costs caused by baseload consumption in relation to variable consumers.

Finally, Germany explains that a large and stable load lead to economies of scale that the network charge determination on the basis of the simultaneity function did not take into account. The network charge determination on the basis of the simultaneity function would therefore overestimate the network charges due by baseload consumers.

Germany concludes on this point that compared to variable consumers baseload consumers lead to a series of cost reductions and cost savings that benefitted all network users. Those savings could not be calculated with accuracy but they could
be computed indirectly by allocating the individual costs of the baseload consumer (incremental costs).

(73) Germany considers that the legal requirement of having an electricity consumption exceeding 10 GWh and reaching 7,000 hours of full use was justified and consistent as it ensured stable and significant baseload consumption. In order to reach 7,000 hours of use, end users would need to take electricity out of the network corresponding to the maximum annual peak load in every quarter of an hour over a period corresponding to 80% of the year. The 7,000 hours of full use were thus not a function of the quantity of electricity consumed but of the stability of the consumption. In other terms, 7,000 hours of full use could be reached only if the consumer had exactly the same take off at least 80% of the entire year. Germany also explains that the 10 GWh-requirement has been defined as such because network users would consider leaving the general system of network charges only at a certain level of electricity consumption\(^{45}\).

(74) With regard to the potential involvement of State resources, Germany considers that the State did not exercise any control over the financing of the exemption. It submits that the mere approval of the exemption by the regulatory authorities was not sufficient to establish such control.

(75) Furthermore, Germany argues that the Paragraph 19-surcharge did not qualify as a levy within the meaning of the Essent judgment\(^{46}\). In support of that argument, Germany submits that the Paragraph 19-surcharge was not determined by the State, but by the TSO, which were mainly private companies. Also, contrary to the Essent judgment, no surplus of the Paragraph 19-surcharge would accrue to the State budget. Finally, the TSO were considered to be free in the use of the proceeds of the Paragraph 19-surcharge.

(76) Germany also contends that the mere fact that the Paragraph 19-surcharge had been introduced by the BNetzA was not in itself sufficient to establish State control. In this regard, Germany explains that the Paragraph 19-surcharge was introduced in order to allow for an equalisation of the losses in revenue following the exemption. Such equalisation across Germany was necessary due to the regulatory specificities in Germany, where the transmission network is divided into four geographical areas and four TSO. The alternative would have consisted in increasing the network charges for the non-exempted end users within a concerning network area, which however would have led to geographically different cost burdens in Germany. The amount of the cost burden thus depended on the amount of exemptions within the respective network area.

(77) As regards 2011, Germany explains that the losses in revenues that occurred in 2011 could not be recouped through network charges in 2011 as network charges had to be established in advance. They could also not be recouped in 2012 as network charges have to be calculated based on the forecasted network costs. Hence, in the absence of the Paragraph 19-surcharge, losses in revenue following the exemption may have partially, if at all, been compensated via the *Regulierungskonto* in accordance with the provisions laid down in Paragraph 5 of the ARegV 2011. If then the losses in revenue would have led to a negative difference between the obtained revenues and

\(^{45}\) The cumulative requirements of exceeding 10 GWh of consumption and reaching 7,000 hours of full use can already be reached with a load of 1.4 MW.

the authorized maximum revenue level, this difference would be booked on the regulatory account. If at the end of the regulatory there was still a negative balance, it might translate into an increase of the maximum authorized revenue levels in the next regulatory period. In this regard, Germany explains furthermore that the competent regulatory authority neither had ownership of the *Regulierungskonto* nor control over it. The *Regulierungskonto* served the mere purpose of offsetting the proceeds from network charges that exceed the approved maximum revenue level over the course of specific regulatory period under the system described in recital (41). Accordingly, no liquid assets were registered on the *Regulierungskonto* that could be used to finance the losses in revenue resulting from the exemption.

(78) Germany also considers the full exemption not to be creating an additional burden on the State budget. In particular, the TSO could not be assimilated to the State. By coordinating their procedures as to the administration of the Paragraph 19-surcharge for the purpose of efficiency and transparency, they would not have acted similarly to a fund.

(79) Germany moreover expressed its view that the full exemption from network charges did not create a distortion of competition in the internal market. In this regard, Germany referred to the high level of electricity costs that would burden energy-intensive undertakings active in Germany more than their competitors active in other Member States. In this regard, Germany also argued that it should be allowed for Member States to adopt measures which maintain the competitiveness of the European industry, in particular energy-intensive industries and highlight in this respect that Germany had a very ambitious renewable policy compared to other Member States and that this ambitious policy required important network investments. Network charges would thus increase. A limitation of the energy costs that resulted from the deployment of renewable energy was necessary to ensure a level playing field compared with industries in other Member States or in third countries. Without the limitation, the German industry would be threatened.

(80) Furthermore, Germany explains that even if the full exemption would qualify as aid it would in any event constitute compatible aid under Article 107(3)(b) or (c) of the Treaty given that the full exemption in place between 2011 and 2013 was necessary in order to incentivize an electricity consumption pattern that was beneficial for the network and its stability. Germany explains in this respect that the full exemption was necessary to keep baseload consumers within the system of general electricity supply and to prevent that they switch to a system of self-supply or to build a direct line to a power plant at the detriment of network stability. In that way, the full exemption contributed to the objective of security of supply. In that connection, Germany repeats that baseload consumers facilitate a secure network management through their predictability and stable consumption. In addition, Germany stresses that the exempted baseload consumption was a prerequisite for the minimum conventional electricity generation necessary to guarantee the stability of the network and referred also to the 2012 Study. In particular, Germany explains that in the period 2011-2013 the electricity mix in Germany was still dominated by conventional power plants and was not yet very flexible. Without a large and constant offtake of electricity conventional power plants with synchronous generators would not have been able to run on a continuous mode and deliver the
same ancillary services. This would be relevant in particular in the light of the increasing share of electricity produced from intermittent renewable energy sources and the decision to close 8 nuclear plants after the Fukushima accident. Without the conventional power plants with synchronous generators, the network operators would have been required to implement other network stabilizing measures, which would in turn have increased the general network costs. Germany therefore is of the view that the objective of the full exemption was in line with the overall objectives set out in Paragraph 1 of the EnWG, namely a safe, reasonably priced and efficient electricity supply. Germany also argues that the full exemption was needed to facilitate the development of renewable electricity given that it guaranteed that there would always be consumers to consume the renewable electricity whenever it was produced. Absent the baseload consumers there was a risk that renewable electricity would be produced at times when there is no electricity demand. This would, however, oblige network operators to curtail renewable electricity installations and compensate them, thereby increasing the costs of renewable electricity support.

(81) Finally, Germany explains that the full exemption also aimed at implementing Article 14 of Regulation (EC) No 714/2009 of the European Parliament and of the Council as well as recital 32 and Article 32(1) of Directive 2009/72/EC of the European Parliament and of the Council, which require network charges to be applied in a non-discriminatory manner. Germany claims that the full exemption ensured that the network charges reflected the different cost-causalities of baseload and normal electricity consumption.

5. ASSESSMENT OF THE AID SCHEME

(82) The assessment below is based on and limited to an assessment of the legal framework, the market situation, the electricity mix and the network situation in the years 2011 to 2013 only.

5.1. Existence of aid within the meaning of Article 107(1) of the Treaty

(83) Under Article 107(1) of the Treaty, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, in so far as it affects trade between Member States, is incompatible with the internal market.

5.1.1. Existence of an advantage

(84) The concept of advantage within the meaning of Article 107(1) of the Treaty embraces not only positive benefits, such as subsidies, but also measures which, in

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47 Directive 2009/72/EC defines ancillary service as: ‘a service necessary for the operation of a transmission or distribution system.’ Examples of such services that TSOs can acquire from generators are frequency (balancing of the system) and non-frequency (voltage control and black-start) ancillary services to ensure the management of the system.


50 The assessment is without prejudice to the ongoing infringement case 2014/2285 on Paragraph 24 of the EnWG.
various forms, mitigate the charges which are normally included in the budget of an undertaking and which, therefore, without being subsidies in the strict sense of the word, are similar in character and have the same effect.\(^{51}\)

(85) Electricity consumers normally have to pay a charge for using the electricity network. This charge reflects the cost created by that consumer for the network. For undertakings using the electricity network, network charges thus constitute part of their normal production costs. By fully exempting baseload consumers with an annual electricity consumption exceeding 10 GWh and reaching 7 000 hours of full use, the second sentence of Paragraph 19(2) of the StromNEV 2011 relieved them from a financial burden and production costs that they otherwise would have to bear. The second sentence of Paragraph 19(2) of the StromNEV 2011 therefore conferred an advantage to baseload consumers fulfilling the eligibility criteria.

(86) Some interested parties have claimed that the exemption did not constitute an advantage because it amounted to the payment for a service (stable consumption) at market conditions (invoking the so-called Market Economy Operator Principle, ‘MEOP’) or to the payment of a compensation for a service of general economic interest.

No compensation for a service of general economic interest.

(87) In its 'Altmark' ruling, the Court of Justice has clarified that following four criteria must all be met for a compensation for a service of general economic interest not to constitute State aid under Art 107(1) of the Treaty\(^{52}\):

(a) the recipient undertaking must actually have public service obligations to discharge and the obligations must be clearly defined;

(b) the parameters on the basis of which the compensation is calculated must be established in advance in an objective and transparent manner, to avoid it conferring an economic advantage which may favour the recipient undertaking over competing undertakings;

(c) the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of public service obligations, taking into account the relevant receipts and a reasonable profit for discharging those obligations;

(d) where the undertaking which is to discharge public service obligations, in a specific case, is not chosen pursuant to a public procurement procedure which would allow for the selection of the tenderer capable of providing those services at the least cost to the community, the level of compensation needed must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided with the necessary means, would have incurred in discharging those obligations, taking into account the relevant receipts and a reasonable profit for discharging the obligations.

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However, it is observed that those four cumulative conditions are not fulfilled in the present case. First, the German legislation does not identify any service of general economic interest that would consist in stable consumption and it does not entrust baseload consumers with any public service obligation. Second, the law does not contain any parameters on the basis of which costs should be calculated to avoid overcompensation. Third, for many of the baseload consumers, having a consumption reaching 7,000 hours of full use and exceeding 10 GWh simply corresponds to their normal consumption profile and does not imply any particular costs. The full exemption is in those cases then necessarily leading to overcompensation as it exceeds what compensation would have been necessary to cover the extra costs related to the alleged public service obligation. Finally, the undertakings were not chosen pursuant to a public procurement procedure and the exemption has not been determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided with the necessary means, would have incurred in discharging those obligations, taking into account the relevant receipts and a reasonable profit for discharging the obligations. Germany has on the contrary indicated that it was hard to quantify the value that stable load had for the network.

The full exemption does not correspond to the behaviour of a market operator

As to the argument that the full exemption was akin to the payment that a market operator would make to buy the service in question, it is observed that no convincing argument has been submitted that would demonstrate that the value of the full exemption corresponds to the price at which network operators would be – absent the provision of the second sentence of Paragraph 19(2) of the StromNEV 2011 – willing to purchase the alleged service from baseload consumers.

First, the fact that network operators have challenged the exemption in front of national courts (see recitals (52) and (53)) shows that network operators would not by themselves have bought the alleged service against the full exemption going beyond the level of individual network charges (on individual network charges, see below section 5.1.2). The BNetzA conducted a survey amongst network operators for the purposes of an evaluation report of 30 March 2015 on the impact of Paragraph 19 (2) of the StromNEV on the management of electricity networks and focussing on data relating to the period 2011 to 2013 (the ‘2015 Evaluation Report’). That report reveals that network operators having baseload consumers connected to their grid are divided over the usefulness of baseload consumers for the stability of the network. Some indicated that in the period 2011 to 2013 baseload consumers caused lower network costs – but crucially still did cause costs - compared to other network users with variable and non-predictable load while others explained that flexible load would be more useful to regulate volatility. Also one TSO explained that the contribution of baseload consumers to the stability of the network is uncertain.

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55 See negative replies in figures 6 and 7 of the report and the findings on p. 38 of the 2015 Evaluation Report.
networks depended on the specific circumstances of the network\textsuperscript{56}. Finally, several of those network operators had observed that the concerned baseload consumers had already the same load pattern before the introduction of the exemption so that the exemption would not be needed in order for them to modify their behavior. In other words: the service had been provided in any event, already absent the measure. Those findings further confirm that network operators would not all on their own motion "purchase" the stable load from baseload consumers, and none of them at the price of a full exemption.

(91) Second, even assuming that in some cases the network operators would have actively purchased the alleged service, they would have procured it only to the limit necessary to facilitate the management of the grid and against a price reflecting the differentiated contribution to stability. By contrast, the full exemption is granted to baseload consumers reaching 7 000 hours of full use and exceeding 10 GWh without consideration being given to either the network level at which they are connected, or their effective contribution to the stability of the networks\textsuperscript{57}, or the fact that there might already be enough of those baseload consumers to enable a stable management of the network. Also, if stable demand (rather than cost reduction) were the key to the safe management of the network, there is no reason to exclude from the exemption stable consumers consuming less than 10 GWh.

(92) Third, it is noted that German Courts also concluded that the full exemption could not be seen as the payment for a service first because for many baseload consumers the "service" merely corresponded to their normal consumption mode and second because the full exemption did not take into consideration the concrete stability increase delivered. According to those Courts, only a reduction taking into account the concrete impact of each baseload consumer on the network could have been justified (see recitals (52) and (52)).

(93) Part of the interested parties based the argument that the full exemption corresponded to the payment that a market operator would make to buy baseload consumers' service on the 2012 Study (see recital (59) of this Decision).

(94) It is observed, first, that the exemption has been introduced by a regulatory act, by the State acting in its capacity as regulatory authority. In that regard, it is necessary to apply the most recent case-law of the General Court, \textit{EDF v Commission}.\textsuperscript{58} According to that judgment, the Member State needs to demonstrate, where it invokes the MEOP, that its regulatory decision was taken in its capacity as shareholder, and not in its capacity as public authority. In the present case, Germany (at federal level) has no shareholding in the network operators. In any event, Germany has not submitted any documents that would indicate that it took into consideration shareholdings of regional and local authorities in the network operators. Germany has, indeed, not produced any contemporaneous evidence showing any commercial considerations, nor have interested parties. The study postdates the BNetzA regulatory decision of 14 December 2011. Hence, the MEOP is not applicable in the present case.

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\textsuperscript{56} See p. 38 of the 2015 Evaluation Report.

\textsuperscript{57} For the purposes of the full exemption, no distinction is made between consumers with an absolutely stable consumption over 8 760 hours of full use and consumers whose consumption is less stable.

It is observed, second, even if the MEOP was applicable, quod non, that this study post-dates the introduction of the exemption. Hence, a market economy operator could not have relied on it when deciding the exemption.

Even if the 2012 Study was relevant for the application of the MEOP, quod non, it does not support the claims made. The interested parties claim that in order to secure the necessary minimum generation by such power plants, there is a need for a stable and large demand as this will ensure the profitability of the plant concerned and ensure that they are not mothballed. It must, however, be noted that the 2012 Study itself does not at all relate to the usefulness of baseload consumers for maintaining the required minimum generation from conventional power plants in Germany to ensure a secured network management. It is not the object of the 2012 Study and baseload consumers are in fact not mentioned in it. By contrast, the summary of the results of the study underlines that the minimum generation capacity needed in Germany to ensure a secured network management has been estimated based on the demand existing in Germany. In other words, the minimum generation capacity needed in Germany to ensure a secured network management depends on the consumption volume but also type of load that needs to be satisfied. If the demand had been smaller or if there was no need to ensure baseload generation in order to cover baseload consumption, the minimum generation capacity needed in Germany would have been different. Baseload consumers are part of the reason why this amount of generation capacity is needed in the first place. Their demand can therefore hardly be described as a service. In any event, the mere existence of baseload consumers would not be sufficient to ensure that the concerned power plants remain on the market. This will ultimately depend on the price at which the electricity is sold. If this price is too low, it will not enable the baseload power plant to remain on the market. It will also depend on the production level of renewable electricity. At times of low demand but high renewable electricity production, the renewable electricity has priority dispatch and priority access over power plants using fossil fuels. Finally, it should be noted that part of the conventional power plants mentioned in the 2012 study on the minimum generation from conventional power plants are not baseload power plants but conventional power plants that can be ramped up rapidly like gas turbines. Baseload consumers will not constitute an incentive for this type of plants to remain on the market as their profitability is linked to the possibility to obtain higher electricity prices when the system is under stress.

Some interested parties have also argued that the exemption is justified because baseload consumers are part of the five stage load shedding plan that has been put in place by TSOs to avoid blackouts when the system is overloaded. This plan is described in the Transmission Code 2007 (Network and System Rules of the German Transmission System Operators). They also claim that this load shedding would occur outside any contractual relationship and without compensation and that the full exemption compensates them for their contribution to security of supply.

On this point, it is noted first that these claims are contradicted by the Transmission Code 2007 itself. Article 7.3.4.(6) of the Transmission Code 2007 explicitly indicates that load shedding will be assured by contractual arrangements with the network customers. In addition there is no correlation between the full exemption and the load shedding in the sense that the inclusion in the five stage load shedding plan is not a

See p. (i) of the 2012 Study, under the heading 'Ergebniszusammenfassung'.
requirement to be eligible for the full exemption. Interested parties admit on this point that their stable consumption only increases the likelihood to be included in the plan. Also consumers who do not qualify as baseload consumers can be part of the plan. In fact, the five stage load shedding plan will have to include consumers other than baseload consumers. Indeed, it includes between 35% to 50% of the system load (after shedding of pumps)\(^6^0\). Based on the information submitted by Germany the beneficiaries of the full exemption would in total reach a peak load of around 3.5 GW which represents around 4.2% of peak demand in Germany in 2013\(^6^1\). Hence, even assuming that the exemption could constitute remuneration for the inclusion in the five stage plan it would still constitute a selective advantage given that it would be limited to baseload consumers and excluded for all other consumers that are also part of the five stage load shedding plan.

\((99)\) Finally some interested parties seem to imply that baseload consumers would need to comply with specific technical specifications when connecting to the grid and that to meet those specifications baseload consumers would need to make investments in devices that improve the stability of the network because delivering reactive power\(^6^2\) but for which they are not compensated.

\((100)\) It is noted, however, that the full exemption cannot be seen as remuneration for this alleged service that a market economy operator would have paid. Indeed, the situation described by the interested parties does not correspond to a service that network operators would buy. It corresponds to a technical specification that consumers need to meet in order to be connected to the network. In particular, they need to ensure that their shift factor remains between \(-0.9\) and \(+0.9\). Depending on the circumstances, this might indeed require the consumer to invest into specific equipment that make sure that their shift factor remains between the prescribed values. This cannot be considered as a service to the grid but constitutes a preventive measure against bigger network disturbances. If consumers, including baseload consumers, were not complying with that technical specification, they would be responsible for significant voltage disturbance in the grid. Interested parties themselves acknowledge that this specification is necessary to ensure safe network management. In addition, technical specifications apply to any consumer requesting connection to the concerned network and not specifically to baseload consumers so even if the exemption could be seen as a "remuneration" (which however is not the

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\(^{60}\) Stage 1: 49.8 Hz Alerting of personnel and scheduling of the power station capacity not yet activated, according to the TSO’s directions, shedding of pumps.
Stage 2: 49.0 Hz Instantaneous load shedding of 10 - 15 % of the system load.
Stage 3: 48.7 Hz Instantaneous load shedding of a further 10 - 15 % of the system load.
Stage 4: 48.4 Hz Instantaneous load shedding of a further 15 - 20 % of the system load.
Stage 5: 47.5 Hz Disconnection of all generating facilities from the network.


\(^{62}\) In a network using alternative current, both real power and reactive power are needed for electricity to be transmitted. The real power is the power consumed and transported over the electric lines. Reactive power by contrast is needed to maintain the voltage of the line (see for instance explanations provided by Amprion: https://www.amprion.net/%C3%9Cbertragungsnetz/Physikalische-Grundlagen/Blind- Wirkleistung/). It is produced by synchronous generators and other reactive power compensation devices. Reactive power tends to decrease when the electric lines are long so that long lines require the installation of reactive power compensation devices in the middle of the line.
case), it would still constitute a selective advantage given that it would be limited to baseload consumers and excluded for all other consumers that are subject to the same requirement.

5.1.2. Existence of a selective advantage

(101) Both the interested parties and Germany have argued that the full exemption did not constitute a selective advantage as that exemption was justified by the nature and logic of the network charge system in Germany. They underline that the network charge system in Germany is based on cost-causality but that baseload consumers have a consumption and load pattern that is very different from typical network users, which have a variable and unpredictable consumption and load. Baseload consumers contributed to the reduction of various network costs which justified the full exemption.

(102) The full exemption can only amount to State aid to the extent that the advantage granted to baseload consumers is selective. In order to establish that an advantage is selective, the Commission has to demonstrate that a measure differentiates between economic operators who are, in light of the objective of the reference system identified, in a comparable factual and legal situation and that such a differentiation cannot be justified by the nature or the general scheme of the reference system.

(103) In order to verify whether, under the relevant legal regime, the full exemption constitutes a selective advantage for certain undertakings over others which are, in the light of the objective pursued by that regime, in a comparable factual and legal situation, it is necessary to first define the reference framework within which the measure concerned fits.

5.1.2.1. The reference system

(104) The Commission agrees that, for the purposes of the present decision, the relevant reference framework is the German network charge system. This network charge system is based on the principle that network charges must be cost-based and non-discriminatory. Indeed, Paragraph 21 of the EnWG establishes the principle that network charges must be proportionate ("angemessen"), non-discriminatory and transparent (see recital (7) of this Decision). The cost-causality principle is enshrined in Paragraph 16 of the StromNEV and implicit in Paragraph 3 of the StromNEV which states that network charges correspond to the payment for the use of the networks. The StromNEV sets out detailed rules on the methodology for a cost-reflective determination of network charges.

(105) Paragraph 24 of the EnWG 2011 empowers the federal government to specify by ordinance the methodology for determining the general network charges to be paid. As set out in recital (7) of this Decision, Paragraph 24 of the EnWG makes a distinction in this respect between the generality of users and atypical network users.

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which can be charged an individual network charge. The StromNEV implements this distinction and also contains two sets of methodologies: the methodology applicable to typical network users (Paragraphs 15, 16 and 17 of the StromNEV) and the methodology applicable to atypical network users (see recitals (17) to (20) of this Decision).

(106) Paragraphs 15, 16 and 17 of the StromNEV provide for the general calculation method to determine the network charges. This methodology has been described in recitals (10) and (14) of this Decision. In particular, the simultaneity function described in Paragraph 16 (2) of the StromNEV and Annex 4 to the StromNEV allows for an allocation of the network costs to the various network users according to the probability that the electricity consumption of the individual user in question contributes to the annual peak. Germany has submitted that in a system in which electricity flows from the top down, the annual peak element is one of the main cost drivers of the network.

(107) Germany has however demonstrated that while this general methodology enables a reliable determination of the network costs caused by most end users, the simultaneity function – if applied in the same way to all network users – de facto overestimated the costs caused by baseload consumers in the period 2011-2013. This is explained by the fact that the calculation methodology based on the simultaneity function spreads the entire network costs between all users while these costs contain costs that baseload consumers did not cause, or caused in the period 2011-2013 to a much lower degree. In particular, the costs that are linked to balancing out sudden variations in the demand are not caused by baseload consumers, as they have a predictable and a much more constant consumption. The same is true for measures that need to be taken to keep the frequency of the network despite variations in load.

(108) It is true that baseload consumers contribute to peak load like all other network users and that peak load is relevant for the dimensioning of the network, and hence for one factor creating network costs. However, it is not relevant for allocating other network costs (for example the costs linked to the reserves needed to supply balancing energy). If all network users had unpredictable and variable consumption patterns, it would still be rational to allocate those costs using the same allocation key, i.e. in proportion to their contribution to peak load. However, baseload consumers have a predictable and much more stable load pattern. In 2011-2013 given the energy mix, baseload consumers generated much less need for system services than other network users. Hence, in a network charge system based on the cost–causality principle, costs for system services that are not needed for baseload consumers could not be allocated to them by using the same key as for network users having a variable and unpredictable load.

(109) Also, the calculation methodology based on the simultaneity function does not take into account economies of scale. Where a network is constantly used up to its full capacity, the costs per unit are much lower than for where the same network is used by variable consumers only from time to time up to its full capacity but generally only up to 30 % of its capacity. Finally, due to the variability and unpredictability of the consumption of users in general, network operators have to take a safety margin into account when they dimension the network. Indeed, the simultaneity factor only expresses the likelihood that a given consumer will consume at the moment of peak load but cannot guarantee this. Such a safety margin is however not needed to the same degree for baseload consumers, if at all. Hence if the network charges of
baseload consumers would be calculated on the basis of the network charge methodology using the simultaneity function, they would again be overestimated.

The Commission therefore considers that the possibility provided for in Paragraph 24 of the EnWG 2011 to determine individual network charges for atypical users such as baseload consumers is in line with the principle of cost-causality and non-discrimination. It must be regarded as an integral part of the reference system as it serves as a corrective to take into account the network costs actually caused by atypical network users such as baseload consumers.

The Commission also considers that the provision according to which the individual network charges paid by atypical network users cannot go below 20% of the published network charges forms an integral part of the rules governing individual network charges under the StromNEV. First, this minimum contribution has continuously been a requirement as regards the group of atypical network users addressed in the first sentence of Paragraph 19(2) of the StromNEV and was in particular applicable in the period 2011 to 2013 (see recital (21) of this Decision). Second, it also applied to baseload consumers under the StromNEV 2010 (see recital (20) of this Decision). And finally, the minimum contribution network charge of 20% for atypical end users such as baseload consumers corresponds – as Germany has explained (see recital (20)) – to a safety net that ensures that atypical consumers contribute to a minimum to remunerating the benefit that derives from being connected to the network. Specifically as regards baseload consumers, the minimum contribution of 20% also takes into account that the physical path methodology, while mirroring closely the network costs caused by baseload consumers, still implies a certain approximation.

5.1.2.2. Deviation from the reference system

However, the Commission considers that the full exemption introduced by the Law of 26 July 2011 is at odds with the concept of individual network charges set out in point 3 of the first sentence of Paragraph 24 of the EnWG 2011 pursuant to which atypical forms of network use might be subject to individual network charges.

The cost-causality principle and the principle that network charges should be proportionate and non-discriminatory imply that network charges are determined based on the individual network costs attributable to a given network user. The full exemption from network charges would therefore be in line with those principles only if it were demonstrated that baseload consumers do not cause any network costs. This has however not been demonstrated. On the contrary, baseload consumers do cause network costs in particular when they are being newly connected to an existing network given that their connection might necessitate an increase of the capacity of such a network. Likewise, where a network has not yet been built, it would need to be dimensioned so as to satisfy at least the demand of baseload consumers. This has also been recognized by German regional courts and the Federal Court of Justice. They have explicitly concluded that the full exemption was contrary to Paragraph 24 of the EnWG 2011 (see recitals (52) and (52) of this Decision). It must further be observed that the other category of atypical network users referred to in the first sentence of Paragraph 19(2) of the StromNEV continued to be subject to individual network charges calculated on the basis of their individual load profile during the years 2011 to 2013 (see recital (21) of this Decision). The full exemption for baseload consumers therefore introduced a discrimination against both other groups of atypical network users that were still subject to individual network charges.
and all other end users given that the full exemption deviates from the principle of cost causality and proportionality of network charges.

(114) It is noted that before the full exemption introduced from 2011 baseload consumers were subject to individual network charges that had to be determined so as to take into account the reduction of network costs or the mitigation of increases in network costs that were due to baseload consumers. Those individual network charges might however not be lower than 20% of the published network charges. In order to calculate those costs, the BNetzA had defined the physical path methodology (see recital (19)). The Commission considers that this methodology is a reliable methodology to approximate the costs caused by baseload consumers in the period 2011 to 2013 given the characteristics of the electricity system at that time. Indeed, this methodology determines the network charges based on the costs that can be attributed to the baseload consumer, that is to say the capital costs and fixed operating costs related to the part of the network that connects the baseload consumer to the nearest baseload power plant that can de facto cover its entire demand. While it is true that this method leads – as one interested party has criticized - to differentiated network charges depending to the location of the baseload consumer on the network, this is precisely the point of individual network charges, namely to verify the costs caused to the network by each baseload consumer individually. If a baseload consumer is further away from a baseload power plant, it also means that he will be using a much large portion of the network to have the electricity transported from the power plant that is able to de facto cover its demand. Also the fact that the physical path is calculated by reference to a power plant covering the entire demand of the baseload consumer is justified. If the power plant were to cover only part of the demand of the baseload consumer, it would imply that he is using again several parts of the network in order to cover his demand and is thus also responsible for higher network costs. As to the fact that the physical path methodology would not accept hydropower plants as baseload power plants, it is noted that the 2010 guidance paper of of the BNetzA referred to under recital (19) above accepts hydro power plants as baseload power plants. In addition, the physical path methodology also takes into account network losses and any network services that the baseload consumer has been using, if any. The adequacy of the physical path methodology to determine the network costs caused by baseload consumers has notably been confirmed by the Federal Court of Justice in 2016.65

(115) The Commission considers thus that a different treatment of atypical users (i.e. non-peak consumers and baseload consumers) compared to the other network users is an integral part of the reference system and expressed in its structure, as long as it is based on the concept of individual network costs attributable to a given network user.

(116) The full exemption in force between 2011 and 2013 however deviates from the determination of individual network charges applicable to atypical users given that the full exemption does not rest on an individual determination of the costs caused by the caseload consumer. Although both non-peak consumers and baseload consumers are in light of the objective of the network charge system, in a comparable factual and legal situation (they are atypical users for which the published network charges would between 2011-2013 not have led to cost-reflective network charges) they were treated differently.

65 EnVR 34/15, paragraph 27.
In addition, the full exemption also deviates from the reference system in that it does not require the baseload consumer to pay at least 20% of the published network charges as required for other atypical users, namely the non-peak consumers. This difference in treatment corresponds to a discrimination given that there is no reason why baseload consumers should be exempted from that requirement. In particular, there is no reason why individual network charges for non-peak consumers should be subject to a safety net while baseload consumers would not, knowing that also baseload consumers – like non-peak consumers benefit from being connected to the network. Also, the individual network charges calculated by using the physical path methodology will imply a certain approximation.

5.1.2.3. No justification in the nature and logic of the network charge system

The concept of aid does not encompass measures creating different treatment of undertakings in relation to charges where that difference is attributable to the nature and general scheme of the system of charges in question. The burden of proof for that latter part of the test is on the Member State.

It is observed that Germany has not put forward any element showing that the full exemption would be justified by the nature and general scheme of the network charge system in Germany. It has put forward that the full exemption could help ensuring security of supply by securing the existence of conventional power plants needed to ensure security of supply and could also help facilitating the promotion of renewable electricity. Those objectives, however, are external to network charges and must therefore be examined under the compatibility assessment in line with the case law of the Court (see Section 3.3.1).

5.1.2.4. Conclusion

The full exemption cannot be justified by the logic of the network charges in Germany to the extent that it goes beyond a reduction of the published network charges reflecting the contribution of baseload consumers to cost savings or the avoidance of costs. The full exemption notably constitutes an unjustified deviation from the reference system as it exempts the baseload consumers from the costs that the reference system would allocate to them, that is to say the individual network costs calculated on the basis of the physical path methodology and which cannot go below 20% of the published network charges.

The Commission therefore concludes that insofar as baseload consumers were exempted from paying network charges going beyond the network costs caused by their consumption or, where those costs amounted to less than the minimum contribution of 20% of the published network charges, were exempted from that minimum contribution, the exemption is not within the logic of the reference system, and does confer a selective advantage.

5.1.3. Imputability

(122) The full exemption has been provided by Article 7 of the Law of 26 July 2011 (see recital (21) of this Decision), and has been implemented by administrative acts confirming the exemption requests (see recitals (24) of this Decision). It is therefore imputable to the State.

(123) Also the Paragraph 19-surcharge that financed the exemption is imputable to the State. First, the Paragraph 19-surcharge was provided for by Article 7 of the Law of 26 July 2011 (see recital (21) of this Decision) and was further implemented by the BNetzA, a government agency (see Section 2.4.2 and footnote 23 of this Decision). The fact that the calculation of the charge is carried out by private entities mandated by law to do so does not affect that conclusion, because those private entities – the TSO – have no margin of discretion when carrying out that task, and have been mandated by the State to carry out that task, as part of their entrustment pursuant to Paragraph 19(2) of the StromNEV 2011 as TSO. Furthermore, the BNetzA has the normal supervisory powers over the TSO, and can address binding decisions to the TSO, if they fail to comply with their obligations (Paragraphs 29 and 54 of the EnWG 2011). Finally, for the year 2012, the BNetzA directly determined which total amount had to be compensated from the Paragraph 19-surcharge (see recital (37) of this Decision).

5.1.4. Existence of State resources

(124) For selective advantages to amount to aid within the meaning of Article 107(1) of the Treaty, they must be granted directly or indirectly through State resources. The concept of "intervention through State resources" covers not only advantages which are granted directly by the State but also "those granted through a public or private body appointed or established by that State to administer the aid". In this sense, Article 107(1) of the Treaty covers all the financial means by which the public authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector.

(125) The mere fact that the advantage is not financed directly from the State budget is not sufficient to exclude that State resources are involved. It results from the case-law of the Court of Justice of the European Union that it is not necessary to establish in every case that there has been a transfer of money from the budget or from a public entity for the advantage granted to one or more undertakings to be capable of being regarded as a State aid within the meaning of Article 107(1) of the Treaty.


The private nature of the resources does not prevent them from being regarded as State resources within the meaning of Article 107(1) of the Treaty. This was also recalled in the ruling France v Commission ruling where the General Court concluded that the relevant criterion for assessing whether the resources are public, regardless their initial origin, is the degree of intervention of the public authority in the definition of the measures in question and their methods of financing. Hence, the mere fact that a subsidy scheme benefiting certain economic operators in a given sector is wholly or partially financed by contributions imposed by the public authorities and levied on certain undertakings is not sufficient to take away from that scheme its status of aid granted by the State within the meaning of Article 107(1) of the Treaty. Equally, the fact that the resources would at no moment be the property of the State does not exclude that the resources might constitute State resources, if they are under the control of the State. In fact the concept of aid granted through State resources serves to bring within the scope of Article 107(1) of the Treaty not only aid granted directly by the State, but also aid granted by public or private bodies designated or established by the State.

This line of reasoning was also applied in Essent. In that case, the Court of Justice had to assess a law which provided that the operators of the Dutch electricity network had to collect a price surcharge on electricity consumed by private electricity clients and pass on the proceeds of that surcharge to SEP, a joint subsidiary of the four electricity generators, in order to compensate the latter for so-called “stranded costs”. This surcharge had to be transmitted by network operators to SEP which had to collect the proceeds and use them up to a certain amount defined in the law for the purposes of covering stranded costs. In this regard, the Court observed that SEP had been appointed by the law to manage a State resource. The Court found that the Dutch system involved State resources.

On the basis of this case-law, it can be concluded that subsidies financed through parafiscal charges or contributions imposed by the State and managed and apportioned in accordance with the provisions of the legislation imply a transfer of State resources, even where they are not administered by public authorities but by private entities designated by the State that are separate from the public authorities.

judgment of 30 May 2013, Doux Elevage and Cooperative agricole UKL-ARREE, C-677/11, EU:C:2013:348, paragraph 34 and judgment of 19 March 2013, Bouygues Telecom v Commission, joined cases C-399/10 P et C-401/10 P, EU:C:2013:175, paragraph 100.


This has been confirmed by the Court of Justice in the *Vent de Colère* case\(^{79}\) where the Court in particular observed that the fact that part of the funds collected were not channelled to the *Caisse des Dépôts et Consignations* but were retained by the undertakings subject to the obligation to purchase renewable electricity at feed-in tariffs was not sufficient to exclude an intervention through State resources.

The Court of Justice excluded the transfer of State resources in only very specific circumstances: For instance, the Court\(^{80}\) considered that a decision by which a national authority extends to all traders in a certain sector an agreement which introduces the levying of a contribution in an inter-trade organisation recognised by that national authority, thus rendering that contribution compulsory, in order to make it possible to implement certain promotional and public relations activities, does not constitute State aid. The Court noted in this respect that the measure was not financed from State resources since it was not the State but the inter-trade organisation that decided how to use the resources stemming from the levy. Those resources were entirely dedicated to pursuing objectives determined by that organisation. Hence, the resources were not constantly under public control and were not available to State authorities.

In *PreussenElektra*, the Court found that the Electricity feed-in Act (*Stromeinspeisungsgesetz*)\(^{81}\), in its version applicable in 1998, did not involve a public or private body established or appointed to administer the aid\(^{82}\). This conclusion was based on the observation that the *Stromeinspeisungsgesetz* put in place a mechanism that was limited at directly obliging electricity supply undertakings and upstream electricity network operators to purchase renewable electricity at a fixed price, without any body administering the stream of payments.\(^{83}\) The situation under the *Stromeinspeisungsgesetz* was characterized by a multitude of bilateral relationships between renewable electricity generators and electricity suppliers. There was no surcharge established by the State to compensate the electricity suppliers for the financial burden resulting from the supply obligation. Therefore, nobody had been appointed to administer such a surcharge and the corresponding financial flows.

By contrast, the Court indicated in the *Vent de Colère* case that the French support system was different from the situation examined in the *PreussenElektra* case in two respects: In *PreussenElektra* the private undertakings concerned had not been appointed by the Member State concerned to manage a State resource, but were bound by an obligation to purchase by means of their own financial resources. In addition, in *PreussenElektra* there was no mechanism established and regulated by the State for offsetting additional costs arising from the purchase obligation and

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\(^{81}\) BGBl. I p. 2633.


through which the State offered the private operators bound by the obligation to purchase the certain prospect that the additional costs would be covered in full84.

(133) The Court has recently confirmed this differentiated approach to the assessment of State resources. In the ENEA S.A. case, the Court ruled that a national measure placing an obligation on both private and public undertakings to purchase electricity produced by cogeneration does not constitute an intervention by the State or through State resources when the extra costs resulting from that purchase obligation cannot be passed on entirely to end users and are not financed by a compulsory contribution imposed by the State or by a full offset mechanism85.

(134) In light of those principles, for the purposes of examining whether the financing of the full exemption, as resulting from the second sentence of Paragraph 19(2) of the StromNEV 2011, involves State resources, it is necessary to differentiate between the financing of the full exemption in 2011 and the financing of that exemption during the years 2012 and 2013, that is to say following the introduction of the § 19-surcharge.

5.1.4.1. Financing through State resources after the BNetzA imposed the Paragraph19-surcharge (years 2012 and 2013)

(135) Based on the compensation mechanism provided for in the sixth and the seventh sentence of Paragraph 19(2) of the StromNEV 2011 described under section 2.4 of this Decision, the BNetzA imposed by regulatory decision of 14 December 2011 on the DSO the obligation to collect from end users the Paragraph 19-surcharge and to transfer the proceeds from this surcharge to the TSO on a monthly basis.

(136) In recitals (49) to (84) of the Opening Decision, the Commission indicated why it considered that the full exemption had to be regarded as financed from State resources. Those reasons can be summarized as follows:

(a) the full exemption corresponds to a policy of the State;
(b) the network operators are being provided a guarantee in the law that the financial losses resulting from the full exemption will be fully compensated through a surcharge on the electricity consumption of network users; that is to say they do not need to finance the exemption from their own financial means;
(c) the TSO have been entrusted with the management of the financial flows resulting from the exemption and the Paragraph 19-surcharge;
(d) the TSO are not free to use the proceeds of the surcharge as they wish given that the Paragraph 19-surcharge must be limited to the financial losses resulting from the exemption; any excess revenues resulting from the surcharge must be deducted from the surcharges to be paid in following years;
(e) the Paragraph 19-surcharge does not correspond to the payment for a service or a good.

(137) The Commission does not share the view expressed by both Germany and the interested parties that the full exemption could not be regarded as financed through State resources because the financial resources that finance the exemption would not

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84 Judgment of 19 December 2013, Association Vent de Colère, C-262/12, EU:C:2013:851, paragraphs 34-36.
transit through the State budget. As recalled in recitals (125) to (125) of this Decision, the Court has repeatedly ruled that the concept of State resources can also be fulfilled if the aid is financed through private means, which are imposed by the State and managed and apportioned in accordance with the provisions of the legislation. According to the Court, such a financing scheme implies a transfer of State resources, despite the fact that those resources are not administered by the public authorities but by private entities designated by the State that are separate from the public authorities.

(138) The Commission considers that the losses in revenue resulting from the full exemption from network charges in 2012 and 2013 were passed on entirely to end users by a full offset mechanism financed by a compulsory contribution imposed on them by the State.

(139) As described in recitals (35) to (39) of this Decision, the legal framework in place in 2012 and 2013 provided for a financing mechanism that would offset the losses in revenue encountered by the network operator to which the exempted baseload consumers was connected. The TSO were obliged to compensate the DSO for their losses in revenue and equalise this additional financial burden amongst them. Pursuant to the regulatory decision of the BNetzA of 14 December 2011 adopted on the basis of Paragraph 29(1) of the EnWG and point 6 of Paragraph 30(2) of the StromNEV 2011, the TSO were compensated for this financial burden through the Paragraph 19-surcharge.

(140) The Paragraph 19-surcharge constituted a parafiscal levy on end users. As such, it did not form part of the general system of network charges as suggested by the comments submitted by the interested parties. The BNetzA itself has explained in its decision of 14 December 2011 that the Paragraph 19-surcharge had a special purpose, namely to compensate TSO for their financial losses, and therefore did not correspond to a general network charge but rather constituted "another charge" within the meaning of Paragraph 17(8) of the StromNEV, that has to be collected separately from the general network charges. This was further confirmed by German courts and in particular by the Federal Court of Justice, which concluded that the Paragraph 19-surcharge did not correspond to a network charge but corresponded to a surcharge that was aiming at covering the financial losses resulting from the exemption provided under the second sentence of Paragraph 19(2) of the StromNEV 2011 (see recitals (52) and (52) of this Decision).

(141) The Paragraph 19-surcharge amounts to a compulsory contribution imposed by the State. It had been provided for in the StromNEV 2011 and has then been introduced via binding regulatory decision of the BNetzA, a high federal public authority entrusted with administrative and regulatory tasks and acting under the supervision of the Ministry for economic affairs and energy. Its president and vice-presidents are nominated by the Minister, while its council is composed of representatives of the Bundesrat and Bundestag 86.

(142) Furthermore, the network operators had been appointed to levy and administer the Paragraph 19-surcharge in accordance with the legal framework in place. In this regard, it is to be recalled that the Court has repeatedly ruled that also a private entity can be appointed with the administration of State resource. Also, it follows from the

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Essent-judgment that more than just one entity can be appointed to carry out the administration of the surcharge.

First, the DSOs and the TSOs were obliged to levy and collect the Paragraph 19-surcharge from the end users and DSOs were obliged to transfer the Paragraph 19-surcharge to the TSO.

Second, the TSO could use the proceeds from the Paragraph 19-surcharge for the sole purpose of compensating for the losses in revenue stemming from the exemption for baseload consumers under the second sentence of Paragraph 19(2) StromNEV 2011 and the equalisation mechanism described in recital (35) of this Decision. This is demonstrated by the fact that the amount of the Paragraph 19-surcharge was adapted to the financial needs triggered by the full exemption. In particular, any proceeds in year $x$ in excess of the amount required to compensate for that financial burden led to a reduction of the surcharge in year $x+2$ (see recital (39)). The Commission therefore does not share the view of Germany and the interested parties according to which the network operators could use the proceeds of the Paragraph 19-surcharge as they wish.

In light of the above, it is noted that the introduction of the Paragraph 19-surcharge gave a guarantee for the network operators that their losses in revenue resulting from the exemption granted under the second sentence of Paragraph 19(2) of the StromNEV 2011 were fully compensated and is therefore different from both the PreussenElektra and the ENEA\textsuperscript{87} cases in which the undertakings on which the purchase obligation rested had to finance the obligation through their own financial means and could not pass on the costs to their customers.

In that respect, the view presented by the interested parties that the proceeds of the Paragraph 19-surcharge were not hypothecated to the financing of the exemption under the second sentence of Paragraph 19(2) of the StromNEV 2011 cannot be accepted. Indeed, as of 2012, the exemption from network charges could not be financed differently than via the Paragraph 19-surcharge which was calculated so as to correspond exactly to the financial needs created by the exemption.

Based on those elements, the Commission maintains its conclusion that the advantage granted to baseload consumers in the form of the full exemption in 2012 and 2013 must be considered as financed through State resources.

While the full exemption under the second sentence of Paragraph 19(2) StromNEV 2011 was applicable as of 1 January 2011, the Paragraph 19-surcharge only entered into force on 1 January 2012 (see recital (40) of this Decision). In its Opening Decision, the Commission therefore questioned whether the exemptions granted in 2011 were equally financed through State resources and invited Germany to provide additional information on how the full exemption was financed in 2011.

On the basis of the additional information provided by Germany, but also taking into account the comments made by interested parties, the Commission does not consider the financing mechanism in place in 2011 to involve State resources.

(150) As Germany has explained (see recital (77)) and as the BNetzA has explicitly stated in the regulatory decision of 14 December 2011, no compensation and set-off mechanism was in place in 2011. In particular, the sixth and the seventh sentence of Paragraph 19(2) of the StromNEV 2011 were not yet applicable. Accordingly, the losses incurred due to the full exemption from network charges in 2011 were not passed on to the end users by a full offset mechanism or – in the absence of the Paragraph 19-surcharge in 2011 – by a compulsory contribution imposed by the State.

(151) Instead, as the regulatory decision of 14 December 2011 establishes, the DSO and the TSO had to cover the losses in revenues encountered due to the full exemption in 2011 from their own resources.

(152) They were entitled to include those losses as costs in their regulatory accounts established under the ARegV 2011. However, as set out in recital (47), the losses in revenue incurred in 2011 could not be recouped by an adaptation of the 2011 network charges given that those charges have to be set in advance and cannot be modified in the course of the year. The loss in revenues – if not compensated by other increases in revenues, and hence own resources of the TSO and DSO, for 2011 – had to be booked on the Regulierungskonto. Where at the end of the regulatory period ending in 2013 the losses in revenue for 2011 were compensated by additional revenues in other years of that regulatory period, then no compensation of the losses would occur, and the losses would be covered by own resources of the TSO and DSO. Only where the losses could not be set off against additional revenues in the regulatory period ending in 2013 could the losses of revenue encountered in 2011 lead to compensation over the next regulatory period. However, even in that situation, there was no guarantee of full compensation. Rather, the level of compensation depended on other factors, in particular the efficiency (or not) of the DSO and TSO, as the ARegV is not based on real costs, but on ideal costs of an efficient undertaking.

(153) The network operators therefore enjoyed no guarantee that their losses in revenue resulting from the full exemption in 2011 would be compensated. In other words, in 2011, the network operators had to finance the full exemption from their own financial means.

(154) The Commission therefore concludes that the advantage granted to baseload consumers in the form of a full exemption from network charges in 2011 had to be financed through the own resources of the network operators and was not financed through State resources.

5.1.5. Effect on trade between Member States

(155) In accordance with the Court’s settled case-law, for the purpose of categorising a national measure as State aid, it is necessary, not to establish that the aid has a real effect on trade between Member States but only to examine whether that aid is liable to affect such trade. In particular, when aid granted by a Member State strengthens

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89 Judgment of 8 May 2013, Libert and Others, joined cases C-197/11 and C-203/11, EU:C:2013:288, paragraph 76.
the position of an undertaking compared with other undertakings competing in intra-
Community trade, the latter must be regarded as affected by that aid90.

(156) As indicated above, the large majority of the undertakings concerned are active in the
chemical industry (including industrial gases), paper, textile, steel, non-ferrous metal
industry, oil refineries and glass manufacturing. Some beneficiaries also operate data
centers as service providers. All those sectors are open to trade between Member
States with cross-border exchanges of goods. By exempting the undertakings
concerned from a cost that undertakings active in the same sector in other Member
States normally have to bear (network charges), the full exemption is strengthening
the position of the exempted undertakings as compared with other undertakings
competing in intra-community trade, the full exemption from network charges is
therefore liable to affect trade between Member States.

5.1.6. Impact on competition

(157) A measure granted by the State is considered to distort or threaten to distort
competition when it is liable to improve the competitive position of the recipient
compared to other undertakings with which it competes91.

(158) The manufacturing sectors, in which the exempted undertakings are typically active,
as well as the market for data centers, are open to competition. In many of these
sectors electricity costs represent a large share of production costs, which Germany
has confirmed in its letter of 6 December 2013 as concerns the paper, the cement, the
chemical sectors and the aluminium and other metal industries. In this context, the
full exemption from network charges lowers the production costs of the exempted
undertakings. It is therefore liable to improve the competitive position of the
beneficiaries of the exemption compared to their competitors in other Member
States. It is also likely to improve their competitive position compared to
undertakings that do not reach an annual electricity consumption of 10 GWh and
7 000 hours of full use but which are active in the same sector. The full exemption
hence threatens to distort competition.

(159) It is noted that neither an effect on trade nor a distortive effect on competition can be
excluded because of an allegedly higher level of electricity costs in Germany
compared to the electricity costs in other Member States. The second sentence of
Paragraph 19(2) of the StromNEV 2011 granted a full exemption from network
charges to baseload consumers. As a consequence, these consumers did not
experience any financial burden from using the electricity grid, whereas competing
undertakings in other Member States had to pay network charges. In addition, the
Court has already ruled that a Member State was seeking to approximate, by
unilateral measures, the conditions of competition in a particular sector of the
economy to those prevailing in other Member States cannot deprive the measures in
question of their aid character92.

90 Judgment of 8 May 2013, Libert and Others, joined cases C-197/11 and C-203/11, EU:C:2013:288,
paragraph 77
92 Judgment of 3 March 2005, Wolfgang Heiser v Finanzamt Innsbruck, C-172/03, EU:C:2004:678,
paragraph 54.
5.1.7. Conclusion on the existence of aid

(160) In light of the above the full exemption from network charges in place in 2012 and 2013 for baseload consumers exceeding an annual electricity consumption of 10 GWh and reaching 7,000 hours of full use amounts to State aid to the extent that it exempted those consumers from the network costs caused by their electricity consumption and from the minimum contribution of 20% of the published network charge.

(161) The exemption from network charges granted in 2011 was not financed through State resources and therefore did not amount to State aid.

5.2. Unlawfulness

(162) By failing to notify the measure before its implementation, Germany did not fulfils their obligations under Article 108 (3) of the Treaty. The aid measure thus constitutes unlawful State aid.

5.3. Compatibility with the internal market

(163) The compatibility assessment below only covers the full exemption granted to baseload consumers in 2012 and 2013 to the extent that it constitutes aid (see recital (160)).

(164) In its Opening Decision, the Commission raised doubts as to whether the full exemption from network charges for baseload consumers could be declared compatible with the internal market. Accordingly, the Commission invited Germany to submit additional comments as regards the compatibility of the full exemption with the internal market.

(165) Germany has submitted that the full exemption could be declared compatible based on Article 107(3)(b) or (c) of the Treaty given that it aimed at the following objectives:

- guaranteeing security of electricity supply;
- facilitating the promotion of renewable electricity;
- implementing a system of access to the network system without discrimination between system users as required by Article 32 of Directive 2009/72/EC;
- ensuring that network charges reflect the actual costs incurred as required by Article 14 of Regulation (EC) No 714/2009.

(166) In general, Germany also considered that the full exemption would reinforce the competitiveness of the European industry and be in line with the Union objective of reindustrialising Europe.

5.3.1. Compatibility based on Article 107(3)(b)

(167) With regard to Germany's first compatibility base, it is noted that the full exemption is not linked to any specific and concrete "important project of common European interest". Germany has not described any such project the execution of which would be promoted through the full exemption from network charges. Germany has also not submitted any information that would show that the full exemption would remedy a serious disturbance of the economy in Germany. The full exemption can thus not be justified under Article 107(3)(b) of the Treaty.
5.3.2. **Compatibility based on Article 107(3)(c)**

(168) Article 107(1) of the Treaty provides for the general principle of prohibition of State aid within the Union. However, the Commission may declare an aid measure compatible directly under Article 107(3)(c) of the Treaty if it is aimed at and is appropriate to reach a well-defined objective of common interest, is necessary to reach this objective, has an incentive effect and is proportionate, provided that the positive effects for the common objective outweigh the negative effects on competition and trade.

(169) The Member State has the burden of proof for compatibility.

(170) As Germany has argued that the full exemption was helping to promote the production of electricity from renewable sources and security of supply, the Commission has verified that the measure at stake would fall within the scope of the Community Guidelines on State Aid for Environmental Protection (‘EAG’). However, the EAG do not contain compatibility rules for measures aimed at ensuring security of supply. As to the promotion of renewable electricity, they only contain compatibility criteria for aid granted to installations producing renewable electricity (Section 1.5.6. of the EAG). These criteria, however, do not relate to measures such as the one concerned in the present case, which would consist of exempting consumers of electricity from the network charges in order to "incentivize" them to remain connected to the grid so that when electricity from renewable installations is produced, there would be a higher likelihood that consumers would also consume the electricity. The EAG do not apply to the measure examined here. The Commission has thus examined the compatibility of the full exemption directly under Article 107(3)(c) of the Treaty.

5.3.2.1. Objective of common interest and appropriateness of the aid

5.3.2.1.1) Compliance with European legislation on network charges

(171) With regard to that argument, it is referred to the findings in recitals (85) to (121) of this Decision. As demonstrated in those findings, the full exemption granted to eligible baseload consumers between 2011 and 2013 conferred a selective advantage to the extent that it also exempted them from the network costs caused by their electricity consumption. This is not in line with the objective of ensuring that network charges reflect the actual costs incurred as required by Article 14 of Regulation (EU) No 714/2009 and is also not in line with the non-discrimination principle. The Commission therefore does not share the view of Germany that the full exemption from network charges contributes to these objectives, or would be required on the basis of European legislation.

5.3.2.1.2) Promotion of security of supply and of renewable electricity.

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(172) Germany claims that the full exemption was contributing to security of supply and to the promotion of renewable electricity in three different manners (see recital (165)):

- It first argues that the baseload consumers delivered a necessary stability service in the period 2011 to 2013 before the network stabilizing measures could be introduced. Germany has argued that the continuous and constant electricity consumption by the exempted baseload consumers would relieve and stabilize the network. The predictability of the exempted baseload consumption would contribute to an efficient utilization of the generation capacities, while frequency and voltage deviations would be reduced. This would reduce the need for reserves and balancing electricity. Furthermore, Germany has explained that the exempted baseload consumers are often located close to large power plants. Therefore, the distance over which the electricity needs to be transported is relatively low, which would reduce transport losses and the need to have devices to ensure reactive power. Interested parties have also underlined that baseload consumers are often included in the 5 steps load shedding plan of TSOs without any contract and without any compensation. Also certain interested parties have indicated that end users are subject to technical specifications when they want to be connected to the grid and that this requires certain investments which improve voltage control without being remunerated.

- Also, Germany argues that conventional power plants were needed to ensure a secured management of the network at a time when renewable electricity started to be deployed more rapidly and when flexibility solutions for the electricity system had not yet been developed (like demand-response96) as they deliver important ancillary services to the network and that in order to maintain the existence of those conventional power plants, baseload consumers were needed, in particular in the light of the increasing share of electricity produced from renewable energy sources.

- At the same time, Germany argues that the stable offtake of electricity by baseload consumers ensured that renewable electricity was always consumed when it was produced, which reduced the necessity to adopt (other and more costly) network stabilizing measures (curtailment). This facilitated the energy transition and contributed to the promotion of renewable electricity.

(173) It is noted in general that the objectives of ensuring security of supply and of promoting renewable electricity have been recognized as constituting objectives of common interest97.

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96 Demand-response designates changes in electric usage by final consumers from their normal consumption patterns in response to changes in the price of electricity over time (reduce their consumption when prices are high and increase consumption when prices are low).

It is noted however, that it is not clearly established that the full exemption could contribute to and was appropriate to reach the attainment of the objectives of security of supply and the promotion of renewable electricity. In particular, Germany has not demonstrated that the full exemption could contribute and was appropriate to reach the objectives pursued. As will be explained below, the full exemption leads to contradictory results in terms of the objectives attained and could even constitute a hindrance for the attainment of the objectives concerned.

5.3.2.1.2.1) Baseload consumption can constitute an obstacle to the objective of promoting renewable electricity and security of supply

In order to demonstrate that the full exemption from network charges granted under the second sentence of Paragraph 19(2) sentence of the StromNEV 2011 could contribute to and was appropriate to ensure security of supply between 2011 and 2013, Germany has referred to a certain number of characteristics of baseload consumers that facilitate network management and that benefit all network users: their stable and predictable demand reduces the need for balancing measures, reserves and re-dispatching. Also, being located generally closer to power plants, they cause less electricity losses during transport and less need for reactive power compensation devices.

It is noted that these elements can reduce network costs and facilitate network management and could indirectly be considered as facilitating the TSO's obligations in ensuring security of supply. However, assuming that exactly the same characteristics that were already taken into account to justify individual network charges can again be taken into account to consider that the exemption would pursue an objective of common interest, the exemption would in any event not be necessary, would not have any additional incentive effect and would not ensure the proportionality of the aid as explained more in detail below (sections 5.3.2.2 to 5.3.2.4). In addition, as will be seen below, the exemption and the conditions under which it is granted could also constitute a hindrance to flexibility measures that Germany introduced in 2013 to promote security of supply (recital (179) below) and could also increase the costs of the promotion of renewable electricity (recital (181) below). For those reasons, the exemption cannot be viewed as appropriate to reach the objectives of security of supply and promotion of renewable electricity.

Germany and interested parties also mention that the full exemption would be useful for frequency regulation and voltage control.

It is noted, however, that the frequency regulation and the voltage control that Germany and interested parties are referring to do not correspond to a service delivered by the baseload consumers but by conventional power plants, which both Germany and interested parties admit in their submissions. In fact, the argument made is that baseload consumers are needed to maintain the viability of conventional power plants. This argument is examined under recitals (183)-(188) and reference is made to those findings. As far as the contribution to the five stage load shedding plan is concerned, reference is made to the observations made under recital (97) where it is concluded that the full exemption could not be viewed as the remuneration for participation in the five stage load shedding plan. As to devices that baseload consumers need to install in order to comply with the requirement that the shift factor remains between +0.9 and -0.9, it has already been observed that this obligation aims at ensuring the safe and normal management of the grid and is imposed on any consumer requesting for access to the grid and not just baseload consumers (see...
recital (99) and following). It can thus hardly be seen as justifying an exemption for baseload consumers.

(179) It is noted further that in its submissions Germany indicated that the full exemption induced value for security of supply only for a transitory period (2011 to 2013) pending the introduction of various measures to make the electricity system more flexible. However, already in 2012 did Germany adopt the Ordinance on interruptible load contracts ("ABLAV Ordinance")\(^{98}\) aiming at purchasing three gigawatt ("GW") of interruptible load to flexibilize demand. It entered into force in 2013 (the last year of the full exemption) and was based on Paragraph 13(4a) of the EnWG 2011. The purpose was to make available to network operators interruptible loads to address situations in which there is too much demand compared to the available generation. Those situations can occur more often in electricity systems with high (intermittent) renewable penetration given that a sudden drop in the wind or the sun radiation leads to a sudden decrease of generation. Also wind and solar energy can be lower than initially expected based on the weather forecast. It is observed however, that the full exemption for baseload consumers actually constitutes an incentive for those consumers not to offer interruptible load under the ABLAV Ordinance given that they would then not reach the 7 000 hours of full use and thus runs against the objectives of another measure aimed at security of supply. For 2013, the full exemption therefore constituted a hindrance to another measure ensuring security of supply by de-incentivizing baseload consumers from offering interruptible load.

(180) In addition, Germany has argued that the exempted baseload consumption would contribute to the promotion of renewable electricity by reducing the costs of such promotion. In particular, Germany has indicated that the stable offtake of electricity by baseload consumers ensured that renewable electricity was always consumed when it was produced, which reduced the necessity to curtail and compensate the renewable electricity installations in case of curtailment.

(181) It is noted that indeed, in the absence in 2011-2013 of storage installations coupled with renewable electricity installations and in the absence also of flexible demand and incentives to increase consumption at times when renewable electricity is abundant, the existence of baseload consumption could indirectly reduce the likelihood that renewable electricity installations be curtailed. The exemption could therefore be viewed as facilitating the promotion of renewable electricity. However, the exemption could also indirectly increase the costs of the promotion of renewable electricity. Indeed, when renewable electricity is not available due to the sudden decrease of wind or sun, the inflexibility of baseload consumers induced by the exemption will make it necessary to ramp up conventional power plants, most likely coal-fired or gas-fired power plants to cover the demand of baseload consumers in case of sudden drops in intermittent renewable electricity generation. This could be perceived as increasing the costs of the promotion of renewable electricity.

(182) Finally, it is noted that the exemption is granted to baseload consumers irrespective of where they are located. However, as the 2012 Study shows (section 2.3) under certain conditions the network can be congested because the electricity produced for instance in the North is exceeding the transmission capacity needed to deliver the electricity to the South where the consumption point is located. That congestion could be linked to strong wind conditions. In fact the 2012 Study contains a scenario

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\(^{98}\) BGBl. I p. 2998.
(Figure 2.3) in which strong wind conditions are simulated to identify potential network bottlenecks. In such situation, it is necessary to curtail power plants that are located before the bottleneck and ramp up power plants located after the bottleneck. Redispatching measures involve compensation both to the curtailed power plants and to the power plants that need to ramp up. If the baseload consumer is located after the bottleneck, he will not reduce the costs of renewable electricity support but increase them. As the full exemption is devoid of any locational signal and being granted without any consideration for network bottlenecks, the exemption could increase the costs of renewable electricity deployment.

5.3.2.1.2.2) Unclear link between the full exemption and the security of supply

(183) Germany has also argued that the exemption would (indirectly) contribute to security of supply because it would ensure the presence of constant consumption which is itself a prerequisite for conventional generation capacities, which it considers to be necessary not only to provide network stabilizing services but also to meet the electricity demands in a market environment that is increasingly marked by flexible and decentralized generation capacities based on renewables energies. Germany and several interested parties have submitted that conventional power plants (equipped with synchronous generators) deliver a certain number of important network services that network operators need to keep the network in operation, principally voltage regulation and frequency regulation. They argue that if conventional plants do not run on a continuous basis, those system services would be more difficult to acquire and in any event more expensive (for instance due to the need for a larger reserve). Conventional power plants could however only operate on a constant basis if there is sufficient constant demand to consume the electricity produced. More specifically, Germany claims that the 2012 Study shows that Germany would need in coming years between 8 and 25 GW of conventional power plants to ensure secured network management and has argued that in order to maintain those conventional power plants a constant and stable demand was needed.

(184) It is noted first that the 2012 Study was realised after the full exemption was granted, which excludes its use to show the necessity of the full exemption to ensure the viability of the concerned conventional power plants. In addition, as will be shown below, the contribution of the exemption to the security of supply is not established.

(185) Second, the 2012 Study does not itself refer to the need to secure a certain minimum constant consumption nor has Germany indicated how the baseload consumers relate to the minimum conventional generation needs. Germany has merely explained that the baseload consumers by their constant offtake constituted an incentive for conventional power plants to remain on the market. However, the 2012 Study makes a distinction between conventional baseload plants (i.e. to nuclear power plants, run-of-river power plants and lignite power plants) and conventional power plants that are more flexible. The minimum generation need refers to both types of generation. Germany and third parties, however, in their arguments do not make this distinction and have not explained how baseload consumption relates to both types of generation. When they refer to conventional power plants, they seem to refer to baseload power plants only given that they refer to constant production and the need to have equally constant consumption. By contrast, the 2012 Study makes clear that the conventional generation needed cannot only be baseload. The 2012 Study in fact insists on the flexibility needs of the system and the time necessary to modify and adapt generation to fluctuations. It is hard to see what the relationship is between those flexible plants and baseload consumers. Indeed, as already mentioned in recital
(96), for conventional power plants that can be ramped up rapidly like gas turbines, baseload consumers will not constitute an incentive to remain on the market as their profitability is linked to the possibility to obtain higher electricity prices when the system is under stress.

(186) In addition, the argument that the exemption would contribute to security of supply because helping to secure the existence of (baseload) conventional power plants is based on a circular reasoning: As baseload consumers themselves require continuous electricity supply they are themselves accountable for a part of the minimum generation identified in the 2012 Study. By arguing that baseload consumers are needed to maintain the operation of power plants, Germany and the interested parties are using a circular argument insofar as those power plants are required to cover those consumers’ own demand. Such an argument cannot support the view that the full exemption was appropriate to achieve security of supply.

(187) Finally, it is noted that Germany's and interested parties' argument rests on the assumption that baseload consumers are decisive to secure the offtake of the electricity produced by those plants and their viability.

(188) However, the 2012 Study reveals that the existence of baseload consumers is not sufficient to ensure constant offtake from baseload power plants and to guarantee their viability. On page 1 of the 2012 Study, it is observed that the continuous deployment of renewable electricity installations and the priority dispatch of renewable electricity lead to a reduction of electricity supply by conventional (including conventional baseload) power plants. In addition, Germany itself admits that at times of lower demand and high renewable electricity production, the baseload consumers would consume the renewable electricity due to priority dispatch and access instead of consuming the electricity that would normally have been supplied by conventional baseload power plants. This shows that the consumption by baseload consumers will not ensure the viability of conventional baseload power plants and will not make redundant the system stability measures (higher reserve requirements, quick ramping up of power plants when renewable production decreases, etc.) that Germany and interested parties claim could be spared with a continuous operation of conventional power plants.

5.3.2.1.2.3) Conclusion on the appropriateness of the aid to ensure security of supply and to promote renewable electricity

(189) Based on the above elements, the Commission concludes that Germany has not demonstrated that the full exemption could contribute to and was appropriate to contribute to the security of supply or indirectly to the promotion of renewable electricity.

(190) Even assuming that full exemption from network charges of baseload consumers was appropriate to contribute to the objective of ensuring the security of supply and indirectly the deployment of electricity from renewable sources it still is necessary to verify whether it can be considered as necessary to reach those objectives, has an incentive effect, is proportionate and whether the negative impact of the measure remain smaller than its positive effect. It will be demonstrated below that these requirements have not been fulfilled. This reasoning constitutes subsidiary reasoning, as the Commission considers that the aid cannot be declared compatible already for the sole reason that it is not, in reality, capable of contributing to an objective of common interest.
5.3.2.1.3.) Competitiveness of the European industry

(191) Germany has underlined that the decision to phase out nuclear energy and to increase the share of renewable electricity would imply an increase in electricity costs (both costs related to electricity production and electricity transmission) which will penalize in particular electro-intensive industries like paper, cement, chemical, aluminium and other non-ferrous metal industries in comparison to competitors in other Member States facing significantly less costs from renewable policies. The exemption would create a level playing field.

(192) It is noted however that the exemption is not creating a level playing field nor is it linked to costs that would be induced by renewable energy policies. Indeed, the full exemption from network charges representing the individual costs of the baseload consumers is exempting German baseload consumers from their entire network costs, including the costs of the network path that is connecting the baseload consumer to the closest baseload power plant. Those costs have no relationship with renewable energy policies and correspond to costs that competitors in other Member States have to pay as part of their normal production costs and that consumers and competitors in Germany need to compensate via the Paragraph 19-surcharge.

(193) Finally, it is noted that the full exemption aiming at improving the competitiveness of the concerned consumers seems to be contrary to Article 14 of Regulation 714/2009 as not being cost-reflective, and to Article 32 of Directive 2009/72/EC as not in line with the non-discrimination principle. In addition, exemptions from network charges decided by the legislator or the Government do not seem in line with Article 37(1)(a) of Directive 2009/72/EC establishing the principle that tariffs must be established by the regulator.

(194) For those reasons, it is concluded that the full exemption from network charges corresponding to the individual costs attributable to the baseload consumers concerned in so far as it would aim at reinforcing the competitiveness of the beneficiaries is not capable of contribution to an objective of common interest.

5.3.2.2. Necessity of the full exemption

(195) In any event, as is demonstrated below (recitals (197) to (199), even assuming that Germany had demonstrated that the full exemption could contribute to and was appropriate to ensure indirectly the promotion of renewable electricity and security of supply, it is not demonstrated that the full exemption was needed in 2012-2013 to reach those objectives. This would only have been the case if Germany had demonstrated that the full exemption was necessary to maintain baseload consumption and prevent baseload consumers from disconnecting from the network.

(196) However, as the elements below show, Germany did not demonstrate that without the full exemption, baseload consumers would leave the public network and would either construct a direct line to a power plant or become self-suppliers. Also, Germany did not demonstrate that absent the full exemption, the beneficiaries concerned would change their consumption pattern and have variable unpredictable load profile.

The full exemption is not needed to avoid that baseload consumers build a direct line

(197) Germany has not demonstrated that if the baseload consumers benefitting of the exemption would still be subject to individual network charges as would normally result from Paragraph 24 of the EnWG, they would stop contributing to the objective...
of common interest (stabilizing the network and promotion of renewable electricity) by building a direct connection to a power plant.

(198) This seems highly unlikely given that individual network charges would be calculated based on the physical path methodology which examines the costs related to the use of the network path between the connection point of the baseload consumer to the network (offtake point) and the nearest baseload power plant. In that sense, individual network charges are mimicking the costs that would be implied by the construction of a direct line to the nearest baseload power plant suitable to match the baseload demand of the baseload consumer. All costs being equal, a baseload consumer will prefer to remain connected to the network instead of engaging in a lengthy and uncertain permit procedure. Given that the direct line will in many cases go through properties that do not belong to the baseload consumer, various permits and authorisation will be required and they are difficult to obtain as the general public often opposes electric lines). In addition, in most instances, individual network charges will actually be lower than the costs involved in the construction of a direct line. Indeed, a direct line would imply for the concerned baseload consumer significant investment costs and would also require lengthy and costly permit procedures to build the line. All fixed costs of the line would have to be borne by one single user while under the physical path methodology he only bears his share of those fixed costs.

The full exemption is not needed to avoid that baseload consumers become self-suppliers

(199) Germany has not demonstrated either that if the beneficiaries of the full exemption would be subject to individual network charges as would normally result from Paragraph 24 of the EnWG, they would be at risk of becoming self-suppliers. Germany has not submitted any documents which would show a trend of baseload consumers becoming self-suppliers due to the level of their individual network charges before the introduction of the full exemption. On the contrary, the data submitted by Germany shows that the full exemption is not impacting on the decision of baseload consumers to engage in self-supply. Germany has provided figures for the ten largest beneficiaries in terms of electricity consumption for the period 2013 to 2015 (a period covering the last year of the full exemption and two years during which individual network charges were applied). This data shows that six out of these 10 undertakings did not have a self-supply installation in 2013 and did not acquire any self-supply installation after the reintroduction of individual network charges. The data relating to the four other companies reveal that one of those companies entirely injects into the grid the electricity produced. The remaining three companies all had self-supply installations already in 2013 and continued to use them throughout the entire period 2013 to 2015 with a decreasing trend for one, an increasing trend for the second and a rather stable trend for the third company. This confirms that the full exemption is not necessary for preventing self-supply and that baseload consumers chose self-supply models on the basis of other factors. This has been confirmed by Germany in its comments regarding State aid SA.46526

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99 Those companies belonged to the […] and to the […] sector.
100 Those companies belonged to the […] sector, the […] sector and the […] industry.
In which Germany first indicated that self-supply solutions in the energy-intensive industry\textsuperscript{102} were driven by synergies with heat requirements, synergies with waste gases and production residues and not by the possibility to escape payment of the charge on electricity that consumers pay in Germany to finance the support of renewable electricity (the so-called EEG-surcharge)\textsuperscript{103}. Germany in addition showed that despite a significant increase of the EEG-surcharge in the period 2011 to 2014 (with the EEG-surcharge representing more than the electricity wholesale price as of 2013), self-supply in the four main sectors resorting to self-supply (paper, chemical industry, steel manufacturing, oil refineries) remained stable in the period 2010 to 2014\textsuperscript{104}.

The alleged contribution to the stability of the grid is already taken into account in individual network charges.

In order to justify the full exemption Germany has referred to the stability and predictability of baseload consumption as an important element to facilitate network management and thus indirectly facilitate security of supply.

It is noted, however, that all these elements are already taken into account for the calculation of individual network charges given that this calculation allocates to each baseload consumer only the costs linked to the network connection between that baseload consumer and the nearest baseload power plant that can cover its demand. Costs for balancing energy are anyway not included in network charges in general neither in the individual network charges. Costs for the various reserves and re-dispatching costs are not included in the individually calculated network charges and energy losses due to the transport of electricity are allocated in proportion to the network portion used. Also the reduced need for reactive power compensation devices will be taken into account given that those devices will only be included in the calculation of the individual network charges if they are located on the network path between the baseload power plant and the baseload consumer.

Given that this calculation allocates to each baseload consumer only the costs linked to the network connection between that baseload consumer and the nearest baseload power plant that can cover its demand, it must be concluded, that the individual network charges already adequately take into account the benefits induced by baseload consumers in terms of network management and indirectly security of supply. There is thus no need for any aid measure in the form of a full exemption and Germany has not brought forward any element that would show that with network charges based on individual costs (for instance by using the physical path methodology), the beneficiaries would become consumers with a variable and unpredictable consumption profile.

Further, Germany has not demonstrated that the full exemption from network charges would have an incentive effect. An aid has an incentive effect when it changes the behaviour of the undertakings concerned in such a way that they engage


\textsuperscript{102} Germany has indicated that most baseload consumers were energy-intensive undertakings.

\textsuperscript{103} See recital 60 of the Commission decision in case SA.46526.

\textsuperscript{104} See recital 61 of the Commission decision in case SA.46526.
in an additional activity which they would not carry out without the aid or which they would carry out in a restricted or different manner.

(204) Several elements in the file show that in many cases the full exemption was granted to baseload consumers for adopting a consumption pattern that corresponds to their usual consumption pattern given that their production process involves constant electricity consumption. Individual network charges for baseload consumers exist since 2005. Initially those individual network charges were possible only for baseload consumers reaching 7 500 hours of full use. At least for baseload consumers who were already benefitting from individual network charges under that initial regime, the full exemption did hence not change their behaviour compared with their behaviour during the application of individual network charges and thus had no incentive effect. In addition, the number of baseload consumers obtaining individual network charges in 2014 is very close to the number of baseload consumers having obtained an exemption in 2011 to 2013 and the applicants are often the same. This also confirms that for most of the baseload consumers, the full exemption has not modified their behaviour compared to what they would anyway do based on individual network charges. The German national courts have made the same observations (see recital (52)). Finally, the 2015 Evaluation Report also highlights that several network operators had observed that the baseload consumers concerned already had the same consumption pattern before the full exemption had been introduced105.

5.3.2.4. Proportionality, negative impact on trading conditions and overall balance

(205) Even assuming that for some baseload consumers the full exemption was appropriate, and necessary to contribute to an objective of common interest and had an incentive effect, it should be noted that the full exemption was not proportionate and that the negative impact of the aid outweigh its hypothetical positive impact.

(206) In order to be proportionate, the full exemption would have had to be limited to the amount necessary to trigger the change in the behaviour of the concerned baseload consumer that is beneficial for either the security of supply or the promotion of renewable electricity.

(207) However, Germany has not demonstrated that the full exemption is calibrated to being limited to what would be necessary to incentivize a change in the consumption pattern of baseload consumers, nor that the full exemption is the least distorting tool to keep the baseload consumers’ contribution to the stability and security of the network. In this respect, some interested parties have claimed that in order to be sure that they would reach the 7 000 hours of full use, their employees needed to reserve part of their time to the monitoring of the consumption and that a continuous consumption also involved continuous production and thus possibly increased stocks when product demand was decreasing. However, the same interested party admits that those costs differed for each company. Therefore, even assuming that in order to reach 7 000 hours of full use some of the baseload consumers would face additional costs, there was no guarantee that the exemption would in all cases correspond to what would have been necessary to cover those extra costs and Germany did not demonstrate that it had been the case.

It is noted in addition that the measure does not seem to promote security of supply beyond what is already taken into account to compute individual network charges. Such additional contribution has not been demonstrated. In any event, both Germany and interested parties admit that it cannot be quantified.

In addition, it is noted that even if it was assumed that baseload consumers would contribute to security of supply beyond the stabilizing effect on networks already taken into account in the determination of individual network charges and would also indirectly contribute to the promotion of renewable electricity, Germany has not demonstrated that the aid is limited to what would be necessary to achieve those positive effects. In its 2015 Evaluation Report, the BNetzA noted that network operators having baseload consumers connected to their network were split between those finding that baseload consumers had stabilizing effects and those finding that they had no such stabilizing effects (see figures 6 and 7 of the report and the findings on p. 38 of the report). As the report does not make this distinction, it is unclear whether for those network operators having identified stabilizing effects, the effects concerned would go beyond those already taken into account to calculate individual network charges. One TSO explained that the contribution of baseload consumers to the stability of the networks depended on the specific circumstances of the network: in the event of overload, baseload consumers were threatening network stability while at times of underload, they were contributing to it so that the key to network stability was actually flexible load. However, baseload consumers by definition do not constitute flexible load but stable and inflexible load. Indeed, if the baseload consumers were to offer flexibility services (reduction of consumption upon request of the network operator for instance), they would not comply with the definition of baseload consumers anymore as they would not reach the 7000 hours of full use anymore. This confirms at the very least, that — assuming that under certain conditions baseload consumers contribute to network stability beyond what is already taken into account to compute individual network charges — baseload consumers' additional contribution to stability would depend on each case but cannot be automatically presumed for any baseload consumer exceeding 10 GWh of consumption and reaching 7000 hours of full use. Nor can it be presumed that it would warrant a full exemption from network charges in all cases.

In addition, as to Germany's and interested parties' argument that the exemption would secure the existence of baseload conventional power plants which are themselves important providers of ancillary services, it should be noted that the argument rests on the assumption that the minimum generation needs identified in the 2012 Study would remain constant irrespective of demand in Germany, which is not the case. On the contrary, as mentioned in recital (93) of this Decision, the 2012 Study underlines on page (i) (part "Ergebniszusammenfassung") that the extent of the minimum generation is highly dependent on the current situation, in particular the renewable production but also the demand load. Germany has not provided any elements that would demonstrate that the full exemption is limited to the baseload consumption that is allegedly needed to secure the existence of baseload conventional power plants nor that it would over time be calibrated to adapt to changing needs.

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Germany has argued that there would be no undue distortion of trading conditions as the impact on competition would be limited given that the measure significantly contributed to security of supply and would hardly have any impact on competition with undertakings from other Member States given the very high electricity prices in Germany compared to other Member States.

However, as result from the findings under section 5.3.2.1. to 5.3.2.4. it is not demonstrated that the full exemption would be appropriate to achieve security of supply and promotion of renewable electricity, nor that it would be necessary and have an incentive effect. Also, as demonstrated under (205)-(211) of this Decision, the aid is not limited to amount needed to reach the objectives and leads to overcompensation. The hypothetical positive impact of the aid is therefore extremely limited, if existing at all.

By contrast, the full exemption does not seem to observe Article 32 of Directive 2009/72/EC and Article 14 of Regulation (EC) No 714/2009.

Concerning the distortion of competition with other Member States and contrary to Germany's views, they cannot be considered as being insignificant. First, the measure fully exempts the beneficiaries from network charges while all their competitors remain under the obligation to pay network charges in their respective Member States, in line with the applicable European legislation. This can have an important distortive impact on competition given that, as Germany has pointed out itself, most of the beneficiaries are electro-intensive undertakings. Electricity costs are thus an important factor of their competitiveness. Second, the circumstance that electricity prices would be high in Germany and would heavily burden the production costs of electro-intensive companies in Germany has not been demonstrated. It is noted to the contrary that between 2011 and 2013 electro-intensive users benefitted in Germany from reductions of the electricity tax, of the EEG-surcharge and of the CHP-surcharge.

Based on those elements, it is concluded that the negative impact of the aid exceeds the hypothetical positive contribution that it might have had in terms of the promotion of renewable electricity or the security of supply.

5.3.3. Conclusion

The aid granted in 2012 and 2013 is not compatible with the internal market.

6. RECOVERY

According to the Treaty and the Court's established case-law, the Commission is competent to decide that the Member State concerned must abolish or alter aid when it has found that it is incompatible with the internal market. The Court has also consistently held that the obligation on a Member State to abolish aid regarded by the Commission as being incompatible with the internal market is designed to re-establish the previously existing situation.

In this context, the Court has established that this objective is attained once the recipient has repaid the amounts granted by way of unlawful aid, thus forfeiting the

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advantage which it had enjoyed over its competitors on the market, and the situation prior to the payment of the aid is restored.\textsuperscript{109}

(219) In line with the case-law, Article 16(1) of Council Regulation (EU) No 2015/1589\textsuperscript{110} stated that "where negative decisions are taken in cases of unlawful aid, the Commission shall decide that the Member State concerned shall take all necessary measures to recover the aid from the beneficiary […]".

(220) Thus, given that the aid in question was implemented in violation of Article 108 (3) of the Treaty and is incompatible with the internal market, it must be recovered from the beneficiaries in order to re-establish the situation that existed on the market prior to their granting. Recovery should cover the time from when the advantage accrued to the beneficiary, that is to say when the aid was put at the disposal of the beneficiary, until effective recovery, and the sums to be recovered should bear interest from the date on which they accrued to the beneficiary until effective recovery.

(221) As regards the claim put forward by some interested parties that the recovery would be in violation of the principle of the protection of legitimate expectations, it should be pointed out that the Court of Justice has repeatedly held that the right to rely on the principle of the protection of legitimate expectations extends to any person in a situation where a Union institution has caused him to entertain expectations which are justified by precise assurances provided to him. However, if a prudent and alert economic operator could have foreseen the adoption of a Union measure likely to affect his interests, he cannot plead that principle if the measure is adopted.\textsuperscript{111} In light of that case-law, the judgment in PreussenElektra could not create any legitimate expectations because it has not put into question the possibility to mandate private bodies to administer an aid scheme and to qualify parafiscal levies and charges as State resources. Rather, it concerned one narrow situation already identified in Van Tiggele\textsuperscript{112}. In addition, the Commission has concluded on the existence of State aid in a big number of schemes financed on the basis of a surcharge imposed by the State.\textsuperscript{113}

\textsuperscript{109} See judgment of 17 June 1999, Belgium v Commission, C-75/97, EU:C:1999:311, paragraphs 64 and 65.


\textsuperscript{111} See judgment of 22 June 2006, Forum 187 v Commission, joined cases C-182/03 and C-217/03, EU:C:2006:416, paragraph 147.


In any event, the Court clarified in Essent114 the boundaries of the PreussenElektra judgment and repeated its earlier case law that also qualifies as State resource an advantage financed from surcharge imposed by the State and managed by an entity designated by the State.

The interpretation of State resources adopted in this decision is in line with the well-established case law of the Court as well as the decisional practice of the Commission. As it could have been foreseen by any prudent and alert economic operator, recovery would not be in violation of the principle of the protection of legitimate expectations.

In light of the above, especially with respect to recital (216), the aid should be recovered as it is incompatible with the internal market and the sums to be recovered should bear interest from the date on which they accrued to the beneficiary until effective recovery.

Recovery should only cover the full exemption from network charges granted during the period from 1 January 2012 until 31 December 2013 by comparison of the individual network charges that would have been due absent the exemption, as only that part qualifies as State aid.

The recoverable amounts are for each of the years concerned, the individual network charges that the beneficiaries would have had to pay without the full exemption.

The individual network charges referred to in the previous recital should be calculated on the basis of the physical path methodology as it was set out by the BNetzA in its guidance document "Leitfaden zur Genehmigung individueller netzentgelterechnungen nach § 19 Abs. 2 S. 1 und 2 StromNEV" issued on 26 October 2010.

The recoverable amount, for each of the years concerned, equals at least 20 % of the amount that the beneficiary would have paid if he had had to pay the published network charges.

Where the total amount of advantage received by a beneficiary is less than EUR 200 000 and where the advantage meets all the other criteria laid down in either Commission Regulation (EU) No 1407/2013115 or Commission Regulation (EC) No 1998/2006116, such advantage should be deemed not to constitute State aid in the meaning of Article 107(1) of the Treaty, and should therefore not be subject to recovery.


7. **CONCLUSION**

(230) It is concluded that Germany has unlawfully put into effect during the period 1st January 2012 until 31 December 2013 aid in the form of a full exemption from network charges for baseload consumers reaching an annual electricity consumption of at least 10 GWh and 7 000 hours of full use in breach of Article 108(3) of the Treaty.

(231) The State aid amounts to the network costs actually caused by the exempted baseload consumers in 2012 and 2013 or, where those network costs amount to less than the minimum network charges of 20% of the published network charges, to those minimum network charges. To this extent, the full exemption granted under the second sentence of Paragraph 19(2) of the StromNEV 2011 deviates from the reference system as it was in place. Accordingly, the State aid amounts to the value of the individual network charges that the baseload consumers did not pay in 2012 to 2013 and corresponds to at least 20% of the network charges published in the respective years.

(232) The State aid does not meet the conditions of any of the derogations provided for in Article 107(2) and (3) of the Treaty and cannot be considered compatible with the internal market for any other reason. Consequently, it is incompatible with the internal market.

(233) In accordance with Article 16(1) of Regulation (EU) No 2015/1589 the Commission must require that the Member State concerned takes all necessary measures to recover the aid from the beneficiaries. Germany should therefore be required to recover the incompatible aid.

HAS ADOPTED THIS DECISION:

**Article 1**

1. The full exemption of baseload consumers in Germany from paying network charges, which Germany has unlawfully put into effect in 2012 and 2013, constitutes State aid within the meaning of Article 107(1) of the Treaty insofar as those consumers were exempted from paying network charges corresponding to the network costs caused by them or, where those network costs amounted to less than the minimum network charges of 20% of the published network charges, from paying those minimum network charges.

2. The State aid referred to in paragraph 1 was put into effect by Germany in breach of Article 108(3) of the Treaty and is incompatible with the internal market.

**Article 2**

Individual aid granted under the scheme referred to in Article 1 does not constitute State aid if, at the time it is granted, it fulfils the conditions laid down by the regulation adopted pursuant to Article 2 of Council Regulation (EC) No 994/98\(^{117}\) which is applicable at the time the aid is granted.

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**Article 3**

(1) Germany shall recover the incompatible aid granted under the scheme referred to in Article 1 from the beneficiaries.

(2) The sums to be recovered shall bear interest from the date on which they were put at the disposal of the beneficiaries until their actual recovery.

(3) The interest shall be calculated on a compound basis in accordance with Chapter V of Commission Regulation (EC) No 794/2004\(^\text{118}\).

(4) Germany shall cancel all outstanding payments of aid under the scheme referred to in Article 1 with effect from the date of adoption of this Decision.

**Article 4**

(1) Recovery of the aid granted under the scheme referred to in Article 1 shall be immediate and effective.

(2) Germany shall ensure that this Decision is implemented within four months following the date of notification of this Decision.

**Article 5**

(1) Within two months following notification of this Decision, Germany shall submit the following information:

   (a) the list of beneficiaries that have received aid under the scheme referred to in Article 1 and the total amount of aid received by each of them under the scheme;

   (b) the total amount (principal and recovery interests) to be recovered from each beneficiary;

   (c) a detailed description of the measures already taken and those planned to comply with this Decision;

   (d) documents demonstrating that the beneficiaries have been ordered to repay the aid referred to in Article 1.

(2) Germany shall keep the Commission informed of the progress of the national measures taken to implement this Decision until recovery of the aid granted under the scheme referred to in Article 1 has been completed. Upon a simple request by the Commission, Germany shall immediately submit information on the measures already taken and those planned to comply with this Decision. It shall also provide detailed information concerning the amounts of aid and interest already recovered from the beneficiaries.

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Article 6

This Decision is addressed to Germany.
Done at Brussels, 28.5.2018

For the Commission

Margrethe VESTAGER
Member of the Commission