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COMMISSION DECISION

of 8.11.2016

**ON STATE AID SCHEME
SA.39621 2015/C (ex 2015/NN)**

(Text with EEA relevance)

(Only the French version is authentic)

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PUBLIC VERSION

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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 called on interested parties to submit their comments pursuant to those articles¹, and having regard to their comments,

Whereas:

1. PROCEDURE

- (1) By letter dated 13 November 2015 (the ‘Opening Decision’), the Commission informed the French authorities that it had decided to initiate the procedure laid down in Article 108(2) of the Treaty on the Functioning of the European Union (TFEU) in respect of the measure.
- (2) The French authorities submitted their comments on that letter in their letter dated 17 December 2015.
- (3) The Commission decision to initiate the procedure was published in the *Official Journal of the European Union* on 2 February 2016². The Commission invited interested parties to submit their comments on the measure in question.

¹ State aid SA.39621 (2015/C) (ex 2015/NN) – Capacity mechanism in France – Invitation to submit comments pursuant to Article 108(2) of the Treaty on the Functioning of the European Union (OJ C 46, 2.2.2016, p. 35).

- (4) The Commission forwarded the comments received from interested parties to the French authorities and gave them the opportunity to respond. The French authorities' observations were sent by letter dated 24 May 2016.
- (5) On 2 May 2016 the Commission sent a list of questions to the French authorities, which replied by letters dated 21 June and 15 July 2016. On 27 July the Commission sent a new list of questions to the French authorities, which replied on 9 September 2016.

2. DETAILED DESCRIPTION OF THE MEASURE

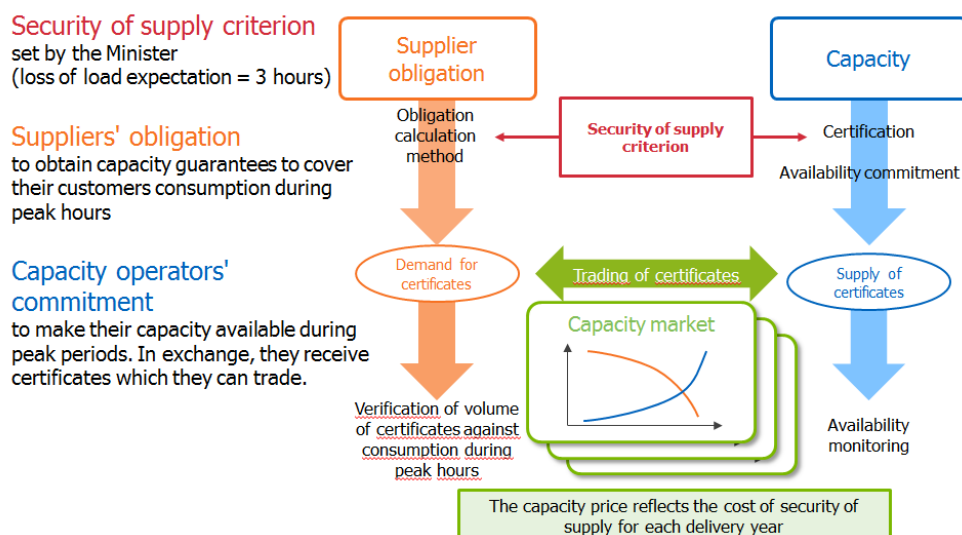
- (6) The mechanism is described in detail in the Opening Decision and summarised in the sections below.

2.1. General operation of the mechanism

- (7) Law No 2010-1488 of 7 December 2010 on the new organisation of the electricity market ('the NOME Act') made it obligatory for electricity suppliers, network operators (for losses), and consumers (for consumption outside a supply contract) – 'the suppliers' – to contribute to the security of electricity supply in France in line with their own and their customers' power and energy consumption. In order to fulfil this obligation, every year each of them must prove that they have a certain volume of capacity guarantees in relation to their own and their customers' peak-period consumption.
- (8) Capacity guarantees are obtained by suppliers either directly for resources they own (generation plants or demand-side response capacities), or must be purchased on a decentralised market from other holders (capacity operators, other suppliers, traders, consumers who are their own suppliers, etc.).
- (9) Operators of generation or demand-side response capacity ('capacity operators' or 'operators'), on the other hand, are obliged to have their capacity certified by the operator of the public electricity transmission grid (RTE). Operators will be allocated capacity guarantees by RTE according to the projected contribution of their plant to reducing the risk of shortfall at times of peak demand.
- (10) Capacity guarantees are tradable and transferable. The purchase by suppliers of capacity guarantees from capacity operators to meet their legal obligation will be organised on the basis of a decentralised market for capacity guarantees. The general operation of the mechanism is illustrated in Figure 1.

² See footnote 1 above.

Figure 1: General operation of the mechanism



Source: letter from the French authorities dated 2 February 2015.

2.2. Capacity obligations

2.2.1. Obligations of suppliers

- (11) Calculation of a supplier's reference power, i.e. its capacity obligation, is based on the following principles:
 - (1) consideration of peak-period consumption (PP1) during the delivery year (DY; one calendar year);
 - (2) correction for the temperature sensitivity of consumption (thermosensitivity), on the one hand, and
 - (3) correction for the demand-side response power of the certified capacity activated during the PP1 period, on the other.
- (12) The operator of the transmission grid specifies each year the PP1 days that determine the suppliers' capacity obligation in mainland France, on the basis of the national demand forecast for the following day (D-1). The number of PP1 days must be between 10 and 15 for each delivery year, and the hours used to calculate the capacity obligation are the normal time-slots (7.00-15.00 and 18.00-20.00) of the PP1 days selected. The number of PP1 peak hours is therefore between 100 and 150 hours per year. The PP1 days are notified to suppliers before 10.30 one day in advance (D-1).
- (13) The obligation is not laid down by rules in advance, but is determined on the basis of measured data, so that each consumer's actual contribution to the shortfall risk can be referred back to them. To reflect the contribution of a consumer to the shortfall risk in view of its thermosensitivity, the consumer's observed consumption during the delivery year is adapted in order to simulate a cold spell corresponding in severity to the risk that the system is intended to cover (ten-yearly cold spell), thus respecting the security of supply criterion set by the French authorities. The security of supply criterion was laid down by Decree No 2006-1170 of 20 September 2006, and corresponds to an average expected shortfall of three hours per year.
- (14) The parameters used to determine the actual need for capacity guarantees in the delivery year will be published four years before the delivery year and will remain

stabilised throughout the financial year, to enable trading within a fixed regulatory framework and ensure that the value of the product will not be altered by intervention external to the market. Each supplier's exact obligation will then be calculated after the delivery year by applying these parameters.

- (15) Demand-side response can be taken into account using two different methods: either by reducing a supplier's capacity obligation by reducing consumption ('implicit demand-side response') or by certifying demand-side response capacity ('explicit demand-side response'). The obligations for the two types of demand-side response capacity are different: 'implicit demand-side response' must actually be activated during PP1 hours, whereas 'explicit demand-side response' must be available during PP2 hours.
- (16) The French authorities have laid down that the capacity guarantees should be linked to the ARENH³ product for alternative suppliers, which should, in their opinion, contribute to reducing the market concentration of capacity guarantees.

2.2.2. *Obligations of capacity operators and certification principles*

- (17) A request for certification must be made to RTE by the operator of every generation plant (technologically neutral mechanism) connected to the public transmission grid or to the public distribution network. A request for certification may be made to RTE for every demand-side response facility, whichever network it is connected to. It is therefore the capacity operator who makes an initial estimate of the capacity volume that it could have available during peak consumption periods (PP2) in a given delivery year.
- (18) There are between 10 and 25 PP2 days in a delivery year. In addition, PP1 days are necessarily PP2 days. PP2 days that are not PP1 days are selected one day in advance by RTE on the basis of stress on the electricity system. The time-slots concerned are the same as those for PP1 days. There are therefore between 100 and 250 PP2 peak hours per year.
- (19) The certified level is then calculated by RTE on the basis of the data submitted using the calculation methods laid down in the legal basis for the mechanism. Corrections are applied, for example, to take into account the potential number of successive days of activation of the certified capacities, or the actual contribution to reducing the shortfall risk of a capacity for which the primary energy source is subject to the vagaries of the weather.
- (20) The operator may then change its availability forecasts throughout the duration of the mechanism, including during the delivery year, using a rebalancing mechanism. Rebalancing corresponds to 'recertification' of capacity and enables the operator to adjust its forecasts as and when new information on its capacity becomes available. Rebalancing may be upwards or downwards.
- (21) This declaration system is supplemented by a capacity control system: the principle is that all certified capacities must be activated at least once per year. Random tests

³ Regulated access to incumbent nuclear electricity (*Accès Régulé à l'Électricité Nucléaire Historique* - ARENH) is a right that entitles suppliers to purchase electricity from EDF at a regulated price and in volumes determined by the French energy regulator (*Commission de régulation de l'énergie* - CRE). For more information on ARENH, see: https://clients.rte-france.com/lang/an/clients_producteurs/services_clients/dispositif_arenh.jsp.

are made for each capacity without notifying the operator in advance. A capacity may not be tested more than three times per delivery period.

- (22) The precise certification arrangements vary according to the type of capacity concerned:
- (1) certification of existing generation capacities may begin four years before the delivery period, and a request for certification must be made three years before the delivery period begins;
 - (2) certification requests for planned generation capacities may be made after the signing of the first settlement under the signed connection agreement, and up to two months before the delivery period begins; and
 - (3) demand-side response capacities may be certified up to two months before the delivery period begins.
- (23) The certificates portfolio manager (*responsable du périmètre de certification* - RPC) is the legal person with financial liability for the imbalances of capacity operators within that area. Operators may act as their own RPC or enter into a contract with an RPC. RPCs may accumulate the capacities within their portfolio.
- (24) With regard to the financial settlement of imbalances, RTE notifies each RPC of the imbalance within their area at the latest on 1 December of the delivery year +2.

2.3. Trading in capacity guarantees

- (25) The capacity guarantees are all entered in the register of capacity guarantees held by RTE, the network manager. Each supplier and each capacity operator is obliged to open an account with RTE in the register of capacity guarantees. Vertically integrated players are therefore obliged to hold two accounts within this register, one for their production activities and one for their retail activities.
- (26) Ownership of a capacity guarantee results from RTE entering it in the holder's account in the register of capacity guarantees. Each capacity guarantee issued is numbered to enable it to be managed and trades to be traced. A guarantee is valid for one delivery year. A capacity guarantee, the unit of which is 0.1 MW⁴, exists solely once issued: an operator holding a capacity guarantee does not bear any risk relating to the underlying capacity.
- (27) Transfers of capacity guarantees between operators (issuance and transfer) are carried out by transferring them in the register of capacity guarantees at the request of both parties (the transferor and the recipient). The actual transfer of ownership takes place when a capacity guarantee is entered in the recipient's account.
- (28) Capacity guarantees may be traded directly (over the counter) or on organised markets.
- (29) Trading in capacity guarantees may take place throughout the period between certification and the deadline for transfer of capacity guarantees. As explained in recital 23, RTE notifies each supplier of its capacity obligation at the latest on 1 December in the delivery year +2. The transfer deadline is 15 days after this.

⁴ The certified capacity level is rounded to the nearest 0.1 MW. Capacities with power of less than 1 MW may be aggregated in order to participate in the market.

(30) Suppliers which have a surplus of capacity guarantees in relation to their obligation on the deadline for notifying the obligation are required to make a public offer for sale before the deadline for transferring capacity guarantees.

(31) Five days after the deadline for transferring capacity guarantees, RTE calculates for each supplier the imbalance between the supplier's capacity obligation and the capacity guarantees in the supplier's account in the register, and the corresponding financial settlement.

2.4. Financial settlement of imbalances

(32) The mechanism makes provision for allocating responsibility for the imbalances between forecasts and actual results.

(33) The general structure of the financial settlements corresponds to imbalance settlements carried out in a manner that is very similar to the one used for energy ('rebalancing') and assumes that suppliers and RPCs pay a financial settlement in the event of a negative imbalance and receive a financial settlement for a positive imbalance. In the event of a negative imbalance all final consumers will benefit from a price reduction via the TURPE system (Public Electricity Grid User Tariff)⁵.

(34) The settlement price applied for a given delivery year depends on certain criteria:

(1) when security of supply is not significantly threatened, the settlement price is wholly based on the market reference price (MRP: the arithmetic mean of the capacity prices set during the auctions held prior to the delivery year). For the settlement of negative imbalances, an incentive coefficient ('k') is added to this price to provide an incentive to use the certificates market rather than wait for the financial settlement (for positive imbalances, it is deducted); and

(2) when security of supply is significantly at risk (overall imbalance below a threshold to be set by RTE: 2 GW below the overall obligation for the first two delivery years), the imbalance settlement price refers to an administered price ('Padmin'). The administered price is a ceiling for the capacity price on the market.

(35) Once the various imbalance settlements have been calculated, the RPCs and suppliers with negative imbalances pay the settlement amount they owe to their respective fund, and the RPCs and suppliers with positive imbalances receive the settlement amount owing to them from their respective fund. However, for a given delivery year, the sum of positive settlements may not exceed the sum of payments made in relation to the negative financial settlements. Any balance remaining in the funds for the settlement of imbalances is redistributed in full to the users of the public electricity transmission grid, i.e. all final customers.

(36) There is no financial flow between the fund for the settlement of RPC imbalances and the fund for the settlement of supplier imbalances. There is therefore no financial flow between capacity operators and the suppliers affected by the settlement of imbalances.

(37) RTE handles administrative and financial management and accounting for the imbalance funds ('fund for the settlement of certificates portfolio managers')

⁵ TURPE (*Tarif d'Utilisation du Réseau Public d'Electricité*), established by Law No 2000-108 of 10 February 2000, is used to pay the operators of the transmission and distribution network. The TURPE calculation methodology and any adjustments are determined by the CRE.

imbalances' and 'fund for the settlement of suppliers' capacity rebalancing') in line with private accounting rules. It is therefore responsible for invoicing and recovering amounts owed by RPCs and suppliers, and for recording any defaults on payment.

- (38) The Energy Regulatory Commission (CRE), the French regulatory authority in the energy sector, is responsible for monitoring the settlement of suppliers' imbalances (Article 7 of Decree No 2012-1405, codified in Article R. 335-12 of the Energy Code) and may apply administrative sanctions in the event of failure to fulfil the legal obligation to pay for imbalances. The sanction applied must be proportionate and may not exceed € 120 000 per MW of capacity for a delivery year (Article L. 335-7 of the Energy Code).

2.5. National legal basis

- (39) The legislative and regulatory texts governing the capacity mechanism are:
- (1) Law No 2010-1488 of 7 December 2010 on the new organisation of the electricity market, codified in particular in Articles L. 335-1 to L. 335-7 and L. 321-16 to L. 321-17 of the Energy Code;
 - (2) Decree No 2012-1405 of 14 December 2012 on the contribution of suppliers to the security of electricity supply and establishing a capacity obligation mechanism in the electricity sector, laid down by Article L. 335-6 and codified in the regulatory part of the Energy Code, R. 335-1 to D. 335-54;
 - (3) the Order of 22 January 2015 laying down the rules for the capacity mechanism and adopted pursuant to Article 2 of Decree No 2012-1405 of 14 December 2012 on the contribution of suppliers to the security of electricity supply and establishing a capacity obligation mechanism in the electricity sector; and
 - (4) the Annex to the Order of 22 January 2015: Rules of the capacity mechanism.
- (40) In view of the remedies proposed by France following the Commission's objections in the Opening Decision, these texts will be amended or supplemented to reflect all the remedies described in Section 3 of this Decision.

2.6. Beneficiaries

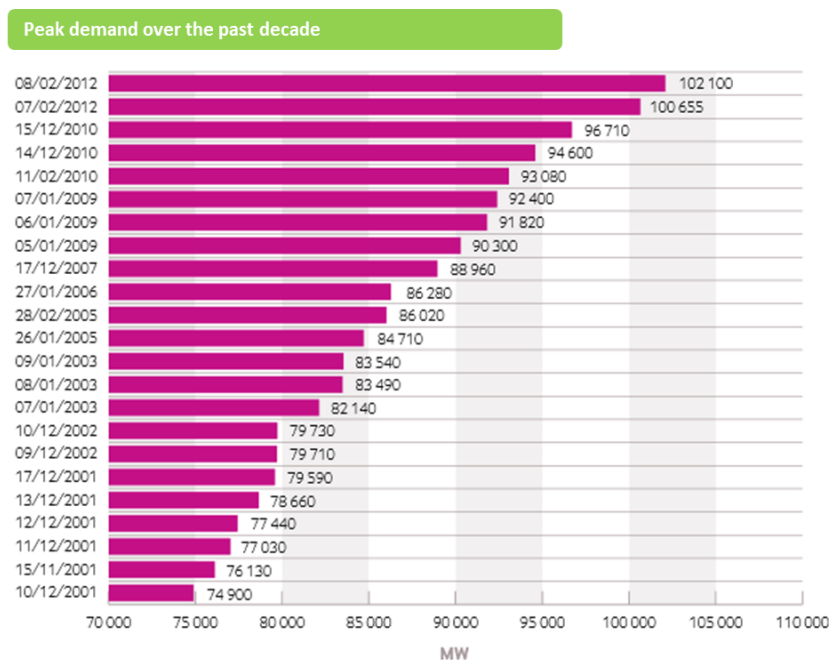
- (41) The beneficiaries of the mechanism are the capacity holders, who receive capacity guarantees (certificates) from the State (via RTE) and may resell them.

2.7. Objective of the mechanism: security of supply

- (42) The indicator used by France to assess the risk of a disruption to the balance between electricity supply and demand is the expected duration of a shortfall caused by a supply-demand imbalance (loss of load expectation, 'LOLE'). The French authorities have chosen to use an average duration of three hours per year as the expected loss of load for France.
- (43) The French authorities explained that, for many years, France has experienced a spike in electricity consumption during winter. The French electricity system is characterised by significant consumption thermosensitivity, leading to a peak in electricity consumption during winter cold spells. As illustrated in Figure 2, this thermosensitivity has continued to grow in recent years, owing in particular to the increase in consumption linked to electric heating, but also to new uses of electricity which often coincide with peak demand in the evening.

- (44) Peak demand has increased more rapidly than the general level of electricity consumption. In addition, French peak demand is very volatile and the consumption imbalances can therefore be particularly substantial (up to 20 GW between two years). Controlling peak electricity consumption is therefore a major concern, particularly in the context of the transfer of energy use to electricity.

Figure 2: historical peak demand in France



Source: RTE – *Generation Adequacy Report on the supply-demand balance in France, 2014* (p. 33)

- (45) According to RTE, in terms of supply Europe is characterised by stagnating demand and significant overcapacity in electricity generation, caused by several factors. Since 2008, the economic crisis has reduced electricity demand. At the same time, there has been rapid development of subsidised ‘non-market’ renewable energy, which benefits from priority access on the electricity grid. In addition, European coal-fired power stations have enjoyed a strong upturn in activity, linked to the fall in the price of coal resulting from the boom in American shale gas that prompted the United States to export a huge amount of its newly surplus coal production to Europe. Finally, gas-fired power stations – which have become less competitive than coal-fired plants – have seen a sharp reduction in their profitability and therefore in their activity.
- (46) In this context, unpredictable weather conditions result in uncertainty over payment for the peak capacities necessary to cover this peak demand. Spikes in consumption occur rarely, for only a few hours per year, or not at all in some years when temperatures are mild.
- (47) The French capacity mechanism was devised as one way of responding to this problem, to ensure compliance with the security of supply criterion laid down by the public authorities. Its objective is both to provide a means of changing consumption behaviour during peak hours (the demand approach) and to encourage adequate investment in production plants and demand-side response capacities (the supply approach).

2.8. Budget

- (48) The value of capacity guarantees is not set by the authorities, but rather determined by the market. Trades are freely agreed by the participants in the mechanism on the basis of their forecasts, their coverage strategy, and the information at their disposal.
- (49) In spite of the decentralised nature of the mechanism, which makes it difficult to estimate the budget, an estimate has been made assuming an overall capacity obligation for French demand of between 80 000 and 95 000 MW and a security coefficient maintained at 0.93. Demand will depend on the trend in consumption in mainland France, including measures to control demand put in place by electricity suppliers, leading to a reduction in their individual obligation. On this basis the gross income received by operators on the capacity market could range from € 0/kW to € 30/kW between 2017 and 2026, with the highest amounts in years in which new production facilities had to be constructed.

2.9. Duration

- (50) The first delivery year begins on 1 January 2017. By way of derogation from the general rule that certification is carried out four years before the delivery year, certification for the first delivery year (2017) began on 1 April 2015. For the moment, so long as no end date for the mechanism has been set by the French authorities, an annual assessment will be carried out by RTE and the regulator as laid down by French legislation. Where applicable, the assessment may give rise to either a revision of the mechanism (for example, to bring it into line with the latest changes to European legislation) or the end of the mechanism if it is no longer required⁶.

2.10. Cumulation

- (51) With regard to plants under a purchase obligation contract (electricity from renewable sources) or eligible for the top-up payment, Articles L. 121-24 and L. 335-5 of the Energy Code provide that profits from the sale of capacity guarantees will be deducted from their total public service costs, including other State aid awarded that finances the support mechanism via the obligation to purchase. Similarly, producers will not be subject to imbalance settlement if actual capacity is lower than the certified capacity owing to uncertain availability of the primary resource⁷.

⁶ Article 20 of the Decree on the capacity mechanism provides for an annual report by the CRE on the basis of RTE work on the mechanism ('One year after publication of the rules on the capacity mechanism, and every subsequent year, the Energy Regulatory Commission must send the Minister responsible for energy a report on the integration of the capacity mechanism in the European market, drawn up on the basis of work carried out by the operator of the transmission grid. This report must include information on developments, in neighbouring countries, in regulations on the contribution of operators to security of electricity supply. It must analyse the interaction of the French capacity mechanism with the arrangements put in place in these countries and, where applicable, propose improvements to the operation of the capacity mechanism'). In addition, the Order adopting the operating rules of the mechanism contains two articles on the assessment reports to be produced by RTE (in addition to the report required by the Decree): Articles 5 and 8 (on the cross-border aspect and the dynamic impact of the mechanism).

⁷ For example, if a producer of wind power has a problem with maintenance or with the facility and does not rebalance, it will be subject to imbalance settlement. However, if there is no wind, the producer will not be subject to imbalance settlement.

3. GROUNDS FOR INITIATING THE PROCEDURE

3.1. State aid within the meaning of Article 107(1) TFEU

(52) In recital (143) of the Opening Decision, the Commission had already concluded that the measure constituted State aid within the meaning of Article 107(1) TFEU, for the reasons set out below.

3.1.1. Imputability and financing through State resources

(53) In the Opening Decision, the Commission considered that a transfer of State resources could be deemed to exist not only if there was a transfer of money directly from the State budget or from a public body, but also if the funds to support the mechanism came from the undertakings' equity capital, provided that (i) the State does not collect the State resources to be collected and/or (ii) the financial resources used under the mechanism remain under public control, whilst not necessarily being public property on a permanent basis.

(54) With regard to the first point, France foregoes public resources because it allocates capacity certificates to capacity operators free of charge, rather than selling them (as in the *NOx*⁸ and *Romanian green certificates*⁹ cases).

(55) With regard to the second point, the financial resources to support the mechanism remain under State control (similarly to *Vent de Colère*¹⁰ and *Essent*¹¹), since: (i) the funds are financed by the mandatory contributions imposed by the State and therefore imputable to it; (ii) the State sets the parameters (security of supply criterion and methodology for setting the reference market price determining the imbalance settlement price) that influence the capacity price and the overall number of certificates, even if they are not fixed as such by the State; (iii) the Energy Regulatory Commission (CRE) is authorised to impose sanctions on suppliers that do not fulfil their obligations in terms of imbalance settlement; (iv) the operator of the transmission grid – RTE – has been appointed by the State to manage the imbalance settlement fund.

3.1.2. Selective advantage

(56) According to the Commission, the *Altmark*¹² judgment does not apply in this particular case because the public service obligation is not clearly defined. There are numerous obligations under the mechanism and they differ according to the various stakeholders (power-station operators, demand-side response operators, suppliers). In terms of the obligation on capacity operators, the certification obligation is not strictly regulated, in that: (i) it is optional for demand-side response capacities and (ii) the operators of existing production plants have a choice as to the level of capacity that they certify.

⁸ CJEU, 8 September 2011, *Commission v Netherlands*, C-279/08 P.

⁹ SA.37177 *Romania – Amendments to the green certificates support system for promoting electricity from renewable sources*.

¹⁰ CJEU, 19 December 2013, *Association Vent de Colère! Fédération nationale and Others v Ministre de l'Ecologie, du Développement durable, des Transports et du Logement et Ministre de l'Economie, des Finances et de l'Industrie*, C-262/12.

¹¹ CJEU, 11 September 2014, *Essent Belgium NV v Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt*, Joined Cases C-204/12 to C-208/12.

¹² CJEU, 24 July 2003, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH*, C-280/00.

(57) The allocation of capacity guarantees therefore constitutes an advantage, not compensation for a public service obligation. This advantage is selective since the mechanism provides for aid to capacity operators and not to other sectors of the economy.

3.1.3. *Effect on competition and trade between Member States*

(58) According to the Commission, the capacity mechanism could affect competition with capacity operators located abroad (thus also affecting trade between Member States) in that the capacity operators located in France obtain an advantage that the capacity operators abroad could not obtain as they cannot be certified.

3.2. **Objective of common interest and necessity**

(59) France's concern with regard to adequacy of generation capacity is strictly linked to a peak demand problem which arises during relatively short periods of intense cold weather, owing to France's particular reliance on electric heating.

(60) The Opening Decision raised doubts as to the necessity of the measure because:

- (1) the 2015 Scenario Outlook and Adequacy Forecast of the European Network of Transmission System Operators for Electricity (ENTSO-E)¹³ identifies a security of supply problem only as of 2025;
- (2) France did not seem to have explored alternatives to the capacity mechanism, such as tariffs that would encourage reduced consumption in peak hours; and
- (3) in spite of the implementation of a favourable regulatory framework for demand-side response, which had allowed independent demand-side response to take over the demand-side response historically offered by the incumbent supplier, RTE does not anticipate a substantial net increase in demand-side response capacity from 2014 to 2019.

3.3. **Appropriateness of the aid**

(61) In the Opening Decision, the Commission considered that the mechanism risked discriminating between different demand-side response capacities. In particular, two types of demand-side response can participate in the mechanism: implicit demand-side response, which consists of suppliers reducing their capacity obligation by effectively switching off certain customers during peak hours on 10 to 15 days per year, thereby releasing capacity; and explicit demand-side response, which requires (larger) consumers or aggregators to get their demand reduction potential certified, and keep that capacity available (but not necessarily curtailed) during peak hours on 10-25 days per year.

(62) In addition, in the Opening Decision the Commission criticised the fact that the mechanism was not open to all technologies that could contribute to security of supply, including interconnectors and/or foreign capacities.

(63) The Commission had also highlighted the risk of new generation capacity being excluded from participation in the mechanism, mainly because of the absence of reliable price signals for capacity guarantees. More specifically, the Commission was concerned that:

¹³ The Commission referred to the 2015 edition, available here: https://www.entsoe.eu/Documents/SDC%20documents/SOAF/150630_SOAF_2015_publication_wcover.pdf.

- (1) the relatively short validity period of capacity guarantees could not give a reliable price signal;
- (2) suppliers, and especially new entrants, could have difficulty forecasting the development of their client portfolios far in advance;
- (3) the incentives for operators to be in balance before the delivery year were not sufficient; and
- (4) the ceiling on the price of imbalance settlements did not reflect the cost of new entry (CONE).

3.4. Proportionality

- (64) In the Opening Decision the Commission had identified a risk that the mechanism could lead to overcompensation of some capacity operators, primarily for the following reasons:
- (1) the risk of suppliers overestimating demand – this is a potential risk if the suppliers’ individual capacity obligations are not sufficiently clear;
 - (2) the potential lack of transparency regarding capacity pricing, in particular owing to a potentially high volume of OTC trades and intra-group transactions, which could distort the price signal and lead to overcompensation;
 - (3) the limited participation in the mechanism (exclusion of cross-border capacity and discrimination between different demand-side response operators);
 - (4) EDF’s market power – the possibility of EDF artificially increasing the value of capacity guarantees as a seller, whilst applying lower prices to its retail branch. Underlying this, the Commission identified three more specific risks: the risk of capacity withholding, the risk of capacity guarantee withholding, and the risk of a price squeeze.

3.5. Avoidance of negative effects on competition and trade

- (65) In the Opening Decision, the Commission identified a number of problems regarding potential distortions of competition at both generation and supply level.
- (66) The Commission expressed concerns regarding the existence of significant information asymmetries. Large vertically integrated suppliers, especially those already present on the French market, are likely to have an advantage because of their more comprehensive knowledge of the market, especially in terms of capacity availability, supply needs and prices. They are consequently able to produce more reliable forecasts and be more efficient in fulfilling the obligations imposed by the mechanism.
- (67) Another effect of information asymmetries is that it is likely to be more difficult for new entrants to estimate their future portfolio of clients, which is a key aspect of calculating the need for capacity guarantees.
- (68) The Commission also expressed concerns regarding the possibility of a dominant incumbent operator being able to withhold capacity.
- (69) The Commission also raised the risk of a dominant incumbent operator being able to withhold capacity guarantees.
- (70) Furthermore, the Commission referred to a risk of price-based exclusionary practices (margin/price squeeze, predatory prices) by the dominant incumbent operator.

- (71) The Commission stressed that the lack of long-term price signals for capacity might create or reinforce barriers to entry for new producers. Long-term investments by new entrants may require some degree of price predictability over a certain number of years, which one-year certificates are unlikely to provide.
- (72) The Commission also reiterated its position regarding reduced competition in the mechanism owing to the exclusion of certain types of capacity operators (cross-border capacities, discrimination between demand-side response capacity operators).

4. COMMENTS BY INTERESTED PARTIES AND OBSERVATIONS BY FRANCE

- (73) The Commission received 18 responses from interested parties other than France, RTE and the CRE during the consultation period on the Opening Decision. One party replied after the deadline.
- (74) The various comments are grouped by topic below. They are addressed as part of the assessment of the measure, but not referred to explicitly.

4.1. State aid within the meaning of Article 107(1) TFEU

- (75) The respondents were divided concerning the classification of the mechanism as aid. Half of the respondents considered that the measure constituted State aid, either explicitly, or implicitly by not reacting to the Commission's arguments on this point; and half considered that the mechanism did not constitute State aid, for the reasons set out below.
- (76) Two respondents explicitly referred to Decision No 369417 of 9 October 2015 by the French Council of State (action brought by the National Association of Energy Retailers - ANODE¹⁴), in which the Council of State considered that the proposed capacity mechanism did not have the characteristics of State aid. The French authorities also referred to the conclusions of the Council of State in this case¹⁵.
- (77) The French authorities' arguments regarding classification of the measure as State aid should be read in conjunction with those already set out in the Opening Decision.
- (78) The French authorities chose not to return to these aspects during the in-depth investigation with the Commission, and focused on the proposal for measures to ensure that the capacity mechanism was compatible with the internal market, irrespective of the question of classification as State aid. For the sake of completeness, France's arguments concerning classification as State aid are nevertheless included below.

4.1.1. Imputability and financing through State resources

4.1.1.1. Comments by interested parties

- (79) Two demand-side response aggregators, two vertically integrated electricity companies, and the French Electricity Union considered that the measure is not financed using State resources. More specifically, these respondents considered that

¹⁴ ANODE (*Association Nationale des Opérateurs Détaillants en Énergie*) is the association of alternative suppliers in France.

¹⁵ Decision of the Council of State, 9th and 10th chambers combined, 9 October 2015.

the funds in question are channelled directly and exclusively between private operators; RTE neither holds nor uses imbalance settlement funds.

- (80) Furthermore, according to these respondents, the rules applicable to the management of these resources can be compared to those governing management of ‘imbalance adjustment’ under the balance manager system in the energy market.
- (81) EDF added that the role of the French State in relation to the mechanism is restricted to setting out a specific regulatory framework in which only private operators are active. According to EDF, by establishing a capacity mechanism, the French State is in effect exercising its prerogatives as a public authority and acting as a market regulator.
- (82) EDF considered that the capacity mechanism is sufficiently distinct from the system at issue in *Commission v Netherlands* (the *NOx* case)¹⁶, in which the Dutch State granted real ‘pollution rights’ that made it possible to avoid paying fines and had a market value from the moment they were granted by the State. Certificates consequently have no value in the relationship between the French State and capacity operators.

4.1.1.2. Observations by France

- (83) According to the French authorities, the price of capacity guarantees, and therefore the revenue that capacity operators could gain from selling their certificates, is not set by the State. The State does not intervene concerning the quantity of products offered on the market either. In a decentralised mechanism, it is the market that determines the price and quantity of certificates. Financial flows relating to the capacity mechanism take place between stakeholders governed by private law, and not at all under State control.
- (84) In addition, the French authorities consider that the financial flows relating to the payment of imbalance settlements should make up a very small part of the mechanism (taking into account the incentives to rebalance on the market in advance) and cannot be considered to be State resources or under State control. The imbalance settlement laid down for the capacity mechanism follows a template identical to the model currently in force in Europe for the settlement of imbalances on the energy market (‘electricity balancing settlement mechanisms’).
- (85) The French authorities further argue that the mechanism is more similar to that dealt with in the *PreussenElektra*¹⁷ case than to those discussed in the *Vent de Colère*¹⁸ and *Essent*¹⁹ cases. As in *PreussenElektra*, and contrary to *Vent de Colère*, the capacity mechanism does not provide for any compensation mechanism for suppliers. Unlike in *Essent*, (i) the financial flows remain the property of private stakeholders at all times (suppliers and capacity operators), and (ii) the financial flows are not the result of a tax. The presence of State resources is all the more debatable since, unlike in the *PreussenElektra* case-law, no minimum purchase price is set for capacity guarantees.

¹⁶ CJEU, C-279/08; see Footnote 7. The Commission referred to this case in recital 108 of the Opening Decision.

¹⁷ CJEU, 13 March 2001, *PreussenElektra AG v Schleswag AG*, in the presence of *Windpark Reußenköge III GmbH* and *Land Schleswig-Holstein*, Case C-379/98.

¹⁸ CJEU, Case C-262/12; see Footnote 9.

¹⁹ CJEU, Joined Cases C-204/12 and C-208/12; see Footnote 10.

- (86) Furthermore, according to the French authorities, the sale of capacity guarantees should not be considered to be a waiver of public resources; the State does not forego any resources, since the market value of certificates can come (i) from the intrinsic underlying value that they cover, or (ii) from their scarcity when they are issued. These two factors are outside the power of the State and distinguish this case from the *NOx* and *Romanian green certificates* cases, in which the certificates could be sold at auction or had a minimum value (respectively).
- (87) Finally, in the Romanian case, the law explicitly obliged suppliers to pass on the costs of obtaining green certificates to consumers. The reasoning of the Court of Justice of the European Union (CJEU) in *Vent de Colère* was similar, where suppliers acted only as financial intermediaries (the contribution to the public electricity service²⁰ made it possible to compensate for their additional costs). On the other hand, in the case of the French mechanism, suppliers are completely free to choose the way in which they pass on costs to their customers. There is no mechanism to compensate suppliers for the additional costs relating to the purchase of capacity guarantees.

4.1.2. *Selective advantage*

4.1.2.1. Comments by interested parties

- (88) Together with EDF, a company principally active in France in the wholesale market considers that the mechanism constitutes a public service obligation and refers to the Commission Decision in Case N475/2003 on an invitation to tender for new capacity in Ireland²¹.
- (89) According to EDF, since the certification procedure corresponds to an availability commitment, it constitutes consideration for a service provided by the capacity operators, not an alleged advantage granted free of charge.
- (90) Furthermore, EDF and another vertically integrated electricity company consider that the capacity mechanism does not confer a selective advantage on capacity operators. In their opinion, the various participants in the mechanism are in the same factual and legal situation and are treated entirely equally: they are remunerated in the same way, whatever the technology used. In this way no operator can draw an advantage from the specific nature of its generation facilities.
- (91) EDF takes the view that it is wrong to consider the supposed advantage selective because the capacity ‘provides for aid to capacity operators and not to other sectors of the economy’. In so considering, the Commission misunderstands the characteristics of the capacity mechanism (market-wide and technology-neutral), as does CJEU case-law, which assesses the selectivity of a measure in relation to other undertakings in a comparable factual and legal situation.

4.1.2.2. Observations by France

- (92) First, according to the French authorities, the allocation of certificates under the capacity mechanism is indeed consideration for an availability commitment at times of high demand or stress on the electricity system.

²⁰ The contribution to the public electricity service (*contribution au service public de l'électricité* - CSPE) is a fiscal levy on electricity consumers in France, intended to compensate operators for the additional costs resulting from the obligations imposed on them by the law on the public electricity service.

²¹ http://ec.europa.eu/competition/state_aid/cases/137628/137628_485545_28_2.pdf.

- (93) Second, the French authorities take the view that the public service obligation is clearly defined. With regard to demand-side response, the optional nature of certification facilitates its participation in the capacity mechanism. For generation plants, the declarative part of the certification process does not call into question the precise nature of the public service obligation: the CRE will be able to impose the necessary sanctions in the event of an attempt to manipulate the market, in particular should a participant underestimate its capacities in order to put upward pressure on the price of capacity guarantees.
- (94) As the capacity mechanism is technologically neutral, the authorities consider that it does not confer any selective advantage for any particular production or demand-side response technology.
- (95) According to France, the Commission's point of view, in which it appears to consider that the capacity mechanism is selective in so far as it applies only to capacity operators (not to other sectors of the economy), means that any sectoral measure would be inherently selective.

4.1.3. Effect on competition and trade between Member States

4.1.3.1. Comments by interested parties

- (96) No respondents commented on this point.

4.1.3.2. Observations by France

- (97) The French authorities consider that the capacity mechanism will have no impact on the electricity market, both at national level and in interactions with neighbouring countries, which will continue to function in the same manner. More specifically, they take the view that the capacity mechanism will not alter the price of electricity on spot markets.

4.2. Objective of common interest and necessity

4.2.1. Comments by interested parties

- (98) The respondents in general are of the view that the mechanism is necessary and that it should become an integral part of the market design. Only three respondents question the necessity of the measure, on the grounds that:

- (1) RTE's 2015 Generation Adequacy Report does not foresee any reliability issues;
- (2) there is currently overcapacity in France, as demonstrated by the fact that, for 2017, the volume of certified capacity is higher than that needed to serve peak demand; and
- (3) demand has been decreasing in recent years and peak demand is stable (RTE estimated an increase in peak demand).

4.2.2. Observations by France

4.2.2.1. Security of supply

- (99) According to the French authorities, a security of supply indicator was indeed defined and a shortfall risk was identified in RTE's latest studies: RTE's latest Generation Adequacy Report, drawn up before the mechanism came into force (in 2014), shows a margin deficit of 2 GW for winter 2016-2017 in the baseline scenario. This margin was reduced to 200 MW in the 2015 Generation Adequacy Report for winter 2017-18, but this was due to the signal given by the introduction of

the mechanism. These analyses are confirmed by those of the Pentalateral Energy Forum.

- (100) However, the adequacy study carried out by ENTSO-E (the Scenario Outlook and Adequacy Forecast) used a deterministic methodology: the peak demand caused by cold spells and thermosensitivity was not modelled in the assessment. These different methodologies produce different results. The application of the target methodology that ENTSO-E is striving to implement will help reduce the discrepancies between these various forecast exercises. In this regard, the Mid-Term Adequacy Forecast published in 2016 by ENTSO-E²², which is the first version to use a probabilistic methodology, is consistent with the results of the study by PLEF and RTE.
- (101) Contrary to what the Commission appears to suggest, the French capacity mechanism was not designed to address any ‘missing money’ problems, but to guarantee the security of supply of the French electricity system (especially at times of peak demand), by remunerating the availability of facilities that cannot be remunerated in a satisfactory manner on the energy market alone.
- (102) France is implementing various measures in addition to the capacity mechanism: interconnection projects; reviews of regulated tariffs and tariffs for using public electricity transmission and distribution networks, so that they better reflect scarcity; the development of demand-side response capacities (e.g. through the development of the regulatory framework for electricity markets to enable demand-side response to be included in all mechanisms, the removal of technical and competitive barriers to the aggregation of capacities, the deployment of smart meters); the deployment of renewables, etc.
- (103) In the meanwhile, RTE has published its 2016 Generation Adequacy Report. According to the French authorities, RTE’s latest Generation Adequacy Report does not change their analysis. On the contrary: it supports it by illustrating once again that France’s security of supply depends on the future of certain thermal power plants (such as CCGTs) and demand-side response, i.e. precisely those energy sources that are most sensitive to the implementation of the capacity mechanism.

Figure 3: Shortfall indicators in ‘high thermal’ and ‘low thermal’ scenarios:

		2016-17	2017-18	2018-19	2019-20	2020-21
‘High thermal’ scenario	Expected energy not served	2.0 GWh	1.4 GWh	2.5 GWh	2.7 GWh	0.8 GWh
	Loss of load expectation	0 h 45	0 h 30	1 h 00	0 h 45	0 h 15
	Capacity margin or deficit	4 700 MW	5 400 MW	3 600 MW	3 700 MW	6 600 MW
‘Low thermal’ scenario	Expected energy not served	8.6 GWh	13.4 GWh	26.5 GWh	26.2 GWh	7.6 GWh
	Loss of load expectation	2 h 30	3 h 45	6 h 45	6 h 15	2 h 15

²²

Available here: <https://www.entsoe.eu/outlooks/maf/Pages/default.aspx>.

	Capacity margin or deficit	600 MW	-700 MW	-2 500 MW	-2 400 MW	900 MW
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Source: RTE 2016 Generation Adequacy Report

- (104) According to RTE, among the thermal scenarios presented in the 2016 Generation Adequacy Report (see Figure 3), the ‘low thermal’ scenario should be applied in the absence of a capacity mechanism. The ‘low thermal’ scenario includes the closure of certain facilities, e.g. those for which operators have currently postponed closure pending the introduction of the capacity mechanism. The ‘high thermal’ scenario, however, corresponds to all current plants being maintained, independently of any economic considerations: according to the French authorities, there is therefore little chance of it becoming reality.
- (105) Thus, in the ‘low thermal’ scenario, security of supply is threatened from winter 2017-2018, if an average winter is used as the baseline. Moreover, again assuming the ‘low thermal’ scenario, RTE calculated the expected shortfall by simulating an extreme winter, with cold spells, for the next five winters. The results of this calculation are shown in Figure 4.

Figure 4: Expected shortfall in extreme winter (in hours)

	2016-17	2017-18	2018-19	2019-20	2020-21
Expected shortfall	5-15	8-21	16-36	14-34	5-13

Source: RTE

- (106) The calculation shows that, every time, the expected shortfall would exceed the shortfall criterion used by France, i.e. an expected shortfall of an average duration of three hours per year. It should be noted that the French capacity mechanism is designed precisely to protect against extreme winters.

4.2.2.2. Other objections raised by the Commission in the Opening Decision

- (107) In recital (164) of the Opening Decision, the Commission pointed out that the Competition Authority had suggested the introduction of an hourly and seasonally adjusted TURPE, with a distinction between peak and off-peak periods, in order to provide an incentive for industrial consumers to reduce their demand during peak periods. France confirmed that the TURPE is already hourly and seasonally adjusted, with prices differentiated according to the season, day of the week and/or the time of day.
- (108) Lastly, in recital (153) of the Opening Decision, the Commission considered that the de-rating factors (in the optional legal certification scheme) were not clear enough. France explained that, in this optional legal certification scheme, the certified capacity level corresponds to the average power delivered by the facility during PP2 hours over all historical years, multiplied by the energy source contribution coefficient (or de-rating factor). These contribution coefficients (85 % for run-of-river hydroelectricity, 70 % for wind and 25 % for solar) reflect the fact that, for facilities processing ‘unavoidable’ energy sources, the average availability during PP2 periods does not perfectly reflect the contribution of these facilities to reducing the shortfall risk owing to: (i) the correlation between the availability of the facility

and periods of system stress (which is not the case for controllable capacity) and (ii) a profile of non-constant availability during PP2 hours (controllable capacities have an even availability profile), which has an impact since the shortfall probability function during PP2 hours is not uniform. The contribution coefficients for delivery years 2017, 2018 and 2019 were calculated using the scenarios in RTE's Generation Adequacy Report, based on a large number of statistical series.

4.3. Appropriateness of the aid

4.3.1. Discrimination between demand-side response capacities

4.3.1.1. Comments by interested parties

(109) Most respondents refer to the presumed discrimination between explicit and implicit demand-side response providers. Most of them (five) consider that the mechanism is more favourable to explicit demand-side response owing to the activation obligation on implicit demand-side response, which is considered rather burdensome. Two respondents pointed out that under the security of supply criterion, an explicit demand-side response capacity should be activated only once every ten years (since the mechanism is designed for a ten-year winter peak). They therefore felt that the number of PP2 hours (availability of explicit demand-side response) should be 10 times higher than the number of PP1 hours (actual reduction of implicit demand-side response). Two respondents disagreed, pointing out that, in their view, implicit demand-side response has more advantageous conditions, since explicit demand-side response operators must bear the costs of certification. Two respondents believed that the French authorities had struck a fair balance between the obligations on both types of demand-side response operators.

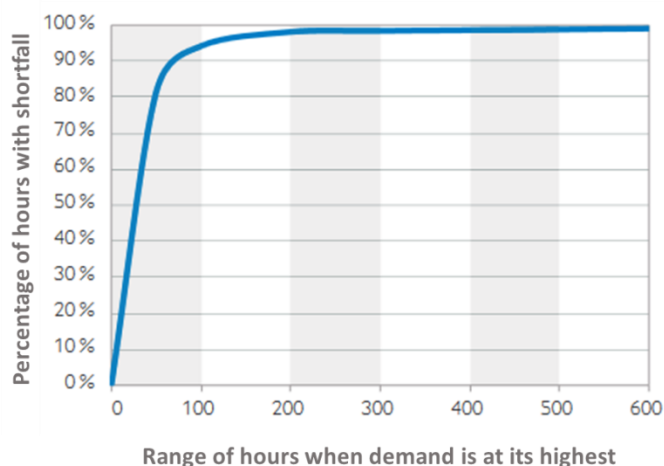
4.3.1.2. Observations by France

(110) France defended itself by pointing out the different obligations on both types of demand-side response operators. To participate in the mechanism, it claims that different conditions are required precisely to enable both types of capacity. In particular, since more is required from an implicit demand-side response operator (activation versus availability), it is logical that the number of days to which it relates (PP1) is lower than the number of days during which an explicit demand-side response operator must be available.

(111) Some interested parties were now concerned that the duration of the PP2 period, although longer than the PP1 period, could potentially be insufficient. According to France, determining the length of the PP1 and PP2 periods is a complex issue, the solution to which necessarily constitutes a compromise. RTE has carried out studies to reach a satisfactory compromise, the results of which were presented in the *Rapport d'accompagnement de la proposition de règles du mécanisme de capacité* (Report accompanying the draft rules on the capacity mechanism) (2014).

(112) In summary, in order to identify the times of higher demand (see Figure 5 below) while being able to identify the participation of consumers under the demand-side response mechanism in reducing the shortfall risk, the French authorities chose to apply a volume of 100 to 150 hours for the PP1 period.

Figure 5: Links between shortfall and hours when demand is at its highest



Source: RTE, *Report accompanying the draft rules on the capacity mechanism (2014)*, p. 139

- (113) According to France, PP2 should be longer than PP1 (since the concept of activation is more onerous than that of availability), but PP2 should not be too long, in order to avoid unduly disadvantaging certain energy sources, and especially demand-side response. The same RTE study showed that 99 % of shortfall hours are included in the 300 hours when demand is highest and that, consequently, a targeted PP2 period, containing between 100 and 300 hours when demand is highest, was a consistent choice to appropriately estimate the contribution of explicit demand-side response capacities to reducing the shortfall risk.
- (114) Within this 100-300 hour range, the French authorities chose the figure of 250 hours. This figure makes it possible to (i) cover around 99 % of shortfall hours (see Figure 5) and does not therefore lead to a deterioration in covering the shortfall risk in relation to the maximum option of 300 hours, (ii) increase the availability of explicit demand-side response in relation to other energy sources²³. Thus, to ensure the same level of security of supply, the French authorities chose to apply a maximum of 250 hours for the PP2 period in order to maximise the contribution of explicit demand-side response for the same level of shortfall risk coverage.
- (115) A PP2 period ten times as long as the PP1 period would mean measuring the availability of power generation and demand-side response facilities over 1 000 to 1 500 hours. Given the availability constraints of demand-side capacity over prolonged periods, widening the availability obligation would have the effect for these capacities of reducing their potential value on the capacity mechanism. 100 MW of industrial demand-side response capable of being made available for around one hundred hours, but not one thousand hours, would have the same value as 20 MW of thermal generation, whereas the studies show that their contribution to reducing the shortfall risk is comparable to 90 MW of thermal generation. Therefore, and in order to guarantee fair competition between demand-side operators and generators, the French authorities chose not to apply a PP2 period ten times longer than the PP1 period and to use a targeted PP2 period.

²³

In the report accompanying the rules, RTE highlighted that most energy sources were unaffected by the choice of a PP2 duration of 200, 250 or 300 hours, but that demand-side response was affected, and that its contribution to the shortfall risk was affected by a wider range of availability.

- (116) Moreover, the French authorities stress that the capacity mechanism includes control of capacity availability (in the absence of voluntary activation), which makes it possible to ensure that there is no deadweight effect between an availability commitment and an activation commitment.
- (117) The French authorities are, however, open to setting values other than those used in the current rules, but believe that the framework presently in force strikes a fair balance between independent demand-side response operators and suppliers. They therefore feel that the PP1/PP2 ratio should be maintained as is for the first delivery years. Its value can be reviewed if the signals sent are not appropriate enough and such an evaluation can be integrated into the assessment of the functioning of the capacity market.

4.3.2. *Exclusion of cross-border capacities*

4.3.2.1. Comments by interested parties

- (118) The comments received in response to the Opening Decision show a broad consensus among market operators that the French mechanism should be opened to cross-border capacities gradually (i.e. without endangering the launch of the mechanism in January 2017).

4.3.2.2. Observations and remedies proposed by France

- (119) In response, France proposed to explicitly take into account foreign capacities with a hybrid model, which remunerates both interconnections and foreign production and demand-side response capacities. In this proposal, the largest remuneration would be for interconnections or foreign capacities, depending on scarcity.
- (120) In the proposal, the foreign production and demand-side response capacities should acquire interconnection tickets to be able to become certified and subsequently offer their capacity certificates on the French capacity market.
- (121) Tickets will be distributed per border on the basis of that interconnector's contribution to security of supply in France. They will then be auctioned 'border by border'. All production and demand-side response capacities of the country connected to France by a given interconnection will be able to take part in the auction of tickets corresponding to that interconnection. The auctions will take place during delivery year-1 ('DY-1'). The system does not prevent capacities contracted under the French mechanism from taking part simultaneously in other capacity mechanisms in the EU. In this context, it will be necessary to define, in partnership with the relevant countries, a procedure for checking and evaluating the service provided.
- (122) Once foreign production and demand-side response capacities have obtained interconnection tickets, they can be certified and obtain capacity certificates. They can then sell these capacity certificates on the French capacity market.
- (123) The French authorities undertake to implement the above 'pragmatic hybrid' solution unilaterally, i.e. to integrate into their regulatory framework the possibility for facilities located in neighbouring Member States to participate explicitly in the French capacity mechanism, provided there is sufficient transit capacity for the interconnections. This regulatory framework will nonetheless provide for the

agreement of the transmission system operators²⁴ (TSOs) in the Member States concerned, in the form of a cooperation agreement making it possible to introduce a certification process and controls needed for the mechanism to be implemented.

- (124) Should certain TSOs in the Member States concerned fail to sign such an agreement, the French authorities undertake to implement a safeguard procedure allowing explicit participation of foreign capacities in the capacity mechanism and to thus move away definitively from the model based on implicit participation. This safeguard procedure will consist of explicit participation of interconnections (a solution that can be implemented without the support of other Member States and that reflects the value added by interconnection capacities to France's security of supply).
- (125) The implementation of these commitments requires a review of the 2012 Decree, adopted by the Council of State after consultation with the Higher Energy Council, the French Energy Commission and the Competition Authority. The French authorities do not consider it feasible that the Decree will be adopted before late 2017, followed by a review of the rules drawn up for its application. They believe that this stage could take around six months. The schedule put forward by the French authorities is therefore based on adaptation to the regulatory framework in 2018, followed by actual implementation for delivery year 2019.

4.3.3. *Lack of signals for new investments*

4.3.3.1. Comments by interested parties

- (126) The Commission received many replies on this point, with a marked divergence of opinion.
- (127) The majority of respondents (seven) agreed that the mechanism is unable, in its original form, to encourage new investments in power plants. The most often-cited reasons include the lack of a representative price signal sufficiently in advance of the delivery year, the EUR 40 000/MW capacity price ceiling (resulting from the cap applicable to the imbalance settlement mechanism) and the absence of long-term contracts.
- (128) Most respondents confirmed that, in their view, either the mechanism is too complex or that at least the suppliers, and especially new entrants, will find it difficult to estimate their future portfolios. One respondent pointed out that a centralised capacity mechanism could avoid this kind of problem.
- (129) Two (incumbent) producers disagreed, arguing that the mechanism will in fact be able to attract new investment, in particular in view of the four-year lead time before the delivery year, the possibility for the market to develop forward products and the price signal, which they deemed reliable. They also believe that the mechanism provides sufficient safeguards to ensure the transparency of capacity obligations, in particular in view of the regular publication by RTE of forecasts on the overall level of capacity certificates required for each delivery year.

²⁴ Under Article 2 of Directive 2009/72/EC, transmission system operator means 'a natural or legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity'.

(130) Two other respondents (alternative producers) argued that the main aim of the mechanism is to maintain in operation existing capacity rather than to stimulate new investments.

4.3.3.2. Observations and remedies proposed by France

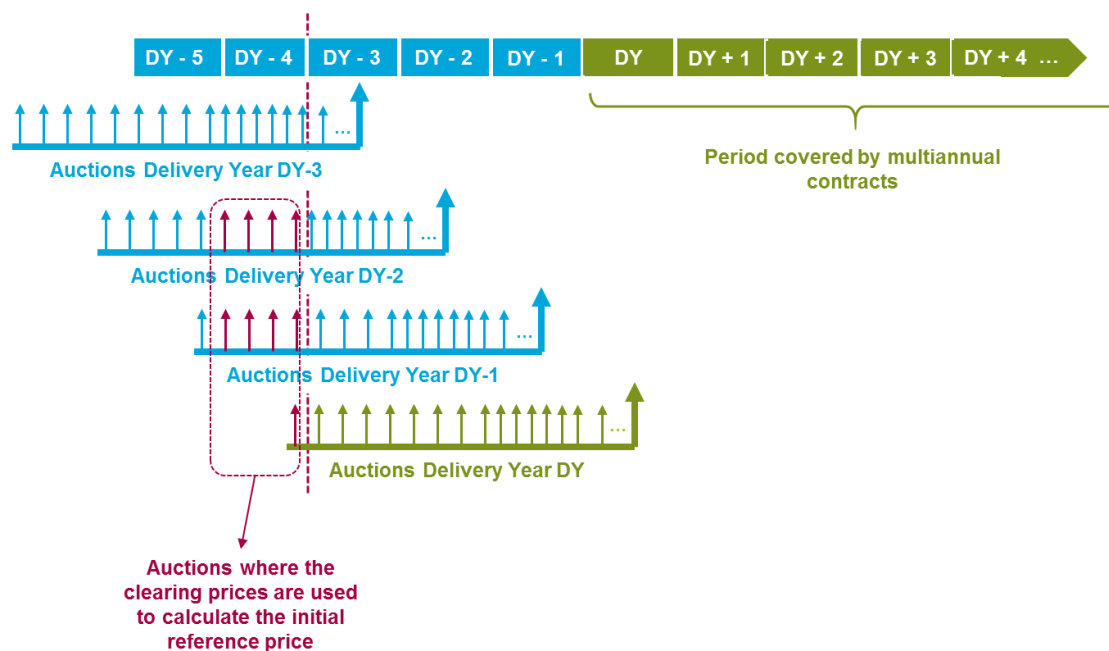
Lack of long-term contracts

(131) Following feedback from third parties, the French authorities undertook to implement a multiannual contract scheme aimed at fostering investment in new capacities. All new capacities²⁵ will be eligible for the scheme if they do not already have a support mechanism.

(132) To allow new projects sufficient start-up time, an initial auction of capacity certificates will be held on the EPEX platform in DY-4. Potential new capacities should submit their bids to RTE in the last quarter of DY-4. Offers must primarily propose a price and a volume.

(133) The competitiveness of the price is then measured against an ‘initial reference price’, which sets the maximum limit for offers to be accepted. The initial reference price will be a weighted price²⁶ of the capacity resulting not only from the auction held in DY-4 for the delivery year DY, but also from the auctions held during the same year for delivery years DY-2 and DY-1, as indicated in Figure 6.

Figure 6: Proposed breakdown of initial reference price



Source: letter from the French authorities dated 9 September 2016.26

²⁵ The criteria applied to distinguish investments in new capacities from investments in maintenance or to extend the lifetime of existing facilities will be aligned with the definitions that already exist in French law, thereby distinguishing ‘new capacities’ from maintenance or lifetime extension investments. Thus, Article L. 311-1 of the French Energy Code, in its version arising from Law No 2015-992 on energy transition for green growth, states: ‘Subject to Article L 311-6, the operation of any new electricity generation facility requires prior administrative authorisation. Under this Article, new electricity generation facilities are also generally those whose installed power is at least 20 % higher and those whose primary energy source is modified’.

²⁶ The precise weighting is yet to be determined by the French authorities after market consultation.

- (134) The initial reference price will therefore not be known to market operators beforehand and the market outcomes will be used to determine it.
- (135) Regarding the volumes to be contracted, France will apply a demand curve to limit these volumes to those bids that are genuinely competitive in the long term. The demand curve will be drawn up annually by RTE and approved by the CRE, and must reflect the value of the new capacity for society. This means ensuring that the multiannual contract scheme will actually have a positive impact for consumers.
- (136) The successful bids will be awarded a 7-year contract for difference, comparable in operation to a feed-in premium, which means that any difference between the offer price and the market reference price (MRP) gives rise to a refund of the difference (if the MRP is higher than the offer price) or a subsidy (if the MRP is lower than the offer price). However, in order to encourage market participants to maximise their income, any income generated by the sale of the certificates at a price higher than the offer price does not give rise to a reimbursement of the difference (selling price - offer price) by the investor.
- (137) Moreover, the French authorities plan to introduce environmental criteria that will lead to preference being given to low-carbon generators, in the form of (i) environmental precedence, with identical technical and economic characteristics, and (ii) a cap on the emissions that can be generated by an asset that would benefit from the specific framework for new capacities. The environmental criteria, such as greenhouse gas emission levels, will be defined in the rules and the most environmentally friendly tender may be selected if necessary. Moreover, existing facilities will continue to be subject to current EU and French environmental laws, which may require investment in these facilities to make them compliant.
- (138) The French authorities undertake to implement the scheme for a selection of capacities in 2019, combined with a first actual participation by selected capacities for delivery year 2023. Moreover, they undertake to implement, from 2019, a transitional system of multiannual contracts, covering the period between 2020 and 2023. For example, this would mean that in 2019, a ‘permanent’ scheme for delivery year 2023 would be launched, but also a transitional scheme for delivery years 2020, 2021 and 2022.

Difficulty for suppliers to predict far in advance how their customer portfolios will evolve

- (139) The French authorities believe that the regular RTE forecasts should provide enough assistance to suppliers to better predict their eventual capacity obligations. They add that suppliers are allowed, at least during the first years of the mechanism, to rebalance their capacity positions free of charge until the end of the delivery year.
- (140) Notwithstanding the above, in addition to these safeguards, the French authorities propose to include in the mechanism’s rules provisions on supporting alternative suppliers with regard to the calculation of their capacity obligation. Currently, the rules require RTE to provide each supplier with a provisional estimate of their obligation one year after the delivery year and with a final level of their obligation two years after the delivery year. In addition, RTE has developed support tools to inform the suppliers of their obligations even before those deadlines. France proposes to formalise the obligation for RTE to assist suppliers in calculating their obligation, in particular through the provision of tools enabling alternative suppliers to better anticipate their capacity obligation and the scheduling of regular windows

during which suppliers will use these tools to obtain a forecast of their obligation. Suppliers will also have the option of using these tools on request, outside of the windows laid down in the rules.

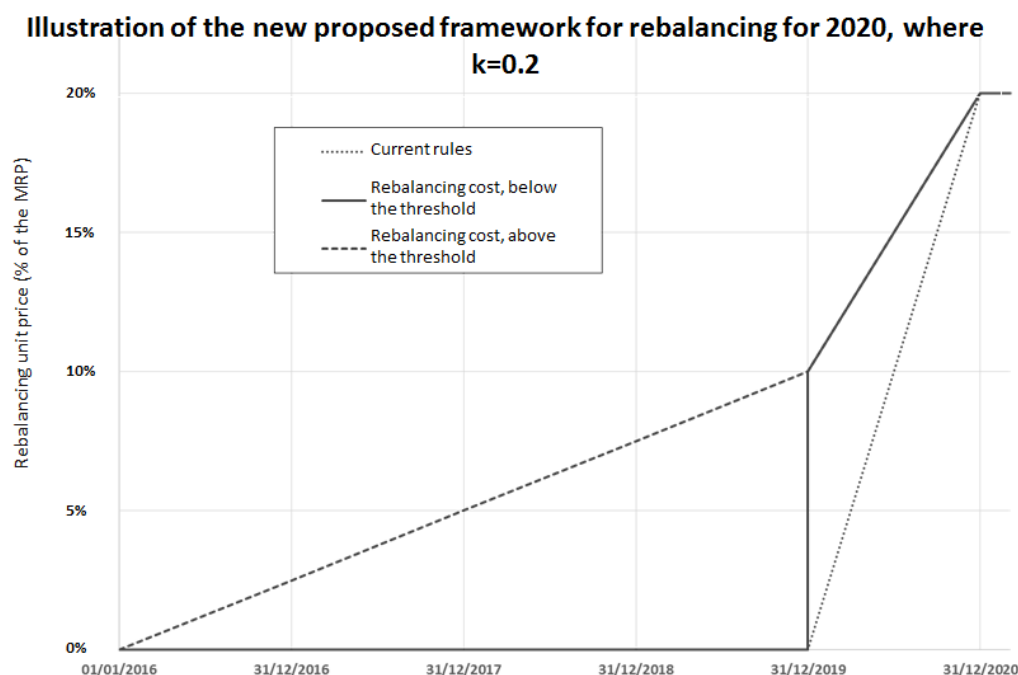
Potential lack of incentives to encourage operators to be in balance before the delivery year

(141) Moreover, the French authorities have undertaken to revise the rebalancing arrangements, so as to encourage capacity operators to obtain the most precise certification possible. More precisely, the rebalancing costs applied to operators are calculated on the basis of each operator’s rebalancing volume:

- (1) where the sum total of rebalancing is less than 1 GW (sum total of absolute values), rebalancing remains free before the delivery year;
- (2) where the sum total of rebalancing is more than 1 GW (sum total of absolute values), rebalancing before the delivery year must be paid for;

(142) The gradual increase in rebalancing costs, depending on the case, is illustrated in Figure 7 below (delivery year: 2020), with a unit price that rises as the delivery year approaches.

Figure 7: Illustration of the new proposed framework for rebalancing for 2020, where $k=0.2$



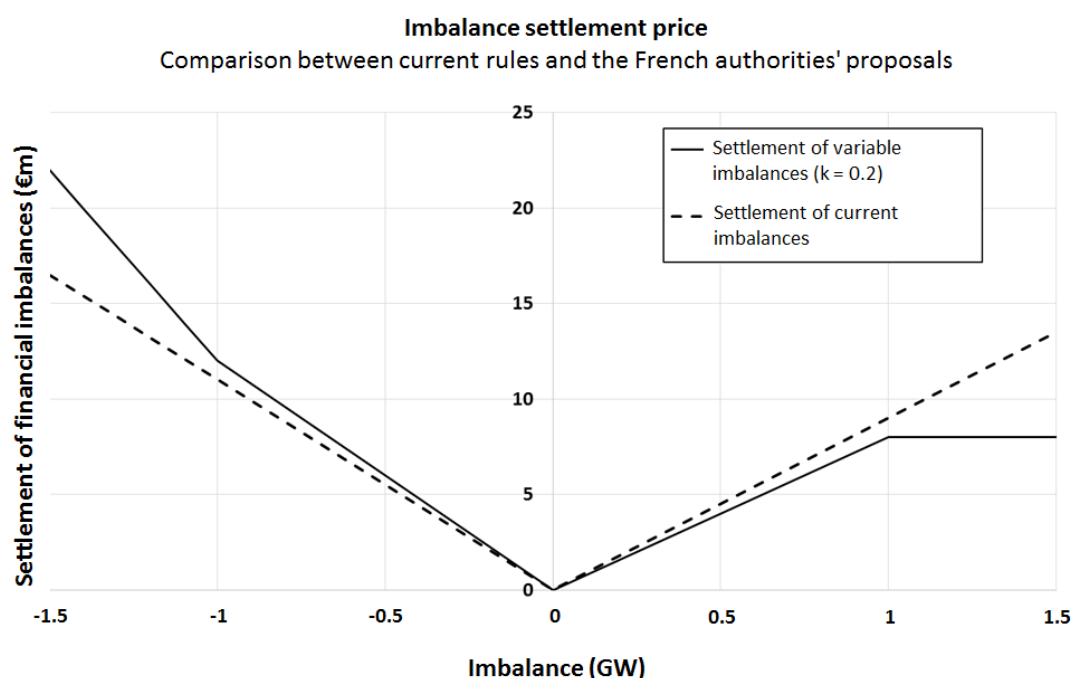
Source: letter from the French authorities dated 9 September 2016.

(143) Capacity operators must now rebalance within a short time frame, set out in the rules, when significant events occur (i.e. involving unavailability of facilities compared with their forecast availability, such as mothballing, decommissioning, damage leading to reduced availability for a long period, etc.)²⁷.

²⁷ Previously, capacity operators were merely required to notify events involving a deviation of more than 100 MW from their forecast availability. The main difference is that the declaration was not necessarily combined with rebalancing (the operator could delay rebalancing, or not rebalance at all and have an imbalance). The only case where there was a rebalancing obligation concerned decommissioning.

- (144) The French authorities also propose that the imbalance settlement mechanism be revised in order to further discourage market operators from having a negative or positive imbalance at any point in time. In particular, the ‘k’ incentive coefficient, applied to imbalances, will be doubled (it was set at 0.1 in the Order of 22 January 2015 but will thus be increased to 0.2), will be further increased for negative imbalances exceeding a maximum threshold of 1 GW, and will be even less rewarding for positive imbalances also exceeding a maximum threshold of 1 GW (the precise level of the thresholds is yet to be set by the authorities on the basis of market feedback but in any event will not exceed 1 GW). These changes are illustrated in Figure 8.

Figure 8: Illustration of the proposed imbalance settlement with the threshold effect of 1 GW and where $k=0.2$



Source: letter from the French authorities dated 9 September 2016.

The price cap on the settlement of imbalances does not reflect the CONE

- (145) In addition, the French authorities have undertaken to gradually increase the administered price (which is a cap on the price of imbalances and, therefore, indirectly on the price of capacity certificates), according to the following schedule:
- (1) in 2017, an administered price of EUR 20 000/MW, to allow operators to master how the market works with limited risk, given the late actual implementation of the mechanism;
 - (2) in 2018 and 2019, an administered price of EUR 40 000/MW;
 - (3) from 2020, an administered price of EUR 60 000/MW, to allow the capacity mechanism, where necessary, to send price signals corresponding to new capacity needs, in a market which should by then have become mature enough.

Furthermore, this provision was not set out by law but by the certification contract; it will now be enshrined in law (higher-level legislation).

- (146) Furthermore, the French authorities undertake, for delivery years 2021 and after, to update the administered price annually so as to bring it in line with the cost of new entry (CONE), specifically the costs of a combined-cycle or open-cycle gas-fired power plant, as calculated by the operator of the public electricity transmission grid and approved by the regulator. This update is not necessarily carried out by means of a full revision of the capacity mechanism rules.
- (147) This schedule makes it possible to (i) match any increase in the administered price with the entry into force of the multiannual contract scheme for new capacities and (ii) question market operators jointly on the increase in the administered price and on the introduction of the multiannual contract scheme for new capacities²⁸.
- (148) In addition to the above and what was stated in the Opening Decision, the Commission explained in the discussions with the French authorities that it was concerned that the spread between the ARENH and the market price for electricity might be an implicit cap on capacity prices, given that the ARENH product includes capacity certificates.
- (149) The French authorities replied that:
- (1) the volume of capacity certificates linked to the ARENH product is low enough in comparison with the entire capacity market and is consequently unable to influence the price of other capacity certificates; and
 - (2) the current spread is more or less equal to EUR 10/MWh, which corresponds to a capacity price of EUR 87 600/MW. Since the administered capacity price is set at EUR 20 000/MW/year, EUR 40 000/MW/year and EUR 60 000/MW/year for 2017, 2018-2019 and 2020 respectively, ARENH is not currently a competitive product²⁹.
- (150) Nonetheless, the French authorities undertake, as part of a future evaluation of the functioning of the market, to study the advisability of ‘unbundling’ (*financiariser*) the capacity portion of the ARENH product,³⁰ to avoid the product disrupting the free formation of prices on the capacity market.

²⁸ As part of the full investigation into the capacity mechanism, the European Commission and the French authorities carried out preliminary analyses on the financing needs associated with new investment projects in gasification combined cycle projects (on the basis of the financial data of the Landivisiau project and various elements in economic literature). These analyses highlight the fact that capacity revenue of EUR 60 000/MW/year is consistent, in order of magnitude, with new investments in GCC but that, in order to ensure the profitability of projects, an administered price increase may be envisaged. Based on existing financial data, the profitability of projects is ensured only for capacity revenues very close to EUR 60 000/MW/year. These analyses must be continued in order to reach a more precise conclusion on the advisability of increasing the administered price and thus ensuring that the administered price level can constitute a safeguard for consumers while not acting as a barrier to entry on the electricity market.

²⁹ An ARENH-market price spread of around EUR 7/MWh would result in a capacity price of around EUR 60 000/MW/year, i.e. the administered price. With an ARENH price of EUR 42/MWh, the energy price would have to be at least EUR 35/MWh for the ARENH-market price spread to be able to constitute an implicit cap on the capacity price. However, according to the French authorities, the forward prices up to 2019 are not of this order of magnitude.

³⁰ The ‘unbundling’ of the capacity ARENH implies that the price of the capacity would be deducted from the price of the energy ARENH.

4.3.4. *Other objections from the Commission*

- (151) In recital (182) of the Opening Decision, the Commission stated that France should clarify why some proposals to improve the mechanism set out by the Competition Authority in Notice No 12-A-09 of 12 April 2012 had not been implemented.
- (152) The French authorities explained that, taking into account the proposed amendments (i.e. to oblige generators to declare the forecast availability of their generation facilities based on their historical availability and implement a mechanism for the explicit participation of cross-border capacities), there remained only two Competition Authority proposals that had not been implemented:
- (1) not allocating certificates to facilities subject to purchase obligations (renewables), because the feed-in premiums for the electricity generated by those facilities already cover the full costs of the facilities; and
 - (2) not making alternative suppliers bear the cost of financing the transitional call for proposals.
- (153) In relation to the first rejected proposal, the authorities explained that they had retained certification for facilities subject to purchase obligations in order to fulfil the capacity mechanism's market-wide criterion. However, to avoid accumulation of remuneration for facilities subject to purchase obligations, it was decided that agreed buyers would be responsible for certifying these facilities and the holders of the associated capacity certificates, with the revenue arising from the sale of capacities being deducted from the compensation given to agreed buyers.
- (154) As regards the second rejected proposal, the authorities explained that the decision had been taken not to launch the transitional call for proposals; alternative suppliers therefore have no costs to bear. They will, however, bear the costs for this mechanism in the future, since the current fall-back tender will be cancelled and replaced by the multiannual contract mechanism once the Decree is amended.

4.4. Proportionality

4.4.1. *Demand overestimation*

4.4.1.1. Comments by interested parties

- (155) The comments by third parties on this point are included in Section 4.3.3.1 above.

Observations by France

- (156) The observations made by France on this point are included in recital (139) above.
- (157) The observations notwithstanding, the authorities propose to oblige RTE to support alternative suppliers in calculating their capacity obligation, as explained in recital (140).

4.4.2. *Lack of transparency on capacity pricing*

4.4.2.1. Comments by interested parties

- (158) A large majority of respondents (thirteen) complained about the lack of visibility on over-the-counter (OTC) transactions, especially intra-group transactions, although several respondents take the view that most of the transactions should be in this form. One respondent again pointed out that a centralised capacity mechanism could avoid this kind of problem.

(159) The incumbent considers that the mechanism in its current form provides sufficient safeguards to ensure transparency of trades (including intra-group trades), in particular:

- (1) the obligation to keep separate accounts in the transactions register (one account for capacity operators and one account for suppliers); and
- (2) the transparency obligations towards CRE and the latter's monitoring of internal transactions.

4.4.2.2. Observations by France

(160) The French authorities also point to the guarantees identified by the incumbent (set out in recital (160)). They also indicate that, taking into account suppliers' need to adapt to evolving customer bases, it seems appropriate to maintain the possibility of over-the-counter trades between market participants, in addition to the periodic auctions. A continuous trading mechanism would ensure this flexibility as well as transaction and price visibility, while reducing asymmetry of information between market participants. However, participation in such a mechanism would be costly, especially for relatively small suppliers. The French authorities therefore propose to maintain over-the-counter trades in association with an organised market, where the price of each transaction would be made public.

(161) However, they also propose to include additional safeguards to improve the transparency and representativeness of the capacity trades.

(162) The mechanism already provides for auction prices on the platform to be set up by EPEX Spot to be public. In order to ensure a level of transparency equivalent to that of a trading platform for OTC transactions, the French authorities propose to give all participants access to the register of (anonymised) OTC transactions, thereby providing visibility on volumes and prices, while ensuring the anonymity of the operators. Stakeholders will then be able to take that information into account in their purchasing and supply strategy in the auctions.

(163) In addition, the auctions will be strengthened. The French authorities have undertaken to increase liquidity in the auctions held, by increasing the number of auctions throughout the four years preceding the first delivery year to 15, i.e. 1 in DY-4, 4 in DY-3, 4 in DY-2 and 6 in DY-1 (in the initial version of the scheme the French authorities had planned only 10 auctions, spread over the three years preceding the delivery year).

(164) Moreover, the French authorities undertake to oblige, within the regulatory framework, certain capacity operators to offer their certificates on the market on the basis of the following formula:

- (1) DY-4: 25 % of the certified capacity level;
- (2) DY-3: the greater of 25 % of the certified capacity level and 25 % of the volume of unsold capacity certificates;
- (3) DY-2: the greater of 25 % of the certified capacity level and 50 % of the volume of unsold capacity certificates;
- (4) DY-1: the greater of 25 % of the certified capacity level and 100 % of the volume of unsold capacity certificates;

(165) This constraint will apply to certificates portfolio managers holding a capacity volume exceeding a threshold of 3 GW.

4.4.3. *Exclusion of certain types of capacity operator from the mechanism*

- (166) The comments by third parties and the observations by the French authorities regarding the potential discrimination between the various types of demand-side response capacity are discussed in Section 4.3.1.
- (167) The comments by interested parties and the proposals of the French authorities to remedy the exclusion of cross-border capacities and new investments are described in Section 4.3.3.

4.4.4. *EDF's market power*

4.4.4.1. Risk of capacity withholding

Comments by interested parties

- (168) Three quarters of the parties who responded to the Opening Decision referred specifically to the risk of capacity withholding in the French mechanism.
- (169) A French industrial consumer association is concerned that EDF will have an incentive to influence the market reference price (MRP) upwards and sell the surplus capacity after the delivery year, given that:
- (1) in such a scenario, the imbalance settlement penalty that EDF would pay would be largely offset by revenues from a relatively high MRP; and
 - (2) the MRP will be used to invoice the capacity cost to the vast majority of consumers, and will therefore be passed on to them.
- (170) An alternative supplier pointed out that, in addition to the fact that the auctions will probably not be very representative of the trades conducted under the mechanism (suppliers should be inclined to choose bilateral transactions to avoid advance payments in cash), the fact that the MRP will not take into account the transactions carried out during and after the delivery year may have the effect of further weakening the disincentive effect of the imbalance settlement mechanism and thereby encouraging withholding strategies by capacity operators.
- (171) In order to further encourage capacity operators not to withhold capacity, the alternative supplier proposes three remedies:
- (1) review the reference base for the MRP;
 - (2) strengthen the disincentive effect of the imbalance settlement mechanism; and
 - (3) remove the option of a fall-back tender, since that can encourage operators to withhold capacity.
- (172) The AFIEG (Association of Alternative Suppliers and Producers) criticises the option of rebalancing capacities at no cost prior to the delivery year, since in its opinion, it creates the possibility of gaming on the availability of the nuclear fleet and thereby artificially creating scarcity or overcapacity.

Observations by France

- (173) In view of these reactions to the Opening Decision by market operators, the French authorities expressed their willingness to improve the mechanism to minimise any risk of abuse of market power.
- (174) In particular, they undertake to impose on capacity operators the obligation to accurately certify in advance all of their available capacity and have limited their

certification possibilities to a range around historical reference values (see Figure 9). Any divergence from this range must be justified with RTE and the regulator.

Figure 9: illustration of the certification range



Source: letter from the French authorities dated 9 September 2016.

- (175) Moreover, the French authorities have undertaken to revise the rebalancing arrangements, so as to encourage capacity operators to obtain the most precise certification possible. They propose that any significant cumulative rebalancing (exceeding a maximum threshold of 1 GW; the precise level of the threshold is yet to be set by the authorities on the basis of market feedback but in any event will not exceed 1 GW) occurring before the delivery year would trigger a penalty. The penalty, aimed at discouraging capacity operators from under-certifying or over-certifying their capacities, increases gradually until the imbalances are settled. Capacity operators must also rebalance as soon as they become aware of an event involving unavailability of facilities (mothballing, decommissioning, damage causing reduced availability for a long period, etc.) compared with their forecast availability.
- (176) The authorities also propose that the imbalance settlement mechanism be revised in order to further discourage market operators from having negative or positive imbalances at any point in time. In particular, the 'k' incentive coefficient, applied to imbalances, will be doubled, will be further increased for negative imbalances exceeding a maximum threshold of 1 GW, and will be even less rewarding for positive imbalances also exceeding a maximum threshold of 1 GW (the precise level of the thresholds is yet to be set by the authorities on the basis of market feedback but in any event will not exceed 1 GW).
- (177) In response to the complaint from one alternative supplier that the fall-back tender could encourage operators to adopt a withholding strategy, the French authorities confirmed that this fall-back tender would indeed be cancelled and replaced by the multiannual contract scheme (described in recitals (131) to (138)).
- (178) Finally, as explained in recitals (146) and (147), the French authorities propose to increase the maximum amount of compensation for price deviations applied in the event of a serious threat to security of supply (i.e. an overall negative imbalance greater than 2 GW). It is proposed that this ceiling (the administered price) be gradually increased from EUR 20 000/MW in 2017 to EUR 40 000/MW in 2018 and 2019, reaching EUR 60 000/MW in 2020. From delivery year 2021, the authorities will update this administered price annually so as to bring it in line with the cost of new entry (CONE), specifically the costs of a combined-cycle or open-cycle gas-fired power plant, as calculated by the operator of the public electricity transmission grid and approved by the regulator.

4.4.5. *Risk of the withholding of guarantees*

4.4.5.1. Comments by interested parties

- (179) Four respondents are especially worried about the risk of guarantee withholding or, in any case, a lack of liquidity for certificates in the market.
- (180) The AFIEG pointed out that the mechanism requiring market participants with a surplus of guarantees after the delivery year (but before the imbalance settlement) to sell these by auction will not be sufficient to prevent withholding of the guarantees *before* the delivery year (relevant period for determining the MRP).
- (181) In addition to suggestions to improve the incentives to be in balance before the delivery year (review of the reference base for the MRP and strengthening of the disincentive effect of the imbalance settlement mechanism), respondents suggest two ways of improving access to the certificates:
- (1) require EDF to resell its certificates in one way or another (e.g. through a ‘certificate release scheme’, imposing a ‘market-maker’ obligation on it); or
 - (2) improve the ARENH product, by (a) introducing a capacity ARENH. To this end, the ARENH would be split into two products: a capacity product and an energy product. Each supplier would be free to buy either product or the two simultaneously; and/or (b) revising upwards the amount of capacity linked to the ARENH energy product (1.15 guarantees per MW of ARENH). In this respect, the French authorities stressed that suppliers have the obligation to make a public offer for sale for all guarantees owned on top of their internal needs. In their view, this should ensure that potential withholding of capacity is prevented. Moreover, part of the certificates owned by the incumbent operator would be automatically transferred to the alternative suppliers through ARENH, and the regulator would still supervise any potential abuse of market power.

4.4.5.2. Observations by France

- (182) In view of these concerns, the French authorities undertook to revise the mechanism so as to oblige capacity operators to offer certain minimum volumes of certificates in each of the auctions organised before the delivery year, as explained in recitals (165) and (166). Additional auctions will also be held, as explained in recital (164).

4.4.6. *Risk of a price squeeze by the dominant incumbent operator*

4.4.6.1. Comments by interested parties

- (183) With reference to a Competition Authority report of 2012, two respondents fear cross-subsidisation by the incumbent between its production and retail activity (i.e. selling certificates to competitors at a higher price than the transfer price between its production and retail segments, leading to a foreclosure of the retail market). This cross-subsidisation could, they believe, lead to a price squeeze for an alternative supplier without generation assets, since it will have to meet its capacity obligations by purchasing certificates on the market.

4.4.6.2. Observations by France

- (184) Regarding the possibility of price-based exclusionary practices (margin squeeze, price squeeze, predatory pricing), the French authorities noted that such anti-competitive practices are already scrutinised and sanctioned by the Competition Authority.

- (185) Nonetheless, to facilitate the detection of such practices, the authorities will strengthen the rules by obliging vertically integrated operators to inform the Energy Regulatory Commission of the method which they used to take into account capacity guarantee prices in their offers.
- (186) They will also specify more clearly in the rules that vertically integrated operators are required to declare a price for all internal transactions relating to capacity certificates. A loophole in the legislation allowing free transfers of certificates will also be corrected.
- (187) Finally, the French authorities have undertaken to provide full access for market operators to the register of capacity guarantees, where the OTC transactions are registered, while ensuring the anonymity of operators involved in each transaction.

4.5. Avoidance of negative effects on competition and trade

4.5.1. Barriers to the entry of new generation capacities

- (188) The comments from third parties and the French authorities' observations and remedies regarding the participation of new generation capacities in the French capacity mechanism are discussed in Section 4.3.3.
- (189) In their response to the Opening Decision dated 17 December 2015, the French authorities indicated that the proposed mechanism is not necessarily designed to generate new large-scale investment increasing overall generation capacity, but rather to ensure the availability of the necessary capacity, for example to cope with a cold spell in winter.
- (190) Nevertheless, the French authorities have recognised that the mechanism must enable new generation capacities to compete with existing generation capacity and acknowledged the need for a more stable framework for new entrants that would facilitate this competition. Two new features have been proposed to address this issue:
- (1) As described in recitals (146) to (148), a gradual increase in the administered price over time, which would initially rise from EUR 20 000/MW for delivery year 2017 to EUR 40 000/MW for delivery years 2018 and 2019, reaching EUR 60 000/MW for delivery year 2020. From delivery year (DY) 2021, the authorities will review this administered price annually so as to bring it in line with the cost of new entry (CONE), specifically the costs of a combined-cycle or open-cycle gas-fired power plant, as calculated by the operator of the public electricity transmission grid and approved by the regulator; and
 - (2) The establishment of a multiannual scheme for contracts for differences (CFD) specifically for new generation capacities, as described in recitals (131) to (138).

4.5.2. Discrimination between explicit and implicit demand-side response

- (191) The comments from third parties and the French authorities' observations regarding this point have been dealt with in Section 4.3.1.

4.5.3. Explicit participation by foreign capacities

- (192) The comments from third parties and the French authorities' observations and remedies regarding the explicit participation of foreign capacities are discussed in Section 4.3.2.

(193) As described in recitals (119) to (125), in response to the concerns of the Commission and third parties, the French authorities have proposed a hybrid model involving the allocation of interconnection tickets that would, in time, allow the participation by generation and demand-side response capacities located in Member States bordering France. In their view, this approach complies with the basic principles set out in Annex 2 to the Commission Staff Working Document accompanying the European Commission’s Sector Inquiry on Capacity Mechanisms.

4.5.4. *Information asymmetry between the dominant incumbent operator and its current and potential competitors*

4.5.4.1. Difficulty for suppliers to predict far in advance how their customer portfolios will evolve.

Comments from interested parties

(194) The comments from third parties on this point are included in Section 4.3.3.1 above.

Observations by France

(195) The observations by France on this point are included in recital (139) above.

(196) As explained in recital (140) above, the latest proposal from the French authorities is to help suppliers better estimate their future customer portfolios and clearly set out this support in the rules.

4.5.4.2. Lack of transparency on capacity pricing

Comments from interested parties

(197) The comments from third parties on this point are included in recitals (159) and (160) above.

Observations by France

(198) As explained in Section 4.4.2 above, the latest proposal from the French authorities on this point is to offer suppliers flexibility by allowing over-the-counter trading while guaranteeing liquidity on the organised trading platform and ensuring the transparency of over-the-counter trading.

5. ASSESSMENT OF THE MEASURE

5.1. State aid within the meaning of Article 107(1) TFEU

(199) In recital (143) of the Opening Decision, the Commission had already concluded that the mechanism constituted State aid within the meaning of Article 107(1) TFEU.

5.1.1. Imputability and financing through State resources

(200) As regards the existence of State resources in the French capacity mechanism, the French authorities allocate capacity guarantees to capacity operators free of charge. At the same time, they create a market for these guarantees by imposing a quota obligation on electricity suppliers, linking these quotas with their customers’ demand peaks. They therefore create a demand for the certificates and a corresponding value. Moreover, instead of selling the certificates to capacity operators or auctioning them, the State allocates them free of charge and, as a result, foregoes public resources.

(201) No arguments have been put forward by the French authorities or third parties that call this assessment into question.

- (202) However, in the intervening period, the Commission adopted another decision confirming that a system of certificate-based subsidies for power plants using renewable energy constitutes State aid³¹. In that case, no minimum price was guaranteed for the green certificates.
- (203) Furthermore, it is incorrect to claim that the present case differs from the case of Romania's green certificates by arguing that, in the French mechanism, suppliers can choose whether or not to pass on the purchase price of the capacity guarantees to customers. In fact, the price of the capacity guarantees must be included in at least the regulated sales tariffs, as laid down in Article R 337-19 of Decree No 2015-1823 of 30 December 2015 on the codification of the regulatory part of the Energy Code. Furthermore, the French authorities have argued that the market price (the MRP, used for the settlement of imbalances) must be the average of the prices resulting from the different auctions held (and therefore cannot take over-the-counter trading prices into account), precisely so as to ensure that the MRP can be replicated. This replicability is the ability to replicate the PRM in sales contracts between suppliers and their customers, as is desired by many market participants, according to the French authorities. This confirms that a great many, if not all, suppliers will pass on the costs arising from the purchase of the capacity guarantees to their customers.
- (204) Furthermore, the capacity mechanism as initially envisaged by the French authorities included a fall-back option for the public authorities, namely an alternative tender procedure to be used in the event that new capacity was required and the capacity market was not generating incentives for the development of new capacity. This possibility of direct market intervention by the State further confirms the classification of the capacity mechanism as State aid.
- (205) In addition, some of the changes that France has made to the capacity mechanism as a result of interested parties' comments on the doubts expressed by the Commission in the Opening Decision must be considered State aid in themselves. This includes the multiannual contracts by which the State guarantees the beneficiaries a certain capacity revenue for seven years. The State plays a crucial role in this mechanism, as it obliges RTE to enter into contracts with new capacities provided that they are competitive and, as a result of these contracts, these new capacities will be certain of receiving a fixed price for their capacity for seven years.

5.1.2. *Selective advantage*

- (206) As regards the argument put forward by EDF and by an undertaking active in France mainly on the wholesale market, taking the view that the mechanism is a public service obligation because capacity remuneration is consideration for a service provided by the capacity operators, the Commission is of the opinion that this argument has already been addressed in the Opening Decision. The Commission considered that the service could not be provided or assigned a value by the market. Indeed, the French authorities had to create a market by imposing obligations relating to the availability and the withholding of capacity guarantees on the different operators in the electricity market so as to give value to this availability. In fact, as a result of establishing this capacity market, capacity operators will receive funds that they would not otherwise have received, and will therefore obtain an advantage that they would not have obtained if the market created by the authorities did not exist.

³¹ SA.37345 (2015/NN) – Polish certificates of origin system to support renewables and reduction of burdens arising from the renewables certificate obligation for energy intensive users.

(207) Furthermore, the argument put forward by EDF and another vertically integrated electricity undertaking that the capacity mechanism does not confer any selective advantage on capacity operators since all the mechanism's participants are in the same factual and legal situation and are treated entirely equally has already been addressed in the same Opening Decision. The Commission takes the view that the advantage is selective, since the mechanism provides for aid to capacity operators and not to other sectors of the economy.

(208) As France has not put forward any new arguments, the Commission stands by its assessment and conclusions set out in the Opening Decision (to which this Decision refers), namely that the mechanism confers a selective advantage on capacity operators.

5.1.3. Effect on competition and trade between Member States

(209) The French authorities repeated their argument, which was taken into account by the Commission in its Opening Decision, that the capacity mechanism will not have an impact on the electricity market. The Commission had reached the conclusion that the mechanism had the potential to affect trade between Member States and distort competition because French capacity operators would gain an advantage that their foreign competitors could not, as they are not permitted to participate in the French capacity market.

(210) It should be noted that one of the remedies proposed by France is precisely to have explicit participation of cross-border capacities in the French mechanism. However, this participation is restricted to France's usable interconnection capacity (i.e. once de-rating factors have been applied) with its neighbouring countries. Furthermore, there is no guarantee that cross-border capacities will receive the same remuneration as French capacities for the service provided, given the additional cost of participating in the French mechanism linked to the obtaining and purchasing of interconnection tickets.

(211) This therefore confirms the Commission's assessment and conclusion in the Opening Decision (to which this Decision refers), namely that the advantage relating to capacity remuneration, conferred upon French capacity operators, has the potential to affect trade between Member States and distort competition.

5.1.4. Conclusion on the existence of State aid

(212) For the reasons referred to above, the Commission maintains that the French capacity mechanism constitutes State aid within the meaning of Article 107(1) TFEU.

5.2. Lawfulness of the aid

(213) When the French authorities first issued certificates to capacity suppliers on 1 April 2015, they began allocating the intangible assets to the beneficiaries. The Commission therefore considers that the French authorities have begun to implement the aid measure in question within the meaning of Article 108(3) TFEU.

(214) Furthermore, the French authorities have not suspended any transactions involving capacity guarantees following the publication of the Opening Decision.

(215) Given that the Commission had not reached a final decision on the measure by the date on which the French authorities began implementing the mechanism, France acted in breach of its obligation under Article 108(3) TFEU.

5.3. Compatibility with the internal market

- (216) To assess whether an aid measure can be considered compatible with the internal market, the Commission generally analyses whether the aid measure is designed so that the positive impact of achieving an objective of common interest exceeds the potential negative effects on trade and competition.
- (217) The main aim of the measure is the security of electricity supply. The Commission has therefore assessed the measure in the light of Section 3.9 of the Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG), which relates to aid for generation adequacy.
- (218) The Commission's assessment in this Decision will be strictly limited to those points about which it expressed concerns in the Opening Decision.

5.3.1. Objective of common interest and necessity

5.3.1.1. Security of supply

- (219) As described in recital (149) of the Opening Decision, France explained that its electricity peak demand had been rising for several years (rising from 79 590 MW in 2001 to 102 100 MW in 2012), while average electricity demand in France had remained stable. This is largely due to France's highly thermosensitive electricity system, as electric heating is widely used in residential and commercial buildings.
- (220) Furthermore, according to the French authorities, peaking power plants (usually gas-fired plants), have become less competitive in recent years for a number of reasons (see recital (45)). Despite this, these power plants, particularly the peaking power plants, are needed to cover the extreme energy demand spikes described in Section 5.3.1.1. Nevertheless, as these spikes are rare and unpredictable, market operators refrain from investing in new generation capacity.
- (221) For these reasons, and as shown in RTE's calculations reproduced in recital (105), there is a risk that France could fail to comply with its shortfall indicator of three hours per year on average in the event of a cold spell (once every 10 years in France).
- (222) As regards recital (154) of the Opening Decision, France has demonstrated that RTE's adequacy studies were more recent and detailed than ENTSO-E's old deterministic studies. For example, they take account of the precarious situation of a number of existing power plants and the risk that they will close ('Low thermal' scenario; see Figure 3. There may therefore be differences between the old adequacy studies carried out by RTE and those drawn up by ENTSO-E.
- (223) In this regard, France has also taken into account the conclusions of the Mid-Term Adequacy Forecast published by ENTSO-E in 2016, which is the first version to use a probabilistic methodology (see recital (100)). In the baseline scenario for 2020, the expected shortfall in France is slightly below the supply security target set by the public authorities. However, this is not the case in the study carried out using GRARE, based on the largest number of Monte Carlo projections (2 100), which calculates that the expected shortfall in France is between 5 and 20 hours (P95). Moreover, it should be noted that all the studies carried out for 2020 are based on the following hypotheses: (i) mothballed plants are fully available, which is an optimistic hypothesis, according to ENTSO-E, and (ii) France's capacity mechanism is operational from 2017 to 2020. One can therefore conclude that ENTSO-E's most

recent studies do not contradict and in fact actually support the French authorities' conclusions regarding the need for the mechanism.

- (224) RTE's studies also take into account the most recent data on peak demand and therefore also take account of the impact of alternative measures implemented to increase demand-side response capacity (as requested by the Commission in recital (163) of the Opening Decision). These studies nevertheless clearly show that there is a risk that France's upper shortfall limit will be exceeded in the coming years, unless the State intervenes.
- (225) The vast majority of interested parties are also in agreement about the need to put in place a capacity mechanism in France as a matter of urgency. Some of them submitted their financial plans in order to illustrate the existence of France's 'missing money' problem, which contradicted the findings of France's Competition Authority in its Opinion published in 2012 (referred to in recital (158) of the Opening Decision).
- (226) RTE's assessment of the capacity adequacy in its 2015 Generation Adequacy Report was more optimistic than in 2014 (the year in which the capacity mechanism began operating). France explained that this improvement was due to the positive signal given by the launch of the mechanism (some power plants had abandoned their planned closures when the mechanism was launched).
- (227) Moreover, while the French authorities do not contest the fact that there is currently overcapacity in France, this does not rule out threats to security of supply in the coming years, particularly if many loss-making power plants were forced to close. RTE's studies confirm that the 'missing money' problem exists and point out that there is a real risk that power plants could close, a hypothesis that is also supported by recitals (43), (44) and (46).

5.3.1.2. The Commission's other objections:

- (228) As regards the proposal to charge different prices for using the network depending on the season, day of the week and/or time of day, France has confirmed that the TURPE is already hourly and seasonally adjusted.
- (229) France also provided a satisfactory explanation regarding the de-rating factors applied to renewables, as requested by the Commission in recital (153) of the Opening Decision. The de-rating factors appear rather optimistic about the contribution of renewables to security of supply, no longer giving rise to concerns regarding under-estimated available capacity. In any case, renewables will be able to choose the general scheme, based on monitored self-certification.

5.3.1.3. Conclusion on the objective of common interest and the necessity of the measure

- (230) For these reasons, the Commission takes the view that the mechanism, which addresses the objective of common interest of ensuring security of electricity supply, is indeed necessary in France. Furthermore, this does not contradict the objective set out in the EEAG to gradually phase out subsidies that are harmful to the environment, for example by facilitating demand management (232), increasing interconnection capacity (194), including the contribution of renewable energy in the mechanism (230) and giving preference to low-carbon generators (137).

5.3.2. *Appropriateness of the aid*

5.3.2.1. Discrimination between different types of demand-side response capacity

- (231) France does not dispute the difference in treatment between explicit and implicit demand-side response. On the contrary, France takes the view that these different conditions are needed precisely so as to enable both types of demand-side response to participate in the mechanism on equal terms. France had to strike a balance between activation and availability obligations for the two types of capacity, without restricting the possibility to participate in the mechanism.
- (232) The Commission is in agreement with France and takes the view that it is logical for the number of days covered by the implicit demand-side response obligation (PP1 days) to be lower than the number of days during which an explicit demand-side response operator must be available, as more is required of implicit demand-side response (activation as opposed to availability).
- (233) The Commission accepts that the number of PP2 hours should remain strictly defined, so as not to exclude explicit capacities from the mechanism or restrict their participation any more than is necessary.
- (234) As explained in recitals (111) to (115), RTE has carried out a detailed study to set the number of PP1 and PP2 hours, so as to base this calculation on the impact that demand-side response could have in terms of addressing shortfalls. It was found that 94 % of shortfall hours could be caught during the 100 hours per year when demand is highest (for this reason, the PP1 period represents the 100-150 hours when demand is highest) and that 99 % of shortfall hours are included in the 300 hours when demand is highest (which is why PP2 covers between 100 and 300³² peak-demand hours).
- (235) Furthermore, the argument put forward by a number of third parties that explicit demand-side response capacities must be activated only during cold spells (meaning once every 10 years) is, in our view, not justified because all capacities will be activated at least once in each delivery year for the monitoring test.
- (236) For these reasons, the Commission takes the view that France has struck the right balance between the different obligations of demand-side response capacities without restricting their participation in the mechanism. The Commission takes note of France's proposal to evaluate the PP1/PP2 ratio in the future, and to revise it if necessary.
- (237) The measure is therefore sufficiently flexible and provides adequate and appropriate incentives for the different types of demand-side response capacity as required by paragraph (226) of the EEAG.

5.3.2.2. Exclusion of cross-border capacities

- (238) In order to dispel the Commission's doubts on this point, the French authorities have proposed a mechanism that allows explicit participation in the French mechanism by cross-border generation capacities and demand-side response capacities. This proposal is conditional upon cooperation agreements with the transmission system operators in the neighbouring countries where participating capacities are located. So as to avoid resorting to implicit participation of cross-border capacities in the

³² Within the 100-300 hour interval, the French authorities chose the figure of 250 hours for the reasons given in recital (114).

absence of such an agreement, the French authorities have proposed that the relevant interconnections be certified to enable them to participate in the mechanism directly³³.

- (239) The remedy proposed by France, as described in recitals (119) to (124) of this Decision, therefore complies with paragraph (226) of the EEAG. The Commission emphasises that the timetable for implementing this remedy, as set out in recital (125), must be considered a strict timetable and that France must inform the Commission about the various implementation stages of this remedy.

5.3.2.3. Lack of signals for new investments

Lack of long-term contracts

- (240) Following the doubts expressed on this point by the Commission in the Opening Decision, France proposed a mechanism allowing new capacities to participate in the capacity mechanism, as described in recitals (131) to (138) of this Decision. This mechanism consists of multiannual contracts for new competitive capacities.
- (241) The Commission had already concluded that longer-term contracts could be justified to attract new investment, particularly new entrants, in order to make it easier for them to secure financing³⁴.
- (242) France explained that the aim of seven-year contracts for new investments was to guarantee around 50 % of new capacities' investment costs. This measure would therefore help lower the rate of return required by property developers and the finance providers for these investment projects and would make it easier to secure external financing. It is also worth noting that this contract duration is shorter than the 20-year contract in place for the Landivisiau project in Brittany and the 15-year contract in the capacity mechanism in the United Kingdom. Although it is difficult to find a good and reliable benchmark for the length of capacity contracts, it should be noted that shorter contracts have the advantage of being more flexible for the market over the longer term and prevent the lock-in effect in relation to the choice of technology.
- (243) The Commission takes the view that France has struck the right balance between the advantages and disadvantages of the different possible contract durations and that the chosen duration offers satisfactory security for long-term investments, on the one hand, while preventing the risk of technology 'lock in' that could be brought about by longer contacts.

Difficulty for suppliers to predict far in advance how their customer portfolios will evolve

- (244) In the Opening Decision, the Commission expressed doubts as to whether suppliers, and particularly new entrants, would be able to accurately forecast, far in advance, how their customer portfolios would evolve and therefore give a reliable price signal to the market regarding the system's capacity needs.

³³ As laid down in Article 2 of Directive 2009/72/EC, transmission system operator means 'a natural or legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity'.

³⁴ [OJ C 348](#), 3.10.2014, SA.35980 - GB capacity mechanism, recitals (129) and (139).

- (245) These doubts, which were confirmed by a number of third parties, were dispelled on three levels. Firstly, France proposed to oblige RTE to help alternative suppliers better forecast the final level of their capacity obligations. Secondly, the mechanism allows for greater transparency and liquidity of the certificates market. Thirdly, the mechanism allows smaller suppliers to rebalance their certificate portfolios through an adjustment, both during the delivery year and ex post.
- (246) This remedy will help alternative suppliers to better predict their specific obligations in terms of capacity guarantees. By helping suppliers better estimate their capacity needs, this remedy will ensure a more accurate capacity price and, if required, will encourage investment in new capacities.

Potential lack of incentives for operators to be in balance before the delivery year (DY)

- (247) After the Commission expressed reservations about the potential shortcomings of the incentives for operators to be in balance before the delivery year (DY), the French authorities proposed that any significant cumulative rebalancing taking place before the delivery year would be subject to a penalty. Moreover, the authorities have proposed to double the ‘k’ incentive coefficient applied to imbalances, and to further increase the penalties for the settlement of imbalances (relating to an ongoing transaction) for imbalances exceeding the upper limit of 1 GW (see recitals (141) and (143)). Furthermore, the previous rule stipulates that, as of the beginning of the DY, any rebalancing is subject to payment.
- (248) The remedies proposed by France have a common objective to encourage participants in the mechanism to be in balance before the DY begins, and in any event before imbalances are settled. This will encourage participants to carry out the vast majority of required transactions prior to the DY and will also make the MRP more representative (the MRP is used for the settlement of imbalances and for re-invoicing customers). As such, the price signal resulting from trading in capacity guarantees will, in our view, be more representative and reliable, and the mechanism will be more credible in terms of encouraging new investment if required.

The price cap on the settlement of imbalances does not reflect the CONE

- (249) In response to the Commission’s criticism that the price cap on the settlement of imbalances does not reflect the CONE, the French authorities have undertaken to gradually increase the administered price (see recitals (146) and (147)), so that, by DY 2021, it will match the cost of new entry (CONE).
- (250) This remedy corresponds to market needs and the Commission’s request to bring the indirect cap on capacity prices (the administered price) into line with the cost of new entry. If required, new investments can therefore be made.
- (251) The authorities have also assured the Commission that the spread between the ARENH and the market price for electricity does not constitute an indirect cap on capacity prices (see recitals (149) to (151)). More specifically, they explained that the volume of capacity guarantees linked to the ARENH product is sufficiently low in relation to the overall capacity market, and therefore cannot influence the price of the other capacity guarantees. Furthermore, the current spread is such that the ARENH is not a competitive product at the present time. The Commission noted, however, that the French authorities will examine, during a future assessment of the mechanism, whether it is appropriate to ‘unbundle’ the capacity part of the

ARENH product, to ensure that this product does not distort the free setting of prices on the capacity market, if required.

Conclusion on signals for new investments

(252) The various remedies proposed to provide better incentives for new investment are in line with paragraph (226) of the EEAG. In particular, France will implement measures to ensure the participation of cross-border capacities and to encourage new investments, which will open up the mechanism to many potential capacity operators.

5.3.2.4. The Commission's other objections

(253) The French authorities clarified, to the Commission's satisfaction, the reasons for their adopting, where applicable, the various proposed improvements to the mechanism put forward by the Competition Authority.

5.3.2.5. Conclusion on the appropriateness of the measure

(254) In the light of the above considerations, the measure is an appropriate means of meeting the identified objective of common interest.

5.3.3. *Incentive effect*

(255) In recital (184) of the Opening Decision, the Commission had already concluded that the mechanism could have the required incentive effect. It stands by this conclusion.

5.3.4. *Proportionality*

5.3.4.1. Demand overestimation

(256) In the Opening Decision, the Commission had identified a risk that suppliers might overestimate demand, particularly if suppliers' individual capacity obligations were not sufficiently clear.

(257) It is clear from the Commission's observations in recitals (245) to (247) that the French authorities have put in place measures to help suppliers better calculate their capacity obligations.

(258) This remedy effectively addresses the objections raised by the Commission in its Opening Decision.

5.3.4.2. Lack of transparency on capacity pricing

(259) In the initial version of the capacity mechanism, the various participants had little overview of the over-the-counter transactions, as they relied on the CRE publishing, at regular intervals, data on the volume of capacity guarantee trading and the average transaction prices. Furthermore, in order to prevent abuses and a lack of transparency, the authorities had required vertically integrated operators to hold separate accounts in the capacity guarantee register (one account for capacity operators and one for suppliers).

(260) In the light of the Commission's concerns regarding the lack of transparency of commercial agreements in the mechanism, France proposed remedies to improve the visibility of all trades and for all operators. Firstly, the French authorities proposed to grant all operators access to the register of (anonymised) over-the-counter transactions, thereby providing visibility on volumes and prices, while ensuring the anonymity of operators (see recital (163)). Secondly, they proposed to bolster the organised auctions by increasing the number of auctions held in the four years

preceding the first delivery year to 15 and by obliging certain capacity operators (CPMs > 3 GW) to offer their certificates on the market in accordance with a specific formula (see recitals (164) and (165)).

- (261) The approach proposed by the French authorities gives suppliers a certain amount of flexibility by allowing over-the-counter trades and at the same time guaranteeing a certain level of transparency for these trades.
- (262) Free access to the (anonymised) register of transactions guarantees the transparency of the over-the-counter market and ensures that the incumbent operator - who will be the main seller - and its competitors have access to the same information. The proposed approach also enables market operators to take into account the prices achieved on the over-the-counter market when formulating their bids on the spot market and therefore ensures greater consistency between these two markets. In this regard, the proposed approach also reinforces control by the regulator, as any attempt by an operator to manipulate prices would be immediately obvious if the operator's behaviour on the organised market were radically different from its behaviour on the over-the-counter market.
- (263) Furthermore, bolstering the organised auctions should guarantee a sufficient level of liquidity for these auctions and consequently make the market reference price more representative (the capacity price used by the majority of suppliers for their sales and also as a reference value for the imbalance settlement mechanism).
- (264) This remedy therefore prevents the risk of capacity guarantees being withheld by the largest capacity operators for financial reasons, encourages market transparency, improves the liquidity of the organised market and facilitates market surveillance by the regulator.
- (265) The introduction of a 'double restriction' for the years DY-3, DY-2 and DY-1 addresses the risk of market manipulation by integrated market operators, who could artificially reduce their number of unsold certificates by internal transfers. By including a restriction on the level of certified capacity, the French authorities are ensuring that integrated market operators will be obliged to guarantee a certain amount of liquidity on the organised spot market, even if they carry out internal transfers.
- (266) Choosing to set the restriction on certified capacity at 25 % ensures that integrated market operators, and particularly the dominant operator, will offer all or some of their certificates on the organised spot market and will not be able to circumvent this requirement by carrying out internal transfers. This remedy is therefore akin to a market-making solution.
- (267) Applying an upper limit (in GW) to the requirement to offer a certain volume of capacity guarantees in the organised auctions will ensure that the largest market operators, and especially the incumbent operator, will take on the role of 'market maker' in the mechanism, thereby guaranteeing the liquidity of the auctions at all times.
- (268) By guaranteeing market liquidity, the French authorities have addressed the objection raised by the Commission in recital (200) of the Opening Decision.
- (269) More generally, the French authorities' remedies have addressed the Commission's concerns regarding the mechanism's lack of transparency on pricing, as set out in the Opening Decision.

5.3.4.3. Exclusion of certain types of capacity operator from the mechanism

- (270) In the Opening Decision, the Commission took the view that the risk of excluding certain operators from the mechanism, such as certain demand-side response capacities (due to possible discrimination against them), foreign capacities and new generation capacities, could lead to a risk that those operators able to participate in the mechanism would be over-compensated, given the lower level of competitive pressure.
- (271) As explained in Sections 5.3.2.1, 5.3.2.2 and 5.3.2.3 respectively, the French authorities have undertaken to implement appropriate measures so as to ensure that the operators mentioned above can participate in the mechanism. This will ensure competition inside the mechanism and should lead to a capacity price that does not overcompensate.
- (272) In order to comply with the EEAG, the proposed mechanisms relating to the participation of cross-border capacities and the multiannual contracts with new generation capacities must be proportionate.
- (273) The mechanism for including cross-border capacities is described in recitals (119) to (124) of this Decision. Once foreign capacities have obtained interconnector tickets, they will participate directly in the French capacity guarantee market. Since this market is deemed not to lead to overcompensation, the same will be true of the sale of guarantees by foreign capacities. Under the mechanism put in place to allow participation by foreign capacities, some remuneration may also flow to interconnectors from the sale of interconnector tickets. Since the participation in these auctions is likely to be very high (all demand-side response and electricity generation capacity in the interconnected neighbouring Member State can participate), particularly bearing in mind the number of tickets that can be expected to be auctioned, one can take the view that these auctions will not lead to any overcompensation. As a result, the mechanism is proportionate.
- (274) The mechanism proposed by the French authorities to allow new capacities to participate in the French capacity market is described in recitals (131) to (138) of this Decision. As regards the proportionality of the mechanism, the Commission believes that the mechanism excludes the possibility that new capacities will be overcompensated. Specifically, bids made by new capacities will in any case have to be lower than the initial reference price, which is itself an average price resulting from different competitive processes (it is proposed that the price be calculated as the weighted average of the capacity prices resulting from the auction held in DY-4 and from the ongoing DY-2 and DY-1 auctions). The fact that the new capacity providers will not know the initial reference price when making their bids should ensure that these bids are as low as possible in order to be competitive. Given that the participants will not know whether other bids for new capacities have already been submitted when they place their own bids, the volume restrictions on new capacities will therefore encourage bidders to offer the lowest possible price for their investments. For these reasons, the Commission takes the view that there should be no risk of overcompensation in relation to new investments. As a result, the mechanism is proportionate.

5.3.4.4. EDF's market power

- (275) As explained in recital (64), point (4), underlying the Commission's concern that EDF could easily manipulate capacity prices in its favour were three of the

mechanism's more specific risks (some of which could apply to all the operators in the market):

- (1) risk of capacity withholding;
- (2) risk of capacity guarantee withholding; and
- (3) risk of a price squeeze.

Risk of capacity withholding

- (276) France has proposed three categories of changes to the mechanism to prevent the risk of capacity withholding as far as possible:
- (1) require capacity operators to certify their available capacity within a range delineated by the historic reference values;
 - (2) impose rebalancing obligations within a short time frame, as set out in the rules, when significant events occur (e.g. mothballing, decommissioning or damage leading to reduced availability for a long period) and charge for any cumulative rebalancing exceeding a certain limit (maximum 1 GW) before the delivery year; and
 - (3) modify the imbalance settlement mechanism: the 'k' incentive coefficient will be doubled and will be further increased for negative imbalances exceeding a maximum threshold of 1 GW/will be even less rewarding for positive imbalances also exceeding a maximum threshold of 1 GW. Furthermore, the administered price will be gradually increased, from EUR 20 000/MW in 2017 to EUR 40 000/MW in 2018 and 2019, reaching EUR 60 000/MW in 2020 and will eventually be updated annually to bring it in line with the CONE.
- (277) The first remedy ensures that capacity operators with a large capacity portfolio will not be in a position to manipulate the market within the certification range. Moreover, this remedy makes it easier for the regulatory authorities to identify any suspicious behaviour in relation to the existing framework.
- (278) The second remedy should bolster the incentives for market operators to provide the best estimate of the availability of their facilities within the certification range. As regards the measure requiring payment for significant rebalancing prior to the DY, the French authorities have proposed to make this measure asymmetrical and require payment for the rebalancing of certification levels only from market operators that have carried out a significant amount of rebalancing. The reasoning behind this is that applying this measure to all market operators could hinder competition as it would, in practice, be much more restrictive for operators with a low capacity volume compared with the dominant operator, which would be able to accumulate imbalances. The introduction of a payment threshold (still to be determined, but maximum 1 GW) will therefore make it possible to (i) maintain the flexibility of the current set-up for the majority of market operators, while at the same time (ii) making it impossible for market operators with a large capacity portfolio to manipulate the market by rebalancing lots of 'small' amounts.
- (279) The third remedy will bolster the incentives for all market operators to trade their certificates on the capacity market, contribute to the establishment of a market reference price that actually reflects the value of capacity, and prevent arbitrage between using the market and direct sourcing when settling imbalances.

- (280) The Commission takes the view that this set of remedies reduces the risk of capacity withholding as far as possible, although such a risk cannot be ruled out entirely. Naturally, supervision of the market by the French regulatory authorities complements the incentives built into the mechanism.

Risk of the withholding of guarantees

- (281) To prevent the risk of guarantees being withheld, the French authorities have undertaken to increase the number of auctions held before the delivery year and to require capacity operators to offer a minimum guarantee volume at each of the auctions held.
- (282) These remedies are in addition to the remedies already in place, such as the option for suppliers to obtain capacity guarantees by purchasing the ARENH product. In this regard, the authorities have proposed to examine, when assessing the functioning of the market in the future, whether it is appropriate to ‘unbundle’ the capacity part of the ARENH product to ensure that this product does not distort the free price formation on the capacity market. This remedy partially addresses the revisions to the ARENH suggested by certain interested parties, set out in recital (182) of this Decision.
- (283) This set of remedies proposed by the French authorities should help keep to a minimum the ability of large capacity operators, and especially the incumbent, to withhold capacity guarantees and the advantage for them of so doing. This would also ensure the liquidity of auctions.
- (284) The Commission therefore takes the view that these commitments constitute a set of remedies that are proportionate to the liquidity concerns raised by the Commission in the Opening Decision.

Risk of a price squeeze by the dominant incumbent operator

- (285) In recital (194) of the Opening Decision, the Commission had pointed out the risk that cross-subsidisation might occur between the incumbent operator’s production and retail arms (i.e. the selling of capacity guarantees to competitors at a higher price than the price of internal transfers of the guarantees between its production and retail arms, thereby excluding its competitors from the electricity supply market).
- (286) In order to make it easier to detect and address these practices, the French authorities will remove a loophole in the existing rules that allows guarantees to be transferred free of charge. Following this change in the rules, suppliers will no longer be able to transfer capacity guarantees at zero cost from their production arm to their retail arm. The rules will lay down that internal transfers by an integrated operator must be carried out at a price that is representative of the prices resulting from the organised market sessions. To that end, if the price resulting from the organised market session(s) is not known on the date of the internal transfer, integrated operators will be able to declare a price indexed to the price of the organised market sessions. For example, an integrated operator will be able to declare that an internal transfer is equal to the market reference price before its exact value has been officially set by the Energy Regulatory Commission.
- (287) Furthermore, market operators will have full access to the register of capacity guarantee transactions. The market will thus be able to monitor over-the-counter trades, as these (anonymous) transfers will be public. As explained in recital (263), this measure therefore guarantees the transparency of the over-the-counter market.

(288) The French authorities have therefore addressed the Commission's objections regarding the risk of a price squeeze by the incumbent operator.

5.3.4.5. Conclusion on the proportionality of the measure

(289) Taking into account the different remedies proposed by France, the Commission considers that the revised mechanism is proportionate to its objective.

5.3.5. *Avoidance of negative effects on competition and trade*

5.3.5.1. Barriers to the entry of new generation capacities

(290) In order to address the difficulty for new generation capacities to participate in the mechanism, as identified by the Commission in its Opening Decision, the French authorities have undertaken to change the mechanism as follows:

(1) By establishing a multiannual scheme for contracts for differences (CFD) specifically for new generation capacities, as described in recitals (131) to (138).

(2) As described in recitals (146) to (148), by gradually increasing the administered price over time, eventually bringing it into line with the CONE.

(291) These remedies are sufficient to remove the barriers to entry for new capacities.

5.3.5.2. Discrimination between explicit and implicit demand-side response

(292) As explained in recital (237), the Commission takes the view that France has struck the right balance between the different obligations of demand-side response capacities without restricting their participation in the mechanism. Although the participation of the two types of demand-side response is not the same, the Commission takes the view that this differentiation is required in order to allow both types of demand-side response capacity to participate in the best possible way.

5.3.5.3. Explicit participation by foreign capacities

(293) As described in recitals (119) to (125), in response to the concerns of the Commission and third parties, the French authorities have proposed a hybrid model involving the allocation of interconnection tickets that would, in time, allow foreign generation capacities to participate.

(294) As explained in recital (239), the French authorities have proposed a suitable remedy that allows the explicit participation of cross-border capacities in the mechanism. This objection from the Commission has therefore been addressed.

(295) The solution chosen by France for the explicit participation of cross-border capacities also allows interconnectors to be remunerated if this asset is scarce. The chosen solution therefore addresses the risk that the coupling of the markets identified by the Commission in recital (206) of the Opening Decision might be jeopardised³⁵.

5.3.5.4. Information asymmetry between the dominant incumbent operator and its current and potential competitors

(296) As explained in recitals (245) to (247) and in Section 5.3.4.1, the Commission had identified a risk that alternative suppliers, and particularly new entrants, might find it difficult to estimate their individual capacity obligations. In the light of the Commission's observations in those recitals, the French authorities have put

³⁵ As regards the mechanism's compliance with European Union rules, see paragraph (97) of the EEAG.

appropriate measures in place to help suppliers better calculate their capacity obligations.

- (297) Moreover, in the initial version of the capacity mechanism, the various participants had little information about the over-the-counter trades, which meant that they lacked a full overview of the capacity price. France proposed remedies to improve the visibility of all trades for all operators, as described in Section 5.3.4.2. These measures include granting all operators access to the register of over-the-counter trades (anonymised) and bolstering the organised auctions.
- (298) This set of remedies ensures that operators other than the incumbent will have a better overview of their capacity obligations, on the one hand, and trading volume and prices, on the other. These measures greatly improve the transparency of the mechanism and therefore redress the information asymmetry in favour of the incumbent operator, which will be the biggest operator in the mechanism on both the capacity operator side and the supplier side.

5.3.5.5. Preference given to low-carbon generators

- (299) The Commission notes that, for new capacities, the French authorities are planning to introduce environmental criteria that will lead to preference being given to low-carbon generators (see recital (137)).
- (300) These provisions comply with the EEAG³⁶, which stress the need for such measures to give preference to low-carbon generators with equivalent technical and economic parameters.

5.3.5.6. Conclusion on potential distortions of competition and intra-EU trade

- (301) For the reasons given above, the Commission concludes that there is no longer a risk that the mechanism will unduly distort competition and/or intra-EU trade.

5.3.5.7. Time frame

- (302) Given that the French mechanism is the first decentralised capacity mechanism approved by the Commission under the EEAG and given that the necessity of the mechanism is highly dependent on the evolution of the energy market, a market that is still developing in a context of market liberalisation, the Commission takes the view that the mechanism must be time limited. The Commission considers that a duration of 10 years is reasonable and consistent with previous decisions³⁷.

6. CONCLUSION

- (303) The Commission finds that France has unlawfully implemented a capacity market in France in infringement of Article 108(3) TFEU. However, in view of the different remedies proposed by France described above, the measure complies with the EEAG,

HAS ADOPTED THIS DECISION:

³⁶ See paragraph (233) of the EEAG.

³⁷ See, for example, [OJ C 348](#), 3.10.2014, SA.35980 - GB capacity mechanism, recital (162).

Article 1

The capacity market implemented by the French Republic constitutes State aid that is compatible with the internal market under Article 107(3)(c) TFEU.

Article 2

The Commission authorises the aid scheme implemented through the capacity market for a maximum period of 10 years. Any scheme maintained at the end of this period must be re-notified.

Article 3

This Decision is addressed to the French Republic.

Done at Brussels, 8.11.2016

For the Commission
Margrethe VESTAGER
Member of the Commission

