

The EU Internal Electricity Market Status and Outlook after the Reform

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EU legislation on the internal electricity market has been comprehensively reformed. cep gives the following assessment of the reform:

- ▶ An increasingly deregulated internal electricity market increases competition among the electricity producers, reduces electricity prices and enhances security of supply.
- ▶ Member States should use their social policy to take account of the electricity costs in poor households rather than continuing to keep electricity prices low by way of state regulation.
- ▶ Independent comparison websites help consumers to choose their supplier, make it easier to change supplier and thereby increase competition among electricity suppliers.
- ▶ Uniform EU rules on capacity mechanisms may reduce distortions of competition in the internal market. Restricting capacity mechanisms to power stations with low CO₂ intensity, however, only means that the CO₂ emissions are relocated to other industrial sectors, is therefore ineffective as regards climate policy and unnecessarily increases the cost of climate protection.

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1 Introduction

According to Art. 194 (1) (a) TFEU, EU energy policy aims to ensure the functioning of the internal energy market. The ability to trade in energy – including electricity – across borders should allow for a sustainable, secure and competitive energy supply within the EU.¹

Current regulation of EU energy markets is based on the “Third Internal Energy Market Package” of 2009, which includes inter alia the Internal Electricity Market Directive [2009/72/EC]², the Network Access Regulation [(EC) 714/2009]³ and the Regulation establishing the EU Energy Agency ACER⁴ [(EC) 713/2009]. These Acts focus on the deregulation of the internal electricity market by unbundling formerly vertically integrated electricity companies, developing new organisations for regulating cross-border electricity networks and national electricity markets as well as consumer protection.⁵ In addition, in 2014, the EU Commission published “Guidelines on State aid for environmental protection and energy 2014-2020”⁶ which it uses to examine inter alia whether support systems in the Member States for safeguarding the electricity supply by way of “adequate electricity generation” (“capacity mechanisms”) are compatible with EU law on state aid.⁷

The legislation on the internal electricity market has been comprehensively reformed between 2016 and 2019.⁸ The Electricity Market Regulation (2019)⁹, the Electricity Market Directive (2019)¹⁰ and the ACER Regulation (2019)¹¹ impose the establishment of “regional coordination centres” as new cross-border regulatory organisations, extend the rights of electricity consumers and, for the first time, contain explicit EU-law provisions on the introduction of capacity mechanisms.

This cepInput summarises the existing EU rules on the internal electricity market and presents and assesses the EU rules which will apply in future to “organisations to regulate the electricity market” (Section 2), the rights of electricity consumers (Section 3) and capacity mechanisms (Section 4).

¹ EU Commission, Communication COM(2007) 1 of 10 January 2007, An Energy Policy for Europe.

² Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity [hereinafter: “Internal Electricity Market Directive (2009)”].

³ Regulation (EC) No. 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity [hereinafter: “Internal Electricity Market Regulation (2009)”].

⁴ Regulation (EC) No. 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators [hereinafter: “ACER Regulation (2009)”].

⁵ Bonn, M. / Nader, N. / Heitmann, N. / Reichert, G. / Voßwinkel, J. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, [cepKompas](#), p. 46 et seq.

⁶ EU Commission (2014), Guidelines on State aid for environmental protection and energy 2014-2020, in: OJ C 200 of 28 June 2014, p. 1 et seq. [hereinafter: “E&E Aid Guidelines” (2014–2020)"]; on this: Bonn, M. / Reichert, G. (2015), Capacity Mechanisms – An option for ensuring an affordable and secure electricity supply in the EU?, [cepInput 15/2015](#).

⁷ E&E Aid Guidelines (2014–2020), para. 216–233.

⁸ At the time of the editorial deadline of this cepInput, the final versions of the reformed legislative acts had not yet been published in the Official Journal of the EU.

⁹ Regulation of the European Parliament and of the Council on the internal electricity market [hereinafter: “Internal Electricity Market Regulation (2019)”], see [cepPolicyBrief 14/2017](#).

¹⁰ Directive of the European Parliament and of the Council concerning common rules for the internal market in electricity [hereinafter: Internal Electricity Market Directive (2019)], see [cepPolicyBrief 09/2017](#).

¹¹ Regulation of the European Parliament and of the Council establishing an Agency for the Cooperation of Energy Regulators [hereinafter: ACER Regulation (2019)], see [cepPolicyBrief 19/2017](#).

2 Organisations to regulate the electricity market

2.1 Context

Unlike oil and coal, the price of electricity is not established on the world market but – depending on the network infrastructure – locally, nationally or on a regional level encompassing several Member States. Efficient electricity markets require that all electricity producers have the same access to power grids. This has previously been hampered by the fact that national electricity markets in the EU were dominated by vertically integrated power companies that not only produced electricity and sold it to the end customer but also controlled the power grids. The Third Internal Energy Market Package of 2009 therefore required the unbundling of the vertically integrated power companies by separating operation of the power grids, at least in terms of legal structure, organisation and decision-making powers, from the production and sale of electricity. Member States could choose between three options of differing scope.¹²

Deregulation of the electricity markets and their merger into one internal EU electricity market required comprehensive regulation which, since the Second Internal Energy Market Package of 2003, has largely been carried out by national regulatory authorities that are independent of the energy industry. The authorities must inter alia ensure non-discriminatory access to national power grids and approve tariffs for using the transmission and distribution networks. After the Third Internal Energy Market Package, the national regulatory authorities were no longer subject to the instructions of government agencies or other public or private bodies.¹³

The Third Internal Energy Market Package resulted in the establishment of the EU Energy Agency “for the Cooperation of Energy Regulators” (ACER¹⁴) and the European Network of Transmission System Operators (ENTSO-E¹⁵). ACER supports national regulatory authorities in coordinating, at EU level, regulatory functions carried out in the Member States.¹⁶ ENTSO-E’s tasks include the development, in collaboration with ACER, of “network codes” that are accepted by the Commission. Network codes are detailed technical rules for organising network operation and electricity market integration in the EU.¹⁷ Every two years, ENTSO-E adopts a non-binding EU-wide ten-year network development plan.¹⁸ The transmission system operators have also undertaken to set up Regional Security Coordinators (RSCs) to support the transmission system operators in operating cross-border electricity networks. The RSCs are subordinate to the transmission system operators and do not have their own decision-making powers.¹⁹

2.2 Changes due to the internal electricity market reform 2019

The latest internal electricity market reform will give rise to gradual changes in the organisation and powers of the regulatory organisations. Thus, in future, the ACER Director will have to take account of

¹² Internal Electricity Market Directive (2009), Art. 9, 13 and 17 et seq.; on this Bonn, M. / Nader, N. / Heitmann, N. / Reichert, G. / Voßwinkel, J. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, [cepKompas](#), p. 49 et seq.

¹³ Internal Electricity Market Directive (2009), Art. 35.

¹⁴ Agency for the Cooperation of Energy Regulators (ACER), www.acer.europa.eu (this and all other links were last accessed on: 10 April 2019).

¹⁵ European Network of Transmission System Operators for Electricity (ENTSO-E), www.entsoe.eu.

¹⁶ ACER Regulation (2009), Art. 1 (2).

¹⁷ Internal Electricity Market Regulation (2009), Art. 6 and 7.

¹⁸ Ibid. Art. 8 (3).

¹⁹ EU Commission (2016), Impact Assessment SWD(2016) 410 accompanying the Proposal COM(2016) 861 for a Regulation of the European Parliament and of the Council on the electricity market (recast), p. 72 et seq.

comments or changes by the Board of Regulators when issuing ACER's opinions, recommendations and decisions.²⁰ In addition, ACER will inter alia take over the supervision of the new "regional coordination centres" that are to replace the existing RSCs.²¹ The regional coordination centres will be nominated by several transmission system operators of a region and approved by the national regulatory authorities. They are independent of the transmission system operators.²² They undertake network regulation which involves a cross-border element such as coordinated capacity calculation, coordinated safety and security analysis, creating common network models and setting the level of the reserve capacity in the region.²³ The transmission system operators, however, retain responsibility for guaranteeing a safe, reliable and efficient electricity system.²⁴

In the future, a "European Association of Distribution System Operators (EU DSO Entity) will also be created along the same lines as ENTSO-E.²⁵ In the future, distribution system operators will be able to join the EU DSO Entity and thereby participate inter alia in the development of the network codes that apply to them.²⁶

2.3 Assessment

A deregulated and EU-wide integrated internal electricity market will lead to more competition among electricity producers which will in turn be reflected in lower electricity prices. In addition, a functioning internal electricity market will increase security of supply by evening out national imbalances between electricity production and electricity demand. Thus, it will be easier to manage the growing proportion of electricity production derived from renewable energy, which is dependent on weather and the time of day.²⁷

The rules set out in the Third Internal Energy Market Package, on unbundling vertically integrated electricity companies, ensuring non-discriminatory network access and on establishing new regulatory organisations, represent important steps towards the creation of an internal electricity market. Regional cooperation between the transmission system operators is also essential for a functioning internal electricity market and optimum utilisation of transmission system network capacity. Voluntary initiatives, such as the Regional Security Coordinators (RSCs) – as well as ENTSO-E – have proven to be of value when it comes to meeting the particular requirements of the individual regions of Europe.²⁸

With the now mandatory establishment of Regional Coordination Centres to replace the RSCs, it is appropriate for essential network regulatory functions with a cross-border element – such as coordinated capacity calculation – to be carried out by organisations that are independent of transmission system operators, the latter being focussed on individual Member States. It is also appropriate, however, for transmission system operators to retain sole responsibility for ensuring a secure, reliable and efficient electricity system in the relevant Member State because, in order to

²⁰ ACER Regulation (2019), Art. 23 (5).

²¹ Ibid., Art. 8.

²² Internal Electricity Market Regulation (2019), Art. 32 (1).

²³ Ibid., Art. 34.

²⁴ Ibid. Art. 32 (3).

²⁵ Ibid., Art. 49.

²⁶ Ibid., Art. 54.

²⁷ Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, [cepKompas](#), p. 56.

²⁸ Bonn, M. / Reichert, G. (2017), Organisations to regulate the EU electricity market, [cepPolicyBrief 19/2017](#), p. 4.

guarantee a high level of system security, areas of responsibility must be clearly defined and any unnecessary duplication of structures avoided.

The growing proportion of electricity derived from renewable sources that is being fed onto the grid, increases the technical requirements applicable to distribution system operators. It is therefore appropriate for them to take part via the newly established EU DSO in developing network codes which principally contain technical rules relating to the distribution systems.²⁹

3 Rights of electricity consumers

3.1 Context

With more freedom of choice for the consumer and competition on the retail markets, electricity will become cheaper for the consumer. Since July 2007, all consumers in the EU have been free to choose their electricity supplier. By no later than March 2011, Member States had to ensure that electricity customers could change to another supplier within three weeks unless longer notice periods had been agreed in an electricity contract. In addition, all household customers and possibly also companies with less than 50 employees and annual turnover under € 10 million (“small businesses”) must receive at least a basic electricity supply.³⁰ Each Member State must define the concept of “vulnerable customers” who need to be protected from an inadequate electricity supply (“energy poverty”).³¹ For this purpose, Member States can also intervene in the electricity market and impose obligations on electricity suppliers regarding electricity prices.³²

Electricity suppliers must specify, on invoices and promotional materials, what energy sources are used to produce the electricity.³³ In addition, every Member State must ensure that, by 2020, at least 80% of consumers are equipped with smart electricity meters (“smart meters”). Smart meters provide electricity consumers with detailed information about their electricity consumption over time. They therefore constitute a basic requirement for the active management of the electricity demand (“demand-side response”) which makes it easier to handle fluctuations in the electricity supply. Until now, Member States could decide against such a large-scale deployment of smart meters if they were able to prove, by way of a cost-benefit analysis, that such a scheme was uneconomic. Germany took this approach, sixteen other Member States – including France, Italy and Spain –, on the other hand, did not.³⁴

3.2 Changes due to the internal electricity market reform 2019

The recast Internal Electricity Market Directive (2019), whose requirements the Member States must transpose into national law by the end of 2020,³⁵ contains some fundamental changes to the rights of electricity consumers. Thus, in future, electricity consumers must be able to switch their electricity supplier “in the fastest possible time” – and in any case within no more than three weeks, as is currently the case – unless longer notice periods have been agreed in an electricity contract. In this regard,

²⁹ Ibid.

³⁰ Ibid., Art. 3 (3)-(5).

³¹ Ibid. Art. 3 (7).

³² Ibid. Art. 3 (2).

³³ Ibid., Art. 3 (9).

³⁴ Ibid., Annex I para. 2; EU Commission (2014), Cost-benefit analyses & state of play of smart metering deployment in the EU-27, Commission Staff Working Document SWD(2014) 189, p. 13.

³⁵ Internal Electricity Market Directive (2019), Art. 70.

households and small businesses must not incur any switching fees. Member States may however decide that electricity suppliers can require switching fees from electricity customers wishing to terminate fixed-term supply contracts before their maturity, if the customers were informed of the fees prior to concluding the contract and the switching fees are “proportionate”. As of 2026, the technical procedure for switching electricity supplier must not last more than 24 hours.³⁶

In order to be able to compare the various electricity offers, households and small businesses with annual consumption of up to 100,000 kWh, must in future, have free access to a “comparison tool” – e.g. an internet portal – that has been certified by an independent authority. Electricity customers must be informed of the availability of such tools, e.g. on the electricity invoice.³⁷ The operators of “comparison tools” must be independent of the electricity suppliers, include all “significant” electricity offers and assess these by way of objective criteria and up-to-date information.³⁸

Although, as of 2021, electricity suppliers will be free to determine the price at which they supply electricity, Member States will still be able to intervene in pricing on the electricity market, in order to protect “vulnerable customers” from “energy poverty”, provided such intervention serves a “general economic interest, is transparent, non-discriminatory, verifiable”, time limited and proportionate. In addition, for a transitional period, Member States can intervene in pricing on behalf of households and small businesses provided they have informed the Commission of the nature and scope of the intervention.³⁹

In future, Member States may still decide against the nationwide deployment of smart metering if the costs involved are shown to exceed the benefits.⁴⁰ In this case, however, every electricity consumer has the right to installation of a smart meter, at his own expense, within four months of the request.⁴¹ Every Member State must guarantee that electricity customers, who are equipped with a smart meter, are entitled to a supply contract with time-of-day (“dynamic”) tariffs, from at least one supplier and from all suppliers with over 200,000 end-customers. Electricity suppliers must fully inform their customers of the opportunities and risks of dynamic electricity tariffs and the installation of smart meters.⁴²

In future, all electricity consumers must be permitted – even without the consent of their electricity provider – to engage service providers (“aggregators”) to offer their self-generated electricity on the market, bundled together (“aggregated”) with other quantities of electricity.⁴³ For the first time, Member States must also allow households and/or companies to form “energy communities” in which they join forces in one or more areas of the electricity industry – production, distribution, supply, consumption.⁴⁴

Electricity customers must be given access, free of charge, to their consumption data and be able to decide for themselves to which other companies – e.g. electricity suppliers, network operators and

³⁶ Ibid., Art. 12.

³⁷ Ibid., Art. 14 (1) and (2).

³⁸ Ibid., Annex I.

³⁹ Ibid., Art. 5.

⁴⁰ Ibid., Art. 19 (2).

⁴¹ Ibid., Art. 21 (1) (f).

⁴² Ibid., Art. 11 (1) and (2).

⁴³ Ibid., Art. 13.

⁴⁴ Ibid., Art. 16 in conjunction with Art. 2 (7).

aggregators – such data is to be communicated.⁴⁵ The company which manages the electricity consumption data must – with the consent of the electricity consumer – allow other companies to have non-discriminatory access to the consumption data.⁴⁶

3.3 Assessment

The requirement for all consumers to be able to choose their own electricity supplier, increases freedom of choice and promotes competition among the electricity suppliers. Independent sources of information for comparing electricity offers, help consumers to choose their supplier, make it easier to change supplier and thereby also strengthen competition among electricity suppliers.⁴⁷

Combating energy poverty is the task of social policy and not energy policy. Therefore, rather than using state regulation to keep electricity prices low, Member States should ensure that their social policy takes account of the electricity costs of poor households by adjusting social benefits in line with electricity price increases. Although the rule introduced in the recast Electricity Market Directive (2019) basically prohibits Member States from intervening in pricing by electricity suppliers, it allows them too much latitude to continue doing so, by way of exemptions and transitional arrangements. Thus, as a result of the continuing state regulation of electricity prices, competition on the retail electricity market in many Member States will remain unnecessarily restricted.

The nationwide deployment of smart meters is a prerequisite for a more flexible demand-side response which may allow for better management of fluctuations in the electricity supply. However, it is appropriate – in the case of a negative cost-benefit analysis – that Member States will still be able to decide against the nationwide installation of smart meters. A contribution to the costs by consumers must not exceed the benefit associated with the installation of smart meters.⁴⁸

Tariffs with electricity prices based on the time of day give electricity customers the incentive to make more effort to adapt their consumption to price fluctuations on the wholesale markets. However, until demand for such tariffs reaches a critical mass, the requirement for them to be offered, at least by large electricity suppliers, is inefficient because where demand is low, the electricity suppliers' revenue will be insufficient to cover the costs of introducing the tariffs. If demand for such tariffs increases in future, competition among the electricity suppliers will mean that the tariffs will be offered without any legal requirement.⁴⁹

4 Capacity Mechanisms

4.1 Context

The proportion of renewable energy sources, in the electricity supply, that are generally dependent on the weather and time of day – such as sun and wind –, has steadily increased in recent years, whilst the proportion of conventionally generated electricity based on natural gas, coal or nuclear power, has fallen. If conventional electricity producers achieve lower revenues from pure electricity sales, they

⁴⁵ Ibid., Art. 23 (1) and (4).

⁴⁶ Ibid., Art. 34.

⁴⁷ Bonn, M. / Reichert, G. (2017), Internal Electricity Market I – Directive, [cepPolicyBrief 09/2017](#), p. 3 et seq.

⁴⁸ Ibid.

⁴⁹ Ibid.

will not invest in existing or new power stations. These are, however, necessary to ensure that there is the required (“appropriate”) electricity production to avoid any shortages in supply.⁵⁰

For this reason, several Member States have introduced so-called “capacity mechanisms” whereby electricity producers are remunerated for the availability of secure power plant capacity irrespective of the amount of electricity actually produced by the power plant. This aims to ensure sufficient incentive for investment in power plants thereby helping to ensure adequate electricity production in the long term.⁵¹

Capacity mechanisms can be divided into three groups. A “strategic reserve” refers to power plants that are available simply as a standby for extreme situations and do not take part in the wholesale electricity market. On a “central capacity market”, electricity producers obtain revenue both from the sale of electricity and from the provision of secure capacity. By contrast, in the case of a “decentralised capacity market”, electricity producers can offer the product “secure capacity” in the form of “capacity allowances” which electricity traders have to acquire as proof of secure electricity production in addition to pure electricity sales.⁵²

4.2 Guidelines on State Aid for Environmental Protection and Energy 2014–2020

Capacity mechanisms must be compatible with EU law on state aid and approved by the EU Commission. In this respect, the EU Commission bases its decisions on the “Guidelines on State Aid for Environmental Protection and Energy 2014–2020” submitted in 2014⁵³. The E&E aid guidelines (2014–2020) do not, in principle, prohibit capacity mechanisms. These must not, however, obstruct integration in the internal market by reducing the incentive for investment in cross-border power lines, prevent the merger of several national electricity markets or promote market dominance on the electricity market.⁵⁴

In order to bring in a capacity mechanism, Member States must provide the Commission with a detailed explanation of why the revenue from electricity sales alone are not sufficient to finance the construction of the necessary power plant capacity in order to ensure security of supply. The level of remuneration for the provision of capacity must be determined in a tendering procedure with clear, transparent and non-discriminatory criteria. In addition, capacity mechanisms must not be restricted to promoting fossil fuel power stations and must also be open to e.g. companies that can restrict their electricity demand in the event of a shortage of electricity on the wholesale market (“demand-side response”). In the case of fossil fuel power stations, checks must also be made as to whether supporting them is compatible with the EU targets⁵⁵ to reduce CO₂ emissions by 20% by 2020 and 40% by 2030, as compared with 1990 levels.⁵⁶

⁵⁰ Bonn, M. / Reichert, G. (2015), Capacity Mechanisms – An option for ensuring an affordable and secure electricity supply in the EU?, [ceplnput 15/ 2015, 5 2015](#), p. 5–7.

⁵¹ Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, [ceplnput 15/ 2015, 9 2015](#), p. 71.

⁵² Bonn, M. / Reichert, G. (2015), Capacity Mechanisms – An option for ensuring an affordable and secure electricity supply in the EU?, [ceplnput 15/ 2015, 9 2015](#), p. 9–11.

⁵³ EU Commission (2014), Guidelines on State Aid for Environmental Protection and Energy 2014–2020, in: OJ C 200 of 28 June 2014, p. 1 et seq. [hereinafter: “E&E-Aid Guidelines (2014–2020)”].

⁵⁴ Ibid., para. 233.

⁵⁵ European Council of 23/24 October 2014, Conclusions, Doc. EUCO 169/14, para. 2.

⁵⁶ E&E Aid Guidelines (2014–2020), para. 216–232.

In 2016, in the Final Report⁵⁷ of the Sector Inquiry on Capacity Mechanisms, the Commission called on Member States, to examine the need for capacity mechanisms more carefully and design them in such a way as to keep distortions of competition in the internal market to an absolute minimum. In February 2018, it approved six capacity mechanisms in Belgium, Germany, France, Greece, Italy and Poland.⁵⁸

4.3 Changes due to the internal electricity market reform

With the recast Internal Electricity Market Regulation (2019), comprehensive and explicit EU law requirements will apply to the introduction of capacity mechanisms for the first time, as from 2020. Thus, after 2021, Member States are also permitted – as long as it is necessary for ensuring an adequate electricity supply – to bring in capacity mechanisms provided this does not create “undue” distortions of competition on the regular electricity markets or restrict cross-border trade in electricity.⁵⁹ Capacity mechanisms must also be technology-neutral and temporary and the level of support must be limited to what is necessary. They must be open to direct participation by power stations in other Member States provided such power stations are situated in a country that is connected to the Member State operating the capacity mechanism, by way of a direct electricity line.⁶⁰ At the same time, Member States cannot prohibit electricity producers based in their territory from participating in capacity mechanisms in other Member States.⁶¹

Member States may only bring in a capacity mechanism on the basis of a national “reliability standard”. This reflects the necessary level of security of the electricity supply in the Member State and is determined by the national regulatory authorities using standard EU methods.⁶²

Power stations with a CO₂ intensity⁶³ of more than 550 g CO₂/kWh, that began commercial electricity production after 31 December 2019, are not permitted to receive payments from a capacity mechanism. Older power stations with a CO₂ intensity of more than 550 g CO₂/kWh and average annual CO₂ output per kilowatt of power generating capacity of more than 350 kg CO₂/kW, can no longer participate in a capacity mechanism as of 1 June 2025.⁶⁴

4.4 Assessment

On the one hand, supporting power generating capacity by way of capacity mechanisms stimulates investment in new power plants which, in the long term, increases security of the electricity supply. On the other hand, they can be misused by Member States to give domestic electricity companies an advantage over the competition from other Member States. The binding and uniform EU rules on the deployment and design of capacity mechanisms may reduce the risk of distorting competition in the internal market. In this regard, a ban on the general exclusion of foreign power plant operators from participating in capacity mechanisms is also required.

⁵⁷ EU Commission (2016), Report COM(2016) 752 of 30 November 2016 on the Sector Inquiry on Capacity Mechanisms.

⁵⁸ EU Commission (2018), State Aid – EU Commission approves six capacity mechanisms to ensure security of the electricity supply in Belgium, Germany, France, Greece, Italy and Poland, Press Release of 7 February 2018, http://europa.eu/rapid/press-release_IP-18-682_de.htm.

⁵⁹ Internal Electricity Market Regulation (2019), Art. 18b.

⁶⁰ Ibid., Art. 21 (1) and (2).

⁶¹ Ibid., Art. 21 (3).

⁶² Ibid., Art. 20 (1) and 2 in conjunction with Art. 19 (5)

⁶³ CO₂ intensity refers to the proportion of CO₂ emissions in grams (g) for each quantity of electricity produced in kWh.

⁶⁴ Internal Electricity Market Regulation (2019), Art. 18b (4).

It is right that capacity mechanisms should only be allowed where there is no other possibility for the Member State to achieve its chosen “reliability standard” for the electricity supply. In particular, it is necessary to assess whether the roll-out of cross-border power lines and the merger of national electricity markets into one internal electricity market is sufficient to ensure an adequate electricity supply. Since Member States may have varying preferences as to the level of security of the electricity supply, it is also appropriate that Member States choose their own national reliability standards – rather than having a common EU standard.⁶⁵

There should not, however, be any climate-policy-based restrictions when it comes to choosing the power plants that will participate in a capacity mechanism because the electricity sector is already part of the EU Emissions Trading System (EU ETS) in which the total amount of CO₂ emissions from all participating plants is established by way of a cap on emission rights (“allowances”) and reduced year by year by way of a predetermined long-term reduction scenario. The ability to trade allowances allows the participating companies to decide for themselves, where and how they will reduce CO₂ emissions. Restricting participation in capacity mechanisms to power plants with lower emissions will therefore not result in a reduction in CO₂ emissions but will simply mean that CO₂ is shifted over to other power plants or industrial sectors within the EU ETS with no benefit in terms of climate policy. This regulatory duplication will rob the EU ETS of part of its steering function and unnecessarily increase the cost of climate protection in the EU.⁶⁶

⁶⁵ Bonn, M. / Reichert, G. (2015), Capacity Mechanisms – An option for ensuring an affordable and secure electricity supply in the EU?, [ceplInput 15/ 2015](#), p. 20 et seq.

⁶⁶ For a comprehensive analysis see Bonn, M. / Reichert, G. (2018), Climate Protection by way of the EU ETS – Status and Outlook after the Reform, [ceplInput 03/2018](#).

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