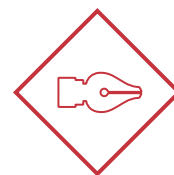


ACTIVITY REPORT 2015

Reference document



CRE Activity Report 2015
Reference document



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MESSAGE FROM THE BOARD

Twenty years after the first directive to liberalise the gas and electricity markets, and after 15 years of CRE as the energy regulator, what can be said about the energy market today? It is a commonplace that the sector has seen many changes and a lot of disruption, but it is less often mentioned that the low price scenario which we see today is nothing exceptional. It is what we also saw at the end of the 90's and the beginning of the twenty-first century. The price of electricity on the wholesale market was even slightly lower than where it is today. At that time the price of petrol was around 20 dollars a barrel.

In other words, the present situation that is so strongly worrying all the companies operating in the electricity and gas sector is nothing new. What is new, is the factors that have helped to create this drop in prices. In 2000, the only factor that determined the wholesale price was the price of petrol, which defined the price of gas and, curiously, also affected the price of coal. As the two components of the marginal cost in Europe were basically coal and gas, the prices were low. This factor still plays a role today, and the large-scale development of shale gas in the United States has released large quantities of coal onto the world market, making them available at very low prices.

The new factors, however, are the economic crisis that is affecting Europe, the increase of nearly 40% in installed capacity in Europe between 2000 and 2013, especially with the large-scale arrival of renewable energy, and the growth of combined-cycle gas turbines in the European market, with consumption only growing by 7.5% during this same period. This situation, apparently, arrived unexpectedly, despite the targets set by directive 2001/77/EC of 27 September 2001, which on the one hand set a target of 22% of electricity to be produced from renewable energy sources by 2010, and then the Energy-Climate package known as "3 x 20" that was inspired by the directives of 23 April 2009 (directives 2009/28/EC, 2009/29/EC and 2009/31/EC).

As far as France is concerned, two further items have affected the situation since the turn of the century.

Following the Fukushima disaster, the French Nuclear Safety Authority (ASN) stepped up its requirements in terms of safety. Since these requirements increase the necessary maintenance investments of nuclear power plants, which are all at least 20 years old, the future investment requirements will be substantial.

In addition, the competition that started very slowly in France, at least for electricity, has really speeded up in the last few months with the end of regulated tariffs in the industrial and professional sectors. EDF's loss of nearly 30% of these customers came as a shock to many. Now competition has indeed become a reality and will not be going away. Already well-advanced in the natural gas market which is 44% open, it is likely to gear up in a similar way in the electricity market, which is truly a new situation for our country. The questions being asked today are the same ones asked at the end of the 90's when the markets were opened up, namely how to make an investment decision in a context of low prices and how to respond to real competition.

In this context, the construction of the integrated European market with easy cross-border trading, largely achieved through the targets defined 10 years ago, is now continuing with the harmonisation of the operating rules of the network codes. The challenge is to continue building the European energy union, while reviewing what has already been achieved so far. One of the problems we now encounter is that of a sort of race forward always setting new objectives, some of which do not always seem relevant from an economic viewpoint. Let us just think of, for example, the project of defining the new interconnection level for each Member State at 15% of its production capacity by 2030. In 2002, the European authorities had raised this target to 10%, which appeared realistic given the "traditional" electricity production methods at the time. With the rapid development of renewable energy sources, the context has changed, and the target of 15% does not take into account the weaker capacity of electricity generation from renewable sources. Meeting this target would involve heavy investment. Equally, it would be normal to ask questions about the impact of American liquefied natural gas, expected by all the experts to arrive in Europe from 2017, on the attractiveness of the various LNG terminals. A European energy union will have more power and more legitimacy if it can take the time to assess what has already been accomplished in order to define its new targets without bias.

One of the other challenges the regulator and the European Union will face in the next few years will be how to reconcile, on the one hand, a certain degree of centralisation caused by market integration — particularly from reinforcing the Agency for the Cooperation of Energy Regulators — and on the other hand, promoting decentralised production and initiatives. The European Commission is in fact expecting this kind of change of paradigm in its "market design" projects. At present, local bodies do indeed want to play a role in energy transition. With the arrival of renewable sources and with smart grids and connectivity bursting onto the scene, rebalancing is needed while ensuring protection of personal data. Even though the very low prices of raw materials on the wholesale market are nothing new in themselves, all the rest is new. Between the "copper wire" world that we know well and tomorrow's optic fibre world, we are going to change gears. The transformation that is starting now will probably move more swiftly than those in the past.

KEY DATE

08/12/2015: CRE PROPOSES
THE LEVEL OF REGULATED
ELECTRICITY SALES TARIFFS
TO THE GOVERNMENT

KEY FIGURES

236 DELIBERATIONS
85 COMMISSION SESSIONS

KEY WORDS

REGULATION
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THE ENERGY REGULATORY COMMISSION

The Energy Regulatory Commission (CRE) helps to ensure the proper functioning of the electricity and natural gas markets for the benefit of end consumers, in the context of the construction of a European market, and in accordance with energy policy objectives.

THE ORGANISATION AND MISSIONS OF CRE

1. THE ORGANISATION OF CRE

The CRE is an independent administrative authority, created when the energy markets were opened up to competition. The law of 10 February 2000 relating to the modernisation and development of the public electricity service, codified in the Energy Code, entrusted it with the mission of regulating these markets. Its principal mission is to support *“the proper functioning of the markets for electricity and natural gas for the benefit of end consumers and in accordance with energy policy objectives”*⁽¹⁾. To achieve this task, the CRE is composed of two independent bodies: the Board of the Commission and CoRDIS, the Standing Committee for Dispute Settlement and Sanctions. In making its decisions, the Board relies on the management of CRE, who report to the Chairman and the Managing Director.

1.1. The Board of the CRE

The Energy Code requires the Board of the CRE, which respects parity between men and women, to comprise six members. The members other than the Chairman include:

- one member appointed by decree, on a proposal by the Minister of Overseas Territories, for his/her knowledge and experience of non-interconnected territories;
- two members appointed, one by the President of the National Assembly (lower house of French Parliament) and the other by the President of the Senate (upper house of French Parliament), based on their legal, economic and technical qualifications respectively in the domain of data protection and local public energy services;
- two members appointed by decree, due to their legal, economic and technical qualifications, one in the domain of energy consumer protection and combatting fuel poverty, and the other in the fields of energy demand control and renewable energy.

In accordance with these provisions, Catherine Edwige was appointed on 1 April 2014 by decree on the proposal of the minister of Overseas Territories, Yann Padova was appointed by the President of the National Assembly, and Christine Chauvet was appointed by the President of the Senate as of 7 February 2015. H el ene Gassin and Jean-Pierre Sotura were appointed by decree on 29 March 2013. The Chairman, Philippe de Ladoucette, was appointed by decree by the President of the Republic on 7 February 2011.

The commissioners are appointed for a six year term, which is non-renewable. One third of the composition of the board is renewed every two years. The Board members perform their activities full time. In order to comply with the independence requirements set out by European law, they can only be dismissed in one of the three cases provided for in Article L. 132-5 of the Energy Code: non-compliance with the incompatibility rules, a serious breach or impediment. The rules on incompatibility shall prohibit any accumulation of the position of member of the Board with a municipal, departmental, regional, national or European elected mandate, and prohibit any taking

(1) Article L. 131-1 of the Energy Code

of a direct or indirect interest in a company in the energy sector. This ban on the acquisition of interest applies until the expiry of a period of three years following the end of their mandate.

1.2. The Standing Committee for Dispute Settlement and Sanctions (CoRDIS)

CoRDIS, which was created by law no. 2006-1537 of 7 December 2006, is made up of four members: two state councillors appointed by the Vice-President of the Conseil d'État (Council of State), and two councillors to the Cour de Cassation, appointed by the president of the court. The Committee also has four alternate members since 2013. As with the CRE Board, CoRDIS members and their alternates are appointed for a non renewable six-year term. CoRDIS is responsible for settling disputes relating to technical and financial matters between operators and users of the public electricity and natural gas networks. Therefore, this committee, which is independent from the Board of commissioners, enables CRE to carry out one of its core missions: to guarantee transparent and non-discriminatory access to electricity and natural gas networks, which is the key to open competition. CoRDIS also has the power to sanction the failures cited in the Energy Code and – since the law of 15 April 2013 – violations of the regulation of 25 October 2011 on Energy Market Integrity and Transparency (REMIT). This law has also clarified the procedures for separating the prosecution and sanctioning powers within the Committee.

Decree no. 2015-206 of 24 February 2015 relating to the CRE's Standing Committee for Dispute Settlement and Sanctions strengthened CoRDIS' power to apply sanctions. Under this decree, CoRDIS adopted new rules of procedure in a decision dated 11 March 2015, laying down the procedural rules for its hearings. While the procedure for dispute settlement underwent several improvements which combined to strengthen respect for the principle "hear the other side", the main changes affected the sanctions procedure.

2. THE MISSIONS OF CRE

CRE's missions are divided into two components. On the one hand, the task of regulating the electricity and natural gas networks consists of ensuring users (businesses, local authorities, consumers and producers) have non-discriminatory access to the transmission and distribution infrastructure which are natural monopolies, while ensuring the security of supply. On the other hand, the task of regulating the markets to allow free and fair competition to develop for the benefit of end consumers. CRE is required to consult the Higher Energy Council prior to its decisions on subjects that may "have a significant impact on energy policy objectives" whose list is determined by Article R 134-1 of the Energy Code. In order to accomplish its various missions, the CRE Board issued 236 opinions and held 85 formal meetings (a meeting taking one day) in 2015.

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In 2015, in order to perform its various tasks, the CRE Board issued 236 deliberations and met in formal sessions 85 times.

2.1. The regulation of gas and electricity networks

Since the law of 10 February 2000, the missions assigned to CRE have grown continually. Law no. 2010-1488 of 7 December 2010 on the organisation of the electricity market, known as the NOME law, and the implementation of directives 2009/72/EC and 2009/73/EC of 13 July 2009 concerning the common rules for the internal market

in electricity and natural gas, and law no. 2015-992 of 17 August 2015 relating to the energy transition towards green growth are important steps in the reform of the energy sector.

*Guaranteeing the right of access to public electricity
and natural gas networks and facilities*

Opening up to competition is only possible on the electricity and natural gas markets if operators and consumers have access to the networks, infrastructures and facilities under transparent and non-discriminatory conditions. CRE helps to ensure this requirement and to monitor that networks are safe, reliable and efficient for the benefit of consumers. It promotes the adequacy networks and energy efficiency, as well as the integration of energy production from renewable sources. The tasks of CRE to guarantee this right of access are essentially the same for the natural gas market and for the electricity market.

The principle of non-discrimination is the guarantee of market access to new entrants and the promotion of fair competition for the benefit of consumers. CRE receives contracts concluded between system operators and users, as well as protocols for accessing the electricity networks and natural gas transmission and distribution infrastructure, as well as liquefied natural gas installations. It receives justified notifications of refusals to enter into contracts or protocols for accessing such networks, structures and installations. In relation to access to electricity networks, CRE issues a preliminary opinion on the decisions of the préfet (responsible administrative authority) refusing to authorise the construction of a direct line.

In relation to access to natural gas infrastructure, it issues an opinion on the exemptions introduced by decree from the tariffs for the use of the transmission and distribution networks of natural gas and liquefied natural gas installations, as well as on the exemption made to the commercial conditions for using the networks or installations.

CRE has coercive power with respect to operators in the event of a serious and immediate breach of the rules governing access to or use of networks, infrastructures and installations: it may order, by way of a dispute ruling, precautionary measures in order to ensure the continuity of network operation.

*Ensuring the proper functioning and development of electricity, gas
and liquefied natural gas networks and infrastructures*

The CRE monitors the proper functioning and development of electricity, gas and liquefied natural gas networks and infrastructures. To do so, it now sets tariffs for the use of public electricity and natural gas networks, and the charges for related services provided under the monopoly of the operators of these networks. Before the implementation of the 3rd energy package, CRE only had the power to suggest these tariffs to the relevant ministers, who could oppose its proposal.

CRE approves the annual investment programmes of the natural gas transmission system operators (GRTgaz and TIGF) and of the public electricity transmission system operator (RTE), and ensures that the necessary investments are made for the proper development of the networks.



CRE approves annual investment programmes of natural gas and electricity transmission system operators. It also reviews each year their ten-year investment plans, and checks that these cover all investment needs.

The implementation of the 3rd energy package in the Energy Code modified the CRE's tasks regarding investment programmes from the transmission system operators. Each year, CRE examines the ten-year investment plan of the TSOs, to check that the plan covers all of the investment needs and is in line with the European plan prepared by the ENTSOs (European Network of Transmission System Operators). The CRE can, if necessary, consult with the Agency for the Cooperation of Energy Regulators (ACER) and require the transmission system operator to amend its ten-year investment plan. Should the TSO fail to carry out an investment that, under its ten-year investment plan, should have been realised within three years, CRE has coercive power. In fact, if it deems that the investment is still relevant in the light of the current ten-year plan, it may either require the TSO to fulfil its obligation, and thus make the proposed investment, or it can organise a call for tenders open to third-party investors to carry out the investment.

In the event of a serious and immediate breach to the security and safety of public electricity transmission and distribution networks or to the quality of their operation, CRE may propose precautionary measures necessary to ensure the continuity of their operation to the Energy minister.

Ensuring the independence of network operators

The CRE is also the guarantor of the independence of network operators. Therefore, it approves the accounting rules for the separation of activities between electricity production, transmission and distribution, and other activities of integrated electricity operators, and between transmission, distribution, storage of natural gas and the use of liquefied natural gas installations and other activities of integrated natural gas operators. It performs a monitoring and surveillance function embodied in the possible exercise of its powers of investigation and sanction.

Management of the electricity and natural gas transmission networks is provided by legal entities separate from those operating electricity or gas production or supply⁽²⁾.

The CRE also publishes an annual report on compliance with the codes of conduct established by electricity and gas transmission and distribution system operators, and an assessment of their independence (see annexes on page 132).

Finally, the CRE can, either on its own initiative or following a justified request from the European Commission, carry out a new review when it considers that events affecting the organisation of the transmission system operator or that of its shareholders are likely to affect its independence obligations. As part of its evaluation of the independence of network operators, CRE published a deliberation on 23 June 2015 on the replies given by ERDF, GRDF and their parent companies to requests relating to their compliance with the provisions of article L.111-64 of the Energy Code (see page 63).

⁽²⁾ Article L. 111-7 of the Energy Code

2.2. The regulation of the electricity and natural gas markets

Monitoring transactions on the wholesale electricity, natural gas and CO₂ markets

Since 2006, CRE has been assigned the mission of monitoring transactions on the wholesale electricity and natural gas markets, in particular ensuring that the offers made by market players are consistent with their economic and technical constraints. This monitoring activity is carried out on the basis of data that is collected regularly. Its aim is to ensure that prices are consistent with the physical and economic fundamentals which determine supply and demand, such as, weather conditions, the level of consumption, the availability of production sites and interconnectors, fossil fuel and CO₂ prices, etc.

Law no. 2010-1249 on banking and financial regulation of 22 October 2010 gave CRE the power to monitor the CO₂ market. In cooperation with the French Financial Markets Authority (AMF), CRE monitors transactions on the CO₂ market carried out by European electricity and natural gas suppliers, traders and producers on European emission quotas or EUA (European Union Allowance), as well as on CER (Certified Emission Reduction) and ERU units (Emission Reduction Units) provided for by the Kyoto Protocol. It analyses these transactions for consistency with the economic, technical and regulatory constraints of the activities of these electricity and natural gas suppliers, traders and producers.

CRE's task of monitoring wholesale markets is also part of the framework of the Regulation on Energy Market Integrity and Transparency, known as REMIT, which prohibits market abuses on the wholesale electricity and gas markets. The market

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In 2016, CRE will be responsible for the first time for proposing the regulated sales tariffs for electricity to the Minister of Economy and the Minister of Energy.

monitoring is carried out in cooperation with ACER. CRE's CoRDIS has the power to sanction breaches or violations of this regulation. 7 January 2015 marked an operational turning point, with the entry into effect of the implementing regulation on the collection of transactional data on the gas and electricity wholesale markets. This regulation fixed the key dates of 7 October 2015 and 7 April 2016 for the commencement of collection by ACER, depending on the type of contracts exchanged, collection having started on 7 October for standard transactional data.

As part of this mission, CRE created an annual report on the functioning of the wholesale markets, the 8th edition of which was published in December 2015 (see annexes on page 120).

Ensuring the proper functioning of retail markets

CRE helps to ensure the proper functioning of retail markets. CRE has the power to monitor, on the one hand, transactions carried out between suppliers, traders and producers and those carried out on organised markets, and, on the other hand, the consistency of the offers made by the producers, traders and suppliers, in particular toward end consumers, with their economic and technical constraints⁽³⁾. CRE may also issue opinions and propose any measures to promote the proper functioning and transparency of the retail market. As part of this mission, CRE publishes an annual report on the monitoring of the retail markets, the 4th edition of which was published in December 2015 (see annexes on page 119).

(3) Article L. 131-2 of the Energy Code, arising from the provisions of the NOME law

CRE's mission to ensure the proper functioning of the retail markets is also applied through its role in setting regulated sales tariffs for electricity and natural gas. Until 8 December 2015, these were fixed each year by the Minister of Economy and Minister of Energy after consulting with CRE. In 2016, the CRE will be responsible for the first time for proposing the regulated sales tariffs for electricity to the Minister of Economy and the Minister of Energy, and its decision will be considered accepted unless the ministers object within three months following the receipt of these proposals.

***Contributing to the implementation of measures
to support electricity generation and supply of electricity and gas***

The CRE contributes to the implementation of the measures to support electricity production through several channels. On the one hand, it issues an opinion on the decrees setting the purchase tariffs for energy produced by small-scale installations, for example recycling household waste or using renewable energy. On the other hand, if the production capacities do not meet, by the simple set of operator initiatives, the objectives of the multi-annual programming of electricity production, the Minister of Energy can resort to a call for tenders with CRE in charge of its implementation. The Minister of Energy develops the specifications for such a call for tenders, and submits them to CRE for review. CRE examines and appraises tenders. The minister appoints the selected candidate(s) after obtaining CRE's opinion, if its choice differs from the ranking drawn up by CRE.

In addition, CRE assesses the amount of charges attributable to public service missions which are fully compensated under the conditions laid down in article L. 121-9 of the French Energy Code, and each year proposes the amount of public service charges (CSPE) and the amount of the contribution applicable to each kilowatt hour to the Minister of Energy. It also proposes the amount of the contribution to the social tariff applied to gas (CTSS) and the amount of the contribution applicable to each kilowatt-hour (articles L.121-9 and L.121-38 of the Energy Code). Finally, CRE proposes to the Minister of Economy and the Minister of Energy the amount of the repayments to be made to operators incurring public service charges.

The CRE also provided its opinion, in a deliberation of 9 December 2015, on two draft decrees relating to the implementation of the provision for additional remuneration under article L.314-18 of the Energy Code, amending the system of purchasing obligation under law no. 2015-992 of 17 August 2015 on the energy transition towards green growth (see page 16).

Management of the ARENH mechanism

CRE proposes to the Minister of Energy the terms which apply to the sales of the Regulated Access to Incumbent Nuclear Electricity (ARENH). In application of the NOME law, this sale is open to all operators supplying end consumers residing in metropolitan continental France or system operators for their losses. CRE issues an opinion on the overall volume of maximum incumbent nuclear electricity that can be assigned (ceiling set by the Minister of Energy and the Minister of Economy after consultation with CRE, within the ceiling of 100 TWh set out by law), particularly with a view to the development of competition on the electricity production markets and its supply to end consumers. The methodology for calculating the ARENH price must be defined by a decree of the Council of State, under article L.336-10 of the Energy Code. For the moment, the Government has not yet published the decree defining the methodology for calculating the price for ARENH.

Informing all consumers

To deliver on its task of informing consumers, CRE has created, jointly with the French Energy Ombudsman (Médiateur national de l'énergie), the Energie-Info website, an information sharing service which answers questions raised by consumers. It includes practical sheets to help understand the opening up of the energy markets: how to change energy supplier, who to contact when moving or relocating, what procedure to follow in the event of a complaint or even how to benefit from social tariffs.

The Energie-Info site created by the French Energy Ombudsman and to which CRE also contributes, also provides access to an electricity and gas supply comparator. Educational and easy to use, it allows consumers to compare the offers of different suppliers with their current supply offers, to consult, and to get an estimate of the annual expenditure, the price ex-tax and inc-tax prices for a subscription and per kilowatt-hour, as well as a breakdown of the taxes, and to see who is offering green power if this is a selection criterion.

From 2014, preparing for the gradual phasing out of regulated sales tariffs for professional consumers, CRE set up an information mechanism (guides, practical information sheets, information meetings by the chambers of commerce and industry, etc.) in order to support consumers during this transition. An initiative welcomed by energy suppliers and the different stakeholders, an educational video was also made, the preview of

which was shown during a meeting of the working group devoted to communication and information on the end of the regulated tariffs set up by CRE. Finally, a website www.tarifsgreglementes-cre.fr, was published in June.

In 2015, CRE wanted to step up its information to consumers by writing directly to over 10,000 consumers affected by the end of regulated tariffs for the sales of gas, and by carrying out a phone campaign among shared ownership properties benefiting from the arrangement for continued supply provided by GRDF, to make them aware of the risk of being cut off. Finally, CRE organised a round table discussion in September 2015 in order to explore the feedback on the experience from those involved (see page 49).

2.3. New tasks for CRE arising from law no. 2015-992 of 17 August 2015 on energy transition towards green growth

Regulation of the approved revenues of operators of underground natural gas storage

A new task relating to the regulation of the approved revenues of underground natural gas storage operators could soon be assigned to CRE by the Government.

In fact, in March and April 2015, the Directorate General for Energy and Climate (DGEC) carried out a public consultation where it proposed that the CRE should regulate the underground natural gas storage, and offered two possible mechanisms for doing so. At the same time, article 167 of the law on energy transition towards green growth allows for the possibility of the Government using an order to amend the provisions of the Energy Code relating to access by third parties to underground natural gas storage, as well as the provisions relating the CRE's tasks, with the intention "of strengthening the security of supply of gas and, if necessary to achieve this goal, of controlling the tariffs of underground natural gas storage capacities".

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In 2015, CRE wanted to step up its information to consumers by writing directly to over 10,000 consumers affected by the end of regulated tariffs for the sales of gas, and by carrying out a phone campaign among shared ownership properties.

CRE, in its reply to the DGEC public consultation published on 16 April 2015, replied favourably to the suggested implementation of a gas storage regulation. It deemed that if the access tariffs to storage were to be regulated, or if the operators' revenues were subject to authorisation, it would be natural for CRE to be entrusted with this task. In addition, it reiterated that when defining the terms of regulation, the legal texts needed to allow the regulator some flexibility, to ensure the implementation of a regulation using efficient incentives. Nevertheless, it also stated that it would not be in a position to undertake this new task in a satisfactory manner without some additional resources.



THE 13 NEW TASKS FOR CRE ARISING FROM THE LAW ON ENERGY TRANSITION TOWARDS GREEN GROWTH

Law no. 2015-992 of 17 August 2015 on energy transition towards green growth includes, in 17 separate articles, 29 references to CRE, which it entrusts explicitly with a total of 13 new tasks:

- a techno-economic evaluation of a device for displaying consumption data in real time (article 28);
- opinion on the conditions of renewable energy purchase specific to an overseas department or region (article 104);
- opinion on the decrees relating to additional remuneration (article 104);
- method of calculating the provisional cost of Regional Plans for Connection to the Network for Renewable Energy (Schémas Régionaux de Raccordement au Réseau des Énergies Renouvelables) (article 148);
- receipt of and legal checks on the suspension notifications under the RTE adjustment mechanism (article 150);
- technical and economic evaluation of the measures linked to the conversion to H gas of infrastructures supplied with L gas (article 164);
- calculating the operating costs to be taken into consideration for the tariff comparisons for electricity system operators with more than 100,000 customers (article 165);
- possibility of regulating gas storage (article 167);
- preparation of a public report on distributed load shedding and a proposal if necessary for changes to the rules covering payments and an opinion on the drafts for the relevant decree (article 168);
- approval of agreements on local flexibility services (article 199);
- approval of special rules relating to the conditions of access and use of experimental smart grid networks (article 200);
- opinion on the specific measures taken in the regions of Guadeloupe and Martinique under the powers granted to them (article 205);
- opinion on the decree relating to the conditions of approval under which end consumers can have their supply suspended, the general technical methods of suspension and the conditions under which the transmission system operators shall compensate the approved end consumers (article 158).

Alongside these additional tasks, CRE can now require an audit of the information it collects during its different tasks, at the expense of the companies and in proportion to the goal being pursued and the size of the company involved (article 169).

These new tasks will cause a steep increase in the volume of CRE's activities. As its staffing levels have not been increased in 2016, they will obviously not be sufficient to handle the overall increase in all its tasks.

3. CRE AND OTHER INSTITUTIONAL ACTORS

3.1. CRE and the Parliament

Independence from the Government is one of the core reasons for creating an independent administrative authority like the CRE. CRE is not subject to the hierarchical authority or supervision of the executive authority, and its independence is enshrined in the European Directives. However, article L.134-14 of the Energy Code does state that the Chairman of CRE *"reports on the activities of the Commission before the parliamentary standing committees competent in matters of energy, at their request"*.

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The Chairman and the departments of the CRE appeared before the National Assembly and the Senate for 8 hearings during 2015.

CRE attaches particular importance to this dialogue. Each CRE publication is sent to Parliament and sometimes even a presentation is made before the competent committee. CRE officers

are also available to provide information to the Parliamentary administrators on the functioning of the energy and natural gas markets whenever they request it.

The Chairman and the departments of the CRE therefore appeared before the National Assembly and the Senate for eight hearings during 2015. These hearings are held to present the work of CRE, and also to:

- communicate information in an investigation committee, such as those carried out by the Senate on independent administrative authorities;
- hear CRE's opinion during the process of drafting legislation. This year, CRE was heard on several occasions during the examination of the draft law no. 2015-992 of 17 August 2015 on energy transition towards green growth, and also on the preparation of reform of the CSPE provisions in law no. 2015-1786 of 29 December 2015 on financial corrections for 2015 (see page 101).
- to discuss allocations to be made to CRE and the reform of energy taxation: the Chairman of CRE and the Managing Director were heard within the framework of the draft 2016 finance law no. 2015-1786 of 29 December 2015 by the Economic Affairs Committees of both houses, as well as the finance commission of the National Assembly.

3.2. CRE and local authorities

With regard to energy, local authorities are responsible for five major tasks: they promote production from renewable energy sources, they distribute – this has historically been their role – and consume energy, they manage the planning of the towns and countryside and they raise awareness among local actors and the general population of energy management. In the context of the transformation of the energy system, especially with the development of decentralised electricity production, their role has

grown in terms of planning production means. Local authorities today are taking the initiative in many innovative projects to help manage energy more efficiently.

In March 2016, a commissioner and two officials from CRE visited French Guiana to audit the production facilities of EDF SEI, and share with the local actors the energy issues for the territory.

Finally, CRE invites local authorities to become involved in its work by offering them a platform at the events it organises (forums and symposia) or by inviting them to respond to the interview published in its newsletter *Décryptages*.

3.3. CRE and other independent administrative authorities

The CRE, as a regulatory authority, is required to work with other administrative authorities, in particular with the Competition Authority and the Financial Markets Authority (AMF).

Article L. 134-16 of the Energy Code states that the CRE Chairman must notify the Competition Authority “of any abuses of a dominant position and of any practices that may prevent free competition of which it is aware, in the electricity or natural gas sectors”. The CRE Chairman can also refer to the Authority for an opinion.

In addition, the Competition Authority must inform the CRE of any referral concerning its field of competence, so that it can provide its comments within a period of two months.

The CRE and the Competition Authority are also frequently referred to for opinions on the same draft decrees. Their roles are complementary and there are many touch-points between them. As the preamble to the NOME law states, CRE is tasked with monitoring the consistency of the pricing proposed by electricity market players with their economic constraints, while the Competition Authority is responsible for checking anti-competitive practices under articles L.420-1 and following of the commercial code. *“The functions of regulating the electricity market and of the authority in charge of competition are clearly separate. The first is intended to ensure that a market that was formerly subject to a public monopoly is opened up to competition under fair conditions and while respecting the objectives of public interest specific to that market and set out by law (national security, public service guarantees, strategic industrial objectives, for example). The second role is intended to guarantee that economic competition between market players is free and honest, namely that these players’ practices do not lead to a distortion of the normal functioning of competition.”*⁽⁴⁾

CRE works regularly with the AMF in the context of its market supervision tasks. In fact, Article 1 of the REMIT regulation relating to the integrity and transparency of the wholesale energy market provides that the national regulatory authorities and the responsible financial authorities of the Member States “shall cooperate to ensure a coordinated approach”. The cooperation between CRE and AMF, and the principle of mutual referrals are also mentioned in article L.134-17 of the Energy Code, in article L.621-21 of the monetary and financial code, as well as in the law on banking and financial regulation, which proposes a consistent and complementary regulation

(4) Report produced on behalf of the Production and Trade committee on the draft law (no. 1253) relating to the modernisation and development of public electricity services, by Mr Christian Bataille, member of parliament, p. 273

of the CO₂ market, based on cooperation between the two sector regulators. In order to implement this cooperation in practice, CRE and AMF meet regularly to pool information, and more generally their respective expertise relating to the supervision of CO₂ emission quotas, electricity and natural gas. The principles and methods of this cooperation are defined more precisely in the memorandum of understanding signed by the two authorities on 10 December 2010.

In addition, the development of smart grids is, by definition, a subject which cuts across different areas that encourages CRE to step up its collaboration with the other regulators working in this area. Therefore, jointly with the National Data Protection Commission (CNIL) and the National Agency for Information System Security (ANSSI), CRE is considering the protection of the numerous personal data arising from deployment of information technologies and from communication on energy networks, as well as the cybersecurity of smart grids.

The CRE also meets regularly with the Electronic Communications and Postal Regulatory Authority (ARCEP) to discuss the topic of broadband, through the working group for the implementation of fibre optic cables using the poles used for the electricity and phone networks. CRE was also heard by ARCEP as part of the work cycle initiated by it on the subject of the 'Internet of Things'.

Finally, in 2015, CRE and the Regulatory Authority for Railway and Road Activities (ARAFER) met to discuss on-train metering to ensure the system meets the needs that will arise from the opening up of the rail market and the creation of the new rail system operators.

4. CRE, CONSULTATION AND TRANSPARENCY

4.1. Public consultations to obtain the opinion of actors

Given their structural character, some of the CRE's deliberations automatically trigger one or more public consultations. In 2015, the actors were therefore consulted on matters as diverse as the Regulated Access to Incumbent Nuclear Electricity (ARENH) mechanism, the draft specification for the call for tenders for wood energy and methanisation, or defining the new tariff for use of the GRDF's public natural gas distribution networks.

In certain cases, the French Energy Code sets the principle of consultation of stakeholders by CRE prior to some of the regulator's deliberations. CRE has also made the decision to regularly consult market participants, including for decisions where such a consultative approach is not required by statutory or regulatory texts. This market consultation takes the form of either an ad hoc public consultation, or hearings before the CRE board.

This year, the CRE launched 15 public consultations. In all, 72 actors were heard by the board in 2015, some of them several times, on a variety of different topics. These consultations may also take the form of workshops or round tables, bringing together stakeholders from the sector.

In 2015, CRE organised 83 consultative meetings of which 41 were related to electricity, 41 to natural gas and one was on the combination of the two related to regulated

15
public
consultations

72
market players
interviewed by
the Board

83
consultation
meetings

sales tariffs. CRE also took part in many consultative meetings, especially those organised by the DGEC, for example during the preparation of texts implementing the multiannual program for energy production planned by the law on energy transition towards green growth.

4.2. A principle of transparency formalised in the rules of procedure

The actions and procedures implemented by CRE comply with the principle of transparency formalised in its rules of procedure.

CRE is responsible for ensuring the transparency of the energy markets, in particular through its monitoring tasks, which give rise to the publication of annual reports (see annexes pp. 120 and 121). It also contributes to this via the Energie-Info service.

In addition, the CRE ensures the transparency of its own work in order to guarantee its quality and understanding by stakeholders. Its deliberations, the consultations which precede them, and its reports are available on the www.cre.fr website. This website is part of the educational approach used by CRE in all of its communication tools.

5. HUMAN RESOURCES AND BUDGETARY MEANS

Article 35 of Directive 2009/72 of 13 July 2009 and article 41 of Directive 2009/73 of the same date provide that *"the national regulatory authority has a separate budget and autonomy in the execution of the budget, and has sufficient human and financial resources to fulfil its obligations"*.

The tasks and activities of CRE have increased substantially since 2010, with the implementation of the directives of the Third Energy Package (decision-making power for setting the tariffs for the use of networks, certification, examination of transmission system operators' ten-year investment plans), the entry into force of the NOME law (ARENH, retail market monitoring), the massive use of calls for tenders in the area of renewable energy, the entry into force of the REMIT regulation and the European work on the drafting of the rules relating to market integration. Finally, the law on energy transition towards green growth has added a further 13 tasks. However, the staffing levels and operating budget of the French regulator have fallen over this same period. They are also systematically cut back during each year due to budgetary freezes.

— Changes in the employment cap at CRE

Full time equivalents	2009	2010	2011	2012	2013	2014	2015	2016
Commissioners	3	3	5	5	5	6	6	6
Officers	128	128	126	126	125	124	121	121
Total	131	131	131	131	130	130	127	127

The 121 FTEs of CRE are now entirely responsible for setting prices for electricity (TURPE) and gas (ATRD, ATRT, ATTM) networks and infrastructures, which the CRE previously shared with the Minister of Energy and the Minister of Economy and

Finance. The CRE now itself determines these tariffs, for which it previously only had the right to make proposals. However, the relevant staff have not been transferred from the ministerial department to the independent administrative authority. It must also be remembered that these prices represent a cost of 20 billion euros annually for consumers.

A comparison of human resources between the European authorities for energy regulation in 2015 places the CRE a long way behind the other larger European countries (878 employees in the UK, 298 in Germany, 172 in Italy).

In most of these countries, the number of people employed by the regulators has risen over the last few years, which reflects both the increasing scope of their work, and the need for a more detailed approach to the regulation of tariffs and investments by network operators in a monopoly position.

The lack of staff at the CRE also impacts its missions relating to calls for tenders in the area of renewable energy and the publication of its reports, especially in relation to the monitoring of retail markets:

- CRE is no longer in a position to meet the deadlines imposed by the legal provisions and the specification documents for the calls for tenders in the area of renewable energy, at the very time when a substantial increase in this activity is planned. This is why the specification for the latest call for tenders relating to photovoltaic plants in areas not connected to Metropolitan France and its grid, was prepared with a delay of over 6 months, and the preparation of the first phase of the tender for 100-250 kW photovoltaic was carried out with over 3 months delay.
- CRE cannot manage to publish its reports on monitoring the retail markets and on the codes of conduct and independence every year. Since the entry into force of the NOME law in December 2010, CRE has only published 3 reports on monitoring the retail markets (in January 2013, January 2014 and November 2015). However, carrying out these tasks is essential in a context which is strongly influenced by the ending of regulated price sales tariffs for professionals, demanding increased vigilance in respect of operators' practices, and an educational effort directed at the consumers involved (especially in the absence of any attempt at communication on this subject from the government).

The continued reduction of CRE's operating budget after having implemented a savings plan affects the core of its budget for studies, audits and external advice. These studies are essential for setting tariffs.

As of 31 December 2015, the CRE had 124 staff members (excluding commissioners), including 54 women and 70 men.

Faced with changing tasks, the regulator is trying to acquire better technical and economic competence in the energy sector and better forecasting abilities. In 2015, CRE received over 2,000 applications for 46 open posts, mostly concerning highly sought-after candidates with a very high level of qualification.

CRE's collaborators, the majority of whom are contractual officers under public laws (88% of the workforce) are mainly recruited in companies. Their average age is 36. In 2015, 61% of the officers took at least one vocational training course with an allocated budget of EUR 121,000.

CRE PLAYING A ROLE AT THE HEART OF EUROPE

1. CRE WITHIN ACER AND CEER

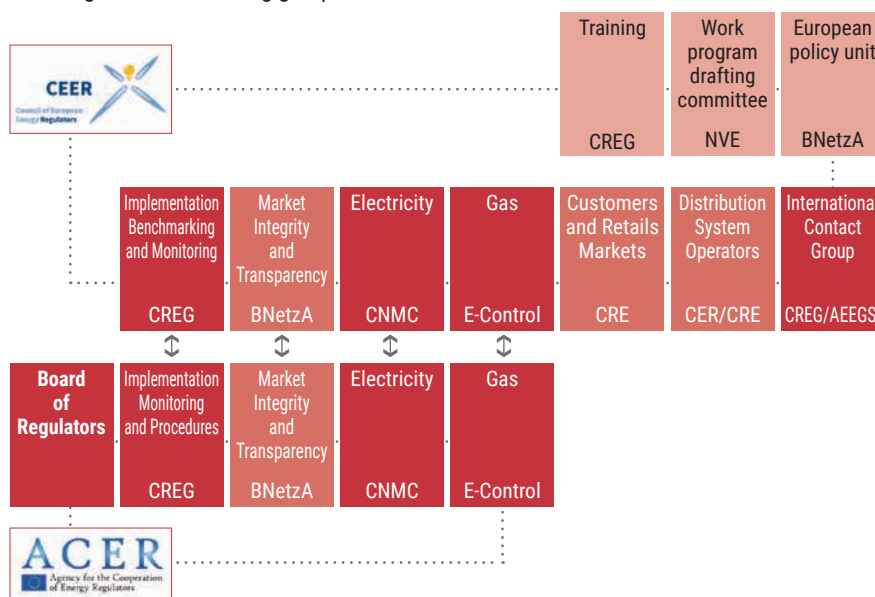
1.1. CRE and the bodies for cooperation between European regulators

CRE is playing an active part in the construction of a single energy market within European regulators, namely the Council of European Energy Regulators (CEER) and the Agency for the Cooperation of Energy Regulators (ACER). It estimates its contribution to the cooperative bodies of the European regulators to be over 15 FTEs. In 2015, it took part in 10 general assemblies of the CEER and in 10 meetings of the ACER's Board of regulators, which is responsible for informing the Agency's director on how its tasks are being implemented.

The CRE is represented in all the working groups of CEER and ACER, where it is working on the development of rules for the operation of the internal market. In addition, during 2015, it held the (co/vice)-chairmanship of three CEER working groups:

- **Distribution Systems Working Group (DS WG)**, responsible for working on the development of distribution systems, and the regulation of electricity and gas distribution system operators. Hélène Gassin, commissioner of CRE, is the co-chairman.
- **Market Integrity and Transparency Working Group (MIT WG)**, which looks at questions of transparency and monitoring, as well as the links between the legislation relating to the wholesale markets and the relevant legislation on the financial markets. Fadhel Lakhoua, director at CRE, is the vice-chairman.
- **Customers and Retail Markets Working Group (CRM WG)**, which is working on consumer rights, intelligent metering, the design and monitoring of the retail markets. It promotes competition in the interests of consumers. Patricia de Suzzoni, advisor to the Chairman of CRE, is the chairman.

Diagram of the working groups at CEER and ACER



FOCUS ON THE EUROPEAN REGULATORY BODIES

The Council of European Energy Regulators (CEER) is a non-profit association under Belgian law which spontaneously brings together regulators from the 28 Member States of the European Union (EU), Iceland and Norway. The CEER also welcomes, as observers, the regulators from Switzerland, from the former Yugoslav Republic of Macedonia, Montenegro and Kosovo. The CEER promotes assistance, the sharing of experience and good practices between its members and enables common positions to be developed. Working closely with ACER on community questions, it also addresses many issues that are complementary to the latter's work, such as smart grids, sustainability and consumer information. It issues non-binding recommendations in the areas of distribution, the functioning of retail markets and consumer protection, of sustainable energy and the storage of gas and liquefied natural gas. The CEER is also the voice of national regulators at community and international level. CRE has been a member of CEER since it was founded in March 2000.

The Agency for the cooperation of energy regulators (ACER) is a European agency with a legal personality based in Ljubljana. Created under the 3rd energy package, it has been operational since 3 March 2011. Its mission is to assist the national regulatory authorities to exercise and coordinate their regulatory tasks at community level and, if necessary, to take complementary actions. It ensures that the integration of markets and the harmonisation of regulatory frameworks is carried out in compliance with the objectives of the EU's energy policy. It is, among other things, responsible for monitoring adherence by the electricity and gas transmission system operators to the European network codes. It has powers to take individual decisions on cross-border subjects such as the conditions of access and security or exemption, as well as a responsibility for monitoring the energy wholesale markets, in coordination with the national regulators. It also contributes to the coordinated development of the EU's energy infrastructures.

1.2. Participation by CRE in other European consultative groups

CRE also participates in the forums created by the European Commission to promote collaboration at community level between market players on aspects of the regulation of the internal energy market. These forums bring together the European Commission, the national regulatory authorities, the Member States and other interested parties, in order to discuss both general and technical issues. There are four forums:

- The Florence forum: created in 1998, it is devoted to the regulatory aspects that affect the electricity market. It meets twice a year.
- The Madrid forum: created in 1999, it is devoted to questions concerning the functioning of the natural gas market. It meets twice a year.
- The London forum: created in 2008, it deals with regulatory aspects that affect the retail markets and the protection of European consumers of electricity and natural gas. It meets once a year.
- The Copenhagen forum: it deals with regulatory and financial aspects related to the expansion and strengthening of energy infrastructures. It met for the first time in November 2015.

In addition, in 2006, the regulators and the European Commission launched regional electricity and gas initiatives in order to take specific actions to assist with the integration of regional electricity and gas markets. CRE is actively involved in the regional initiatives of four of the seven electricity regions, and two of the three gas regions, in close collaboration with its counterparts and ACER.

Finally, CRE is required to attend conferences, workshops and training sessions organised by various European bodies, especially the Florence School of Regulation.



During 2015, CRE officers have travelled briefly on 303 occasions in order to participate in the work of European regulators.

Overall, during 2015, CRE officers have travelled briefly on 303 occasions in order to participate in the work of European regulators.

1.3. CRE's contribution to the European debate

On 15 July 2015, the European Commission undertook an in-depth review of how the energy market is organised, as part of the EU energy union strategy launched in February. This initiative intends to take account of recent developments, especially those affecting the electricity market. To do so, the Commission has initiated a public consultation process, which is focussing mainly on the aspects of governance, in order to hear the opinions of the actors as to whether the existing regulatory framework is adequate, and whether it would be useful to strengthen ACER's capacities. The European regulators have given a combined response, through ACER and CEER, in which they stress the positive results of the first five years of cooperation between national regulators within ACER. In fact, important results have been achieved, such as the publication of opinions and recommendations on the network codes, the gradual implementation of legislation on monitoring the wholesale markets (REMIT) and work on projects of mutual interest. The regulators also stressed the need to follow through with the implementation of the 3rd energy package and of the network codes, as well as the application of REMIT rules. They also formulated specific proposals aimed at improving the functioning of the wholesale market, allowing better regional integration, encouraging greater participation by actors and strengthening current governance. In this respect, the regulators also recalled that the "Bridge to 2025" vision

published by ACER and CEER in September 2014, already contained several recommendations intended to strengthen the Agency, as energy policies become more mature, and that this reinforcement would be consistent with the intention of greater European integration of national energy policies. The CRE fully supports this reply, and also added a separate response, in which it shared its experience on a number of individual points such as load shedding, developing interconnectors and the level of harmonisation of balancing markets.

2. COOPERATION WITH OTHER REGULATORS

2.1. Bilateral meetings with other regulators

Extensive cooperation is needed between European regulators. Bilateral meetings can enable progress on shared interests, such as the approval of rules for access to interconnectors, decisions to grant exemptions or also decisions on allocation of costs of cross-border infrastructures. In 2015, high-level meetings took place between the CRE and its counterparts in Spain, the CNMC (*Comisión Nacional de los Mercados y la Competencia*); Germany, the BNetzA (*Bundesnetzagentur*); Latvia, the PUC (*Public Utilities Commission*); Belgium, the CREG (*Commission de Régulation de l'Électricité et du Gaz*); UK, Ofgem (*Office of Gas and Electricity Markets*).

In addition, the establishment up of high-level exchanges enables some stronger bilateral links and mutual understanding with counterparts geographically closest to France. Cross-border cooperation therefore continued during 2015 in order to discuss recent developments and the future challenges of energy regulation.

Beyond the European Union, the CRE also responds to ad hoc requests for information or involvement from its international counterparts on specific technical matters. The CRE for example, welcomed visits from about fifteen foreign delegations in 2015, from Japan, Saudi Arabia, China, the Ukraine, Romania, Singapore, Brazil, New Zealand and Mexico. It is therefore involved in promoting French and European principles of regulation on the international scene.

15
foreign
delegations
visiting in 2015

2.2. CRE involvement in other multilateral cooperation frameworks for regulators

The CRE is also a member of the Association of Mediterranean Energy Regulators (MEDREG), which brings together the members of almost all the countries bordering the Mediterranean, in order to share experiences and good practices on energy regulation. CRE chairs MEDREG's working group addressing issues related to electricity.

In 2015, the CRE participated in the 6th World Forum on Energy Regulation (WFER6), an event which occurs every three years, and which was held on May 25 to 28 in Istanbul. It allowed 120 speakers and around 700 participants to discuss future challenges of regulation in relation to various topics: "*reconciling the interests of the parties concerned*", "*benefitting from change*", "*regulation and sustainable development*" and "*regulation in emerging countries*". Among the speakers, Dominique Jamme, director of networks at CRE and Patricia de Suzzoni, advisor to the chairman, spoke respectively on behalf of the working group on electricity of the Association of Mediterranean Energy Regulators, and of the consumers and retail markets working group of the Council of European Energy Regulators.

Contribution to IEA analyses

The CRE was also involved in the experts committee on the security of electricity supplies at the 5th workshop of the International Energy Agency (IEA) (*IEA Electricity Security Advisory Panel, ESAP*) which was held on 15 January 2015 on the subject of “*Regional resource adequacy*”. This workshop aimed to discuss developments in the area of regulation and to present the improvements needed to secure investment in electrical infrastructures. The CRE presented its experience on the integration of balancing markets. It also took part in this committee’s 6th workshop, on the topic of “*Integrating New Technologies While Maintaining Resource Adequacy*”.

Finally, the CRE contributed to the regular in-depth review of the French energy policy, undertaken by the IEA in 2015, and was visited by the team responsible for this study in order for a presentation.

2.3. The network of economic regulators in the OECD

Involvement in the work of the network of economic regulators

The CRE has, since its creation, taken part in the work of the Network of Economic Regulators (NER) of the Organisation for Economic Cooperation and Development (OECD), whose first formal meeting was held in November 2013. This forum brings together 70 regulators from OECD countries and partner countries who operate principally in the sectors of energy, telecoms, transport and water. This provides a framework for discussion of questions related to governance and their regulatory practices. In 2015, their work related primarily to the conditions of independence of regulatory authorities, to the use behavioural economics in regulation, to their role in investments in infrastructures, and to the multisectoral Latvian regulator’s (PUC) plan for peer performance evaluation. The CRE was a member of the evaluation committee, alongside the German regulator, BNetzA (Bundesnetzagentur) and the International Confederation of Energy Regulators (ICER). The Managing Director of CRE, Jean-Yves Ollier, was elected vice-president of the NER office for 2016 and president for 2017.

KEY DATE

01/01/2016: END OF REGULATED
TARIFFS FOR NON-DOMESTIC GAS
AND ELECTRICITY CONSUMERS

KEY FIGURES

443 TWH OF ELECTRICITY
AND 450 TWH OF GAS
CONSUMED IN 2015

KEY WORDS

WHOLESALE MARKETS
RETAIL MARKETS
CONSUMPTION
MONITORING

As part of its monitoring task,
CRE assesses the wholesale market 30

The retail market was growing fast in 2015 44





CRE AND THE MARKETS

As part of the gradual removal of regulated tariffs for large energy consumers, the opening up of the markets speeded up in 2015. Prices on offer are more attractive and are enabling real savings in both residential and professional consumers' energy bills. The economic context of falling market prices also explains why conditions are more favourable to competition. In addition, the new legal framework of regulated sales tariffs provides alternative suppliers with the opportunity to offer competitively priced products. As part of its mission of monitoring the markets, the CRE is actively working on the development of competition.

AS PART OF ITS MONITORING TASK, CRE ASSESSES THE WHOLESALE MARKET

Since 2006⁽¹⁾, the CRE has been given the task of monitoring the French wholesale electricity and natural gas markets, and since 2010⁽²⁾, the task of monitoring the CO₂ market, in collaboration with the responsible authorities, and especially with the Financial Markets Authority. In December 2015, it published its annual report on the operation of the French electricity, CO₂ and natural gas wholesale markets, which covers their activities and describes the development of these markets in 2014 and the 1st half of 2015⁽³⁾, as well as the Market Observatory for Electricity, Gas and CO₂, issued each quarter⁽⁴⁾. This monitoring task now falls under the European regulation known as REMIT, in force since 2011, on the transparency and integrity of the energy markets. Where necessary, it is backed up by the exercise of investigative and sanctioning powers if market abuses are discovered.

1. THE WHOLESALE ENERGY MARKET HAS BEEN AFFECTED BY THE SIGNIFICANT FALL IN PRICES

In 2014, the combined effect of the general fall in the prices of raw materials and a particularly mild climate created a relaxed balance between supply and demand, and a clear reduction in unusual market events. Indeed, no price peaks, occurrences that the CRE systematically analyses in depth, were recorded. The price for CO₂ allowances, for its part, registered a slight rise, which reflects the wish of the European Union to introduce structural reforms that will allow it to withdraw the surplus of allowances in circulation.

1.1. Notable facts in 2015

The year was marked by the steep fall in the prices of raw materials

Since the 2nd half of 2014, the prices of commodities have generally fallen. The fall in the price of petrol was particularly important, because after reaching over EUR 80 per barrel during the summer of 2014, the prices reached their lowest price since the summer of 2009 at the end of 2015 (EUR 35/b), which represents a drop of 61% since the start of 2013. The price of coal also fell regularly, reaching 52% since the same date. Apart from the global slow-down, these falls are linked, on the supply side, to the production of shale oil in the US⁽⁵⁾, as well as to decisions on petrol taken by OPEC countries⁽⁶⁾. The development of American shale gas has caused the reduction of the

(1) Under law no. 2006-1537 of 7 December 2006

(2) Under law no. 2010-1249 of 22 October 2010 on banking and financial regulation

(3) www.cre.fr/marches/marche-de-gros/rapports-de-surveillance

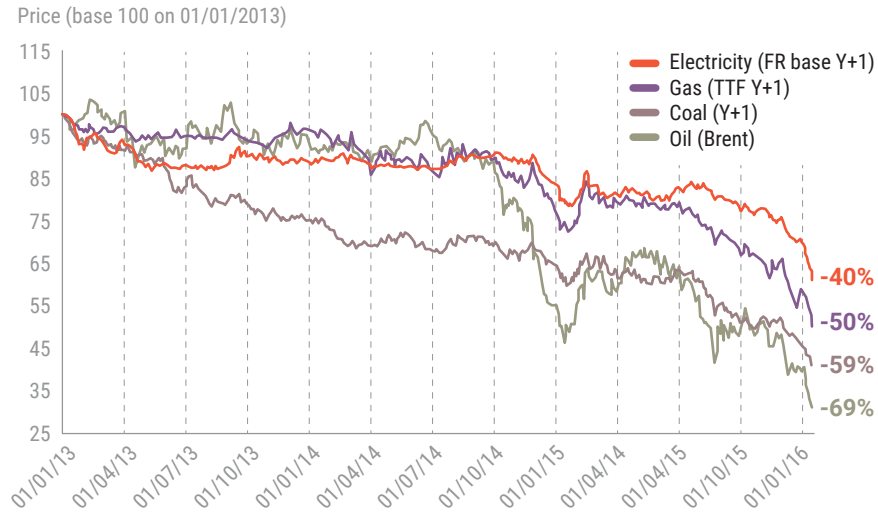
(4) www.cre.fr/marches/observatoire-et-indicateurs-des-marches

(5) According to the IEA, only four countries (the United States, China, Canada and Argentina) produce today shale gas and shale oil in commercial volumes. The United States produces the largest proportion of these volumes, representing around 48% of total production in 2014. Shale oil has risen from 2.19 million b/day in 2012 to 4.19 million b/day in 2014

(6) The decision of OPEC on 27 November 2014 not to reduce its quotas set at 30 million barrels/day, and not to take action against members exceeding their quotas (estimated at between 0.5 and 1 million barrels/day)

demand for coal, which was thus partly replaced in the production of electricity. The fall in demand and the drop in the price of fuels are reflected globally in the downward trend in electricity and gas prices (*Illustration 1*).

Illustration 1: Energy price trends



Sources: Electricity: Product Y+1 EEX base; Gas: Heren TTF Y+1; Coal: EEX CIF ARA Y+1

Demand strongly affected by climatic conditions

During 2014, temperatures were on average 1.26°C above the seasonal average in France. In particular, they were very mild in both winter and summer; demand for heating and air conditioning therefore reduced.



The climatic context had an impact on the demand for gas and electricity in France and in Europe.

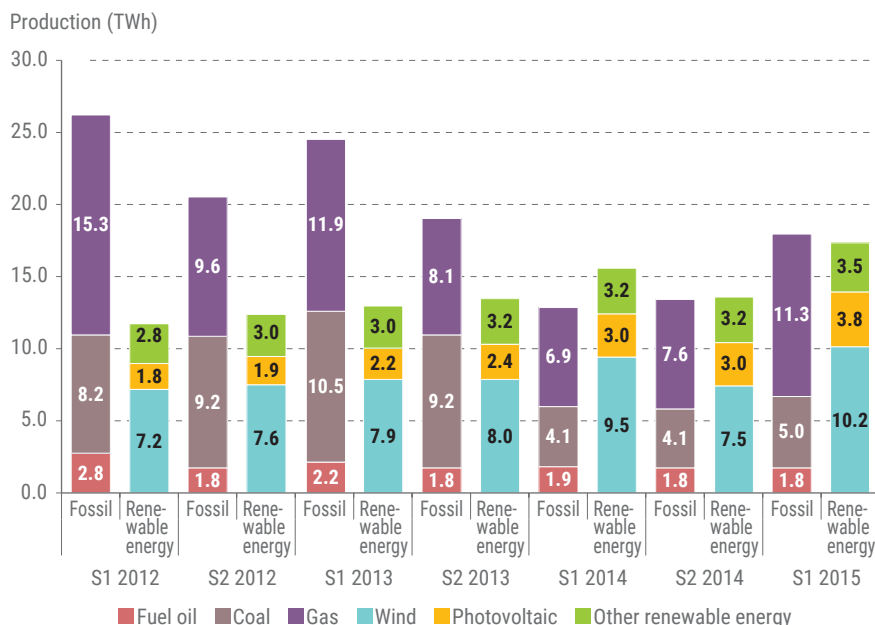
This climatic context had an impact on the demand for gas and electricity in France and in Europe, with visible consequences on the wholesale markets. The consumption of electricity in France fell by 6% in 2014 (435 TWh), reaching its lowest level since 2002. For 2015, it was 443 TWh⁽⁷⁾ (+2%). Gas consumption, in turn dropped by 16% in 2014, reaching a level of 416 TWh, the lowest level since 1997.

(7) Gross consumption after losses and hydraulic pumped storage

1.2. Overall, the electricity industry showed a relaxed balance between supply and demand

The electricity wholesale markets in France were characterised by balancing supply and demand in 2014. Consumption settled at 435 TWh, a drop of 6% compared to 2013. On the supply side, the availability of nuclear production was high, at an average of 80%, which helped to increase exports. The level of exports was 67.3 TWh, an increase of 38% over 2013. Hydraulic production was also at a satisfactory level and production in other renewable energy sectors increased substantially, exceeding fossil-fired production in 2014 for the first time (*Illustration 2*).

— Illustration 2: Comparison between six-monthly fossil-fired production and renewable sources (excluding hydraulic)

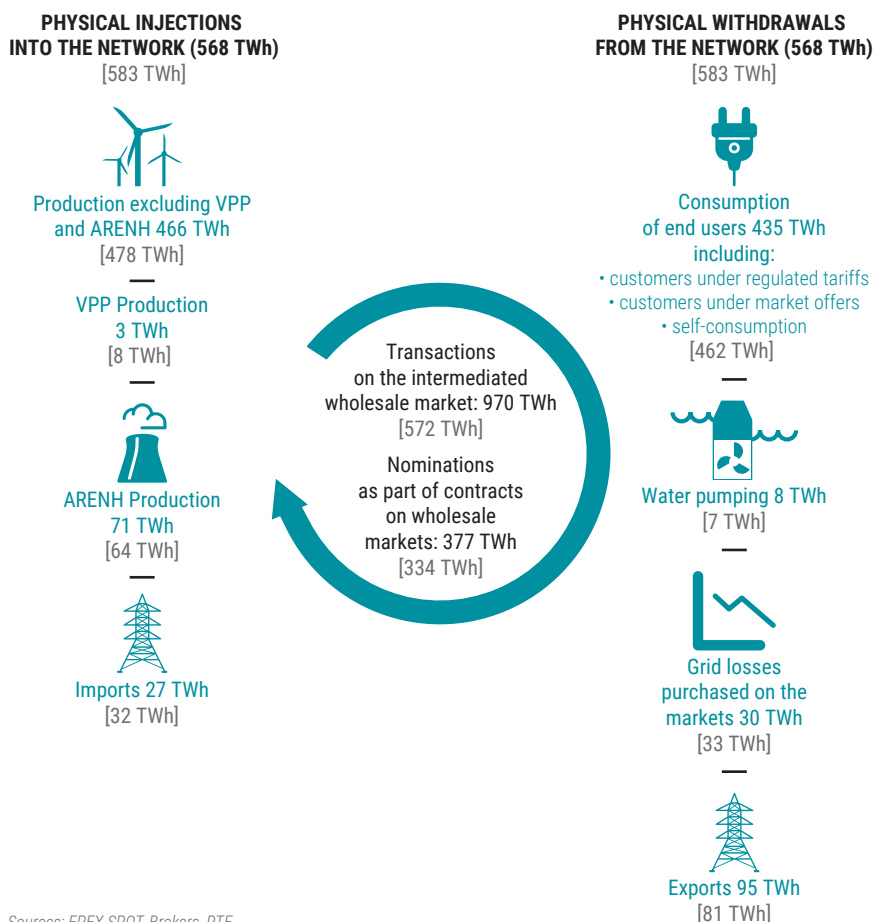


Source: RTE – Analysis: CRE

In addition, the level of energy prices improved the cost effectiveness of gas plants, helping them to come back into production for peak times during the winter of 2014-2015. Therefore the production rate in the gas sector came close to 50% in the 1st quarter of 2015, whereas in 2014 it never rose above 35%.

Under these conditions, all the constituent parts of the French electricity system were able to match consumption throughout the year, with a comfortable margin to spare. Imports were only used for reasons of efficiency optimisation (*Illustration 3*).

Illustration 3: Balance of electricity injections and withdrawals during 2014 [2013]



Sources: EPEX SPOT, Brokers, RTE

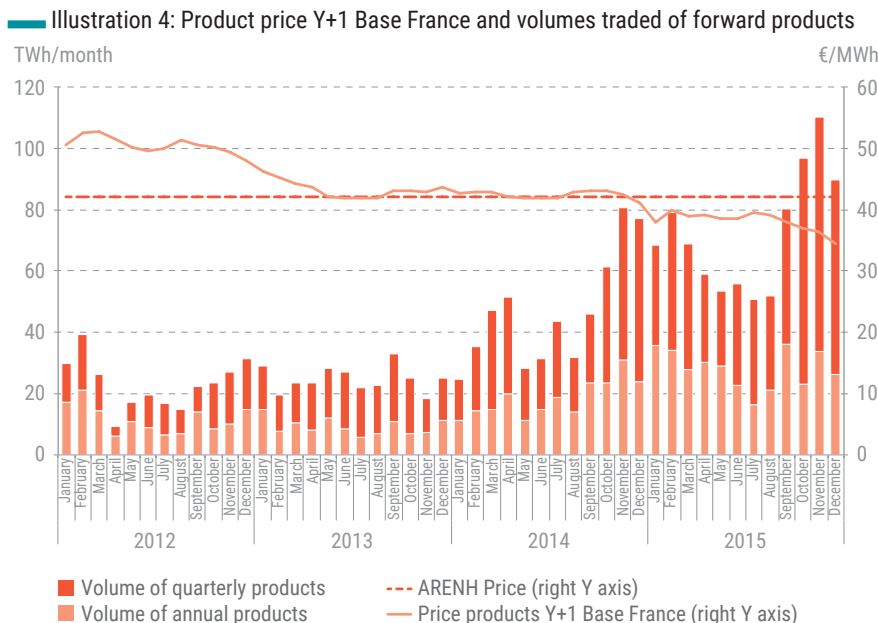
In this context, the 2014 spot price fell by 20%, then rebounded in 2015 due to a more severe winter (Table 1). No positive price peak was seen on the spot market, nor any instances of negative prices.

Table 1 : Average price day-ahead and intraday

Year	Average day-ahead price	Average intraday price
2013	€43.2 /MWh	€44.3 /MWh
2014	€34.6 /MWh	€35.0 /MWh
2015	€38.5 /MWh	€38.8 /MWh

Source: EPEX SPOT

On the futures markets, electricity prices have also generally been falling from December 2014 and during 2015, after annual prices stabilised around €42/MWh, which matches the ARENH price, on which the CRE published some analysis in its monitoring report for 2013-2014. This fall is linked, in particular, to the prices of coal and gas. The futures prices at the end of December 2015 were at levels close to €34/MWh, including for one, two and three year terms.



Source: EEX

This situation also contributed to a sharp reduction in subscriptions to ARENH volumes, and an increase in volumes traded on the wholesale markets. The volumes taken up under the ARENH mechanism therefore were 12.6 TWh and 3.8 TWh for the 1st and 2nd halves of 2015, compared to 34.5 TWh for the 2nd half of 2014. The ARENH volumes that remained unsold were then placed on the electricity market (*Illustration 4*).

The volumes traded on all the wholesale markets increased by 70% in 2014, this increase being marked in the last few months of 2014 and the 1st half of 2015. Spread across all segments of the electricity markets, this growth in traded volumes is partly due to the roll-over of ARENH volumes, and shows how liquidity is improving in these markets.

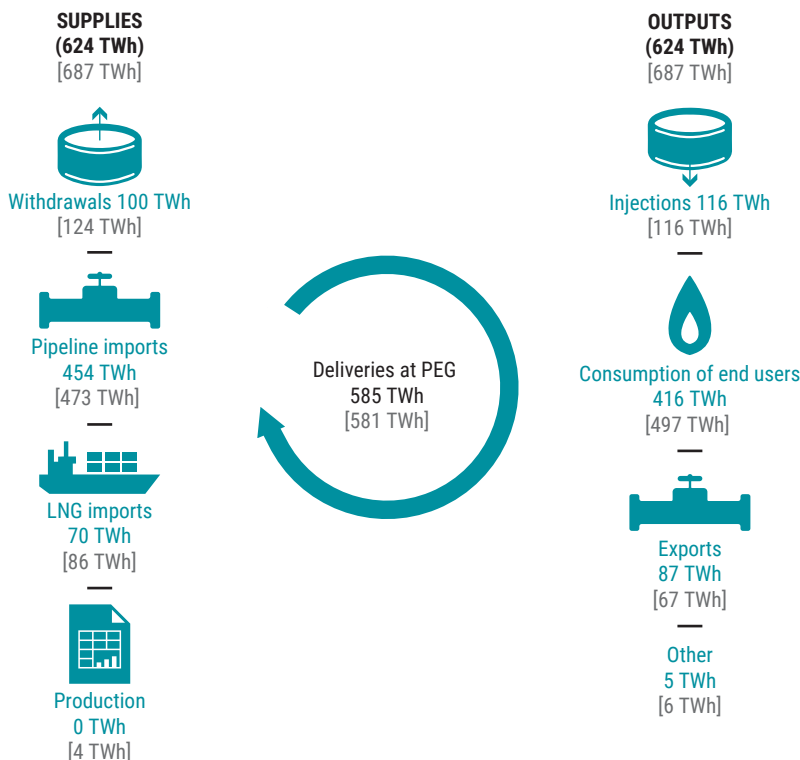
1.3. The overall situation for the gas system: a large fall in consumption

In 2014, the key factor in the wholesale gas markets in France, just like the electricity markets, was a drop in consumption due to the weather patterns, as well as the general fall in raw material prices. In fact, 2014 showed a fall of 16% in gas consumption in France. Otherwise, the weak electricity prices created a fall in consumption from power stations operated by gas.

The low level of consumption led to a slight fall in imports, both overland or from overseas, and helped to launch a recovery in exports. These showed a pick-up in the volume traded between France and Italy on the Oltingue interconnector (it links the Northern region of the GRTgaz network to the Swiss network operated by FluxSwiss), which doubled compared to 2013, going back up to the 2012 level. Exports to Spain rose by 18.7% in 2014.

However, in 2015 we saw a pick-up in gas consumption, with around 450 TWh consumed, which is an increase of 8% compared to 2014.

Illustration 5: Balance of gas injections and withdrawals during 2014 [2013]



Sources: GRTgaz, TIGF – Analysis: CRE

The availability of liquefied natural gas (LNG) increased at an international level and European stocks remained at high levels. These conditions have helped to align the prices in different regions (Europe, Asia, South America) and, at European level, to ensure good price convergence between different marketplaces.

In fact, the spot prices in France fell, especially during the first half of 2014, then fluctuated within a range of €20 to 25 /MWh. Similar trends were seen for the futures prices. The fears concerning the conflict in Ukraine kept winter prices relatively high, and encouraged stockpiling, which emphasised seasonal fluctuation of the prices.

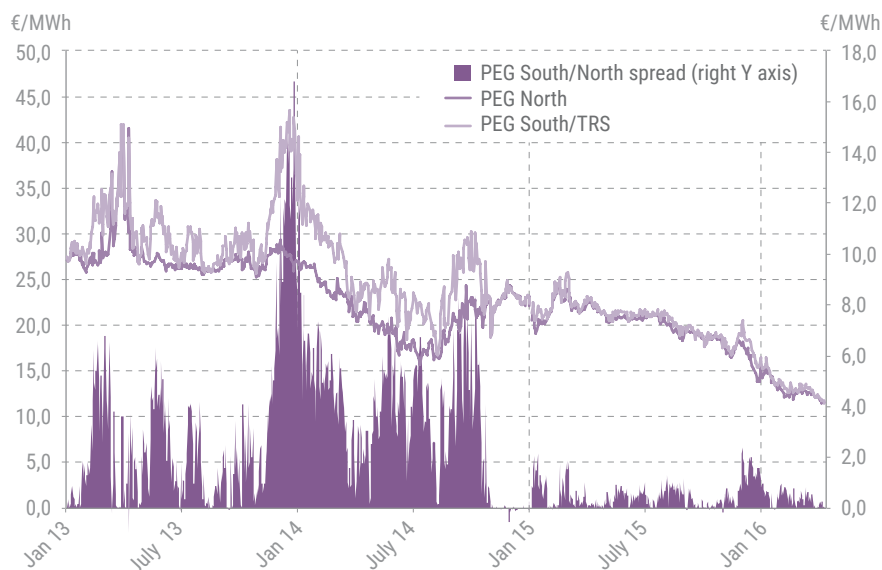
Table 2: Average spot prices PEG North and TRS day-ahead

Year	Average day-ahead price PEG North	Average day-ahead price TRS
2013	€27.6 /MWh	€30.5 /MWh
2014	€21.4 /MWh	€25.0 /MWh
2015	€20.0 /MWh	€20.5 /MWh

Source: Powernext

Good inventory levels, as well as the return of LNG supplies, helped to reduce pressure on the North-South link from October 2014. The price gap between the North and South zones, which exceeded €10/MWh on several occasions at the end of 2013 and in 2014, has reduced significantly since October 2014 and only rarely exceeds €2/MWh in 2015. (Illustration 6).

— Illustration 6: Trend of PEG South / North spread



Source: Powernext EOD - Analysis: CRE

In terms of trading, the merging of the PEG South and TIGF regions took effect on 1 April 2015, in the form of a single exchange point, Trading Region South (TRS). Shippers no longer have to subscribe capacity at the interconnection between these two zones. The management of the physical flows between the networks, and the calculation of imbalances between shippers and their distribution across the two regions, have been delegated respectively to GRTgaz and TIGF. The creation of TRS improves the way the gas market functions in the south of France and will help to expand it. It is a decisive step towards the creation of the single marketplace planned for 2018.

PEG deliveries continue to grow. The volumes traded on the intermediary markets also continue to grow, even if the rate of growth is slowing down compared to previous years, falling from 31% in 2013 to 3% in 2014. The increase that we saw was solely linked to futures products, which brought the volume of exchanges on the wholesale gas markets to a higher level than that of consumption, for the first time since the markets opened.

1.4. An increase in the prices of emission allowances as part of a reform of the European market

The European market for CO₂ emission allowances typically has a surplus of allowances in circulation, that the European authorities are trying to reduce by applying various structural measures.

Among these, the measure of pooling (or “backloading”) reduces the auction volumes of the allowances by 400 Mt, 300 Mt and 200 Mt in 2014, 2015 and 2016 respectively.

Originally, these allowances were supposed to be brought back on the market by 2020, the final negotiations (“trialogue”) between Member States, the European Parliament and the European Commission, however, wound up on 18 September 2015 with a decision to transfer them to the “market stability reserve”.



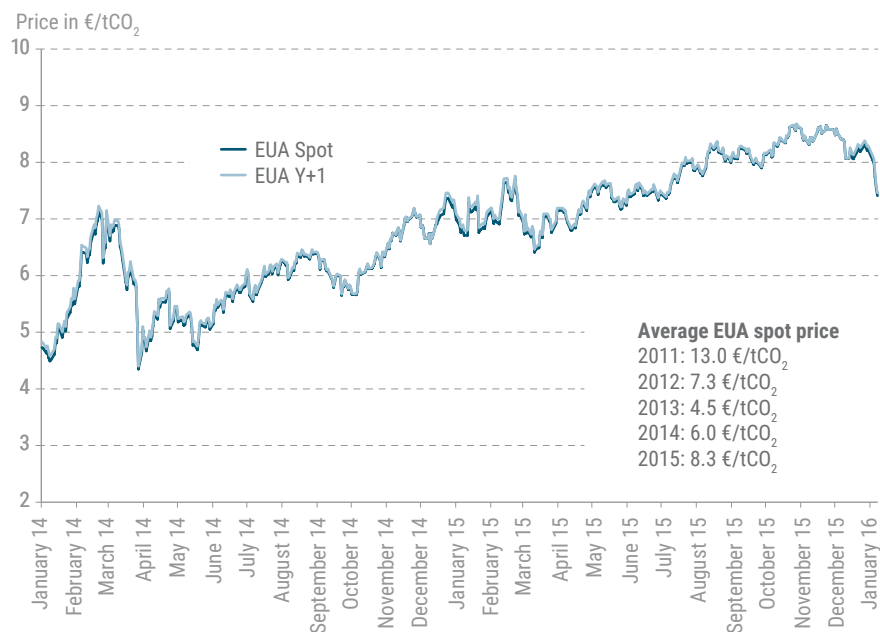
During 2015, discussions about the early implementation of the stability reserve had the price of allowances fluctuating between €7 and 8 /tCO₂.

The creation of the market stability reserve, the second important measure proposed by the European Commission, aims to respond in the longer term to the surplus of allowances, and to increase the resiliency of the EU Emissions Trading System (EU ETS) in the event of strong fluctuations in the demand for allowances. These will be gradually withdrawn from the market, and stored in the stability reserve if there are excess allowances, and put back into circulation under opposite circumstances, depending on thresholds and predefined quantities. In 2015, a decision was taken to bring the measure into effect sooner, on 1 January 2019 instead of 1 January 2021.

Given the context of discussions relating to backloading, the price of the CO₂ allowance (EUA spot) rose substantially in 2014. During 2015, discussions about the early implementation of the stability reserve had the price of allowances fluctuating between €7 and 8 /tCO₂. In January 2016, it fell back below the €8 /tCO₂ level, dragged down by the fall in the other markets (electricity calendar products in Germany, falls in the price of oil and on the stock markets) and by forecasts of very mild temperatures (*Illustration 7*).

But these levels still remain inadequate in relation to the initial purpose of the EU ETS of giving a true indication of the incentive price level to encourage investment in technologies that reduce greenhouse gas emissions.

Illustration 7: The trend in the prices of CO₂ allowances



Source: ECX - Analysis: CRE

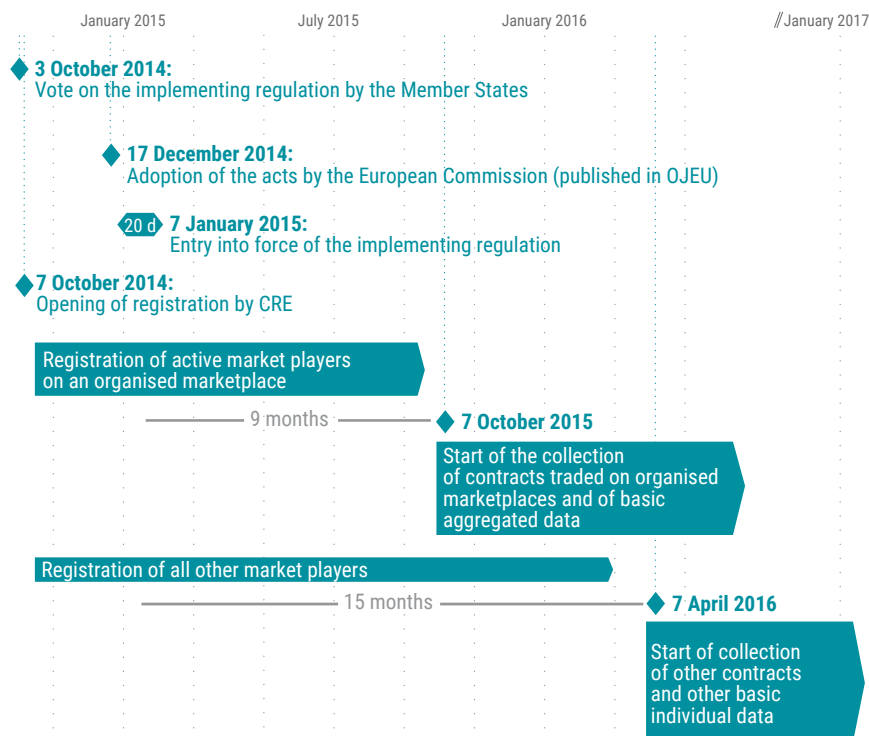
2. THE EUROPEAN REGULATION, REMIT, IS A LEGAL TOOL FOR MONITORING THE MARKETS AT EUROPEAN LEVEL

2.1. Its implementation

On a national scale, CRE's task of monitoring the wholesale gas and electricity markets also falls under the EU⁽⁸⁾ Regulation for energy market integrity and transparency, known as REMIT. In force since December 2011, REMIT forbids market manipulation and insider trading. It gives ACER the task of monitoring all the markets in the European Union, in collaboration with national regulators. The latter are responsible for conducting any inquiries resulting from suspected misconduct.

Heavily involved in all the work relating to this regulation, CRE is an active participant in the current operational implementation phase of REMIT. 7 January 2015 marked an operational turning point, with the coming into effect of the implementing regulation on the collection of transactional data on the gas and electricity wholesale markets. This regulation set the key dates of 7 October 2015 and 7 April 2016 for the commencement of collection by ACER, depending on the type of contracts exchanged. ACER's data collection started in practice on 7 October for standard transactional data (*Illustration 8*). CRE's information security policy has been certified by ACER, which is a pre-condition for sharing data.

Illustration 8: Timetable for entry into force and implementation of REMIT



Source: CRE

(8) Read Regulation (EU) No. 1227/2011 of 25 October 2011

CRE is playing an active part in the various ACER and CEER working groups on market integrity and transparency, as well as the coordination group that ACER set up in 2015 for the operational implementation of REMIT.

Through this work, questions in the following fields are addressed:

- the operational implementation of REMIT and, in particular, the information technology and security aspects of the systems for transmitting and exchanging data;
- the monitoring tools and methods, as well as the coordination of inquiries if market abuse is detected.

2.2. The registration of participants

Before transmitting their transactional data, market participants must first register with ACER through their national regulator, by sending information about the structure of their group, shareholders and potential links between their subsidiaries. As the REMIT regulation stipulates, this registration is necessary to be able to carry out transactions on the wholesale gas and electricity markets. It allows ACER to create a regularly updated European register of market participants, with some of its information getting published.



As of 15 January 2016, more than 140 market participants were registered with CRE in order to carry out transactions on the wholesale gas and electricity markets in accordance with REMIT.

On 7 October 2014, the CRE set up a national registration system that uses the “CEREMP” registration system (Centralised European Register for Market Participants) developed by ACER. By 7 April 2016, all the relevant market participants, including traders, suppliers, local distribution companies or producers of renewable energy had to be registered with the CRE. To assist them with this, CRE organised a number of information sessions. All the documents are available on its website⁽⁹⁾, where there is a page dedicated to REMIT which also provides access

to the registration platform. As of 15 January 2016, more than 140 market participants were registered with the CRE.

2.3. National monitoring

At national level, the law of 15 April 2013⁽¹⁰⁾ amended the Energy Code to assign to CRE the task of enforcing REMIT, and to CoRDIS within CRE, the authority to sanction infringements of REMIT⁽¹¹⁾. The detailed procedural framework for CoRDIS was also set out in decree no. 2015-206 of 24 February 2015. The legal framework to allow CRE to perform its monitoring activities, inquire and sanctions is now in place, and fully operational.

Detection of an unusual or suspicious event on the market may occur:

- by the Wholesale Markets Supervision Department at CRE;
- by the parties carrying out transactions on a professional basis, who are required to alert the national regulatory authority if they suspect an infringement of REMIT articles 3 and 5. ACER has provided a notification platform to enable this⁽¹²⁾;

(9) See the relevant pages at: <http://www.cre.fr/marches/remit>

(10) Under Law no. 2013-312 of 15 April 2013 aiming to prepare the transition towards a low-consumption energy system and including various provisions on the pricing of water and on wind installations

(11) See: Articles L. 131-2 and L. 134-25 of the Energy Code

(12) See the platform for notifying suspicions

- by ACER, who can request that CRE carry out an inquiry. If it believes that there was a potential infringement of REMIT with a cross-border effect, it can also set up and coordinate an investigation made up of the affected national regulatory bodies, along with representatives of financial regulators, or any other relevant authority in the case of suspected market abuses or non-publication of insider information;
- by any other market participant who may suspect an offence under REMIT.

Once it has detected or has been informed of an unusual event, CRE carries out an in-depth analysis attempting to establish if there are grounds for suspicion of an offense under REMIT, or if the event that was observed is likely to severely impair the good functioning of the energy markets. In this area, during 2014 and the first half of 2015, CRE issued 30 requests for information to market participants. Two formal inquiries are also currently underway, one relating to electricity, one related to gas.

3. THE CAPACITY MECHANISM HAS BEEN DEFINED TO PROMOTE THE SECURITY OF SUPPLY AT NATIONAL LEVEL

During 2015, CRE was able to complete the regulatory framework for the capacity mechanism, with a view to enable it to start up in practice. The NOME law introduced an arrangement where suppliers make a contribution to the security of electricity supply⁽¹³⁾. These provisions were amended by the law of 15 April 2013 aiming to prepare the transition towards a low-consumption energy system and including various provisions on the pricing of water and on wind installations.

A decree⁽¹⁴⁾ lays down the terms of implementation of this measure, and places on the suppliers the obligation of proving they have the capacity to provide their customers with electricity. Operators of electricity production plants and load balancing operators must have their capacity certified. The various market participants can trade these capacity certificates among themselves.

This decree includes a body of regulatory texts with different approval procedures, used to determine the architecture of the capacity mechanism. The majority of the terms of implementing the measure are brought together within the "capacity mechanism rules", subject to approval by the Minister of Energy, based on a proposal by the the public electricity transmission system (RTE) operator, and an opinion from the CRE. These rules include provisions that determine:

- the delivery years and peak times PP1 and PP2;
- the method for calculating the reference power level and the suppliers' commitments, the power factor of the capacity guarantee and how it is covered;
- the methods for certifying capacity and their control conditions, as well as the terms of adaptation, prescribed by article L. 321-16 of the Energy Code, for the certification of foreseen capacities, that plays a minor role in the security of supply, rebalancing of capacity producers, and financial settlement relating to this rebalancing.

(13) Now codified in Article L. 335-1 ff. of the Energy Code

(14) Decree no. 2012-1405 of 14 December 2012 on suppliers' contribution to security of electricity supplies, and relating to setting up a mechanism that requires capacity in the electricity industry, now codified (as articles R 335-4 to R 335-53 of the Energy Code), adopted under article L 335-6 of the Energy Code

Following a consultation process led by RTE, draft rules were submitted to the CRE on 6 May 2014. Having heard the participants, CRE gave a favourable response⁽¹⁵⁾ to this proposal, which was then approved by the Minister of Energy on 22 January 2015⁽¹⁶⁾. A body of complementary texts were added to these rules, that CRE either proposed, defined or issued an opinion on, on a case by case basis.



During 2015, CRE was able to complete the regulatory framework for the capacity mechanism, with a view to enable it to start up in practice.

In order to ensure the contribution of participants to all of these various complementary measures, the CRE asked market participants twice, via a preliminary questionnaire sent to them on 31 July 2013, then on 4 July 2014 through a public consultation, about the terms of the capacity mechanism that fall within the competence of the CRE.

CRE approved the proposals from RTE overall, subject to occasional amendments⁽¹⁷⁾. This was principally in order to create consistency with the technical arrangements laid down by the rules, to align the amounts of costs published by the system

operators and to ensure that the terms of managing the various registers provided the necessary transparency for the capacity mechanism to work correctly.

In addition, CRE put forward two proposals⁽¹⁸⁾ on the volume of capacity certificates related to the ARENH and Exeltium products. In order to ensure consistency between the capacity product and the energy product, CRE in both cases linked capacity certificates, depending on the energy delivery profile. On the other hand, concerning ARENH, CRE made sure that the sales timetable was compatible with the mechanism, while still ensuring a balance between EDF and the alternative suppliers.

(15) Deliberation of the CRE of 28 May 2014 concerning the opinion on the draft rules for the capacity obligations mechanism under Decree no. 2012-1405 of 14 December 2012 on the suppliers' contribution to the security of electricity supplies, and concerning the creation of a mechanism to enforce capacity in the electricity industry

(16) Decision of 22 January 2015 defining the rules for the capacity mechanism, taken in application of article 2 of Decree no. 2012-1405 of 14 December 2012 on the suppliers' contribution to the security of electricity supplies, and on setting up a mechanism to enforce capacity in the electricity industry.

(17) The list of CRE deliberations providing approvals is as follows:

- CRE's deliberation of 12 March 2015 providing approval of the format for forecasts and the timetable for publication mentioned in Article 18-I of Decree no. 2012-1405 of 14 December 2012 on the contribution by suppliers to the security of electricity supply, and defining the creation of a mechanism of capacity obligation in the electricity sector
- CRE's deliberation of 12 March 2015 providing approval of the method for calculating the unit price for the financial regulation relating to rebalancing supplier capacity under the capacity mechanism
- CRE's deliberation of 12 March 2015 providing approval of the calculation method for measured consumption, for the sub-categories of small consumers and large consumers as defined in the decree of 28 April 2011, as part of the capacity mechanism
- CRE's deliberation of 12 March 2015 providing approval of the cover arrangements and of the cost levels published by the electricity transmission and distribution system operators for the calculation and transmission of data related to the reference power as part of the capacity mechanism; and CRE's deliberation of 12 March 2015 providing approval of cover arrangements and of the cost levels published by the electricity transmission and distribution system operators for the certification and control of capacities under the capacity mechanism
- CRE's deliberation of 25 March 2015 providing approval of the terms of managing the register of capacity guarantees defined by Decree no. 2012-1405 of 14 December 2012 on the suppliers' contribution to the security of electricity supply, and on to the establishment of a mechanism of capacity obligation in the electricity sector
- CRE's deliberation of 25 March 2015 providing approval of the RTE-GRD agreement relating to the certification of capacities under the capacity mechanism

(18) The list of CRE deliberations providing proposals is as follows:

- CRE's deliberation of 6 May 2015 making a proposal relating to the terms linked to ARENH pursuant to Decree no. 2012-1405 of 14 December 2012
- CRE's deliberation of 13 May 2015 making a proposal for a decision on the calculation method for the level of capacity guarantees attached to supply contracts for electricity that benefit shareholders of approved joint-stock companies whose business activity includes the purchase of long-term electricity supply contracts
- In addition, article L 335-5 of the Energy Code states that "the method of calculating the amount of these capacity guarantees, their conditions and the timetable for their sale shall be defined by a decision of the Minister of Energy, based on a proposal from the Energy Regulatory Commission". This proposal, in line with the sales tariff structure, is still being elaborated, and so was not published in 2015

Finally, the CRE took a number of decisions during 2015⁽¹⁹⁾, which complemented the technical terms of the mechanism related to the recorded consumption determined for losses and to the terms for collecting information, defined the monitoring tools, and set the key parameters for the futures market for certificates. The administered price was therefore set at the maximum level allowed under the rules. The reference price – which is the keystone of the correct functioning of the capacity mechanism and of the success of trading with certificates – was defined as the simple arithmetic mean of the prices seen at the auctions carried out on the organised trading platforms that took place before the start of the delivery year in question.

Following the publication of the various documents that make up the body of regulatory texts, certification of the capacities for the first few years of delivery under the capacity mechanism started on 1 April 2015. To date, more than 93 GW of capacity has been certified for 2017, the first year of delivery under the mechanism.

93 GW
of capacity has
been certified for
2017, the first
year of delivery
under capacity
mechanism

3.1. The European Commission opened an in-depth inquiry to review to assess whether the capacity mechanism complies with the European Union's rules on state subsidies

In 2015, the European Commission has dealt extensively with capacity mechanisms, after these were set up in several Member States, in order to determine whether they were compatible with the guidelines relating to State subsidies.

As a result, it launched a sector inquiry on the capacity mechanisms on 29 April 2015⁽²⁰⁾ in order to “*examine, in particular, whether they ensure sufficient electricity supply without distorting competition or trade in the EU Single Market*”. The European Commission's target is to publish its final conclusions towards mid-2016.

(19) The list of CRE decisions is as follows:

- CRE's deliberation of 12 March 2015 providing a decision on the terms of calculating the consumption determined for losses, as part of the capacity mechanism
- CRE's deliberation of 25 March 2015 providing a decision on the terms for the CRE to collect information about capacity guarantee trading transactions and their derivative products
- CRE's deliberation of 6 May 2015 providing a decision on the calculation rules for the market reference price defined under the rules of the capacity mechanism
- CRE's deliberation of 6 May 2015 providing a decision on the calculation rules of the controlled price defined under the rules of the capacity mechanism
- Articles R 335-12 and R 335-33 of the Energy Code also provide that the CRE shall define the terms of the reallocation among the users of the public transmission system of any remaining balances from the funds introduced by the capacity mechanism. These terms will be introduced as part of the definition of the TURPE project, which is why they have not been defined in detail during 2015

(20) EU decision of 29 April 2015 initiating an inquiry on capacity mechanisms in the electricity sector: http://ec.europa.eu/competition/sectors/energy/decision_on_sector_inquiry_en.pdf



The European Commission has launched a sector inquiry on the capacity mechanisms.

In parallel, the European Commission, on 13 November 2015, officially opened an in-depth inquiry to review the French capacity mechanism to establish whether it complies with the European Union's rules on state subsidies⁽²¹⁾. It believes, in fact, that the French mechanism may constitute a State subsidy and, for this reason, it needs to be analysed with regard to the European Union rules in this area: *"The Commission has concerns that the capacity mechanism planned by France in its current form favours certain companies over their competitors and hinders the entry of new players. Moreover, the Commission will assess whether the objectives of the mechanism could not be reached with less costly and less distortive measures. The Commission will also examine whether the planned mechanism is indeed suitable to encourage investments into new capacity."*

The Government was given one month to submit its comments. It should be noted that article 108, paragraph 3 of the Treaty on the Functioning of the European Union in fact provides for the suspension of all State Aid not compatible with European rules.

On 5 February 2016, the European Commission invited the concerned parties to submit their comments on the French capacity mechanism, under article 108, paragraph 2 of the Treaty on the Functioning of the European Union.

(21) http://ec.europa.eu/competition/state_aid/cases/261326/261326_1711140_20_2.pdf

THE RETAIL MARKET WAS GROWING FAST IN 2015

Despite the level of information provided to consumers remaining too low, 2015 saw significant growth in the retail market. The progress in terms of competition is partly due to the end of regulated tariffs for one category of professional customers. The new legal framework, developed under the law of 7 December 2010 on a new organisation of the electricity market (NOME law), has also been one of the factors for this growth, giving all operators enough visibility to be able to offer attractive deals to consumers.

1. THE IMPLEMENTATION OF THE NOME LAW PROVIDES A NEW LEGAL FRAMEWORK FOR REGULATED TARIFFS

The NOME law aims to enable the growth of a competitive retail market, especially through its provisions relating to:

- the creation of regulated access to incumbent nuclear electricity (ARENH);
- setting up regulated sales tariffs in order to guarantee their contestability by alternative suppliers.

Pursuant to the provisions of articles L.337-4 and L.337-7 of the Energy Code, from 8 December 2015 onwards, the CRE is tasked with proposing the regulated electricity sales tariffs to the Minister of Energy and the Minister of Economy. These tariffs are retained, in metropolitan continental France, only for residential and professional consumers who subscribe to power of 36 kVA or less.

Under article L. 337-6 of the Energy Code, *“the regulated electricity sales tariffs are defined by taking the sum of the regulated price of access to the incumbent nuclear electricity, the cost of additional provision at market prices, the capacity guarantee, the transmission costs of electricity and the marketing costs, plus a normal return for the supply activity”*.



Since 8 December 2015, the CRE has been tasked with proposing the regulated electricity sales tariffs to the government.

Since 1 November 2014, the average regulated sales tariffs can be challenged, that is they are set at a level that now allows operators competing with EDF to offer, in this market, their own prices which are equal to or lower than the regulated tariffs.

Articles R. 337-16 ff. of the Energy Code implement the pricing by stacking the regulated sales tariffs by level and structure. Calculating the regulated tariffs by stacking by structure will allow all the tariffs to be contested in the market, preventing cross-subsidies between consumers on a given tariff option.

2. INFORMATION FOR CONSUMERS ON THE RETAIL MARKET IS STILL VERY MUCH LACKING

2.1. The lack of information to consumers hampers competition

According to the 9th edition of the annual survey of the extent to which the energy markets have opened up, prepared by the French Energy Ombudsman in 2015, 60% of consumers know that they have the option of changing supplier for natural gas, and 52% of consumers for electricity. However, only 57% of French people feel they are well-informed about how the market is opening up to competition, and this level remains unchanged. Only one household in five has tried to obtain information about this. In addition, one person in three claims to know the process for switching energy supplier. These last figures show the lack of interest from French consumers in the energy market. The operation for collective purchasing "Gaz Moins Cher Ensemble" ("Cheaper gas together") launched by UFC-Que Choisir, the consumer association, which ran a media campaign, has no doubt helped to improve this.

How the electricity and natural gas markets are organised remains confusing for French householders. The distribution of roles between the different market participants is still only vaguely understood by the general public. In the public mind, the image of the incumbent supplier, GDF SUEZ (later ENGIE), is always associated with the incumbent electricity supplier EDF. Although they are two separate and competing companies, only 28% of consumers are aware of their separation.

Consumers overall are ill-informed about how the energy markets have opened up to competition. In its public annual report in February 2015, after seeing the low level of information provided to domestic consumers, the Court of Auditors recommended that "public information to individuals about the extension of competition should be refocused and given some impetus".

2.2. The level of competition is weaker in the market for electricity than that for gas

At the end of 2015, the electricity market for residential customers remained largely dominated by the regulated sales tariffs, which still represent 88% of sites and 91% of consumption. As of 31 December 2015, in the residential sector, 3,689,000 sites out of a total 31.7 million are under market offers for electricity, almost all with an alternative supplier. The number of sites under market offers increased on average by 54,500 sites per month during 2015, a growth of 21.5% for the whole year. The alternative suppliers have acquired a portfolio of 654,000 sites during 2015, which equates to almost all the new sites, while the number of sites with the incumbent suppliers remains unchanged. Among the alternative suppliers, Direct Energie and ENGIE are the two main players in the residential sector, with market shares of respectively 27% and 70%. The market shares of the 11 other national suppliers⁽²²⁾⁽²³⁾ who are actively⁽²⁴⁾ selling into this sector remain marginal.

3,689,000
sites out
of 31.7 million
are under
market offers
for electricity

4,360,000
sites out
of 10.6 million
are under market
offers for gas

(22) Registered on the suppliers' search engine by post code online on the website www.energie-info.fr

(23) National suppliers are those who cover more than 90% of the connected locations in metropolitan continental France

(24) A supplier is referred to as being active within a sector if it meets one or more of the following conditions:

- it has at least one site on a sole source contract
- it is responsible for balancing at least one distribution site or one transmission site
- it is responsible for balance and has delivered part of the consumption at a site during the previous year

On the natural gas market, despite clear improvements in opening up to competition during 2015, the regulated tariffs still hold the majority of the residential market as at 31 December 2015, with 59% of sites and of consumption (or -8.5 points and -9.2 points respectively compared to 2014.) The number of residential sites supplied under market offers increased significantly in 2015. In both 2015 and 2014, two thirds of new residential customers signed a contract for supply under a market offer with incumbent suppliers, with ENGIE at the top of the list.



Direct Energie, ENI and Lampiris are the players who are gradually gaining a foothold in the residential market under market offer and together cover one quarter of the market.

As of 31 December 2015, in the residential sector, 4,360,000 sites of a total 10.6 million are under market offers, with 2,097,000 with an alternative supplier and 2,264,000 with an incumbent supplier. The number of sites under market offers increased on average by 75,800 sites per month during 2015, a growth of 26.3% for the whole year. Although nine national suppliers are actively selling, just two, ENGIE and EDF, between them hold three quarters of the market share in the residential sector. ENGIE has shown strong growth in the last three years, unlike EDF who is losing sites, but still remains the second largest supplier after the incumbent. Direct Energie, ENI and Lampiris are the players who are gradually gaining a foot-

hold in the residential market under market offer and together cover one quarter of the market.

The churn rate ⁽²⁵⁾ (or switch rate) is an indicator of the intensity of competition on the market. The annual switch rate in the residential sector is 4.3% for electricity and 9.4% for gas.

It is important to note that for both types of energy, the incumbent suppliers are carrying out the large majority of new connections (new sites coming on line or a new client moving into an existing site), while the alternative suppliers are more active in relation to switching suppliers.

2.3. Domestic consumers can enjoy more competitive supply offers than the regulated sales tariffs for both types of energy

During the last two years, the market offers of alternative suppliers have significantly improved and become more diverse. They generally continue to be cheaper than the regulated sales tariffs, with possible savings of the order of 5% on an electricity bill and between 5% and 7% on a gas bill. They generally offer fixed prices for a period of one to three years, which ensures that consumers know in advance what their bills will be. These offers are not binding in terms of contract periods. A customer who has signed up for three years to a market offer, can leave the contract at any time, including going back to the regulated sales tariffs. This principle of reversibility between public tariffs and market offers is laid down in the Energy Code.

⁽²⁵⁾ This is the ratio of the total number of supplier changes and connections by alternative suppliers to the total number of customers in each customer segment

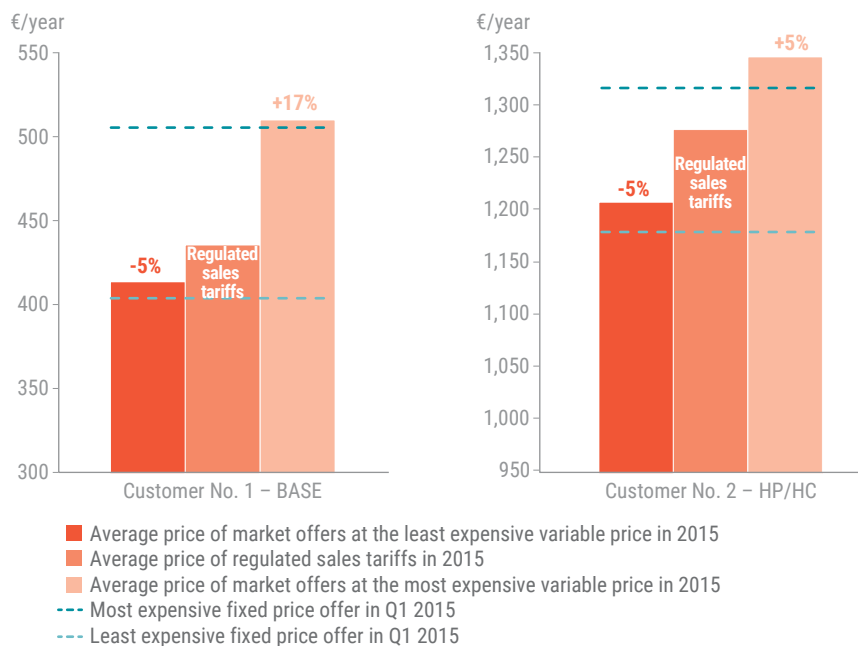


Market offers for gas and electricity continue to be cheaper than the regulated tariffs, with possible savings of the order of 5% on an electricity bill and between 5% and 7% on a gas bill.

Illustration 9 compares an average bill at the regulated electricity sales tariff of EDF in 2015, to that of a market offer at the lowest variable price and one at the highest variable price proposed to the two types of customers involved. The annual average is calculated from the invoice data collected at the end of each quarter. Purely for information, the level of the cheapest fixed price market offer and the level of the most expensive fixed price market offer, prices valid for the 1st quarter of 2015, are also shown.

It was therefore possible for the “base” type customers, with a contract covering 6 kVA and an annual consumption of 2,400 kWh to save 5% compared to the regulated sales tariff, by opting for the variable prices offered. A customer who signed up for a contract with the option “Peak hours/Off-peak hours” for a power of 9 kVA and annual consumption of 8,500 kWh could have made a saving of around 5% compared to the regulated tariff. It is also possible, for both of these customer types, to make savings by opting for the most competitive of the fixed priced market offers.

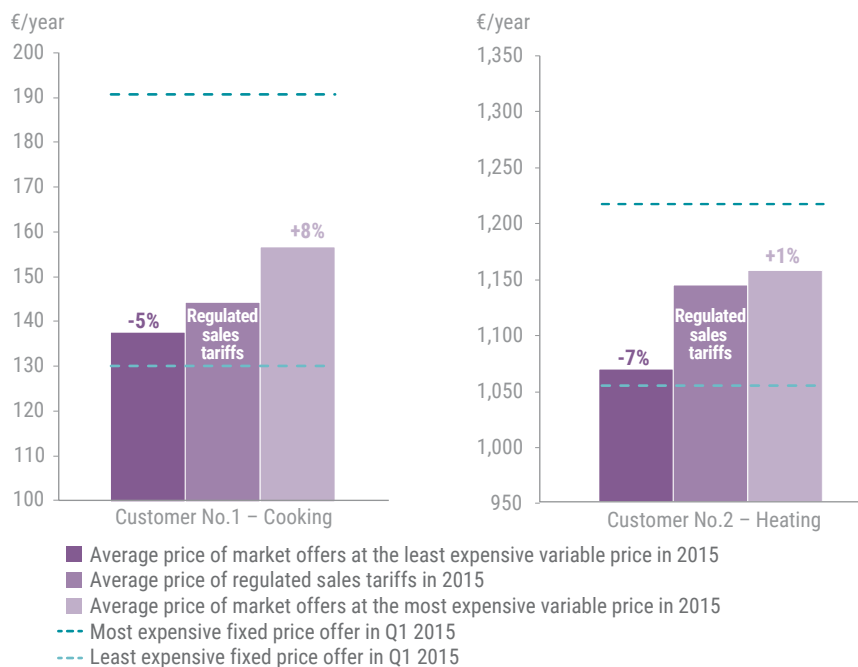
Illustration 9: Comparison of retail electricity price offers at the most expensive variable prices compared to the regulated tariffs for two types of customer



Source: energie-info.fr – Analysis: CRE

As for natural gas, Illustration 10 (p. 48) compares the average bill at the regulated sales tariff from ENGIE for 2015, to that of a market offer at the lowest variable price and one at the highest variable price proposed to the two types of customers: the first using gas for cooking, the second for heating. The annual average is calculated from the invoice data collected at the end of each quarter. Purely for information, the level of the cheapest fixed price market offer and the most expensive fixed price market offer, the price valid for the 1st quarter of 2015, are also shown.

Illustration 10: Comparison of retail natural gas price offers at the highest and lowest variable prices with the regulated tariffs for two types of customers



Source: energie-info.fr – Analysis: CRE

It was therefore possible for customer no. 1 (cooking only) by choosing the variable prices on offer to make savings of around 5% compared to the regulated sales tariff, and of around 7% for customer no. 2 (heating).

Larger savings could be achieved for both types of consumption by choosing the most competitive fixed price market offer.

3. THE END OF REGULATED SALES TARIFFS FOR BUSINESSES IS A DECISIVE STEP IN OPENING UP TO COMPETITION

The NOME law and law no. 2014-344 of 17 March 2014 relating to consumption, brought an end to regulated tariffs for some professional sites. This involved 468,000 sites supplied with electricity and 170,000 using gas. This phasing-out of regulated tariffs has been accomplished in three main stages:

- on 19 June 2014, for gas customers connected to the transmission network;
- on 1 January 2015, non-domestic gas consumers and shared ownership properties consuming more than 200 MWh/year;
- on 1 January 2016, for non-domestic consumers with consumption over 30 MWh/year, shared ownership properties consuming over 150 MWh/year of gas, and electricity customers subscribing for power levels above 36 kVA (yellow and green tariffs).

The affected consumers had to subscribe to a market offer with the supplier of their choice by those dates. Consumers who failed to do so were automatically transferred to a default arrangement, a so-called "interim offer", for a maximum of six months.

3.1. CRE made strenuous efforts to assist with the removal of regulated sales tariffs

CRE invested significant resources in 2014 and 2015 to address the competitive challenges posed by the ending of regulated tariffs.

Improving consumer information

In January 2014, CRE set up a working group for the preparation of the dismantling of regulated tariffs, comprising the French Energy Ombudsman, suppliers, system operators, consumer associations, energy unions and representatives of the DGEC and the DGCCRF. In particular, this group prepared practical guides and fact sheets, intended to inform consumers, which are available on the CRE website (www.cre.fr) and on the professional website of Énergie-Info (www.energie-info.fr/Pro). CRE also made an educational video and a website specially dedicated to the ending of regulated sales tariffs (www.tarifsreglementes-cre.fr).

In 2014 and 2015, CRE took part in many meetings that brought together companies and public purchasers. It got involved in many different information events across the whole of France, to raise awareness among actors about the end of regulated tariffs, and to inform them what steps they needed to take. The CRE spoke at 33 meetings bringing together nearly 1,200 companies or public purchasers. It stepped up its information campaign among professional representatives by building up contacts with professional associations of crafts and SMEs, shared ownership properties and public authorities, and also worked together with the electricity suppliers to prepare an information brochure to be sent to companies belonging to professional associations.

In May 2015, the CRE wrote to nearly 10,300 consumers who were still under interim offers, in order to encourage them to sign a market offer contract before the deadline of 30 June 2015. In September 2015, it also carried out a phone campaign shared ownership properties benefitting from the arrangement for continued supply provided by GRDF, to make them aware of the risk of being cut off (see below).

Finally, the CRE organised a round table in September 2015, bringing together consumer representatives, which was an opportunity for it to collect their feedback and identify their priorities in terms of retail market functioning.

Sharing customer files of incumbent operators with other suppliers

As part of a complaint raised by Direct Energie, the Competition Authority directed ENGIE to make certain data from its files on residential and non-residential clients subject to regulated tariffs available to alternative suppliers, in its decision of 9 September 2014 on precautionary measures, partially amended by a decision of the Court of Appeal of Paris on 31 October 2014, based primarily on analyses provided by the CRE.

Applying these measures by extension to electricity, the CRE requested EDF to allow free of charge access for competitors to the contact and consumption details of its file on non-residential customers affected by the end of regulated electricity tariffs. CRE also requested local distribution companies to provide their competitors with the data of their customers affected by the dismantling of regulated tariffs.

10,300
mails sent
by CRE to
consumers
who were still
under interim
offers, in order
to encourage
them to sign
a market offer
contract before
the deadline of
30 June 2015.

In addition, the CRE ordered the incumbent suppliers to send it, as well as all alternative suppliers, the files of the clients who were moved to an interim offer on 1 January 2016.

The preparation and monitoring of the process of phasing out regulated tariffs

CRE guaranteed that no technical obstacles related to the distribution system operators' IT systems was allowed to slow down the process of phasing out regulated tariffs. To do this, the CRE placed this issue on the agenda very early on for the consultation groups under its auspices (working groups "supplier-DSO procedures and relations" and "information systems"), back in 2014. The conclusions of the work

carried out by the working groups led to a deliberation by the CRE on 27 November 2014. Given the sheer volume of the number of electricity contract switches expected at the end of 2015, CRE asked ERDF to carry out stress tests on its information system, to be able to assess the DSO's ability to handle all these sites within a limited period. The feedback provided by ERDF shows that the changeover of a large number of sites under market offers and under interim offers on 1 January 2016 passed without incidents.

Noting that there were still a significant number of gas customers under interim offers as 30 June 2015 approached, the CRE took emergency measures to delay cutting off supply for a further three months after the initial planned date of the end of the interim offer⁽²⁶⁾. These sites continued to be supplied by the network operators, but at a price 20% higher than the regulated tariff in August 2014.

With regard to the volumes for the customers affected by the deadline of the phasing-out of tariffs on 1 January 2016, for gas, but mainly for electricity, CRE this time indicated that a temporary mechanism like the one implemented on 30 June 2015 would not be repeated for this deadline. It invited *"the government [...] to take all possible measures to ensure that such a situation does not happen again on the future deadlines, in particular, to put in place measures to handle the situation of inactive consumers or active consumers who do not manage to obtain market offer contracts. In particular, the government could examine the feasibility of implementing a mechanism for a supplier of last resort or a default supplier, under terms that are compatible with European law – especially those relating to creating competition between suppliers – and with the provisions encouraging inactive consumers to seek out a market offer"*. In so doing, CRE contributed to the work done by the public authorities regarding the creation of a default supplier mechanism to manage the due date of 1 July 2016.



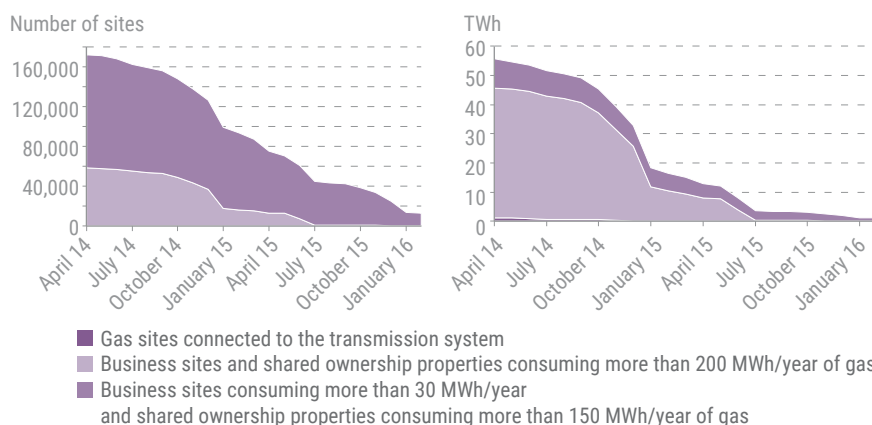
Noting that there were still a significant number of gas customers under interim offers as 30 June 2015 approached, the CRE took emergency measures to delay cutting off supply for a further three months after the initial planned date of the end of the interim offer.

(26) CRE's deliberation of 28 May 2015 providing a decision on the missions of the natural gas distribution system operators related to the launch of interim offers under the provisions of Article 25 of Law No. 2014-344 of 17 March 2014 on consumption.

3.2. The net result of the different stages of dismantling the regulated tariffs shows that competition had already taken root in the sites of large-scale energy consumers

The first stage of dismantling regulated sales tariffs for natural gas affected a limited number of sites, as competitors were already well established for non-residential customers connected to the transmission network. During the month of April 2014, just 6% of sites, representing only 0.4% of the volume, were still using regulated tariffs. Thus, 30 sites were moved under interim offer in June 2014, and when this expired, all these consumers had signed a contract with a supplier of their choice.

Illustration 11: Trends in the number of sites (on left) and consumption (on right) of the sites affected by the various deadlines for dismantling regulated gas sales tariffs.



Source: ENGIE, local distribution companies – Analysis: CRE

Since 1 January 2015, non-domestic sites with annual consumption exceeding 200 MWh no longer qualify for the regulated natural gas sales tariffs. The sites affected by this second deadline were mainly educational establishments, hospital buildings, retirement homes, supermarkets, offices, industrial sites, public authority buildings or large condominiums. During the month of April 2014, 57,000 sites under regulated tariffs with ENGIE, with an annual consumption of 43 TWh, were covered by this deadline.

On 1 January 2015, 17,000 sites were automatically switched to ENGIE's interim offer for 6 months (increase in price of between 1 and 3% compared to the regulated tariffs). On 1 July 2015, 3,250 sites were moved for a period of maximum 3 months to GRDF under the temporary measure introduced by the CRE to avoid cutting off supplies of natural gas.

The final stage in the phasing-out of regulated tariffs on 1 January 2016 was the largest in terms of the number of customers affected. This deadline affected both non-domestic consumers of gas consuming more than 30 MWh/year (restaurants,



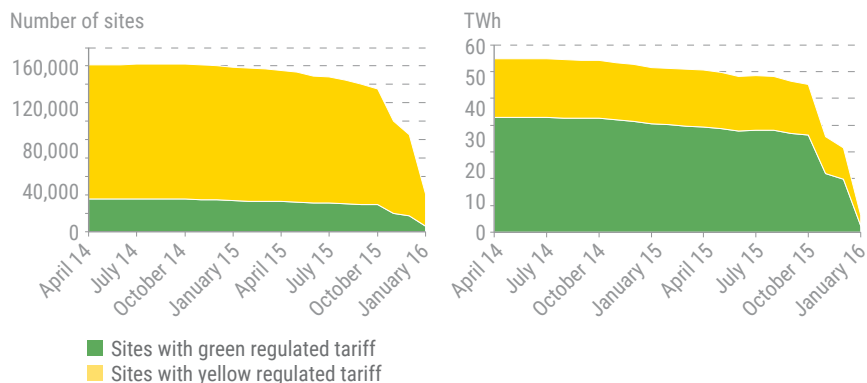
On 1 January 2016, 17,000 sites were moved under interim offer for natural gas, the same number as on 1 January 2015, although twice as many sites were affected by this last step.

offices, workshops, smaller supermarkets or medium-sized condominiums) and electricity customers subscribed to a power above 36 kVA (medium-sized and large commercial centres, office towers, industrial sites, large hotels, local authorities, etc.). At the end of April 2014, 111,000 sites were affected by this last deadline for the phasing-out of regulated tariffs with ENGIE for gas and 437,000 with EDF for electricity.

The phasing-out of regulated gas tariffs on 1 January 2015 provided initial experience which led to raising awareness among the consumers affected by the last stage on 1 January 2016, which reduced the number of customers moved under interim offer.

On 1 January 2016, 17,000 sites were moved under interim offer for natural gas, the same number as on 1 January 2015, although twice as many sites were affected by this last step. In April 2014, 100,000 sites, one quarter of the sites under regulated tariffs were moved under interim offer for electricity.

Illustration 12: Trends in the number of sites (on left) and consumption (on right) of sites under regulated electricity sales tariffs and under interim offer, affected by the phasing-out of these tariffs on 1 January 2016



Source: distribution system operators, suppliers – Analysis: CRE

The transition to market offers was slower for electricity sites than for gas. It only really took off in December 2014, with an average reduction of 6.3% in the number of sites affected between December 2014 and June 2015. This rate then picked up rapidly from 1 November (-24%) and from 1 December 2015 (-12%). On 31 December 2015, there were still 250,000 sites under regulated sales tariffs, with 17% of those sites being on the green tariff, and 83% of sites on the yellow tariff.

3.3. The market is more dynamic in the business sector, especially for the largest energy consumers

In the non-residential sector, only small businesses that take a power level of 36 kVA or less, are still eligible for regulated electricity sales tariffs. In fact, since 1 January 2016, all sites with power levels of more than 36 kVA have moved under market offer with a supplier of their choice, or have automatically been transferred under interim offer with their incumbent supplier.

As of 31 December 2015, 976,000 sites in the non-residential sector, of a total 4.9 million are under market offers for electricity (+39.8% compared to the end of 2014), with 60% being supplied by an alternative supplier.



25 suppliers were active at national level, providing offers in electricity to non-residential customers as of 31 December 2015.

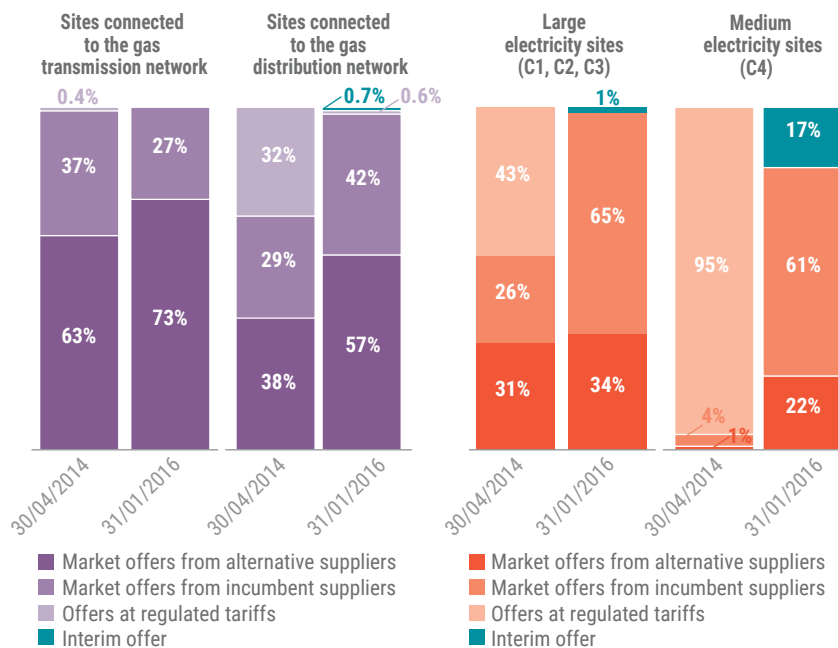
Competition is less well-developed on sites that have left regulated electricity sales tariffs: around 86% have accepted a market offer or an interim offer from their incumbent supplier. The market share of the latter therefore rose by 4 points between the end of 2014 and the end of 2015.

As of 31 December 2015, 25 suppliers were active at national level, providing offers in electricity to non-residential customers. Compared to 2014, this is an increase of 3 additional suppliers.

The market shares of these suppliers in the non-residential sector vary in the number of sites and in volume. EDF still holds 76% of the market by number of sites in the segment of large and medium non-residential sites, who are no longer eligible for regulated sales tariffs. Alternative suppliers deliver a bit less than half of the consumption, that is 43%.

In the sector of small, non-residential sites, the presence of incumbent suppliers is less marked, representing about 30% by number of sites and volume, the rest of the market being split between Direct Energie and ENGIE.

Illustration 13: Trends in the breakdown of annualised consumption by non-residential sites affected by the phasing-out of tariffs, by kind of offer for electricity and for natural gas



Source: CRE



ACER-CEER REPORT ON MARKET MONITORING

ACER is also tasked with the monitoring of the retail and wholesale markets. It prepares an annual market monitoring report on this subject in close collaboration with the Council of European Energy Regulators (CEER), the European Commission and the national regulatory authorities. These annual reports, which present the results of market monitoring and are jointly prepared by ACER and CEER, aim to propose approaches to improve the functioning of the energy markets for the benefit of European consumers. To this end, ACER and CEER jointly produce reports to provide an assessment of the progress achieved in implementing the 3rd energy package, focussing on the remaining obstacles with the aim of fully completing the internal energy market.

The 4th edition of the market monitoring report, published on 30 November 2015, includes a section dedicated to the retail markets, which provides an outline of the situation in 2014 and how it has changed compared to previous years. To do this, it publishes a series of indicators that allow, among other things, the tracking of price movements by component on the retail market, market concentration, the entry and departure of new participants, and also consumer behaviour.

The report shows, for example, that the average level of a household energy bill in the European Union increased in 2014, for both electricity and natural gas consumers (+2.6% for electricity and +2.1% for gas). ACER also notes that in most countries of the EU, the components not opened up to competition (taxes and networks) are rising steadily in cost, and constitute a substantial burden on consumers' bills as they represent on average 55% of these bills. On the other hand, the prices for industrial customers have fallen by 0.2% for electricity and by 6% for gas.

From the results presented in this report, ACER concludes that markets are still strongly concentrated in many countries, that retail prices remain high despite falling wholesale prices, and that consumer involvement remains low. Despite a growing trend towards changing suppliers, the majority of electricity and gas consumers are not playing any active part in the market by exploiting price competition between the different offers and suppliers available. Consumer behaviour plays an important role in the development of markets and competition. Consumers are more active in countries where there are a large number of suppliers proposing a wide selection of offers. A plethora of different offers, however, could make it difficult for consumers to compare offers, and reduce the level of transparency. Although a low rate of changing suppliers does not necessarily reflect a lack of competition, it can still indicate the existence of barriers to entry into the retail markets. The reasons, according to ACER, are well known: too small benefit on the bill compared to the perceived complexity of the process, lack of confidence in new suppliers, loyalty to existing suppliers, process of changing supplier perceived as too complex by consumers. ACER also notes that consumers are less active in the countries where regulated sales tariffs still exist. Finally, to the extent that the entry of new suppliers into the market allows competition to develop and leads to the creation of new offers, the Agency believes that removing obstacles to entry needs to be given priority.

KEY DATES

01/04/2015: MERGER OF MARKETPLACES
OF GRTGAZ SOUTH AND TIGF
21/05/2015: START OF FLOW-BASED
MARKET COUPLING

KEY FIGURES

35 MILLION LINKY METERS
AND 11 MILLION GAZPAR METERS
WILL BE DEPLOYED

KEY WORDS

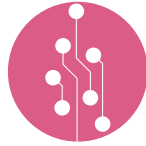
INTERCONNECTIONS
NETWORK CODES
SMART GRIDS

The CRE's work to promote non-discriminatory access to networks **58**

The CRE is preparing the future of the networks **69**

CRE contributes to the development of the European regulatory framework **80**





CRE AND THE NETWORKS

The CRE guarantees non-discriminatory access to the electricity and natural gas networks and infrastructures, and ensures that they are functioning and developing correctly. In addition, it ensures the independence of system operators from their parent companies.

At European level, the construction of the energy market is moving forwards, thanks to the smooth operation of interconnections between national networks, which improve fluidity in the flow of gas and electricity from one end of Europe to the other.

CRE plays an active part in developing these rules which help to promote the integration of the French market with the European market.

THE CRE'S WORK **TO PROMOTE NON-DISCRIMINATORY** **ACCESS TO NETWORKS**

In 2015, the CRE worked on preparing the tariffs for the transmission and distribution electricity and natural gas networks, to be adopted in 2016 and 2017.

- the tariffs for using the public electricity networks (TURPE) HVA/LV from the electricity distributors (ERDF and local distribution companies) and TURPE HVB from the electricity transmitter RTE, affect around 36 million customers in France and represent a little under 14 billion euro annual turnover for the distributors, and around 4.5 billion euro annual turnover for the transmitter;
- the tariff of third party access to the distribution systems (ATRD) run by the natural gas distributor GRDF affects around 11 million customers in France, and represents a little under 3.2 billion euro annual turnover for the distributor;
- the tariff of third party access to the transmission systems (ATRT) run by natural gas transmitters GRTgaz and TIGF affect approximately 900 industrial customers in France and represents around 1.6 billion and 200 million euro annual turnover respectively for the transmitters;
- the tariff of third party access to the LNG terminals (ATTM) run by regulated LNG terminal operators Elengy and Fosmax LNG represent approx. 300 million euro total turnover.

In addition, the CRE helped to implement a new regulation for the storage tariffs. In relation to the independence of the network operators – although its lack of resources does not allow CRE to publish annually its report regarding respect for the codes of conduct and the independence of the electricity and natural gas system operators – it was referred to during 2015 as part of the tracking of certification of transmission system operators, for forty-seven contracts. It strongly criticised the similarity between the names of the operators of the distribution systems and those of their parent companies, which it considers to be a source of confusion between their public service task of delivering electricity and their activities as competitive suppliers.

1. WORK DONE BY THE CRE DEFINES A STABLE FRAMEWORK FOR NETWORK TARIFFS

As vectors for economic signals to market participants, and to encourage operators to improve their efficiency, both from the point of view of cost control and of the quality of service they provide, the tariffs for use of the networks are critical to the good functioning of the markets. In 2015, apart from defining tariffs, CRE also worked on improving the regulatory framework, in order to provide good visibility to future developments in tariff levels.

1.1. The preparation of the next tariff for use of the GRDF natural gas distribution system, known as the "ATRD5 tariff"

Since February 2015, the CRE undertook work to map out the GRDF ATRD5 tariff, which comes into force on 1 July 2016. Based on the positive results from previous years, confirmed particularly by the responses in the public consultations it held from

18 November to 18 December 2015, the CRE has rolled over the general tariff regulation framework ATRD4, while making some improvements in the areas of the incentive regulation of investment expenditure, quality of service, increasing the number of connected consumers and research and development spending.

CRE's deliberations of 10 March 2016⁽¹⁾ defined the tariff framework for four years. This decision is based on in-depth analysis of the projected costs presented by GRDF, and on a number of studies relating to the frameworks for incentive regulation and pricing levels for the distribution of natural gas applied elsewhere in Europe. CRE also reconsidered the weighted average cost of capital (WACC) on the basis of a study it carried out on the electricity and natural gas infrastructures. All of these studies are published on the CRE website.

In relation to the costs, the CRE took into account GRDF's requests relating to security, personnel costs, investments, as well as projects with major impacts, such as Gazpar (smart metering), the "Transformation" project (i.e. the reorganisation of activities shared with ERDF) or project "Tulipe" (i.e. conversion and adjustment from L gas to H gas in the north of France).

In line with article L.452-3 of the Energy Code, the CRE took into consideration the main lines of energy policy communicated by the Minister of Energy, in a letter dated 10 February 2016.

On 1 July 2016, the GRDF tariff will increase by 2.76% in current euros, which is an increase of 0.6% before tax in the regulated sales tariff for gas for an average domestic customer using gas for heating (tariff B1 in the Paris area). From 2017 to 2019, CRE will impose annual changes in the price lists, corresponding to the inflation minus 0.8%, which represents an effort to further increase productivity (compared to what GRDF suggested) by 0.4% per annum on average on the net operating costs.

During 2016, the CRE will start work on planning the next ATRD5 tariffs for local distribution companies of natural gas. The regulatory framework for the new distribution tariffs is likely to be close to that defined for GRDF.

1.2. Preparation of the next tariffs for the use of public electricity networks, known as "TURPE 5"

In 2015, the CRE started working on the structure of TURPE 5 futures tariffs, which are intended to take effect from the summer of 2017, replacing the tariffs that apply currently and came into force in 2013 and 2014, with one major goal in mind: to support the development of the electricity system, including the growth of renewable energy, maximum flexibility to satisfy demand and the introduction of smart grids, and of self-supply.

With an effect on both the short term (improving operations) and the long term (optimising investments), this preparatory work aims to allow efficient operation of the networks by giving users incentives to move to behaviours that minimise investment and operating costs.

⁽¹⁾ CRE's deliberations of 10 March 2016 providing the decision on the standard rates for use of GRDF's public distribution systems for natural gas

During a public consultation relating specifically to the tariff structure, started in the summer of 2015, CRE invited market participants to speak out on the relevance of new pricing options, such as an option with four time bands for small residential and tertiary consumers, and movable peak time tariffs for all areas of overload. The public consultation also covered the terms of financing the costs of balancing and the transfer of part of the network costs to producers.

Given the complexity of the subjects that should be addressed, the need for demonstrable visibility during a public consultation and the potential deadlines for updating information systems, on 18 February 2016 the CRE adopted a deliberation aiming to set out the parameters for the structure of TURPE 5, especially in relation to the aim of managing consumption peaks⁽²⁾. The CRE decided to introduce:

- a tariff option for movable peak times in the high-voltage A domain intended to increase incentives to manage peaks in demand by adjusting the signals given by the network tariff for certain defined periods, defined each day for the following day;
- a pricing option with 4 time bands for the low voltage domain, of 36 kVA and lower, which will help to reflect the difference in usage costs of the network between summer and winter;
- a transitional provision for movable peak time for the high-voltage A domain for the period from 1 January 2017 until the date that TURPE 5 takes effect, in order to ensure consistency in the message given by the tariffs over 2017 as a whole.

In 2016, the CRE plans to initiate two public consultations which will look in sequence at the tariff structures, the regulatory frameworks planned for RTE and ERDF, then at the final version of the price lists, the tariff levels and the authorised revenues for RTE and ERDF.

1.3. The development of the regulatory framework

Pursuant to the Energy Code (articles L.341-3 and L.452-3), the tariffs for the use of the transmission and distribution systems for natural gas (ATRT5 and ATRD4) and for electricity (TURPE 4), define a framework that encourages network operators to improve their efficiency in terms of managing operating costs and quality of service provided to users.

While the regulatory frameworks currently in force meet the targets of visibility, efficiency and simplicity, improvements are possible, especially in terms of incentives to manage investment costs. That is why, in 2015, the CRE commissioned an external study to compare the incentives in the regulatory frameworks for electricity and natural gas system operators in force in Germany, Spain, Ireland and the United Kingdom. The improvements recommended by this study, published on the CRE's website, relate primarily to mechanisms that affect operators' investment costs and the costs related to the development of smart grid solutions. It also recommends increasing the incentives for improving quality of service⁽³⁾. The results of this study have been fed into the work on the new GRDF tariffs, and will also be taken into account in considerations for the next tariffs for the use of the systems (ATRT6 and TURPE 5 in particular).

(2) CRE's deliberation of 18 February 2016 relating to the decision to amend the usage tariff for the public electricity networks (TURPE) in order to define an interim mechanism for movable peak times in the high-voltage A domain, and outlining approaches to structuring for the next TURPEs

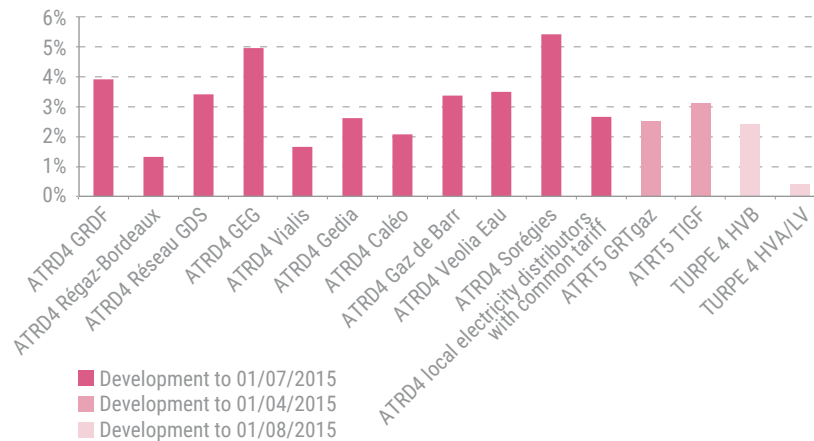
(3) <http://www.cre.fr/documents/consultations-publiques/prochain-tarif-d-utilisation-des-reseaux-publics-de-distribution-de-gaz-naturel-de-grdf-dit-atrd5>

As far as the regulatory framework that applies to the GRDF (ATRD5) tariffs is concerned, the CRE opted to improve the mechanism to encourage control of investment costs into a system of dual incentives relating to the unit costs of certain investments in the networks (investments relating to the connection of new consumers and the movement or conversion of infrastructures) and also “non-network” investments (real estate property, vehicles, information systems...) where the boundaries between investment costs and operating costs can be especially unclear. So the CRE is planning, for non-network investments, to put in place the same type of incentives for both capital and operating costs. As far as the quality of service is concerned, the changes agreed for the ATRD5 tariffs attempt to clarify, through simplification, the mechanism for assigning financial incentives. An incentive regulation for research and development (R&D) costs has also been introduced in order to ensure that GRDF has the means to complete its plans, while increasing the visibility of its innovation capacities.

1.4. Annual tariff changes in 2015

The tariffs set by the CRE for using the electricity and natural gas transmission and distribution systems, change each year following predefined rules. They are revised on 1 April for gas transmission, on 1 July for the gas distribution, and on 1 August for the electricity network tariffs. These changes take account of official inflation figures, the change factor applied to each infrastructure, and the clearance of the expenses and revenues adjustment account (CRCP).

— Illustration 1: Annual tariff changes in 2015



Source: CRE



EXPENSES AND REVENUES ADJUSTMENT ACCOUNT (CRCP)

Given the period for which the tariffs apply, set for about four years, the CRE bases its tariff deliberations on a number of predictions of likely changes in expenses and revenues over the short and medium term. However, certain categories of expenses and revenues are difficult for the operators to predict or to control, especially those relating to the variability of climatic conditions and so they may represent a financial threat to the system operators or, conversely, may increase their profitability. Therefore the CRCP, each year, allows the variances in expenses and revenues seen on the forecast items to be measured and offset.

On 1 August 2015, the tariffs for the use of the public electricity networks increased by 2.4% for high voltage B domain, and by 0.4% for high-voltage A domain and low voltage (deliberations of 11 June 2015 and 28 May 2015). It should be borne in mind that the CRE decided to increase the annual metering element of TURPE 4 HVA/LV, in order to facilitate the use of the new functionality offered by smart meters during the dismantling of regulated sales tariffs for users whose subscribed power is above 36 kVA, which took effect on 1 January 2016. The amount of the metered element no longer depends on the technical characteristics of the meter equipment, nor on the method for calculating the consumed flows.

In addition, after consulting with the concerned players, the CRE decided (deliberation of 11 June 2015) to extend until 31 December 2015 the discount of 50% on invoices for supply of electricity to some large consumer industrial electricity sites which they had exceptionally been given for the period of 1 August 2014 to 31 July 2015 (deliberation of 7 May 2014⁽⁴⁾). This measure was taken because of the economic climate, and the fact that most of the companies working in industrial sectors that are sensitive to the price of electricity are exposed to international competition.

As far as gas is concerned, on 1 April 2015, the tariffs for the use of the gas transmission system (ATRT5 tariffs) increased by 2.5% for GRTgaz and by 3.1% for TIGF (CRE deliberation of 19 March 2015). The increases decided for the tariffs for the use of the public distribution networks on 1 July 2015 ranged from 1.3% to 5.41% (see *Table 1, p. 63*), following the CRE's deliberations on 1 April 2015 for GRDF and on 6 May 2015 for all the local distribution companies.

(4) CRE deliberation on 7 May 2014 providing a decision on the increase as of 1 August 2014 of the tariffs for the use of HVB public electricity networks

Table 1: Changes in tariffs for the use of the gas distribution network

Distribution system operators	Percentage changes in tariffs until 01/07/2015
GRDF	+ 3.93%
Régaz-Bordeaux	+ 1.30%
Réseau GDS	+ 3.40%
GEG	+ 4.95%
Vialis	+ 1.64%
Gedia	+ 2.62%
Caléo	+ 2.05%
Gaz de Barr	+ 3.35%
Veolia Eau	+ 3.51%
Sorégies	+ 5.41%
Local distribution companies with common tariff	+ 2.67%

Source: CRE

2. THE CRE'S WORK TO ENSURE INDEPENDENCE OF SYSTEM OPERATORS

The CRE ensures the independence of the system operators vis-à-vis companies carrying out gas or electricity supply or production activities within the vertically integrated company to which they belong. These checks focus especially on the operators' internal organisation, and their governance rules, as well as on their operational autonomy.

2.1. The CRE is working to put an end to the confusion between the branding of a system operator and that of a supplier belonging to the same group

The independence of system operators is a fundamental requirement, which relates especially to the companies' image. Article L.111-64 of the Energy Code in fact states that no confusion shall exist between the brand used by a system operator and that used by a supplier belonging to the same group. This obligation is intended to prevent the general public from associating or confusing these two categories of actors, who provide different services independently from each other.

Therefore, in its various reports since 2007 on compliance with the codes of conduct and the independence of the electricity and natural gas system operators, the CRE had requested ERDF and GRDF to end the factors causing confusion with their respective parent companies.

The CRE made some very specific requests to these two operators in the last edition of its report published in January 2015, with the aim of removing confusion with the parent companies. It therefore obliged ERDF and GRDF to change the elements making up their branding (visual identity and/or initials and/or pronunciation...) and to present by 1 June 2015 the measures they intend to take along with an *"action plan to be implemented in order to eliminate the risk of the general public associating the two companies, thus removing any possible confusion"*.

The CRE had required ERDF to make major changes to its visual identity. During a hearing on 3 June 2015 before the Board, ERDF presented a plan for changing its brand along with an action plan. In its deliberation on 23 June 2015⁽⁵⁾, the CRE considered that the proposal presented by ERDF for the development of its brand, in the absence of any changes of that of EDF, does not eliminate all risk of confusion of the brands as prohibited by the legal provisions. On 31 May 2016, ERDF announced it was changing its name to Enedis.

Concerning GRDF, GDF SUEZ announced on 24 April 2015 that it was changing its name to ENGIE. The CRE then considered, in its deliberation of 23 June 2015 that this change resolves the issue of confusion between GRDF and its parent company, the incumbent supplier of natural gas. However, ENGIE has since announced that it will use the brand "Regulated Gas Tariff – GDF SUEZ" on the invoices to its customers under regulated tariffs. This choice is a major change of the elements reviewed by CRE, to the point that it needs to revisit the respective situations of ENGIE and GRDF in relation to article L.111-64 of the Energy Code.

2.2. Compliance with codes of conduct and the independence of system operators

The 9th edition of the report on compliance with the codes of conduct and the independence of system operators, published in January 2015, covers the period 2013-2014. It includes an analysis of the individual situations for the eight distribution system operators who supply over 100,000 customers: ERDF, Électricité de Strasbourg, URM, SRD and Gérédis-deux-Sèvres for electricity, GRDF, Régaz-Bordeaux and Réseau GDS for gas; and the three transmission system operators: RTE for electricity, GRTgaz and TIGF for gas.



The CRE notes that the independence of certain system operators is not yet sufficient, especially due to their organisation or the confusion of their brand with that of the suppliers who belong to the same group of companies.

Despite some notable improvements, the CRE notes that the independence of some network operators is not yet satisfactory, especially due to their organisation and the confusion of their brand with that of the suppliers who belong to the same company group. As for the three transmission system operators,

the report notes that in 2013 and 2014 they met their main commitments in the areas of transparency, objectivity, non-discrimination and the protection of commercially sensitive information.

2.3. Certification in 2015

The main purpose of the effective separation of transmission system management activities and production or supply activities, is to prevent any risk of discrimination between users of these systems, and to ensure that decisions on independent investment by system operators are made solely in the interest of supply and production companies. The certification procedure aims to validate that the transmission system operators comply with all the obligations under the Independent Transmission Operator model (ITO model), namely their obligations to be independent and autonomous in relation to their parent companies. On 26 January 2012, the CRE certified RTE, GRTgaz and TIGF as independent transmission system operators.

(5) CRE's deliberation of 23 June 2015 providing a communication on the responses provided by ERDF, GRDF and their parent companies to requests concerning their compliance with the provisions of Article L.111-64 of the Energy Code.

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contracts concluded between RTE and its parent company EDF or between RTE and the subsidiaries of EDF were reviewed

Although the certification is valid for an indefinite period, the system operators are required to notify the CRE of any item likely to justify re-visiting their certification. Therefore, the CRE was led to review the position of TIGF following changes that occurred in its shareholder structure when the Prédica company acquired 10% of its capital. CRE approved TIGF's situation as being in line with the ITO model, in its deliberation of 3 February 2016.

In the case of RTE, 2015 was marked by the change of the president of the management board. In line with the provisions of the Energy Code, the CRE has to check the independence of candidates from the parent company. Therefore the supervisory board of RTE submitted to the CRE Mr Brottes' candidature file to replace Mr Maillard as president. The CRE verified:

- the lack of prior professional activities or responsibilities on the part of the candidate within the companies in the EDF group, other than RTE, or within companies whose principle contractual relations were with these companies;
- the absence of any interest in the companies making up the EDF group, other than RTE;
- the intended terms of remuneration.
- that the proposals for re-election or new nominations for the members of the minority on the supervisory board, and the nominations for members of the board of directors of RTE⁽⁶⁾ complied with the requirements of the Energy Code.

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contracts concluded between GRT gas and Eits parent company ENGIE or some of its subsidiaries were submitted for approval by the CRE

The CRE also carried out a review of the contracts between the system operators and their parent companies. During 2015, sixteen contracts between RTE and EDF, or between RTE and the subsidiaries of were reviewed. Fifteen of the contracts received a favourable opinion from the CRE. The request for approval for a contract between RTE and EDF for the supply and provision of electrical power was rejected: the CRE held that the organisational arrangements for the call for tenders that led to its signature had not permitted freedom of competition to apply. In relation to GRTgaz, of the thirty-one contracts concluded with ENGIE or some of its subsidiaries and submitted for approval by the CRE in 2015, thirty received a favourable option, and one is currently under review. In other cases, six contracts referred to the CRE in 2014 were approved during 2015.

3. THE CRE GUARANTEES THE TRANSPARENT AND NON-DISCRIMINATORY NATURE OF THE PROCEDURES AND RATES FOR CONNECTIONS, AND THE CONTRACTS FOR ACCESS TO THE NETWORKS

A physical connection to the public electricity networks cannot give rise to energy injections or withdrawals without the conclusion of an access contract with the system operator. The CRE provides a framework for the rules for processing requests in order to ensure that system operators offer users the best solution available; it approves the rates, which must transparently represent the costs charged to the user.

(6) CRE'S deliberation of 24 September 2015 providing a decision on a proposal for the nomination of members on the board of directors of RTE

3.1. The CRE approved the 4th edition of the rates for connection of ERDF

Following its deliberation of 8 July 2015, the CRE approved the new rates for billing operations connecting new users to the public electricity distribution system, submitted by ERDF on 30 June 2015. The deliberation included an analysis on the structure of this new connection pricing, which came into effect on 8 October 2015.

ERDF recast its rate of billing connection operations in order to integrate the modification of the evaluation of trenching work and the implementation of the decree of 5 October 2011 on the execution of works in the vicinity of certain underground, overhead or underwater transport or distribution structures. On average, the increases proposed by ERDF amount to:

- 13% for connecting consumers with power \leq 36 kVA;
- 12% for connecting producers of power \leq 36 kVA;
- 21.9% for connections with power $>$ 36 kVA and for extensions.

ERDF followed the recommendations drawn up by the CRE in its deliberation of 28 June 2011, and introduced simplified cost formulas for the infrastructure for the charging of electric vehicles, thus making it easier to understand invoicing for these connection operations.

3.2. The CRE set up a working group on invoicing connection operations, in combination with the Association des Distributeurs d'Électricité en France (ADEeF - Association of Electricity Distributors in France)

In 2015, the ADEeF and the CRE created a working group to facilitate the preparation of the approval records for the connection rates from the electricity distribution system operators, and their processing by CRE, in order to reduce the time required for approvals to a minimum. The group focussed particularly on the publication of price lists, the cost elements required to justify them, the items included in the balance of connection operations and the regional plans for connection to renewable energy sources.

The working group's conclusions will also allow the CRE to work on updating the ruling of 28 August 2007 that defines the principles for calculating the contribution to connection costs.

3.3. The CRE approved for the first time the draft agreement on connection to the public electricity transmission system for existing production units

Pursuant to article L.342-4 of the Energy Code, on 27 April 2015, RTE submitted for the CRE's approval a draft agreement on connecting existing production plants to the public electricity transmission system. This draft agreement defines the requirements for production units that are already connected to the public transmission system, except for production units that only supply internal loads with a total power level of or less than 10 MW in consumption sites. In particular, it defines the performance levels the production units are expected to commit to. It was approved by the CRE in a deliberation on 11 June 2015.

3.4. The CRE approved contracts for access to the electricity transmission system

Under the provisions in article 14 on concession type specifications for the public electricity transmission system, the CRE approved a new template for contracts for access to the transmission system for “consumer” sites, known as CART-C (deliberation of 7 October 2015).

This new template makes major improvements in RTE’s undertakings on the number of cuts, the total duration of longer cuts and voltage dips. It also defines a framework for supplementary compensation for indirectly connected sites that may have suffered losses caused by RTE. Finally, the threshold from which a customer can claim compensation following scheduled network outages has been lowered. This new contract template will be offered to all affected RTE customers within one year.

4. ACCESS TO STORAGE: MOVING TOWARDS A REGULATION OF REVENUES FOR FRENCH STORAGE OPERATORS

4.1. Context

Underground storage of natural gas is an essential part of ensuring secure supplies in France. In order to ensure continuous supply in the event of a cold snap or a breakdown in supply, the Energy Code imposes individual storage requirements on suppliers who supply customers connected to the distribution system.

This system of requirements has not, however, managed to prevent a fall-off in subscriptions to storage capacity in the last few years, which can be explained mainly by the minor differences in price between the summer and winter periods on the wholesale markets in France and the rest of Europe. As they are

less than the cost of storage, these price differences have a negative impact on the economic interest in storage for suppliers. In 2014, given the reduction in subscriptions, the Government stepped up the requirements on suppliers, who now represent about two thirds of the saleable capacities. The question of the regulatory framework of storage then arose more acutely, because under the negotiated access that applies in France, operators can freely define the tariffs that they charge.

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In 2014, given the reduction of storage subscriptions, the Government stepped up the requirements on suppliers, who now represent about two thirds of the saleable capacities.

4.2. Public consultation by the DGEC

Working to remodel the system of third-party access to storage, the Directorate General for Energy and Climate (DGEC) held a public consultation on the application of a system of regulated access to storage in March and April 2015. It proposed two approaches. The first consists of retaining the requirement on suppliers while introducing tariff regulation. The second consists of selling quantities by auction in order to better align the prices to the market value of storage, while guaranteeing operators the recovery of their regulated revenues. The gap between receipts from sales and regulated revenues would be covered by the introduction of a dedicated new tariff charge for the use of the gas transmission networks.

The CRE responded to this public consultation on 16 April 2015, after consulting with the market participants and hearing from the storage operators. It came out in favour of regulating the revenues of the storage operators, given that the system of requirements, which gives Storengy and TIGF the certainty that they can sell a large part of their storage capacity, has to be supplemented by regulation to ensure greater transparency and fair pricing.

The CRE also expressed its preference for a mechanism involving selling storage capacity by auction, as a market mechanism would enable the security of supply in the area, once the reserve price for the auctions had been set correctly.

4.3. The draft ruling to amend the terms of access to storage

Pursuant to article 167 of the law on energy transition for green growth, the Minister of Energy and the Minister of Economy, referred to CRE on 8 February 2016 for an opinion on the draft ruling relating to access by third parties to underground storage of natural gas. The draft provides for the implementation of the second mechanism suggested by DGEC during its public consultation, namely the sale by auction of storage capacity.

The CRE delivered its opinion on 10 March 2016, coming out in favour of the principle of the reform, involving two parts⁽⁷⁾: the regulation of storage operators' revenues and the sale of capacity by auction. But the CRE also felt that the suggested terms would not make for an efficient implementation. It believes in particular that:

- the ruling should be limited to stating the general principles for determining authorised revenues for storage operators, and grant CRE the competence to define the method of calculation;
- fixing the reserve prices at auctions must also be included in the terms of selling the capacity offered by the operators and approved by the CRE.

⁽⁷⁾ CRE's deliberation of 10 March 2016 providing an opinion on the draft ruling amending the terms of access by third parties to underground gas storage

THE CRE IS PREPARING THE FUTURE OF THE NETWORKS

CRE is responsible for approving the investments proposed by the system operators. This task applies both at French and European levels, as the development of infrastructures needs to be approached against a background of the creation of a single market for electricity and gas. The CRE, in collaboration with the other regulatory authorities, is promoting efficient use of existing infrastructure, while seeking to ensure that the investments needed to ensure that France and the EU can meet the energy challenges they will face are identified and carried out under the best possible terms.

Thus, the CRE needs to approve investment programmes for transmission system operators, after checking that they do actually cover the needs, and ensure that these are consistent with the plans for development drawn up at European level. In the short term, the CRE contributes to the adaptation and modernisation of the networks, in relation to short term developments for managing consumption, new types of use, the growth of renewable energy sources and technological innovation.

1. THE CRE APPROVES INVESTMENTS IN THE TRANSMISSION NETWORKS

The electricity and gas transmission network operators use and maintain the public networks for electricity and gas transmission. They are responsible for their development in order to meet the needs of society as a whole and the challenges of energy policy. Each year, they submit to the CRE an investment programme as well as a ten-year plan for developing the networks. The CRE needs to check that these are consistent with the development plans drawn up at European level by the associations of European electric and gas transmission system operators for electricity and gas (ENTSOE and ENTSOG).

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Each year, the system operators submit an investment programme to the CRE, as well as a ten-year plan for developing the networks.

1.1. The 10 year development plans and approval of the annual investment plans

The challenges for the ten year development plan for the electricity sector

In the ten-year development plan published in 2015, RTE stresses the decisive role of the electricity transmission system in *“the deep-seated energy changes that are currently underway”*. So RTE put forward a variety of consumption and production scenarios. The production scenarios vary in terms of the assumptions chosen for the growth of renewable energy, the fall in nuclear production and the fossil-fired plants. According to RTE, the challenges created by the energy transition fall into four groups:

- developing cross-border trading capacity;
- reinforcing the 400 kV network to provide back-up between regions;
- intake of production, especially from renewable sources;
- securing supply of electricity during peak hours.

RTE has therefore identified a certain number of regions that are showing structural weaknesses, especially in terms of balancing production and consumption. In its ten year plan, RTE put forward a list of projects to respond to the need to secure the

network, varying according to different energy transition scenarios. RTE also identified interconnection projects that need to be carried out in order to deal with the new flow patterns observed on large-scale transmission networks and at the borders.

After consulting with users of the public transmission system, the CRE issued some recommendations to define the conditions under which the network development requirements identified by RTE could occur (deliberation of 9 July 2015). The CRE asked RTE to better explain how investment triggers are calculated, in particular in relation to interconnections, and to better define their planning approach. It also requested a better quantification of needs.

The challenges for the ten year development plan for the gas sector

The gas transmission system operators, GRTgaz and TIGF, are subject to the same obligations as RTE. In its ten year development plan in 2015, GRTgaz looked at three scenarios of consumption trends on its network, and based itself on RTE's forecast when evaluating the demand for gas used to produce electricity. These scenarios aim to reflect the uncertainties which apply to the future consumption of gas (electricity production from gas, industrial consumption, new uses for gas). They all include a downward trend in consumption, which strongly impacts the outlook for reinforcing the infrastructures. TIGF only put forward one scenario, which also shows a drop in consumption.

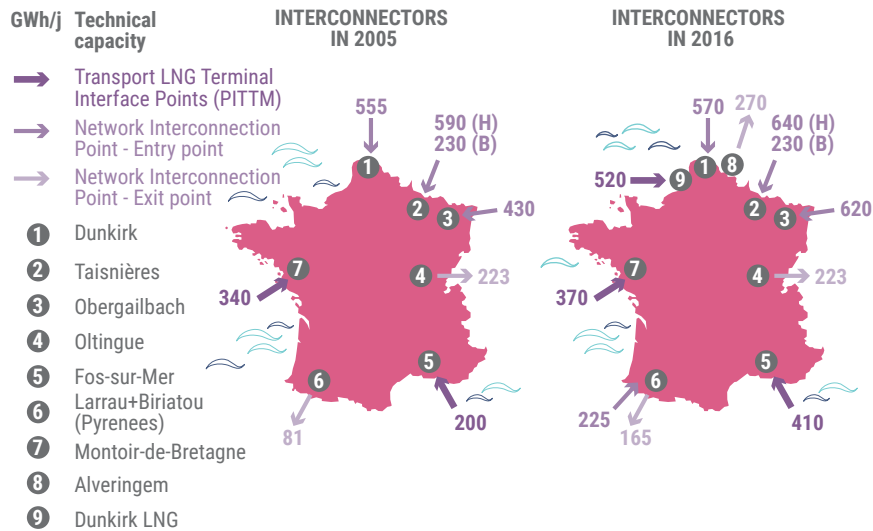
In terms of supplies, the ten-year development plans from GRTgaz and TIGF foresee a sizable increase in biomethane production, which is in line with the approach taken by the law on energy transition towards green growth. This kind of trend could reduce the demands on the transmission network, but also generate investments that allow reverse flows⁽⁸⁾ from the distribution networks into the transmission network.

The challenges of the ten-year development plans also include the development of the design for the French market, and on a wider scale, for the European market. In the last few years, many investments have been made to support the emergence of a liquid market in France that is also well-integrated in the European market. The operators of the gas transmission systems have thus given priority to eliminating internal congestions, with the result that France now only has two market zones, and also to increasing capacity at the interconnections. Since 2005, interconnections have grown by 27% incoming and 116% outgoing, which means today there is a total of 2,285 GWh/day incoming and 658 GWh/day outgoing. These changes especially affect the France-Spain interconnections, where 225 GWh/day incoming capacity has been created. The transmission capacities of the French LNG terminals increased sharply, going from 540 GWh/day in 2005, to 1,300 GWh/day in 2016⁽⁹⁾, an increase of 141%.

(8) This relates to the reduction of the injections from biomethane production units when production volume exceeds consumption, even if it is anticipated that the minimum consumption level observed in a zone defines the maximum injection capacity of a production unit

(9) This total includes the capacities of the Dunkirk terminal that came on-line during 2016

Map 1: Focus on gas interconnections in 2005 and 2016



Source: CRE

After completing its review of the ten-year development plans of GRTgaz and TIGF, and having consulted market participants, the CRE considered (in its deliberation of 17 December 2015) that these properly took into account the current needs and, on the longer term, the needs of the market and that they are consistent with the European network development plan prepared by ENTSOG. They include, in particular, the necessary investments for creating a single market, confirming the objective of commissioning this infrastructure at the end of 2018. The CRE also recalled the importance of market tendering procedures, called “open season”, which consist of the dimensioning of new projects on the basis of the needs stated by users in the form of long-term commitments, thereby safeguarding their financing and reducing the risk of stranded costs.

THE INVESTMENT PROGRAMMES OF THE TRANSMISSION SYSTEM OPERATORS FOR 2016 APPROVED BY THE CRE

FOR ELECTRICITY:

The budget put forward in the autumn of 2015 by RTE totals €1,549 million for 2016. The investment costs relating to developing large-scale transmission networks and interconnections amount to €267 million. These costs are concentrated on a few projects, with 75% of them relating to three projects: the Savoy-Piedmont project, the project to rebuild the Lonny Vesle Seuil axis, and the project to improve the 400 kV network north of Coulange and make it more reliable.

Given that most of the large-scale transmission networks is relatively recent, the costs for updating are low compared to the overall investment planned in 2016 (€46.9 million).

The investment costs relating to developing regional networks amount to €600 million in 2016. These costs arise mainly (64%) from projects to secure electricity supply. There are three projects with a total cost of over one hundred million euro. The cost of connections represent

20% of the investments in the regional networks. The rest of the costs relate mainly to the security of the electrical system and the quality of supply (6% of investment) and the intake or decommissioning production (10% of investment).

The costs for updating regional networks amount to €385 million in 2016. These relate primarily to replacing around 600 km of overhead lines, around 30 km of underground links, and about twenty stations.

The costs of information systems amount to €135 million, while spending on logistics totals €114 million in 2016.

FOR GAS:

The forecast expenditure on gas transmission for 2016 totals €667 million for GRTgaz, unchanged compared to the approved expenditure for 2015, and €110 million for TIGF, a sharp fall compared to its 2015 level of €132 million.

These programmes are basically the last part of two important projects started in 2011. On the one hand, the connection of the Dunkirk terminal with the Arc de Dierry, decided following the final decision on investment in Dunkirk LNG. The terminal is expected to come on line during 2016.

On the other hand, Artère de l'Adour, a project agreed following the open season organised in 2010, which lead to the creation of 60 GWh/day of firm entry capacities at the France-Spain interconnection at Biriadou. For the latter, the CRE has decided to carry out an audit of the project's costs.

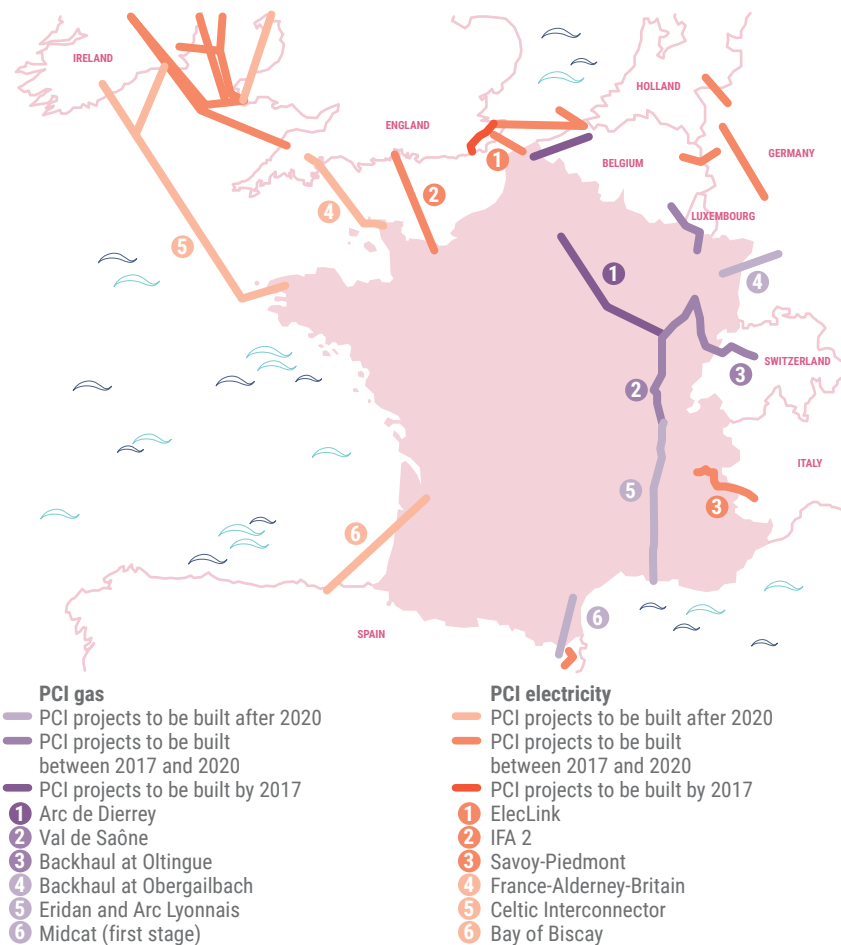
The other investment costs relate primarily to the safety and update of units. Over the last few years, the reinforcement of regulation has led operators to carry out more inspections.

1.2. Large-scale interconnection projects and investments

The "Infrastructure Package"

The European Union adopted the "Infrastructure Package" (Regulation (EU) 347/2013 of 17 April 2013) in order to support investments in the networks necessary to create cross-border energy corridors deemed to be priorities. Its application is based on improved coordination of national investment decisions, by selecting Projects of Common Interest (PCIs) for their contribution to the objectives of the European Union in the areas of market integration, security of supply and sustainable development. The designation of the PCIs is based mainly on the Ten year development plans for the European networks, developed by ENTSOE and ENTSOG, who are required to provide a quantified analysis of the costs and benefits of the projects. The PCIs may be subject to fast-track administrative procedures, agreements for splitting cross-border costs, or European subsidies from the European Interconnection Mechanism (EIM).

Map 2: Large-scale gas and electricity interconnection projects



Source: CRE

The CRE is heavily involved in the work linked to the implementation of the “Infrastructure Package” for both gas and electricity. It participates in the regional groups tasked with selecting the PCIs, contributes to the process of preparing the 10-year development plans by ENTSOG and ENTSOE and also takes part in drafting the ACER recommendations.

Large-scale gas interconnection projects currently underway

Oltingue: The CRE confirmed (deliberation of 17 December 2015) the GRTgaz project to create physical entry capacity from Switzerland at the Oltingue interconnection point. This investment, worth around €15 million, intends to deliver 100 to 200 GWh/day of (interruptible) capacity by 2018. The Oltingue interconnection point, with an exit capacity of 223 GWh/day, links the North zone of the GRTgaz network to the Italian Snam Rete Gas network, via Switzerland.

Artère de l’Adour: The market tendering procedures of 2009 and 2010 resulted in an increase of interconnection capacity between France and Spain to 165 GWh/day in both directions by 1 April 2013. In December 2015, the interconnection capacity between the two countries was again increased, to 225 GWh/day, with the commissioning of Artère de l’Adour by TIGF, costing a total of approx. €160 million, compared

to the original €126 million estimate. The physical flows at the interconnection have always been directed from France to Spain and, in 2015, the usage of the interconnection reached on average 86 GWh/day.

Dunkirk LNG – Hondchoote-Alveringem interconnection: The Dunkirk LNG terminal will be ready for commercial operations in the second half of 2016. It will have an annual transmission capacity of 13 Gm³. The connection of the terminal to the European transmission networks was completed in November 2015. The maximum transmission capacity to the French network will be 520 GWh/day. The new gas pipeline, the Artère des Flandres will allow the transmission of a total of 270 GWh/day of non-odourised gas to Belgium, coming either directly from the Dunkirk LNG terminal, or from PEG North.

Val de Saône and Gascogne-Midi: The CRE has decided to create a single market for France. To do so, the existing physical constraints to linking north and south need to be removed. Two projects were started up: Val de Saône, which will double the Artère de Bourgogne, and the Gascogne-Midi project, reinforcing the TIGF network. These investments will help gas move more easily between the north and the south of the country and thus help to improve conditions for using the interconnections with Spain.

Large-scale electricity interconnection projects underway

ElecLink: Following a decision on 28 August 2014, the CRE and its British counterpart, Ofgem, have granted an exemption to the ElecLink company for the construction and operation of a new 1,000 MW interconnector between France and Great Britain through the Channel Tunnel, which is planned to be commissioned at the beginning of 2019. This option, made possible thanks to European legislation, is a first in France, as all other French interconnectors are operated by RTE within a regulated framework.

Pursuant to the terms of the exemption decision, ElecLink organised a public consultation on the rules of access to the interconnector between 22 October and 23 November 2015. These rules will be submitted to the CRE and Ofgem for approval during 2016.

Savoy-Piedmont Project: The Savoy-Piedmont project comprises the creation of a new direct current interconnector with a capacity of 1,200 MW between France and Italy. This line, with an initial investment budget for RTE of EUR 465 million, should become operational in 2019, across a border with high demand. Given the high utility of this project, the CRE decided (in its deliberation of 26 March 2015) to push RTE towards the efficient management of the project by defining financial incentives for a period of ten years from the date it becomes operational.

France-Spain: 2015 was marked by the commissioning of a new interconnector line between France and Spain. This direct current line is 64.5 km long and completely underground, linking the localities of Baixas, near Perpignan in France and Santa Llogaia near Figueres in Spain. The project involves an investment of €700 million, shared equally by RTE and the Spanish system operator, Red Electrica de España (REE). It also, as a European priority interest project, attracted a subsidy from the European Union of €225 million.

Nearly seven years after starting the project, the line from Baixas to Santa Llogaia was inaugurated on 20 February 2015, and has been in operation since 5 October 2015. However, doubling the interconnection capacity between the two countries, from 1,400 MW maximum to 2,800 MW, was not possible due to some constraints on the Spanish side (delay in carrying out the work, and non-conformity of a reinforcement of the network), on which the CRE expressed its regrets when it issued an opinion on the rules of sharing capacities on the France-Spain border (deliberation of 26 November 2015).

Since then, RTE and REE have improved their operational coordination, which has significantly increased the capacity assigned to the market, without, however, achieving the desired level. In its deliberation, the CRE requested RTE and REE to implement coordinated capacity calculations working on the basis of 2 days ahead, to maximise the allocated volumes. The CRE is looking forward to the initiatives planned in Spain to help remove the constraints that still persist on the use of this interconnector.

2. THE ELECTRICITY AND GAS NETWORKS ARE BEING MODERNISED

The large-scale deployment of Linky and Gazpar smart meters, and the emergence of smart grid solutions, with ever more pilot demonstrations underway, could profoundly reshape the face of the French energy landscape. In order to assist with the current network modernisation, the CRE has become involved in the preparation of a regulatory framework that will promote these developments. It conducted work to develop new data transmission services supported by the smart meters.

2.1. Much more detailed consumption data provided thanks to deployment of Linky and Gazpar

In line with the new regulatory timetable proposed by the CRE (deliberation of 16 July 2014), ERDF started in December 2015 the deployment of the Linky smart meters on networks for which it holds the concession. This smart metering project in the low voltage domain ≤ 36 kVA, involves the installation of 35 million meters by the end of 2021, which is an installation level of 90%. Article R.341-8 of the Energy Code states that the level of installation must be at least 80% by 31 December 2020 and that all consumers must be equipped by 2024. For gas, at the beginning of 2016, GRDF started a pilot deployment of its Gazpar smart meters, covering a limited but representative sample of 150,000 meters, preceding the industrial deployment to take place between the beginning of 2017 and the end of 2022.

The smart meters for electricity and gas will provide much more refined and detailed consumption data than in the past. Customers will have invoices based on an actual reading, matching their exact consumption. The meters in fact take a daily reading, in order to invoice using the actual readings any contractual changes, and will send the supplier a monthly reading to allow regular billing. Customers will therefore be able to better manage their consumption and have access to a greater variety of supply offers. In addition, historic consumption data and load curves will be provided free of charge to consumers and their providers.

The Linky meter will also allow some services to be provided remotely, rapidly and more cheaply, that until now required one or more site visits. This could be, for example, to start providing or to increase the power level of a subscription.

35
millions
of Linky meters
will be deployed
by the end
of 2021

11
million
Gazpar meters
will be deployed
between 2017
and 2022

For gas, the Gazpar meter will not support remote operations. Its installation will therefore not lead to a reduction in the cost of existing services.

When defining the new data transmission services, the CRE drew input from the electricity (GTE) and gas (GTG) consultation groups. A public consultation was launched in November 2015 on the subjects of:

- the pricing principles to apply to the new services;
- the changes in definition and in the tariffs for services provided exclusively by electricity distribution system operators.

The CRE defined the changes in these services for electricity in its deliberation of 3 March 2016.

2.2. The CRE's work on smart grids

The CRE is exploring provisional ideas on the modernisation of the networks. In 2015, the forums organised by the CRE every two months looked at new uses and new resources for natural gas (biomethane, natural gas for vehicles, hydrogen), at the challenges of flexibility regarding demand, and at the lessons we can learn from the growth in smart grids in Japan. Each of these themes produced documentation published on the Internet site www.smartgrids-cre.fr.

In addition, the CRE is continuing its own 'Tour de France' to meet regional actors working on smart grids in local projects. Thus, the CRE organised a round table in Nantes on "The energies and territories of the Loire Valley" on 15 June 2015.

Regular discussions are also held with other project leaders (system operators, producers, equipment manufacturers, etc.). They review feedback on experiences with demonstrators and on the legal and economic questions that have to be answered by the authorities in order to speed up deployment of these technologies. Meetings were held during 2015 with the French Environment and Energy Management Agency (ADEME) on the projects called Réflexe and ENR Pool.

The CRE is working on new forms of access and usage of energy networks and, more especially, on the terms of connections to the distribution systems. The growth of smart grids shows that multi-energy approaches allow the increase of synergy between natural gas, electricity and heating networks, and in this way improve energy systems at local level. Trends in usage will have major impacts on network regulation. The consumption of production at an eco-district level, or within a building with a positive energy balance, or connecting infrastructures for recharging electric or hybrid vehicles also need to be taken into account.

On 12 June 2014, the CRE published 41 recommendations for developing smart electrical grids. RTE and the electricity distribution system operators who serve over 100,000 customers presented to the CRE, in December 2014 and January 2015, a roadmap for implementing these recommendations.

In its deliberation of 25 February 2015, the CRE completed its recommendations on the subjects relating to self-supply and the provision of data. It also requested a detailed report on the demonstrators. It expanded its work to include the natural gas networks, whose operators need to submit their roadmap.

Like other actors affected by the the development of the networks (system operators, equipment manufacturers, authorities, universities and research centres) the CRE participates in the plan for “*Smart electrical grids*” under the government initiative “*la Nouvelle France Industrielle*” (“the New Industrial France”). These strategic deliberations were initiated by the President of France in September 2013. Their intention is to define the priorities for French industrial policy. In this context, the CRE is involved in the exploration of four of the ten actions under the plan:

- action no. 1: bring together and organise French industry through the association Think Smartgrids ;
- action no. 5: carry out a socio-economic evaluation of a general deployment of smart electric grids;
- action no. 6: organise large-scale deployment of smart electric grids in France;
- action no. 8: increase the effectiveness of French actions in the area of standardising on smart electric grids.

As part of action 5, an initial report was published on 3 July 2015, analysing the costs and benefits of smart grids for the public transmission network. However, at this stage in the study, these elements have not been taken into account for the distribution systems. The Minister of Economy and the Minister of Energy asked RTE and ADEME to investigate these subjects further. This work, which the CRE is involved in as an observer, was kicked off during the last quarter of 2015, bringing together all participants in the electrical system.

In addition, to broaden its thinking, the CRE published a study carried out by an external consultant on the value of flexibility of production and of consumption for the management and dimensioning of the electricity distribution system. This study estimates the economic value that load shedding, peak clipping and energy storage could have for the dimensioning and operating of the electricity distribution systems. It then tries to define the situations in which these technologies could provide an economically attractive alternative to reinforce the public network.



Article 199 of the law on energy transition towards green growth provides that the CRE must approve agreements on experimentation with services with local flexibility, concluded between regional authorities and distribution system operators.

Its conclusions will assist the CRE in carrying out its new tasks as defined in article 199 of the the law on energy transition towards green growth. In fact, this legal provision states that the CRE must approve agreements signed between regional authorities and the public distribution system operators, relating to experimentation with services involving local flexibility.

At the European level, within the CEER framework, the CRE is contributing to the EvolvDSO project, that aims to define the future role of public electricity distribution system operators in Europe, working with five of these. It is also involved in the group tasked with defining energy data confidentiality and security principles.

3. THE TERMS OF ACCESS TO DATA ARE YET TO BE DEFINED

The law on energy transition towards green growth helped to define the scope of the use of energy data, the volume of which will be vastly increased by the deployment of smart metering. As a result, article 28 of this law has added to article L. 337-3-1 of the Energy Code a provision that defines that the consumption data will be made available to consumers in euros, using real-time remote displays. Initially, this provision will cover only people at risk of energy poverty. It will be for the CRE to carry out a technical and economic evaluation before any decision is taken to make this generally available to domestic consumers.

In the same way, article 179 of the law on energy transition towards green growth made changes to articles L.111-72, L.111-73 and L.111-77 of the Energy Code, in line with what the CRE recommended in its deliberation of 12 June 2014 on to the provision of data by public network operators (recommendation no. 7), by defining the categories of energy data accessible to public bodies, and the main guidelines for their distribution. The CRE took part in the drafting of the application decree for this article.

Finally, the CRE has stepped up its analysis of the questions related to cyber-security and privacy protection. This subject – among others – was raised during its public consultation on the principles of pricing additional services related to smart metering systems in November 2015.



FOCUS ON "POWER TO GAS"

In its deliberation of 22 July 2015, concerning the conclusions on the implementation of GRTgaz' investment programme, the CRE approved the pilot project for "Power to Gas", Jupiter 1000, for a total investment of €10.1 million. The CRE believes that this project, along with projects for the production of biogas, fall within the scope of the law on energy transition towards green growth and help to develop new uses for natural gas, and for the gas networks on the long term.

The project's principle is based on the conversion or storage of electricity in the form of hydrogen (using a process of electrolysis) or methane (by capturing and injecting CO₂) which is then injected into the gas network. The aim of this project is to develop a business model which is economically viable by optimising the use of existing networks. This technology would eventually allow the recovery of a part of the surplus electricity production from renewable sources, which cannot be stored 'as is' during peak hours, for its use in a way that is better coordinated with the energy demand. The project plans to build a pilot platform for hydrogen production at Fos-sur-Mer, where two technologies that are currently used for electrolysis, (alkaline electrolysis and Proton Exchange Membrane electrolysis), would exist side by side. An industrial site is linked to the project to capture the CO₂ emissions and produce methane (using a methanation process). The pilot plants will come online in 2018 and will be used for three years.

The financing for this project is based partly on a partnership with various interested parties, and also on obtaining European and regional funding, as well as the contribution from ADEME. TIGF is also involved in the project through GRTgaz who was invited to speak in September 2015 during the forum organised by the CRE on hydrogen, in order to present its thoughts on power to gas, and especially its Jupiter 1000 project.

CRE CONTRIBUTES **TO THE DEVELOPMENT OF THE EUROPEAN** **REGULATORY FRAMEWORK**

Contributing to the creation of a European energy market is one of CRE's principal missions. Together with the other regulatory authorities it has to put into practice the rules that derive from European regulations, but also has to be involved in drafting them within ACER, and working on a coordinated development of the rules of access interconnections with neighbouring countries. The CRE believes that dialogue with other regulators is extremely important in order to offer the market the most effective rules. It welcomes any initiatives that work towards advancing the regulatory framework, especially by participating in bringing forward the application of network codes.

1. THE CRE PLAYED AN ACTIVE PART IN DRAFTING THE NETWORK CODES IN 2015

The 3rd energy package⁽¹⁰⁾ requires the development of common rules on how the market should function within fixed deadlines. Known as European network codes, these detailed rules, intended to make energy trading run more smoothly, define the conditions for access to and management of the European energy transmission networks, with the aim of creating a single market for gas and for electricity.

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The development of the network codes is a real challenge, because it means developing common operational rules that cover the technical specificities of the energy systems of every country.

Their development is a major challenge, because we are talking about the establishment of common operational rules that cover the technical specificities of the energy systems of every country. This process requires the involvement of a large variety of stakeholders, such as market participants, system operators, power exchanges and the European Commission. At the end of

this process, the Member States will be consulted for the formal adoption of the texts that will become directly applicable in the territory.

1.1. The planning and implementation of the gas network codes

Bringing forward the implementation of the codes

The Capacity Allocation Mechanisms (CAM) network code is the first European network code to have been adopted. It has been binding since 1 November 2015. Its purpose is to make it easier to trade gas by defining rules for standardised allocations between the market zones. The capacities of the interconnections are allocated by auction, using standard procedures throughout Europe. To this end, a common platform for reservation capacity, known as PRISMA, was initiated in January 2013. It now includes almost all the European operator companies.

(10) Following on from the directives adopted in 1996-1998 and in 2003, the 3rd energy package helps to reinforce the liberalisation of the internal energy market, through measures that aim to strengthen the market regulation, to improve coordination of the different parties involved, and to promote international cooperation

The 2nd network code on Balancing (regulation no. 312/2014 dated 26 March 2014), implemented on 1st October 2015, defines a common system for balancing for the European transmission network operators and encourages network users to do their best to balance their injections and withdrawals of gas, in order to minimise discrepancies requiring intervention by the transmission operators. The CRE anticipated back in 2011 (deliberation of 1 December 2011) the alignment of the French balancing systems with the European target model. On this basis, after completing the work carried out under the mechanism Concertation Gaz, GRTgaz and TIGF submitted to the CRE their proposals for developing balancing rules.

The CRE approved these developments in various deliberations⁽¹¹⁾, between June 2011 and September 2015 for a full application of the code coming in October 2015. These developments relate mainly to:

- the content and frequency of the information provided to shippers by the transmission system operators;
- the terms of payment for shipper imbalances;
- the terms of intervention by the system operators in the market to cover their balancing needs, multiplying the buying-selling slots, including at weekends;
- the supply of a flexible service by transmission system operators based on their line pack;
- falling back, for balancing, on the purchase-sales of so-called "local" products⁽¹²⁾.

In light in particular of the short-term wholesale gas market trends and the quality of information provided by the transmission system operators to shippers, the CRE decided not to implement the provisional measures allowed under the network code.

A 3rd network code, relating to Interoperability and Data Exchange Rules, was adopted in November 2014. It aims to improve commercial and operational cooperation between neighbouring transmission system operators, and in particular to ensure the compatibility of a certain number of technical parameters between adjoining operators at the level of the interconnections. It will be binding from 1 May 2016.

Future network code

The next European network code relating to gas will relate to rules regarding harmonised transmission tariff structures for gas (TAR). The CRE played an active part in drafting it and co-chaired the ACER specialist group that prepared the framework guidelines⁽¹³⁾, and then collected the opinions of the regulators on the draft code. This text aims to dismantle tariff barriers to the cross-border movement of gas and, in particular, to ensure there is no discrimination between the different types of shippers. ENTSOG submitted its final draft network code on 31 July 2015. The Commission is planning to adopt this using the comitology procedure before the end of 2016. The adoption of this code will also mean changes to the code on Capacity Allocation Mechanisms, especially in order to include new provisions relating to the creation of additional interconnection capacities ("incremental capacities").

(11) Deliberations of 21 June and 20 September 2012, of 5 February 2013, of 4 April 2014, of 15 January and 10 September 2015

(12) Products leading to physical gas delivery at one or more points of a balancing zone at a given time of the current gas day

(13) Basis for the development of network codes at EU level, concerning all market participants. These bases are prepared by ACER in framework guidelines

1.2. The development and implementation of electricity network codes

The development of balancing rules: the Electricity Balancing code

To ensure a balance between the production and consumption of electricity, the system operators hold balancing reserves, meaning capacity they can bring on line to adjust the production or the consumption of an actor. In order to make balancing management more reliable and more economically efficient, the draft network code on balancing aims to integrate these mechanisms at European level, allowing transmission system operators to fall back on balancing reserves (or adjustments) provided by a party in a neighbouring country.

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The CRE regularly organises information workshops and exchanges with the French actors on elaborating and implementing the network codes.

Heavily involved in the European debates, the CRE co-chairs with ENTSOE a consultation group of European actors, which has the role of spelling out in detail the measures planned by the draft regulation (definition of harmonised adjustment products, regional exchange zones between system operators, terms for penalising parties that are out of balance). At national

level, the CRE regularly organises information workshops and discussions with French parties affected. RTE is going to submit to CRE a proposed roadmap for implementing the draft European regulation on balancing. These matters will form the subject of a public consultation organised by the CRE in the second quarter of 2016.

Several network codes on the rules relating to electricity networks have come into force or been adopted during 2015

The network code on Capacity Allocation and Congestion Management (CACM), that came into force in 14 August 2015, defines the target European model for calculating and allocating interconnection capacities on a daily and intra-day basis⁽¹⁴⁾. It defines the governance rules as well as the roles and responsibilities of the system operators and the exchanges, and defines the process for approval by the regulators of different methodologies that may be proposed to them in the context of implementing these rules. From December 2015, the CRE designated EPEX Spot and Nord Pool as electricity market operators (or NEMOs - standing for “nominated electricity market operators”). The regulatory authorities need to coordinate their approval of a set of common rules based on the proposals from ENTSOE and the NEMOs.

A 2nd network code relates to the market and trading mechanisms. The Forward Capacity Allocation guidelines (allocation of capacity with timeframes longer than day-ahead) were adopted on 30 October 2015. This code aims to allocate annual and monthly products in a harmonised manner on a single platform at European level. This text should come into force in July 2016. Anticipating the formal implementation of the code, the regulators asked the system operators to propose common rules in 2015. The transmission system operators from 22 Member States therefore put forward harmonised rules known as HAR (standing for Harmonised Allocation Rules), which the CRE approved on 15 October 2015⁽¹⁵⁾. These rules have already been applied to the long-term auctions of products in 2016 in the countries involved, using a shared platform (JAO, Joint Allocation Office). They provide the foundation for future harmonised rules that will be implemented in all Member States of the European Union.

(14) Supply of electricity across national borders on the day of purchase

(15) CRE's deliberation of 15 October 2015 providing approval of the rules for allocating long-term capacity by open auction

Finally, the CRE contributed to developing a number of codes that aim to create common rules for the connection and system operation of various types of installation. In 2015, three such codes were adopted, and they relate to:

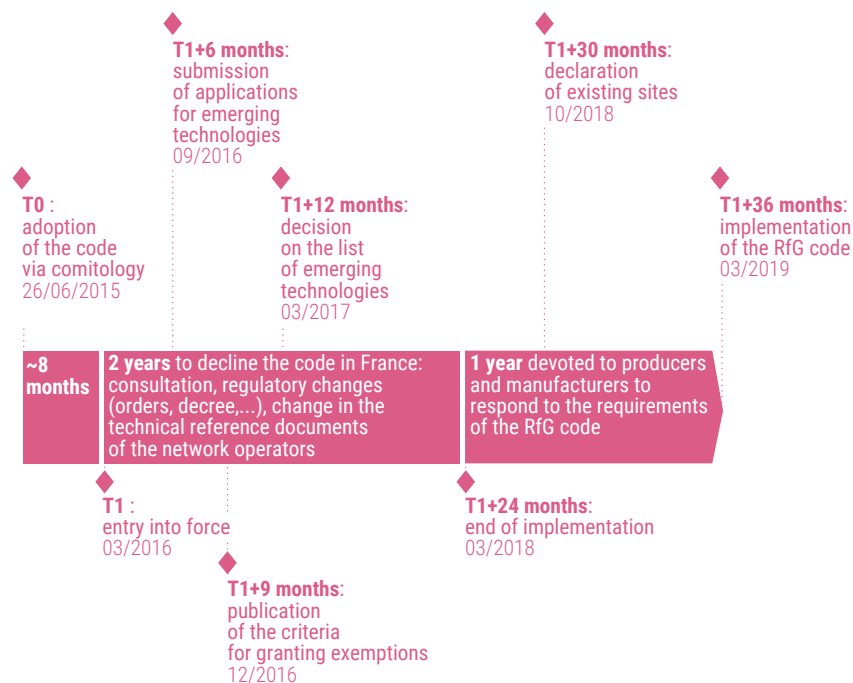
- power generating installations: the code Requirements for Generators was adopted on 26 June 2015 (see box p. 84);
- consumer sites and distribution networks: the code Demand Connection was adopted on 26 October 2015. A consultation relating to the implementation of this code was started by the system operators in December 2015;
- high voltage direct current connections: the code High Voltage Direct Current, and was adopted on 11 September 2015.

Each technical network code has an implementation period of three years before it becomes binding, and this period starts on the day it comes into force. The application of these new provisions will require the adjustment of French regulations and legislation.



FOCUS ON THE CRE'S WORK TO IMPLEMENT THE REQUIREMENTS FOR GENERATORS NETWORK CODE

The Requirements for Generators network code (RfG) sets out detailed rules relating to the connection of, principally, new power generating installations to national electricity networks. A consultative body that brings together the producers, equipment manufacturers and system operators was created by the Directorate General for Energy and Climate in early summer of 2015. Its aim is to prepare for and organise the consultations in France in order to submit proposals for the implementation of the RfG code to the relevant authorities for approval. The work began in 2015, and a work schedule to implement the code was proposed by the consultation body that will allow the milestones set by the code to be met.



The CRE found itself being assigned new competences that require it to publish the criteria for granting exemptions to the codes for the first nine months after it comes into force, and to establish a list of emerging technologies within twelve months which will then be exempted from the requirements of the code. It will therefore be initiating a public consultation on these two subjects during 2016.

The code will also establish the governance principles that led the CRE to propose amendments to the Energy Code. In fact, the network code in principle assigns the competence to the regulator of approving the proposals made by the system operators on technical requirements. However, article L.342-5 of the Energy Code assigns to the minister the power to set technical requirements relating to the connection of users. As part of the ruling provided for in article 172 of the law on energy transition towards green growth, the CRE proposed to the DGEC an amendment to article L.342-5 assigning one competence to two authorities. The sharing of these powers, depending on the type of requirements to be approved, needs to be defined in detail in a Council of State decree.

The CRE's contribution to developing the System Operation guideline

The System Operation guideline will set rules relating to the maintenance of the secure operation of the interconnected transmission system in real time. It is intended to define the European standards for a safe, coordinated and efficient operation of the electricity system, especially in view of a strong increase in renewable energy sources connected to the networks. Made up initially of three texts,⁽¹⁶⁾ which the comitology process failed to approve in 2013, a new version was put forward in late 2015 by ENTSOE at the request of the European Commission.

In December 2015, these guidelines entered the comitology process which involves the CRE and the DGEC and should be approved by the Member States by the end of the first half of 2016.

2. THE REST OF THE CRE'S WORK CONTRIBUTING TO THE COMMON RULES FOR OPERATION OF THE INTERNAL ENERGY MARKET

Parallel to the work on the network codes, the CRE also actively takes part in drafting shared rules at a European level. It works either directly with the other regulators, or in the context of the work done by CEER.

2.1. Work done by the CRE in relation to the gas market

The implementation of a single zone, called the Trading Region South (TRS) in the south of France

Since 2003, the CRE has been taking the initiative to gradually simplify the architecture of the French market, which has allowed the reduction of balancing zones from 7 to 3 and marketplaces from 5 to 2, with the latest step being the merger of the GRTgaz South and TIGF marketplaces on 1 April 2015. This merger gave birth to a single zone called "Trading Region South" (TRS) allowing market participants to benefit from a single price for gas throughout the south of France, and to have access to the combined liquidity of the two previous market places. The next step in the process will be in November 2018, when a single marketplace will be created for France, made up of two balancing zones corresponding to the boundaries of GRTgaz and TIGF.

Work carried out by the CRE with the CEER on the security of supply for gas and the contribution of LNG to the security of supply in Europe

The publication in November 2014 of a study on the capacity of European gas systems to avoid cuts in gas supply led the European Commission to initiate a process of revising Regulation 994/2010 on the security of supply in Europe. A public consultation was initiated in the first quarter of 2015 to hear the opinions of European actors on the revision of this regulation. The CEER working group on the security of gas supply submitted a response to the Commission's public consultation. The CRE played an active role in drafting this response, as well as drafting a background document

(16) The "Operational Security" or "OS" part that sets the rules for operational safety for the European electrical system; the "Operational Planning and Scheduling" or "OPS" part, setting the rules required to prepare operation of the European electrical system with an annual planning phase ahead of real time, while taking into account electricity production forecasts and forecast downtimes with a cross-border impact, and the "Load Frequency Control and Reserves" or "LFCR" part, that defines the technical requirements for controlling the frequency and level of reserves, together with the technical requirements on the providers of reserves set by the transmission system operators to be able to balance the system



A single marketplace for France, made up of two balancing zones corresponding to the boundaries of GRTgaz and TIGF, will be created in 2018.

on the security of gas supply in Europe. The CRE, which co-chairs the CEER working group on LNG, also coordinated the drafting of a document on the role of LNG in reinforcing the security of supply in Europe. It was also involved in the summer of 2015 in the response to the European Commission's public consultation on the strategy relating to LNG and storage in Europe.

2.2. The CRE's work relating to the electricity market

The start of flow-based market coupling

Flow-based market coupling started officially on 21 May 2015 in the Central Western region of Europe, which includes France, Germany, Austria, Belgium, Luxembourg and the Netherlands, after approval by all the region's regulators, including the CRE (deliberation of 26 March 2015⁽¹⁷⁾).



Flow-based market coupling can make a significant contribution to the reduction of production costs by an estimated €100 million per year in the region of Central Western Europe.

Flow-based market coupling is the target model for the calculation and capacity allocation to the interconnectors of national electricity networks in the affected region. Using this method, the physical electricity transmission capacity is automatically assigned to commercial trading at the border, where it is of most use. This development of market coupling, can play a role in significantly reducing production costs by an estimated

100 million Euros per year in this region. Thanks to better coordination between the system operators involved, it also allows more secure management of the electricity system.

Developments relating to intra-day timeframes at the border between France and Belgium.

With the support of market participants, the French and Belgian regulators want to improve the allocation of capacity at the intra-day level across their shared border, even before the European platform comes into use, which is expected in mid-2017. The aim is to deploy allocation mechanisms at this border, in advance of this date, as defined by the regulation on capacity allocation and congestion management.

Therefore, at the end of 2015, the system operators RTE and Elia proposed to the CRE and the CREG some changes in the intra-day allocation rules. The two regulators then initiated a joint public consultation in December 2015, in order to hear the opinions of market participants, before deliberating on 17 February 2016.

European work by CEER on the quality of supply

As part of the European work by CEER, the CRE participated in writing and publishing, in early 2015, the 5th comparative analysis report covering several European countries in respect of the quality of electricity, looking especially at the continuity of electricity supply. The next issue of this report, to be published before the end of the first half of 2016, will include a chapter on the quality of gas supplies.

(17) CRE's deliberation of 26 March 2015 providing approval of flow-based market coupling and the method for capacity calculation

3. THE INVOLVEMENT OF THE CRE IN THE EUROPEAN COMMISSION'S CONSULTATIONS ON "MARKET DESIGN"

On 15 July 2015, the European Commission launched a public consultation on the architecture of the European electricity market. All the national regulators, including the CRE, drafted a joint response from the CEER and ACER, while the CRE wanted to add its own response on the following points:

- cooperation between regulators and ACER: the CRE wanted to stress the major contribution by the national regulators towards the results achieved since the adoption of the 3rd energy package. ACER relies heavily on the skills and resources of the national regulators to prepare and implement the network codes. So the effective cooperation between the regulators and ACER, which has existed since the creation of the agency, is a key factor in enabling ACER to complete the tasks allocated to it. In an environment where ACER's competences might be reinforced, this cooperation needs to be maintained or strengthened;
- reinforcing load shedding: the CRE wants to recall that for several years it has been developing a number of different market mechanisms in France in order to allow consumers to become involved, on their own behalf or through aggregators, on an equal footing with the resources from production. Given this experience at the national level, the CRE believes that developing flexibility to satisfy demand at the European level should be included in the market mechanisms;
- the development of interconnections: the CRE shares the opinion of the European Commission that the existence of a properly interconnected European electricity network is indispensable to the construction of the internal market. Over the past few years, projects have been initiated that aim to significantly increase the electricity interconnection capacities of France. With this in mind, the CRE notes that an overall goal of 10% interconnection capacity in 2020 accurately reflects on the ground the political will in favour of developing interconnections. However, the CRE would like to draw the European Commission's attention to the way in which this ratio is calculated, and also to the need for founding further interconnection growth on solid cost/benefit analyses, to be sure that it effectively meets the needs of the consumers who are bearing the costs.

KEY DATE

10/06/2015: NEW METHOD OF ANALYSING INVESTMENTS FOR MANAGING ELECTRICITY DEMAND IN THE NON-INTERCONNECTED TERRITORIES

CHIFFRE CLÉ

€7.0 BILLION: AMOUNT OF PUBLIC SERVICE CHARGES FOR ELECTRICITY FOR 2016

KEY WORDS

SUPPORT FOR RENEWABLE ENERGY COSTS IN THE NON-INTERCONNECTED TERRITORIES

A new framework for the support of renewable energies defined at European level 90

In 2015 France undertook a major reform of the mechanisms to support renewable energies 91

Changes in the financing of public service costs 98

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CRE AND THE DEVELOPMENT OF RENEWABLE ENERGY SOURCES

The policy applied for the development of renewable energy is undergoing some significant changes. The support mechanisms are being revised, together with their financing, as part of changes to the evaluation grids of the European authorities relating to state aids. In the non-interconnected territories, the support mechanisms need to be adapted to take into account the diversity of territories and electricity systems. In this context, CRE is playing an active role in implementing these reforms. However, these new missions which are being assigned to it add a heavy workload to its existing tasks and mean that it will have to reinforce its means of functioning.

A NEW FRAMEWORK FOR THE SUPPORT OF RENEWABLE ENERGIES DEFINED AT EUROPEAN LEVEL

On 28 June 2014, the European Commission adopted new guidelines on state aid in the field of energy and environmental protection, which came into force on 1 July 2014. These guidelines, which apply for the period from 2014 to 2020, allow for the evaluation of the compatibility of the measures to support and finance renewable energy with the operation of the internal market.

1. THE MAIN CONDITIONS REQUIRED OF THE SUPPORT MECHANISM FOR RENEWABLE ENERGIES

The guidelines provide that *"in order to encourage integration of electricity produced from renewable energy sources into the market, it is necessary for the beneficiaries to sell their electricity directly on the market and for them to be subject to market requirements."* To comply with this, the national subsidy schemes must meet all of the following cumulative criteria:

- subsidies must take the form of a premium that is added to the market price at which producers sell their electricity;
- the standard responsibilities in relation to network balances apply to the beneficiaries, except where no competitive markets for intra-day balancing exist;
- measures must be taken to ensure that producers are not given incentives to produce electricity at negative prices.

The threshold below which these conditions no longer apply is set at 500 kW for all sectors, except for wind power segment where it is set at 3 MW or 3 turbines.

In addition, it is planned that from 1 January 2017, the new support mechanisms in favour of energy produced from renewable sources will be granting the subsidies *"following a competitive procedure based on clear, transparent and non-discriminatory criteria"*. This measure affects in particular all units of over 1 MW power.

2. THE CONDITIONS IMPOSED ON EXEMPTIONS RELATING TO FINANCING THE AID TO RENEWABLE ENERGY, APPLIED TO ELECTRO-INTENSIVE INDUSTRIES

The guidelines also set out the provisions that allow electro-intensive industries to be exempted from part of the financing costs to support renewable energies.

This measure will be considered proportionate by the European Commission, under two conditions:

- it is based on objective criteria that are transparent and non-discriminatory;
- it applies to the segments defined by the European Commission, due to the significant electricity consumption of these companies and their exposure to international exchanges.

In addition, the qualifying companies must pay at least 15% of the surcharge they would owe if they were not exempted. Their contribution can be limited to 4% of their gross added value, or to 0.5% of their gross added value in those cases where the electro-intensive activities represent more than 20%.

These criteria need to be applied at the latest on 1 January 2019 by the Member States who want to implement these types of exemptions. However, the aid granted before this date may be declared as being compatible if it forms part of an adjustment plan that has been approved by the European Commission by 1 July 2016. This plan will ensure gradual convergence of the national mechanisms with these criteria. Non-qualifying sectors that were granted aid before the guidelines came into force can continue to receive compensation if they pay at least 20% of the surcharge that they would be obliged to pay.

IN 2015 FRANCE UNDERTOOK A MAJOR REFORM OF THE MECHANISMS TO SUPPORT RENEWABLE ENERGIES

After the guidelines came into force, 2015 was marked by the reform of the mechanisms in force in France, a process in which the CRE was involved. This reform brought in a new measure: additional remuneration. It also defines a procedure for the allocation of subsidies in the context of the increasing frequency of calls for tenders.

1. A NEW SUPPORT MECHANISM FOR RENEWABLE ENERGY: ADDITIONAL REMUNERATION

In order to ensure the compatibility of French renewable energy development policy with the criteria set by the European Commission, a reform of support measures has been launched.

Indeed, while the purchase obligation mechanism stipulated in article L. 314-1 of the Energy Code can be maintained for facilities with a power capacity under 500 kW, it is incompatible with the European requirements above this threshold, except for the non-interconnected territories. The purchase obligation is maintained because of the special characteristics of these territories and the absence of an electricity market.

1.1. Additional remuneration: a transition of renewable energy producers towards the market

The additional remuneration measure was introduced in Articles L. 314-18 to L. 314-27 of the Energy Code through the law on energy transition towards green growth. These provisions stipulate that those producing electricity from renewable energy will sell their energy directly on the markets. A premium will compensate for the difference between the remuneration derived from this sale and a reference level of remuneration established based facility type, as part of a tariff decree or resulting from a competition procedure.

This premium consists of a premium proportionate to the electricity produced, minus the value of capacity guarantees, plus a management premium:

$$AR = \underbrace{\text{Energy} \times (T_e - M_o)}_{\text{Premium for electricity}} - \underbrace{(Nb_{\text{capa}} \cdot \text{price}_{\text{ref, capa}})}_{\text{Capacity}} + \underbrace{\text{Energy} \times P_{\text{operation}}}_{\text{Operation premium}}$$

The electricity premium can be qualified as a variable premium, insofar as its amount is adjusted in order to compensate for the difference between a reference tariff T_e and a reference market revenue M_o . It thus guarantees producers a long-term level of remuneration near the reference tariff while exposing them to short-term market price signals.

This approach is in keeping with the recommendations that CRE put forward in April 2014 in its response to the public consultation organised by the Minister of Energy on changes to support mechanisms for renewable energy. In these recommendations, CRE re-asserted, among others, that these support mechanisms must allow for the aims of renewable energy development to be met while minimising costs for society. Due to the highly capitalistic cost structures of renewable energy, the level of official support required to trigger an investment decision depends to a significant extent on the cost of capital that project developers need to finance themselves. A support mechanism that would offer the guarantee of fixed revenue for the lifespan of the facility reduces the level of risk and improves financing conditions, thus reducing the costs to society accordingly.

CRE has contributed to working groups set up by the DGEC in early 2015 in order to define the general framework of this new mechanism, as well as its versions for each sector. Upon request of the Minister of Energy, CRE delivered its opinion on the draft decree in connection with the additional remuneration in December 2015⁽¹⁾, in which it highlighted the following points in particular:

- the main advantage of the mechanism lies in the fact that it provides a framework in which renewable energy producers can confront the electricity and capacity markets – a crucial step in order to prepare the deadlines for support mechanisms. In exchange, CRE expects a moderate benefit in terms of managing the level of public service costs;

(1) CRE'S deliberation of 9 December 2015 providing an opinion on the draft decree in connection with the additional remuneration mentioned in Article L. 314-18 of the Energy Code.

- for the onshore wind sector, which is mature and competitive, the organisation of calls for tenders under the additional remuneration measure is the most effective way to develop it at a better cost for consumers;
- marketing of the production of renewable energy on the markets should be accompanied with the development of the role of aggregators. The economic model of these actors should be based on the optimisation of the exploitation of their facilities portfolios, which would be enabled by defining the parameters of the additional remuneration, and cannot be merely based on the existence of a management premium;
- the issue of guarantees of origin and their exploitation should be authorised for producers who are beneficiaries of the additional remuneration.

Once this decree is published, conditions for the additional remuneration should be detailed by sector in the tariff decrees. CRE was thus in charge of 6 draft tariff decrees over the last quarter of 2015 for the purpose of introducing this support mechanism for the following sectors:

- household waste incinerators;
- geothermal energy;
- facilities using biogas coming from non-hazardous waste storage facilities;
- facilities using biogas produced by a wastewater treatment plant;
- small hydroelectric plants;
- natural gas cogeneration.

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CRE has been referred to with 6 draft tariff decisions over the last quarter of 2015 which have the purpose of introducing additional remuneration.

CRE has delivered its opinion on these draft decrees during the first quarter of 2016.⁽²⁾ Just as in its opinions delivered in 2015, its analysis bore, in particular, on the photovoltaic and methanisation sectors, and essentially on the level of profitability available through these support mechanisms. In several places, this led CRE to give a negative opinion or to recommend adjustments to the proposed provisions.

1.2. The implementation of the additional remuneration will give rise to audits of facility costs

The regulatory instruments which introduce the additional remuneration measure bestow new missions on CRE, in particular, the performance of an annual audit of facilities which are beneficiaries of additional remuneration contracts. The purpose of these audits will be to evaluate whether the level of support granted is accurately scaled in terms of technical and economic developments in these sectors. If necessary, CRE would propose a review to the implementation terms of the additional remuneration or of the decisions which establish the level of support allocated to these facilities.

CRE did not wait for this mission to be framed more specifically for it to seek out objective cost elements on which to base its opinions. Thus, after its April 2014 report on the costs of onshore wind, biomass and photovoltaic sectors was published, CRE approached producers from several other sectors to request cost data and related supporting materials. The very incomplete materials which it received at that time did not allow it to base its opinion on objective materials (this was the case in 2015 and in early 2016), and thus required it to work based on reported cost data which had been forwarded to the ministry by professional associations.

(2) Deliberations of 10/02; 18/02; 3/03 and 10/03

In the future, CRE may be forced to use all legal means at its disposal – including sanctions – in order to obtain these data.

2. THE TENDERING PROCEDURES USED BY CRE SHOULD BE GENERALISED FOR MEDIUM- AND HIGH-POWER FACILITIES

CRE is in favour of a generalisation of calls for tenders for those sectors where the level of competition is satisfactory. However, its means should be reviewed accordingly and the tendering procedure should be simplified.

The guidelines set by the European Commission on State aid stipulate that competition procedures must be used systematically in granting support to renewable energy facilities with over 1 MW in power.

This type of procedure allows for the control of the pace of sectoral development. The total volume of new facilities is in fact set ex ante, in connection with the targets set by the public authorities. The localisation of new facilities can also be set by the administration, thus allowing the early identification of potential conflicts of use on a given territory, available resources and possible local synergies.

Given a sufficient level of competition, the tender procedure also allows for the limitation of the costs to society of providing support to renewable energy by resulting in a better match between production costs and the level of support requested by tenderers.

In order to ensure effective competition, the level of support requested should be the deciding criterion in the selection of winners. Otherwise, tenderers may engage in trade-offs between the various rating criteria, and request an excessive level of support considering the risks actually borne.



SUMMARY OF CALLS FOR TENDERS BY SECTOR IN 2015

	Call for tenders over 250 kWp	Call for tenders between 100 and 250 kWp 1 st period	Call for tenders for non-interconnected territories
Targeted power (MW)	400	80	50
End of the applications period	01/06/2015	21/09/2015	20/10/2015
Applications received	598	672	222
CRE forwards its ranking to the minister	26/11/2015	24/02/2016	*
Files ranked by CRE under the targeted power	146	352	*

* the review phase of the call for tenders for non-interconnected territories should be completed in April 2016.

CRE launched three calls for tenders for electricity produced from solar energy, and took part in the drafting process of the specifications for the tendering process in connection with the development of the biomass sector.

CALL FOR TENDERS FOR PHOTOVOLTAIC FACILITIES WITH POWER HIGHER THAN 250 KWP

This call for tenders, launched in late November 2014, sought to support large-scale solar installations in metropolitan continental France with a total power of 400 MW, broken down as 150 MW on buildings, 50 MW on parking lot shade structures and 200 MW on the ground.

Before 1 June 2015, tenderers submitted a total of 598 applications. However, 12 applications were found to be incomplete. CRE thus reviewed 586 applications in the light of the reasoned opinion of the préfet (responsible administrative authority) of the targeted regions on the environmental impact of the projects, or on the redevelopment of deteriorated land, and of the reasoned opinion of ADEME for the assessment of applicants' contributions to innovation in the photovoltaic sector. In addition, it appraised the technical and financial capabilities of applicants, checked that the specifications had been met and rated each project in terms of a wide range of criteria, including price, carbon footprint, integration into the environment, contribution to innovation, etc.

On 26 November 2015, CRE forwarded its ranking of applicants to the Minister of Energy, along with a file for each application summarising the rankings given, or the criteria which had resulted in the rejection of the application, if applicable.

The Minister selected projects which amounted to a higher amount of power than that set out in the specifications.

CALL FOR TENDERS FOR PHOTOVOLTAIC FACILITIES WITH POWER BETWEEN 100 AND 250 KWP

This call for tenders, broken down into three application periods, seeks to support mid-sized installations on buildings. The roofing surface covered by the installation is of the order of between 700 and 2,000 m². When launched in May 2015, the power sought was 40 MW per period. The specifications were modified on 19 September 2015, two days before the deadline

for the first application period. Besides doubling the power sought for the three periods, the modifications divided the 80 MW into two 40 MW groups for the second and third periods, with one being specifically devoted to buildings used in an agricultural context.

Two criteria were used to select applicants at this call for tenders: the price counted for two-thirds of the ranking with the carbon footprint in connection with the manufacture of photovoltaic modules making up the remaining third. However, applications could also be rejected based on criteria related to land management and city planning permits.

For the first period⁽³⁾ (ending on 21 September 2015), 673 applications were submitted via the online platform set up by CRE in 2011. Using the application form, it calculates the grade given to each candidate and ranks them in descending order. CRE reviews the applications in depth and in the order in which they are ranked until the power sought for the period is reached.

On 24 February 2016, CRE forwarded the list of applicants to the Minister of Energy to select the winners.

CALL FOR TENDERS FOR SOLAR POWER-BASED ELECTRICITY GENERATION FACILITIES WITH POWER HIGHER THAN 100 KWP AND LOCATED IN THE NON-INTERCONNECTED TERRITORIES

This call for tenders must be reviewed by CRE before April 2016. Its components seek to respond to specific issues of electrical systems in the non-interconnected territories (see p. 104).

DRAFTING OF THE SPECIFICATIONS FOR THE BIOMASS SECTOR

On 2 July 2015, the Minister of Energy submitted the general conditions to CRE for the drafting of specifications for the biomass sector. In the specifications, the power tendered for is 55 MW divided into two groups: one lot for electricity generating installations based on the combustion of raw plant matter for 50 MW and one lot for electricity generating installations based on biogas produced through methanisation for 5 MW. The special characteristics of these sectors require that specific instructions be drafted in order to ensure that support for these projects is economically and environmentally relevant as well as acceptable. They must take the supply plan into account and show that there are no conflicts of use for the given resource.

In addition, this call for tenders is the first to introduce additional remuneration as a support mechanism. Winning installations will sell on the markets the electricity they produce and will benefit from a premium which brings their remuneration up to the tariff level proposed in their application to the call for tenders.

CRE prepared draft specifications and forwarded them to the Minister on 2 December 2015.

(3) The 2nd period was from 22 September 2015 to 21 March 2016 and the 3rd period was set from 22 March 2016 until 21 July 2016

3. POLICY CHANGES ENACTED FOR THE DEVELOPMENT OF RENEWABLE ENERGY ARE RESULTING IN INCREASED PRESSURE ON CRE'S RESOURCES

The increased use of calls for tenders, as announced by the Minister of Energy, along with the significant changes in support mechanisms for renewable energy have resulted in the creation of new areas of endeavour for CRE without however a review of its funding.

Meanwhile, CRE's budget should cover the development of a new platform to compile online tender applications, in addition to maintaining the IT platform handling applications for photovoltaic installations with a power capacity between 100 and 250 kWp.

Given the increase in calls for tenders, the funding of CRE must be increased in order for it to meet the set deadlines for review. Furthermore, in its opinion dated 3 February 2016 on the decree relating to tendering procedures, CRE recommended that the procedure be simplified.

To this end, CRE recommends that, in drafting the next sets of specifications:

- the subjective criteria for grading or rejection be limited, by making the level of support received by these installations a major criterion which would allow for the automatic ranking of applicants;
- to consider that not all of the criteria can be examined, insofar as the review of one or several criteria taken together and easy to assess allow for the immediate rejection of many bids;
- if certain subjective rating criteria are retained, such as appreciation for the degree of innovativeness or for environmental integration, the review of which is especially complex and for which CRE does not have any competence, then the review of these criteria should be delegated to other authorities, framing the grading of this review in a manner that it will not lead to either interpretation or harmonisation;
- to limit the documents required for an application to those materials needed to classify the bids, including if necessary the verification of certain documents by the authority after winners have been selected, and making, for example, the launch of the installation conditional upon the results of this verification.

CHANGES IN THE FINANCING OF PUBLIC SERVICE COSTS

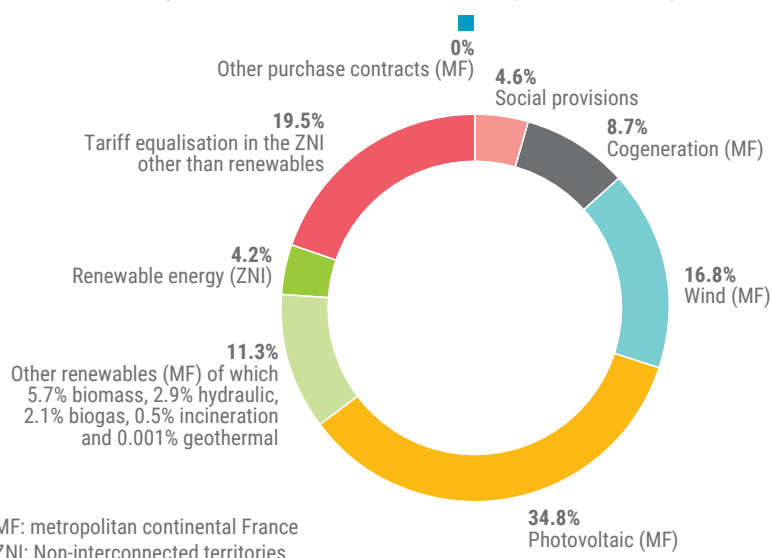
Law no. 2015-1786 of 29 December 2015 on financial corrections for 2015 enacts significant changes in the financing system of energy public service costs. This reform only has a minor impact on their scope, but changes CRE's mandates and work schedule.

1. CONTINUED GROWTH OF PUBLIC ELECTRICITY SERVICE COSTS

Public service costs related to electricity continue to grow at a steady rate. The expected amount of costs for the public electricity service is estimated at €7.0 billion for 2016 (*Illustration 1*). This amount is 17% more than the amount of costs reported for 2014 (i.e. €6 billion) and 11% more than the projected costs for 2015 estimated by CRE in October 2014 (i.e. €6.3 billion).

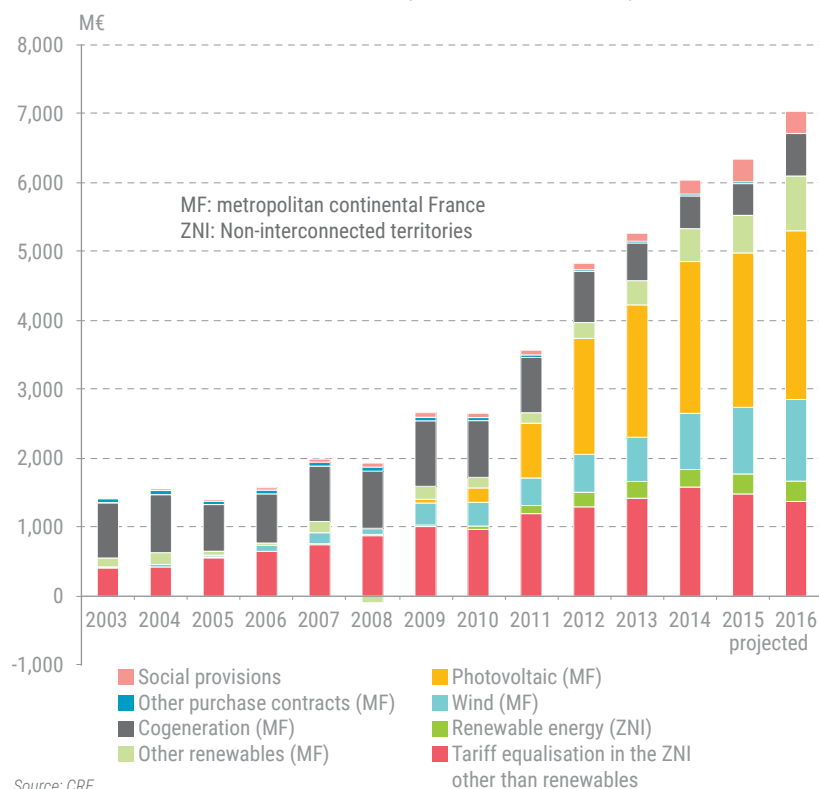
The increase in costs between 2014 and 2016 is due to the development of the photovoltaic and wind sectors which account, respectively, for 35% and 17% of projected costs for 2016 (that is, €2.7 billion and €1.2 billion, respectively). The drop in market prices for electricity – the €1/MWh drop in 2016 resulted in an increase in costs related to the purchase obligation of the order of €50 million – and the remuneration of new production means in the non-interconnected territories also contributed to this increase.

Illustration 1: Projected public service costs for 2016 (total €7.0 billion)



Source: CRE

Illustration 2: Change in public electricity service costs for one year



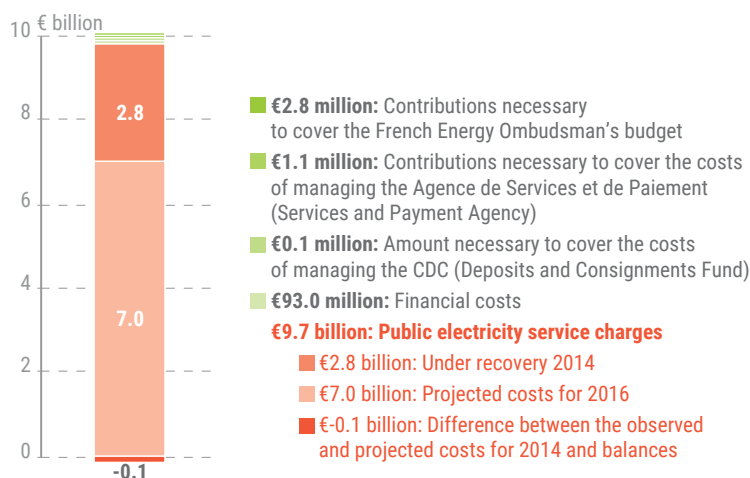
Support to renewable energy accounts for 67.1% of costs in connection with electricity for 2016; the equalisation tariff excluding renewable energy, for 19.5%; cogeneration support for 8.8%; and social measures, 4.6% (62.1%, 26.2%, 8.0% and 3.7% respectively, for 2014).

In this context of progressive growth of these costs, the main part of which is related to renewable energy, CRE pays special attention to the appropriate dimensioning of support mechanisms for each sector. In 2015 and early 2016, CRE warned the government that the profitability achieved through certain proposed tariffs would be excessive.

2. LEVEL OF THE CONTRIBUTION TO THE PUBLIC ELECTRICITY SERVICE PLANNED FOR 2016 BEFORE THE REFORM WAS LAUNCHED

Contribution to the public electricity service for 2016 ("CSPE 2016") should have been enough to finance costs relating to public service activities (projected costs 2016, including projected costs for 2016 and the adjustment of 2014 costs), management costs of the Caisse des dépôts et consignations (Deposits and Consignments Fund – CDC), the financial costs of operators bearing the public electricity service charges, a part of the French Energy Ombudsman's budget and the management costs of the Agence de Services et de Paiement (Services and Payment Agency) for the implementation of the energy cheque. Thus, the total costs to be financed in 2016 is evaluated at €9.8 billion (*Illustration 3*).

Illustration 3: Breakdown of the total amount of costs to be compensated in 2016



The necessary CSPE 2016 to finance them, as evaluated by CRE in its deliberation of 15 October 2015 before the reform of the financing of energy public service costs, was estimated at €27.05/MWh, of which €19.4/MWh would be required to cover the projected costs for 2016 alone (€7.0 billion). Unless set by a tariff decision, the unit-based contribution for 2016 would have been €22.5/MWh, i.e. a €3/MWh increase against the contribution applied in 2015. This CSPE rate would have been sufficient to cover the projected costs for 2016 and to begin to resolve the compensation deficit accumulated over previous years.

With a rate of €27.05/MWh, the CSPE 2016 would have amounted to about 19% (incl. taxes) of the average annual bill of a residential client. With a rate of €22.5/MWh, it would have amounted to 16% of this same bill.

However, neither of these rates will be applied to the bills of consumers in 2016, as the reform introduced through law no. 2015-1786 dated 29 December 2015 on financial corrections for 2015 enacts significant changes in the financing system of energy public service costs.

3. REFORM OF THE FINANCING OF PUBLIC SERVICE COSTS FOR ENERGY

3.1. Operation before the reform

Public service costs for energy are of course related to electricity, but not limited to it. They include:

- with regards to electricity: additional costs resulting from support mechanisms for renewable energy and cogeneration, additional cost related to the equalisation tariff in the non-interconnected territories and additional costs in connection with the application of a special pricing scheme for vulnerable consumers;
- with regards to gas: additional costs in connection with the application of a special pricing scheme for vulnerable clients, and additional costs resulting from the purchase obligation of biomethane injected into natural gas networks.

Reimbursement for these costs as well as the financing of other items (in particular the budget of the French Energy Ombudsman and the Deposits and Consignments

Fund management costs) was covered by specific contributions paid by consumers in proportion with their final consumption of electricity and gas:

- with regards to electricity: the CSPE, created in 2003, described in detail in parts 1 and 2 of this chapter;
- with regards to gas: two contributions on the final consumption of natural gas: the Contribution to the social gas tariff (CTSS) created in 2008 and the biomethane contribution created in 2011.

Furthermore, the partial CSPE exemption mechanisms applied to major electricity consumers and to persons producing their own electricity. The CSPE was collected by suppliers, who forwarded the corresponding amounts to the dedicated account held by the Deposits and Consignments Fund. Compensations due to operators bearing the public service costs for electricity were paid out from this account.

The CTSS and the biomethane contribution were collected by natural gas suppliers and paid back to the Deposits and Consignments Fund, who held two dedicated accounts. Compensations due to operators bearing the public service costs for gas were paid out from these accounts for each of the two components.

3.2. Operation after the reform enacted by law no. 2015-1786 of 29 December 2015 on financial corrections for 2015

In particular, the reform of energy taxation applies to the financing of public service costs for electricity and gas.

Budgeting of public service costs for energy

As part of this reform, public service costs for electricity and gas are classified together under "public service costs for energy". They are integrated into the state budget and distributed between an earmarked "Energy Transition" account and an "Energy public service" budget program according to the following:

- the earmarked "Energy Transition" account includes costs connected to support for renewable energy (for electricity and gas) within metropolitan continental France and in the non-interconnected territories, costs related to load shedding as well as reimbursing operators for the cumulated compensation deficit of their public service costs for electricity as of 31 December 2015;
- the "Energy public service" budget program includes the costs related to the equalisation tariff in the non-interconnected territories (excluding support to renewable energy in these territories in the form of the purchase obligation), to support to cogeneration and to social measures for electricity and gas, as well as Deposits and Consignments Fund management costs.

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In particular, the reform of energy taxation applies to the financing of public service costs for electricity and gas.

Financing of costs

The CSPE, the CTSS and the biomethane contribution have been cancelled for energy consumed after 31 December 2015. However, provisions prior to the reform continue to apply in order to balance the recovery of these contributions and the exemption mechanisms from which consumers may benefit for 2015.

In 2016, energy public service costs are covered by the redefined Domestic Tax on Final Electricity Consumption (TICFE) and by an increase of the Domestic Tax on Natural Gas Consumption (TICGN).

The rate of the TICFE, renamed to “contribution to the public electricity service”, has been set at €22.5/MWh for 2016, which is the same as that of the CSPE for 2016 without the reform. It applies to all consumption of electricity. However, electricity-intensive consumers benefit from reduced rates between €0.5 and €7.5/MWh, depending on their level of electricity-intensiveness and their risk exposure to carbon leakage⁽⁴⁾. Its proceeds, minus €2.043 billion which is returned to the central state budget, are transferred to the special allocation account “Energy Transition”.

The TICGN is set at €4.34/MWh HHV⁽⁵⁾ in 2016 and 2.16% of its proceeds are sent to the earmarked account.

For 2017, law no. 2015-1786 of 29 December 2015 on financial corrections for 2015 stipulates the stabilisation of the TICFE rate and an increase of the TICGN, the Domestic Tax on Energy Products (TICPE) which applies to petroleum products, and the Domestic Tax on Coal Consumption (TICC). In addition, it stipulates that all or part of the proceeds of these taxes on carbonated energy should be transferred to the earmarked “Energy Transition” account, which essentially funds renewable electrical energy.

These taxes are recovered by Customs and returned to the earmarked account or to the central state budget. The state, in collaboration with Deposits and Consignments Fund, ensures that compensation is paid out to operators bearing costs.

4. IMPACT OF THE REFORM ON CRE

Before the reform, CRE played a dual role in operating public service costs measures. On one hand, CRE was in charge of supervising and evaluating public service costs for electricity and gas that applied to each operator. On the other hand, it was in charge of supervising recovery operations for the CSPE, CTSS and the biomethane contribution, as well as for paying out compensations owed to operators bearing costs in connection with the Deposits and Consignments Fund.



The supervision and evaluation of costs by CRE, which begins on 31 March, must henceforth be completed over a three-month period, instead of six-and-a-half months.

As of 2016, CRE will no longer intervene in recovery and operator compensation operations; however this will only apply after all of the operations in connection with consumption prior to 31 December 2015 have been completed. However, the role of CRE in connection with the evaluation of public service costs will remain basically the same. Nonetheless, the time limit imposed upon CRE to evaluate the amount of public service costs has been reduced considerably. In order to be included in the budget timetable, CRE must publish its proposal on the amount of costs before 15 July, instead of 15 October. The supervision and evaluation of costs by CRE, which begins on 31 March, must henceforth be completed over a three-month period, instead of six-and-a-half months. This timetable change increases costs for the Commission. In fact, during this period, CRE will not have enough resources to fulfil its other

(4) As provided for by the EU market rules on CO₂ emissions allowances
(5) HHV is a gas unit meaning “higher heating value”

missions in the same area, such as the review of tariff decisions, the review of calls for tenders, the analysis of over-the-counter contracts in the non-interconnected territories, or audits of sectoral costs stipulated by the provisions of regulatory instruments in connection with additional remuneration.

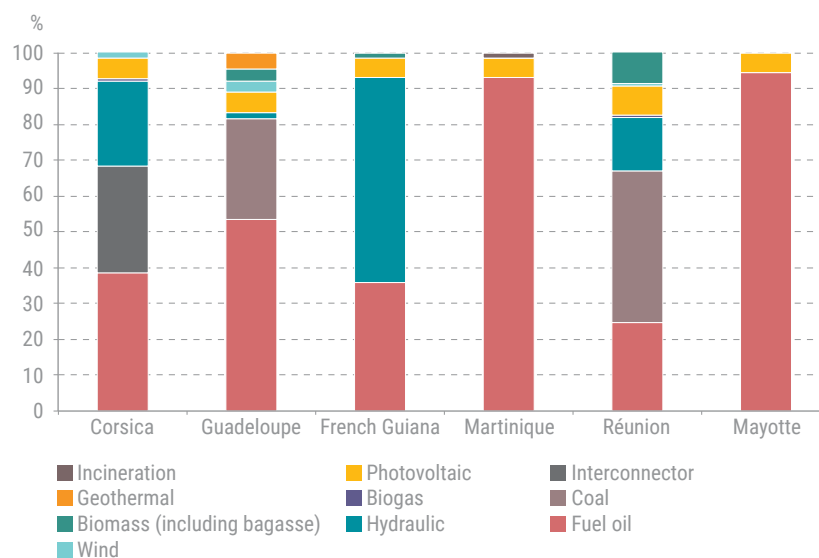
More generally, if the missions related to the recovery of contributions for which CRE was already responsible were reassigned to Customs, CRE would be able to gradually redeploy some of its resources. These resources are especially strained by the increase in calls for tenders for renewable energy-based electricity generation installations (see page 97). The regular decrease in funds allocated to CRE and the significant constraint of meeting the budget timetable will reduce the ability of CRE to meet deadlines imposed upon it to manage calls for tenders or to analyse draft decisions which define support mechanisms.

FOCUS ON THE NON-INTERCONNECTED TERRITORIES

Corsica, overseas departments and regions (Guadeloupe, French Guiana, Martinique, Réunion, and Mayotte), some overseas communities (Saint-Pierre and Miquelon, Saint-Barthélemy and Saint Martin), the Breton Islands of Molène, Ouessant, Sein, the Glénan archipelago and the island of Chausey in the Channel are not connected to the continental electrical grid (or only in a very limited manner in the case of Corsica).

The non-interconnected territories show particular technical and economic features compared to metropolitan France. Their climatic and geographic characteristics (in particular, island, volcanic and mountainous zones) and related logistical constraints (relatively weak levels of port and road infrastructures), as well as the small scale of electrical grids all justify recourse to appropriate technological solutions which generally differ from those developed in metropolitan France. Historical choices in these territories have led to a more carbon-intensive energy mix than in metropolitan France. (*Illustration 4*).

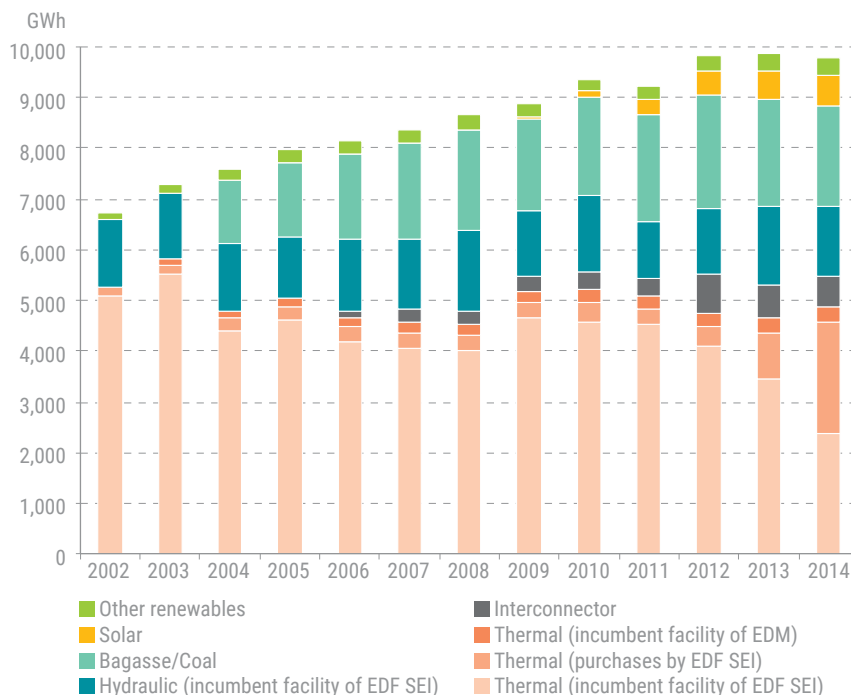
— Illustration 4: Electricity production mix in the main non-interconnected zones in 2014



Source: CRE

However, efforts to redeploy renewable energy in these territories tend to reduce dependence on electricity generation from fossil energy. Electricity derived from fossil fuels (including coal-based generation but excluding interconnections) accounted for 67% of electricity generation in the non-interconnected territories in 2014 as opposed to 78% in 2002 (*Illustration 5 p. 105*).

Illustration 5: Changes in the volume of electricity generated by sector in the non-interconnected territories between 2002 and 2014



Source: CRE

Beyond the composition of the energy mix, the small-scale of these isolated grids limits geographical dispersion and requires scaling of production facilities accordingly. As a result, the cost price per megawatt hour produced is much higher than in metropolitan France. Note that there may be significant variations between production costs in the various territories (*Illustration 6 p. 106*).

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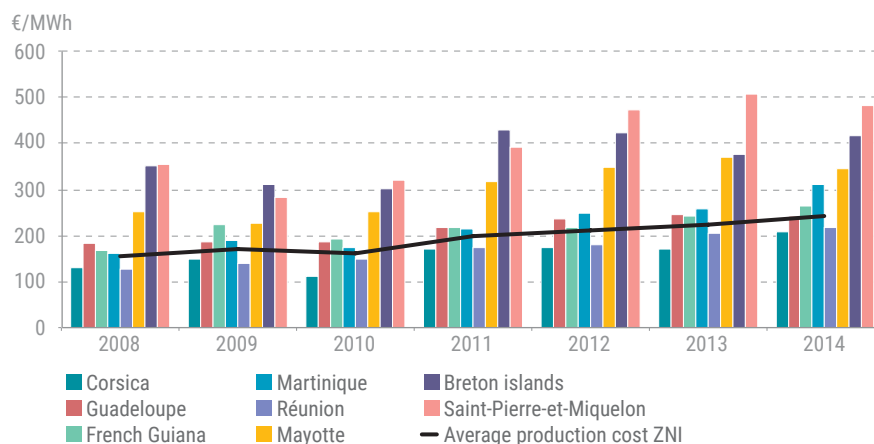
In the non-interconnected territories, the electricity retail sales tariffs are the same as in metropolitan France. This is the principle of tariff equalisation, a national solidarity measure.

In the non-interconnected territories, the electricity retail sales tariffs are the same as in metropolitan France. This is the principle of tariff equalisation, a national solidarity measure. The additional structural costs are compensated by the proceeds of energy taxes which replace the CSPE, in particular by the TICFE which is paid by all national electricity consumers.

Tariff equalisation amounts to about one-quarter of the public service costs for electricity, that is, of the order of €1.8 billion a year. After about ten years of growth at an average annual rate of 15%, it can be seen that the amount of projected costs in connection with equalisation for 2015 and 2016 tends to decrease, due to the drop in fuel prices.

Generation activities in the non-interconnected territories is divided between incumbent operators and third-party operators who sell the electricity that they generate to incumbent suppliers through contracts of sale under the purchase obligation, contracts signed as a result of calls for tenders or over-the-counter contracts.

Illustration 6: Average production cost in the non-interconnected territories between 2008 and 2014



Source: CRE

CRE's role in implementing energy policy in the non-interconnected territories

CRE is in charge of many tasks in the non-interconnected territories: it implements the renewable energy tenders and contributes in a more general manner to the consideration of the issues connected with their deployment in these territories, calculates the public service costs incurred by EDF SEI and Électricité de Mayotte (EDM), evaluates and performs follow-up of over-the-counter contracts. It is called upon to perform audits at generation sites (Réunion and Mayotte in 2014, French Guiana in 2016) to complete its verifications. It is also responsible for evaluating investment projects to meet energy demand, and, to this end, it has developed an analytical methodology. As of 2016, it is in charge of making proposals for the regulated sales tariffs in these territories. The following paragraphs provide more detail on some of these tasks.

1. CONTRACT FOLLOW-UP IN APPLICATION OF THE METHODOLOGY TO REVIEW INVESTMENT AND OPERATION COSTS IN THE NON-INTERCONNECTED TERRITORIES

In order to ensure transparency and to meet the expectations of the actors involved, in its deliberation of 23 April 2015, CRE detailed the methodology which it uses to evaluate investment and operation costs in electricity-generating facilities located in the non-interconnected territories. CRE analyses requests from producers when they ask for a review of their compensation. In particular, this happens when an event occurring beyond the control of the producer results in a substantial change to the balance of the contract.

In this respect, CRE has been referred to several times in the course of 2015, with respect to:

- a request to review the compensation paid out to the Gol-B hybrid plant of Albioma fuelled with coal and bagasse⁽⁶⁾ in order to take into account the additional costs incurred by the measures taken to comply with new pollutant emissions standards (deliberation of 23 April);

(6) Sugarcane residue

- a request to review the compensation paid out to Albioma's plants in Bois-Rouge and Gol located on Réunion and to the Albioma Caraïbes facility in Guadeloupe to take into account the additional costs incurred by the measures taken to comply with new norms on combustion by-products (deliberation of 24 September, and additional deliberations in the first quarter of 2016);
- a request to review the compensation paid out to the Bouillante geothermic plant in Guadeloupe. By integrating the physical constraints of the resource, the review of the contractual framework should allow for the optimisation of production (deliberation of 6 January 2016).

2. CRE HAS DEFINED A METHODOLOGY TO ANALYSE INVESTMENTS AND TO MANAGE ELECTRICITY DEMAND

Over the last few years, demographic growth and improvement in the standard of living have accelerated the growth of consumption in the non-interconnected territories. The deployment measures for electricity demand management has become a priority in order to manage the increase in public service costs for electricity so long as unitary production costs remain high.

In this light, Article 60 of law no. 2012-1510 of 29 December 2012 on financial corrections for 2012 has expanded the scope of projects falling under the definition of electricity public service costs in electricity demand management projects.

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It is up to CRE to evaluate the efficiency of infrastructure projects designed to promote electricity demand management.

By reducing consumption, an electricity demand management project should allow to reduce demand on marginal means with especially high production costs, or even to avoid or re-scale future investments. However, a project cannot generate savings for the CSPE, except if the compensation paid out to the project leader is no greater than the additional production costs avoided.

It is up to CRE to evaluate the efficiency of infrastructure projects designed to promote electricity demand management. The analysis methodology which entered into effect on 10 June 2015⁽⁷⁾ takes into account the contributions received as a result of two public consultations. Projects falling under the framework of this methodology are currently being studied in the non-interconnected territories. Some innovative projects seek, for example, to deploy a district cooling network fed by cold water pumped from the ocean depths⁽⁸⁾.

In order to ensure the efficiency of the installation, the methodology includes a verification of the costs supported by the project leader and of the kWh effectively avoided by the project. This follow-up should allow for the regular re-evaluation of the compensation amount to be paid to the operator.

Until now, the compensation paid out to the project leader was capped at 80% of projected additional costs that it avoids, in order to ensure that the project would

(7) CRE deliberation of 10 June 2015 in relation to the communication on the methodology applied for the examination of an infrastructure project to manage demand for electricity consumption in the non-interconnected territories

(8) Sea-water air conditioning (SWAC)

generate savings for the CSPE. However, Decree no. 2016-158 of 18 February 2016 on compensation for public service costs for energy that supports the reform of the CSPE raised this cap to 100% of avoided projected additional costs. This amounts to authorising compensation for projects whose impact, in terms of reducing production costs, could be zero or even negative, given the uncertainty in relation to the estimation of avoided additional costs. For these reasons, in its opinion of 27 January 2016 bearing on the above-cited decree, CRE spoke out against raising the compensation cap.

The analysis methodology for infrastructure projects seeking to manage electricity demand in the non-interconnected territories should be supplemented in 2016 by an analysis and an evaluation methodology for “small energy demand management actions” which include distributing or installing energy-efficient equipment in households and businesses. The stakes are high, as the rates of households equipped with energy-hungry appliances are growing quickly in the non-interconnected territories. For example, EDF SEI estimated in its forecast report that 68% of households in French Guiana would be equipped with air conditioning by 2030, whereas this figure was only 20% in the year 2000. With regards to household water heating, the rate of equipment is expected to increase from 36% in 2000 to 93% in 2030. At a time when households are rushing to equip themselves, the deployment of – for example – solar water heaters or efficient air conditioning systems among individuals seems just as important at this point as it is to develop large-scale energy demand management projects to tackle additional costs of electricity generation in the non-interconnected territories.

The methodology for the analysis of “small energy demand management actions” should allow to avoid the effect of a bargain and subsequent leap in consumption, which is a recurring risk connected with any subsidy of mass actions. It establishes heightened monitoring of CRE to ensure that their cost does not exceed the savings that they generate.

3. CRE IS NOW RESPONSIBLE FOR ISSUING PROPOSALS TO THE MINISTERS OF ENERGY AND OF THE ECONOMY ON THE REGULATED SALES TARIFFS FOR ELECTRICITY IN THE NON-INTERCONNECTED TERRITORIES APPLICABLE TO ALL CONSUMERS

Contrary to metropolitan continental France, regulated sales tariffs continue to be offered to all consumers in the territories not interconnected with the grid of metropolitan continental France, including consumers who contract for more than 36 kVA of power.

As of 8 December 2015, in keeping with the provisions of the Energy Code, CRE will be responsible to set these tariffs in the non-interconnected territories and shall “transmit its reasoned proposals for regulated tariffs for the sale of electricity to the Minister of Economy and the Minister of Energy.”

Pursuant to Article L. 121-5 of the Energy Code, the regulated sales tariffs offered to consumers in the non-interconnected territories are constructed on the basis of tariff equalisation. This principle allows consumers to benefit

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The average price of each regulated sales tariff in the non-interconnected territories as a result of tariff equalisation must be consistent with the stacking of the electricity pricing elements in metropolitan continental France.

from the same financial conditions of access to electricity, although its production and transmission costs vary from one territory to another.

The average price of each regulated sales tariff in the non-interconnected territories as a result of tariff equalisation must be consistent with the stacking of the electricity pricing elements in metropolitan continental France.

Article L. 337-6 further stipulates that: *“Provided that the total proceeds from regulated electricity sales tariffs cover overall all of the costs mentioned above, the structure and level of these tariffs, before taxes, may be set in a manner which encourages consumers to reduce their consumption during times when overall consumption is at its highest.”*

The structure of tariffs can send economic signals to consumers which are representative of the operation of power plants and of power consumption habits according to specific time slots. These characteristics vary greatly from one non-interconnected territory to another; accordingly, it is reasonable to create different price lists and structures for each territory, which continue to comply with the principle of tariff equalisation on the average.

Accordingly, CRE is working on setting regulated sales tariffs that are adapted to the circumstances of each non-interconnected territory in order to improve cost management for their electricity systems.

In particular, tariffs are constructed in a manner that sends a price signal to consumers, encouraging them to reduce consumption during the hours of the day when the means of generation called upon are the most expensive.

4. DEVELOPMENT OF RENEWABLE ENERGY

The development of renewable energy is one of the priorities of the energy policy in non-interconnected territories, just as the management of demand. The latest version of the Multiannual Programming for Investments⁽⁹⁾, which took up the aims of the Grenelle de l'Environnement (Grenelle Environment Roundtable), set a target of 50% renewable energy in total energy consumption in the non-interconnected territories by 2020⁽¹⁰⁾.



The non-interconnected territories show a great variety of geographical and climatic characteristics that affect the potential for developing various renewable sectors.

The multiannual programme for energy production planned by the law on energy transition towards green growth and which will come into force in the months to come (the multiannual programme for energy production for Corsica has already come into effect) should make it possible to specify objectives per

sector for each territory. Indeed, the non-interconnected territories show a great variety of geographical and climatic characteristics that affect the potential for developing various renewable sectors. For example, the development of geothermal energy should mainly focus on the volcanic islands (Martinique, Guadeloupe and Réunion), while only French Guiana has sufficient biomass resources of its own which would allow this sector to be developed on a large scale. Attention must be paid to the pace at which new generation methods develop, and in particular renewable energy, in order

(9) As of 15 December 2009

(10) Except in Mayotte, where this target was brought down to 30%

to ensure that it is in harmony with the growth and changes in consumption and takes into account the lifespan of existing generation methods, in particular those whose investment is not yet amortized, at the risk of burdening public service costs with failed expenditures.

In order to promote the development of electricity generation from renewable energy sources, the French government primarily uses three economic instruments:

- the purchase obligation whereby producers of renewable energy benefit from a purchase tariff guaranteed over a period of between 15 and 20 years. It should only be used for sectors where the cost levels are sufficiently known and homogeneous from one project to the next, and taking into account (if applicable) the disparities between territories. Accordingly, CRE is only in favour of the purchase obligation in the non-interconnected territories in the case of lower-power photovoltaic installations, provided however that there is a tariff differentiation between territories so that the installations developed in the non-interconnected territories with the most sunshine do not gain excessive profit;
- calls for tenders which result in winning project leaders benefitting from a purchase contract for their energy produced over a set period of time and for the price appearing in their offer. The purchase contract should be used whenever there is a sufficient level of competition and it can decrease the cost of financing and developing the sector – in particular in the case of higher-power photovoltaic installations;
- over-the-counter contracts which allow for CRE to perform a case-by-case analysis of the installation costs, and which must be used in other cases.

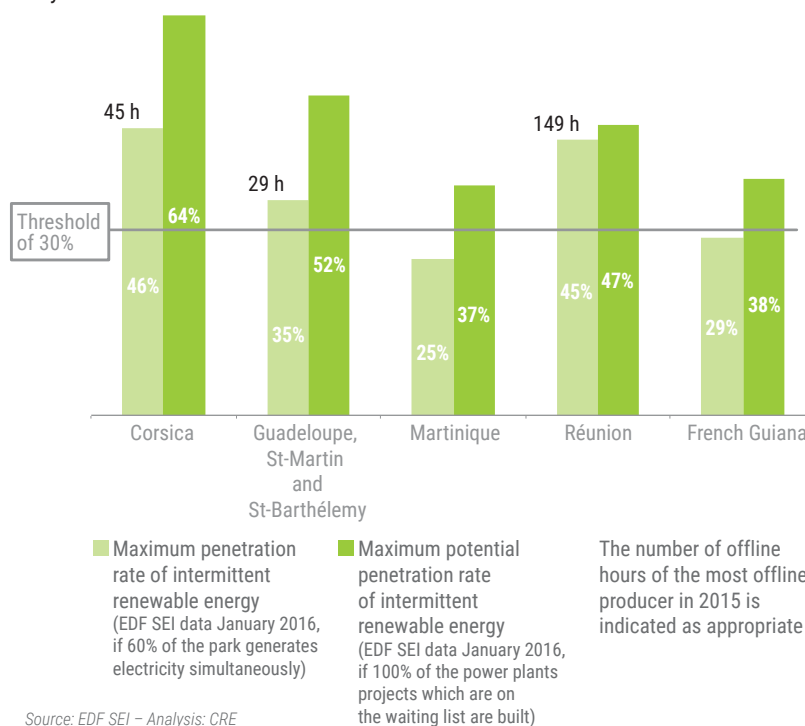
EDF SEI and EDM, as system operators, have the obligation to guarantee the security and safety of the electrical system. Thus, once the cumulative power injected by inevitable and unpredictable means of production⁽¹¹⁾ reaches 30% of the total injected power on the grid, the system operator may disconnect the last wind farm or the last photovoltaic installation connected to the grid⁽¹²⁾.

At this point, the maximum penetration threshold of 30% of inevitable and unpredictable energy has been reached or is about to be reached in all non-interconnected zones (*Illustration 7 p. 111*). This may lead to less profitability for the most recent installations, and is likely to slow the development of photovoltaic and wind power sectors in the non-interconnected zones.

(11) This refers to unpredictable means of production that cannot be controlled, such as wind farms or photovoltaic installations

(12) Ministerial decree of 23 April 2008 amended by the decision of 15 February 2010, amended by the decision of 24 November 2010, amended by the decision of 23 December 2010 on the technical specifications for the design and operation of connection to a low-voltage public electricity distribution grid or a medium-voltage electrical energy generating facility (Article 22)

Illustration 7: Penetration rate of intermittent renewable energy in the electricity systems of the non-interconnected territories



However, the decision of 15 February 2010 stipulates that the maximum penetration rate of intermittent energies may be re-evaluated. Indeed, the threshold at which the penetration rate of intermittent energies causes an actual safety problem for the electrical system depends to a great extent upon the limitations inherent to this system. For this reason, CRE requested that studies be made to assess the optimal disconnection threshold for each territory. The energy transition law stipulates that this threshold should be defined for each territory in each multiannual programme for energy production. The Corsica multiannual programme for energy production has thus set the disconnection threshold at 35% as of 2018 and is considering the possibility of bringing this threshold up to 45% in 2023.

In the meantime, what could be considered is to take into account the risk of disconnection and the effective disconnections in the support mechanisms relating to these installations.

Storage solutions which would facilitate the integration of intermittent energy are currently being studied in the non-interconnected territories. Article 60 of the above-cited law of 29 December 2012 has thus opened the way to compensation for the costs of electricity storage works managed by the electrical system operator. CRE is working on implementing a methodology that will allow for the optimal use of these installations.

In addition, CRE has been requested to review a call for tenders in 2015-2016 for photovoltaic production installations coupled with a storage device in the non-interconnected territories. This call for tenders, which is the first to be completely devoted to the solar sector in the non-interconnected territories, must contribute to the sector's development in these territories and to improving its integration into the electrical system. It raises the issue of the relevance of decentralised storage.

In 2015, CRE was requested to review the first call for tenders of solar projects specifically targeted at the non-interconnected territories. It is for installations generating electricity from solar radiation and with a power capacity over 100 kWp. The targeted power of 50 MW is distributed in two lots (25 MW for installations on buildings and 25 MW for ground-based installations and for parking lot shade structures).

To overcome the intermittence characteristic of photovoltaic generation and which is especially difficult to manage on an island grid, the specifications require project leaders to make a daily commitment as to the production profile of their installation for the following day. In addition, project leaders commit to smoothing out production fluctuations of their installation, under penalty of sanctions.

To this end, the specifications require that all installations be equipped with:

- equipment that allows for measuring and transmitting information on meteorological conditions and production data;
- a storage device that allows them to adjust their production.

In the non-interconnected territories, the evening consumption peak may require starting up combustion turbines, which have a very high production cost. It is thus useful to encourage, in a proportionate manner, project leaders who have a storage device to use this device to produce electricity during these time slots. In this light, the specifications provide that project leaders may choose to commit to supplying a guaranteed amount of power for the evening peak in exchange for an increased purchase tariff of €200/MWh if the project is selected. In this case, the installation must supply at least 20% of its installed power between 7 and 9 PM, under penalty of sanctions.

The 217 complete applications submitted total 356 MWp in power:

- 110 MWp for installations on buildings at a weighted average cost of €254/MWh;
- 246 MWp for ground-based installations and shade structures at a weighted average cost of €215/MWh.

According to the specifications, Corsica, Mayotte, Réunion, Martinique, Guadeloupe and French Guiana will each be allocated at least one winning project for each of the two groups. Results of the call for tenders will be known in the second quarter of 2016. In particular, CRE bases its decision on a reasoned opinion given by regional "prefets" and decentralised state departments regarding the environmental impact of projects and on the ADEME departments regarding the contribution that bidders are making to innovation in the photovoltaic sector.

5. CHANGES IN GOVERNANCE IN THE NON-INTERCONNECTED TERRITORIES WITH THE MULTIANNUAL PROGRAMME FOR ENERGY PRODUCTION

The Energy Transition law provides for the drafting of multiannual programme for energy production specific to each non-interconnected territory. They are drafted under the aegis of the President of the collectivity concerned and by the representative of the state before being entrenched by a decree.

This drafting approach reflects a change towards increased participation of the collectivities in the energy policy that will apply to their territory. Other provisions of the energy transition law also contribute to this approach, with, in particular:

- the involvement of Presidents of collectivities in the drafting of the specifications for calls for tenders;
- a formal opportunity for the latter to request from the Minister of Energy that a call for tenders be held, or that an opinion be issued by CRE on the appropriateness of the purchase obligation tariffs in comparison with prices observed at the local level if they see that the development of a sector is below multiannual programme for energy production targets.



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ANNEXES



PRESENTATION OF THE THEMATIC REPORTS PUBLISHED IN 2015

AUDIT ON ENGIE'S REGULATED SALES TARIFFS FOR NATURAL GAS

(Publication 27 May 2015)

Reasons for this report

CRE performed an audit on 6 February 2015 in order to analyse:

- the development of ENGIE's long-term supply contracts, including in particular an analysis of indexation clauses, flexibility and the state of renegotiations of these contracts, gains in optimisation and arbitration realised by ENGIE;
- the evolution factors of costs not including supply, including in particular infrastructure and trade costs;
- the principles of cost allocation for the supply activity between customers under regulated tariffs and customers under market offers in order to ensure the correct allocation of costs in the area of regulated tariffs.

Conclusions

CRE notes that the costs of ENGIE were covered by revenues from sales to customers under regulated tariffs in 2014. It recommends a revision of the formula for supply costs. It thinks that the indexed market share can be set at a level between 70% and 80% in order to reflect the effects of ongoing renegotiations between ENGIE and its gas suppliers at the time of this audit. This revision may well have a downward influence on ENGIE's average supply costs and will enable it to pass on profits for the benefit of the final consumer. However, CRE considers that such a modification is also likely to increase the volatility and seasonality of tariffs.

CRE also recommends developing the allocation methods for ENGIE's commercial costs between customers under regulated tariffs and customers under market offers in light of the significant changes in the structure of its customer portfolio.

AUDIT ON REGULATED GAS SALE TARIFFS OF INCUMBENT SUPPLIERS (OTHER THAN ENGIE)

(Publication 9 June 2015)

Reasons for this report

The work carried out by CRE aims to check the balance between the costs taken into account in the regulated tariffs and those actually incurred by suppliers, in order to ensure that their costs, including a reasonable sales margin for the activity of supplying natural gas, are covered by revenues from sales at regulated tariffs and to inform its future opinions on the development of regulated tariffs for the 22 incumbent suppliers (other than ENGIE).

Conclusions

As unbundled accounts are not available for a large number of suppliers, CRE could only comment on the cost coverage of 4 suppliers for fiscal year 2014. For these

4 suppliers, CRE did not identify any significant difference between the estimated costs in the tariffs and those actually incurred in 2014.

CRE examined the foreseeable trend for supply conditions for gas suppliers to ensure the balance of the formula for estimating supply costs with the supply conditions of these suppliers and to consider, where necessary, a revision to the formula on 1 July 2015.

These works indicated, on the basis of information available at the beginning of May 2015, that a development of supply conditions should be taken into account on 1 July 2015 for 15 suppliers.

REPORT ON REGULATED ELECTRICITY SALE TARIFFS

(Publication 15 July 2015)

Reasons for this report

It assesses:

- the level of regulated sales tariffs for the year 2015, calculated “by stacking”, according to the method in force since 1 November 2014, which consists of establishing the regulated sales tariffs based on representative costs components of an alternative supplier;
- the shortfall in the cost coverage of EDF with the regulated sales tariffs for the year 2014 for the period from 1 January to 1 November 2014, when the regulated tariffs ceased being established for EDF’s accounting costs;
- the partial catch-up of this shortfall in coverage was undertaken during the period from 1 November 2014 to 1 July 2015;
- the level of tariff development to be undertaken on 1 August 2015, which is the sum of the level resulting from the pricing by stacking and mass delays, still needing to be remedied for the periods 2012, 2013 and 2014.

Pricing by stacking became effective on 1 November 2014 pursuant to the decree of 28 October 2014. This method consists of establishing tariffs by the addition of the following components:

- the transmission cost related to tariffs for the use of the electricity transmission and distribution systems;
- the energy supply cost regarding the regulated access to incumbent nuclear electricity (ARENH) and purchases on the wholesale electricity markets (including capacity);
- the cost of marketing.

Conclusions

On the basis of the evaluation of all these costs, the development of regulated electricity tariffs before “catch-up” would be a decrease of 0.9% for residential blue and 1.6% for non-residential blue tariffs. For electricity consumers subject to yellow tariffs, the decrease would be 2.1%; for those with green tariffs, the increase would be 0.6%.

Furthermore, CRE determined the impact of all the “catch-ups” on the developments to be applied to the current regulated sales tariffs, taking into account the level of costs in 2015 and the “catch-ups” already made. For the blue tariffs which apply to residential and small businesses, the calculations were carried out with hypothetical

“catch-ups” over one or two years. Thus, the tariff changes would be around 8% over one year and 3.5% over two years. Yellow and green regulated sales tariffs were abolished as of 1 January 2016, with their changes being calculated by taking into account the obligation to fully realise the “catch-ups” for the period between 1 August 2015 and 31 December 2015. These would be 2.5% for the yellow tariffs and 10.9% for the green tariffs.

REPORT ON THE CRE MISSION IN MAYOTTE AND ON RÉUNION

(Publication 30 July 2015)

Reasons for this report

Tariff equalisation allows customers in the non-interconnected territories to benefit from regulated sales tariffs applied in metropolitan continental France. However, the costs of producing electricity in these zones are on average, for the year 2013, almost five times higher than the energy share of these tariffs – representative of the production costs accounted by EDF – causing additional costs for the incumbent suppliers, EDF Systèmes énergétiques insulaires (EDF SEI) and Électricité de Mayotte (EDM), which are compensated for by the Contribution to the Public Electricity Service (CSPE) paid by all electricity consumers. In view of past and future financial challenges associated with the development of electricity production in these territories, CRE decided to initiate an audit of all non-interconnected territories, starting with Mayotte and Réunion.

Conclusions

After various interviews held by its delegation on site with all the players, CRE found that the actions to control energy demand present real challenges for limiting public service costs. It also noted that the development of renewable energy is severely constrained by the technical problems created on the networks due to their unpredictable nature.

REPORT ON THE ELECTRICITY AND GAS RETAIL MARKETS (Publication 1 December 2015)

Reasons for this report

As part of the mission entrusted to it by Article L. 131-1 of the Energy Code, CRE helps to ensure the proper functioning of the electricity and natural gas markets for the benefit of end consumers. In this context, since 2004 it has also developed a series of indicators in order to measure the development of competition to give transparency and clarity to the actors. Therefore, CRE publishes a monitoring report at regular intervals on retail markets and a report on their operation.

Conclusions

CRE notes that residential sites for the most part still have regulated tariffs. A third of these has subscribed to a market offer for gas and only 10% for electricity, although there are cheaper market offers than the regulated tariffs. They are up to 10% cheaper for gas and 6% cheaper for electricity.

CRE notes in this respect that the economic context has changed: it has become more favourable to the development of competition. Several factors explain this development, in particular the fall in market prices, but also the new legal framework for tariffs which now covers suppliers' costs. Alternative suppliers thus also have better visibility enabling them to define more diversified and attractive offers.

Faced with the deadlines set by the 2010 law on the new organisation of the electricity market and by the Consumption Law of 2014 which put an end to regulated tariffs for business sites – with a contracted power greater than 36 kVA for electricity or a consumption of more than 30 MWh/year for gas – CRE invested significant resources. Its efforts focussed on equal access to information for incumbent suppliers and their competitors, more specifically to certain data relating to customers with regulated tariffs. However, despite a successful first stage for the largest gas consumers, the feedback from the second stage (on 1 January 2015) shows that there are still significant challenges to realising the transition to market offers for these customers. Indeed, the gas cuts anticipated at the end of the interim offer had to be moved back three months.

In order to support market developments related to the end of regulated tariffs for businesses, CRE stated that it will strengthen its supervision over business and pricing practices. To ensure the proper functioning of markets, CRE makes recommendations to avoid the elements of confusion which benefit incumbent suppliers. Therefore, it asks authorities to no longer use the terms "EDF bill" or "GDF bill" when they ask for proof of address or to replace them with the terms "electricity bill" or "gas bill". It asks the incumbent suppliers not to attach commercial marketing documents to correspondence related to regulated tariffs and to stop sending joint documents concerning an offer of energy supply at a regulated tariff and one under market offer.

CRE will also continue to work towards the removal of entry barriers for alternative suppliers on the territories of local distribution companies where regulated tariffs are still the great majority.

REPORT ON THE OPERATION OF THE FRENCH WHOLESALE MARKETS FOR ELECTRICITY, CO₂ AND NATURAL GAS

(Publication 3 December 2015)

Reasons for this report

As part of its mission of monitoring wholesale markets, CRE ensures that the prices in these markets are consistent with technical and economic fundamentals. It summarises in its annual report its work and analyses undertaken on the behaviour of operators regarding compliance with the REMIT regulation or market events. CRE presents in this report the development of wholesale markets in 2014 and the first half of 2015.

Conclusions

On a national scale, CRE's task of monitoring the wholesale gas and electricity markets is also part of the European regulation, REMIT on the integrity and transparency of the wholesale electricity and gas markets. 7 January 2015 marked an operational turning point for REMIT with the entry into force of the implementing regulation relating to the collection of transactional data on the wholesale markets. Collection began on 7 October 2015 for standard data (physical or financial contracts). Other data will be collected from 7 April 2016 (non-standard contracts, fundamental individual data).

CRE may conduct investigations in cases of suspected market abuse and punish any breaches.

The energy market conditions since 2014 fit in the context of the falling prices of raw materials, in particular those of oil and carbon, reflecting the slowdown of economic growth and a surplus of supply linked partly to gas and oil production from US shale. The particularly mild climatic context over the past year and the good availability of nuclear power stations has meant that the balance of supply and demand – both for electricity and gas – has not suffered from tension. This resulted in a sharp decrease of unusual market events and, in particular, the absence of price peaks.

The upward trend in the price of CO₂ quota is an exception to the downward trend of raw materials. The price is currently nearly €8/tCO₂. Although this level remains low, it rose due to structural reforms (backloading and reserve stability) adopted to reduce the surplus of quotas in circulation.

On the wholesale electricity markets, spot prices declined by 20% to €34.6/MWh on average during 2014. Futures prices fell below the level of €42/MWh from the end of 2014. At the end of September 2015, they were at levels close to €38/MWh, and for maturities of one, two and three years. Today, they are close to €36/MWh.

The drop in subscription to ARENH, which began in 2014, has increased in 2015. The total volume of ARENH delivered in the 1st half of 2015 amounted to 12.3 TWh against 34.5 TWh in the 2nd half of 2014. It fell to 3.8 TWh in the 2nd half of 2015. For the first time since the start of the mechanism, no ARENH volume will be delivered to alternative suppliers in the 1st half of 2016, insofar as they have not requested it.

On wholesale gas markets, good availability of liquefied natural gas (LNG) has helped to move the prices of the different zones (Europe, Asia, South America) closer together and, at European level, ensure a good price convergence between different marketplaces. Good inventory levels, as well as the return of LNG supplies, helped to take the load off the North-South link from October 2014. The price gap between the North and South zones, which exceeded €10/MWh on several occasions at the end of 2013 and in 2014, has significantly reduced since October 2014 and no longer exceeds €2/MWh.

MONITORING REPORT ON THE INCENTIVE REGULATION OF SERVICE QUALITY OF THE NETWORK OPERATORS

(Publication 9 February 2016)

Reasons for this report

The publication of this report is part of the performance of CRE's general mission regarding the proper functioning of the gas and electricity markets. CRE thus monitors precisely the quality level of services that network operators provide to the users they serve. These services, which fall within their public service mission, should respond to the needs of consumers.

Thus, service quality covers several areas, in particular, interventions for end customers connected to distribution networks such as activations, terminations, meter reading, billing, claims processing and connection time of consumption sites, but also the quality of consumption information for gas transmission.

The report takes stock of the incentive regulation of the service quality of ERDF, GRDF, local distribution companies, as well as GRTgaz and TIGF for the period from 1 January 2014 to 31 December 2014.

Conclusions

CRE notes that the performance of the network operators is generally good, or has even improved in some cases. It notes, however, that there is still room for progress, in particular regarding activation times for both gas and electricity, installation times for electricity connections and the quality of consumption measurements between network links of gas transmission and distribution. Furthermore, CRE found no discrimination between operators during the realisation of the main basic services for the proper functioning of the market.

SUMMARY OF THE MAIN DELIBERATIONS OF CRE

REGULATED SALES TARIFFS

28 May 2015

Deliberation on the missions of the natural gas distribution system operators related to the launch of interim offers under the provisions of Article 25 of law no. 2014-344 of 17 March 2014 on consumption

Pursuant to the provisions of Article L.445-4 of the Energy Code, regulated tariffs for natural gas sales were removed from 31 December 2014 for consumers with consumption levels over 200,000 kWh/year. Pursuant to Article 25 of law no. 2014-344 of 17 March 2014 on consumption, consumers affected by the removal of regulated sales tariffs who have not signed a contract with a supplier of their choice are automatically switched on 1 January 2015 to the interim offer scheme for a period of six months. In May 2015, more than 10,000 of these customers were still supplied under this scheme. On 20 May 2015 CRE sent them a letter warning them that if they hadn't chosen a provider by the end of the interim offer, their supply of natural gas could no longer be guaranteed.

Pursuant to Article L. 131-1 of the Energy Code, CRE's mission is to ensure the proper functioning of markets for the benefit of end consumers. Therefore, it felt it necessary to clarify the situation for customers likely to be cut off.

Further to this, GRDF sent CRE a proposal permitting the maintenance of the supply for 3 months of those sites affected at a price encouraging clients to subscribe to a market offer. After this period, interruption of supply to those customers who had not subscribed to a market offer was scheduled, with the exception of condominiums and public purchasers, if they proved that they had committed before this date to procedures (public procurement or procedures specific for condominiums) for obtaining a market offer.

On 28 May 2015 CRE also interviewed authorities and market participants in order to gather their views on the scheme proposed by GRDF. CRE made the following observations based on their comments:

- the scheme meets in its principles the challenges related to the end of the interim offers and the objectives of the liberalisation of gas markets, as well as the protection of end consumers, in that it takes into account the specific constraints of public purchasers and condominiums and makes the consumers concerned incur the cost of the scheme;
- the level of compensation is too low to encourage consumers to subscribe to a market offer;
- local distribution companies are required by CRE to implement the same measures as GRDF and to transmit the list of affected consumers and their contact information to the suppliers who request it;

- consumers have a general disregard for deadlines relating to the end of regulated natural gas and electricity sales tariffs and their consequences. CRE stated that the GRDF proposal could only be envisaged for a limited number of consumers and could not apply to future deadlines for the removal of regulated sale tariffs. CRE noted that the situation could be a concern, in particular for public purchasers facing unsuccessful tendering situations;
- the government is called upon to implement an extensive information campaign for consumers and to take all measures possible to ensure that such a situation does not happen again with the following deadlines, in particular, to put measures in place regarding the situation of inactive consumers or active consumers who do not manage to obtain market offers.

In view of all these elements, CRE asked system operators to implement the following measures:

- maintaining supply for those non-domestic consumers through interim offers who have not signed a contract with a supplier from 1 July 2015 until 30 September 2015 at the latest;
- implementing specific measures for public purchasers and condominiums who can, subject to providing the necessary proof, continue to be supplied by the DSO beyond 30 September 2015;
- paying a compensation to the DSO for the gas consumed during this period;
- establishing a gas purchase procedure necessary to supply the affected consumers;
- 80% coverage by the expenses and revenues adjustment account (CRCP) of the net gas purchase costs from the revenue collected for the supply these consumers, supported by GRDF, in accordance with the provisions of the tariff decision of 28 February 2012;
- transferring the list and contact details of consumers supplied by the distribution system operators from DSOs to the suppliers who request it. This list will be updated on a weekly basis.

28 July 2015

Opinion on the draft decree relating to regulated electricity sales tariffs

CRE was referred to by the Minister of Energy and the Minister of Economy for its opinion on a draft decree relating to regulated electricity sales tariffs.

The draft decree provided for a change in regulated electricity sales tariffs excluding taxes applicable to EDF and the local distribution companies in accordance with the scales in the annex to the decree.

These developments involved changes differentiated by tariff option for each of the colours. The structure of the scales, within each option, remained identical to that of the tariffs currently in effect.

The opinion of the CRE aimed to examine the draft decree regarding, on the one hand, the construction methodology of tariffs by stacking costs implemented since October 2014 and, on the other, the “catch-ups” related to the fact that the tariffs previous to this change of method did not cover the costs sufficiently.

CRE gave a favourable opinion concerning the blue tariffs for individuals and small businesses and noted that the draft decree took into account the tariff “catch-ups” to be made, spreading them out over the next three years.

CRE gave an unfavourable opinion regarding the yellow and green tariffs on power of more than 36 kVA. In fact, CRE recalled both in its deliberation of 30 October 2014 regarding the opinion on the draft decree on regulated electricity sales tariffs, as well as in its 2015 Report on the electricity sales tariffs, the obligation to carry out the entire “catch-up” by 31 December 2015, as highlighted by the Council of State. CRE estimated the increases envisaged on 1 August 2015 to be largely insufficient to achieve all the “catch-ups” by 1 January 2016, the date of the removal of these tariffs.

CRE regretted that the tariff changes envisaged on 1 August 2015 do not give the yellow and green consumers the signal encouraging them to choose a market offer before 31 December 2015. To this end, it pointed out that the current market situation would allow a very large majority of consumers to benefit from electricity prices significantly lower than the regulated tariffs.

In addition, clients subscribing to a power greater than 36 kVA and who have not selected a market offer by 31 December 2015 were deemed to have accepted an interim offer for a maximum of 6 months after which energy supply is no longer guaranteed. In view of the difficulties encountered at the first deadline for the removal of regulated sale tariffs for natural gas, CRE recommended that the government ensure that the level of this interim offer is fixed at a price sufficiently dissuasive to encourage affected customers to subscribe to a market offer by 1 July 2016 at the latest.

Finally, CRE reiterated its recommendations urging the government to implement a broad information campaign for consumers and to take the necessary measures to encourage affected consumers to seek a market offer.

3 December 2015

Opinion on the draft decree amending decree no. 2009-975 of 12 August 2009 on regulated electricity sales tariffs

On 30 October 2015 CRE was asked for its opinion on the draft decree amending the decree no. 2009-975 of 12 August 2009 on regulated electricity sales tariffs. This was first amended by decree no. 2014-1250 of 28 October 2014 defining a new method for calculating regulated tariffs, by a so-called “stacking”, aimed at guaranteeing the contestability of regulated tariffs for sale by alternative suppliers.

The draft decree, submitted to the CRE, clarified several aspects of this tariff reform, planning provisions applicable to the structure of regulated tariffs, the creation of new tariffs, the removal of regulated tariffs in metropolitan continental France on 1 January 2016 for power greater than 36 kVA and the changing of tariffs in the non-interconnected territories to the network in metropolitan continental France.

CRE noted that the draft decree submitted to it for its opinion allowed the elaboration of the following:

- in metropolitan continental France, a tariff structure based – as in the case of establishment on the average level – on the stacking of costs, with the objective of achieving the contestability of all regulated tariffs for the sale of electricity by alternative suppliers;
- in the territories not interconnected to the network in metropolitan continental France, a tariff structure based upon each territory's own balance of supply and demand, thus guiding customers' consumption towards times when electricity systems are under less strain. Tariffs developed in this way allow consumers to participate in the management of energy costs in the non-interconnected territories, thus reducing their energy bills.

CRE issued a favourable opinion on the draft decree, subject to:

- the deletion of Title IV of Article 1 of the draft decree allowing the Minister of Energy and the Minister of Economy, by means of a decree, to define the types of customers for which CRE must propose one or more tariff options. CRE considered in fact that exercising, in full independence, the competence to propose regulated electricity sales tariffs to the ministers implies that it is also competent to propose if necessary new tariff options. Alternatively, if this provision is to be maintained, the decree should provide that this decree be issued after consultation with CRE.
- the deletion of the provisions in Title V of Article 1 of the draft decree which provides, by means of decree, that the Minister of Economy and the Minister of Energy may limit the amount of the fixed component on the price lists in metropolitan continental France. CRE believed that this cap would create uncertainty about effective cost coverage, be harmful to suppliers, in particular to new entrants offering prices indexed to the regulated tariffs and with reduced financial standing. Alternatively, if this provision is to be maintained, the decree should provide that this decree be issued after consultation with CRE. The maximum percentage fixed by the decree provided for by the draft decree should be dimensioned in a way that it does not substantially affect the functioning of the retail market and the development of competition.
- the amendment of Title VI of Article 1 of the draft decree enabling the Minister of Energy and the Minister of Economy to communicate to CRE the directions they wish to see implemented in the tariff adjustment. To avoid any ambiguity on the compliance of these provisions with European law and on the independence of the regulator in its role of tariff proposal, CRE proposed the amendment of Title VI of Article 1 of the draft decree in these terms: *"the Energy Regulatory Commission takes into account the energy policy guidelines indicated by the Ministers of Energy and of Economy."*

INTERCONNECTORS

26 November 2015

Opinion on the rules for capacity allocation on the France-Spain border following the commissioning of a new France-Spain interconnection

Pursuant to the provisions of paragraph 2.6 of the guidelines annexed to Regulation EC No. 714/2009 of 13 July 2009 on the conditions of access to the network for cross-border electricity exchanges, CRE was referred to by RTE on 30 October 2015 regarding a proposal for capacity allocation rules on the France-Spain border, version 3.0.

This proposal relates to the new interconnector line Baixas-Santa Llogaia between France and Spain, which has been in operation since 5 October 2015.

The commissioning of this interconnector, which was declared a European priority project, is the culmination of a project launched in 2008 whose objective was to double the interconnector capacity to carry 2,800 MW in the direction France to Spain and vice versa.

CRE issued a favourable opinion on the rules of capacity allocation on the France-Spain border version 3.0 proposed by RTE.

CRE indicated that it favours the amendments to the rules for allocating capacities between the various timeframes proposed by RTE on the France-Spain border, insofar as these amendments are intended to adapt the rules, at the margin, for taking into account the commissioning of the Baixas-Santa Llogaia line, as well as the CRE deliberation of 15 October 2015 approving the rules for allocating long-term capacities by explicit auction (Harmonised Allocation Rules).

CRE noted however that the rules for capacity allocation between the different timeframes differed significantly from one border to the other.

CRE also indicated that certain European works, such as the implementation of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management, the adoption of the network code relating to forward capacity allocation in the coming months by the Commission or the further extension of market coupling will result in a greater harmonisation of calculation or capacity allocation methods. These changes may require revision and harmonisation of the rules for sharing capacity.

Concerning the capacity allocated for the 2016 annual target by RTE, CRE stressed the need for close collaboration between the affected operators throughout the realisation of interconnector projects.

Furthermore, CRE welcomed the 2014 implementation of a daily market coupling with Spain, on the one hand, to optimise flows and the exchanges of adjustment offers of tertiary reserves between RTE and its Spanish counterpart, on the other, which are aiming to develop until 2018 to meet the requirements of the draft European regulation on balancing.

However, CRE notes that due to constraints on the Spanish network, capacities initially offered on the market of 2,800 MW are limited to 2,000 MW for 2016. CRE stresses that this situation reduces the expected benefits of this interconnector for market players and consumers. Market players have a lower exchange capacity than expected to optimise the cost of production to the region's grid. Consumers will finance the entire investment through TURPE, while the revenues related to the interconnector, which are deducted from TURPE, will be significantly reduced.

To prevent such a situation from happening again, CRE stresses the need for close collaboration between the affected operators throughout the realisation of interconnector projects.

CRE gave its opinion in relation to 3 requests from RTE:

- first of all, the realisation and presentation, in a consultation group before 31 July 2016, of an assessment of the capacity allocation rules currently in force at various French interconnectors, in order to consider, with its counterparts and in consultation with market players, the changes that could be proposed to CRE;
- secondly, ensuring that, within the context of studies conducted ahead of the implementation of any new interconnector, the investments necessary to remove constraints from domestic networks and from the interconnector are taken into account thoroughly;
- finally, approaching the Spanish network operator REE as well as the Spanish regulator (CNMC) in order to make it proposal for capacity calculation coordinated and operated in J-2.

CALLS FOR TENDERS

3 November 2015

Opinion on the draft order implementing various adaptation measures in the gas network sector

On 21 September 2015 CRE received a request from the Ministry of Energy for an opinion on a draft order implementing various adaptation measures in the gas network sector.

The purpose of the draft order was firstly to allow the administrative authority to use a tender procedure for facilities injecting biomethane into the gas network when the objectives of the injection deviate from the path provided for in the multiannual programme for energy production, and secondly to recall that the usage tariffs for natural gas networks or natural liquefied gas facilities take into account the costs resulting from the performance of contracts signed between the state and the system or facility operators, which set the objectives and procedures that allow them to ensure the implementation of the public services assigned to them.

CRE ruled favourably on the provisions allowing the use of tenders for the biomethane sector provided that it is referred to for its opinion on the decree in Council of State. This is provided for by the draft order with a view to define the measures for implementing these calls for tenders and for completing the criteria for the development of the specification in order to supply it with a criterion relating to the availability of resources and conflicts of use.

CRE also held that these calls for tenders for the biomethane sector must include a territorial dimension in order to take into account the local availability of resources and to prevent conflicts of use.

CRE also indicated that it considers, more generally, that calls for tenders are a suitable method for the development of biomethane, subject to a sufficient level of competition between the players in this sector.

The number of projects which CRE is aware of may suggest that the level of competition remains limited to date, at least for certain lots or certain territories. Consequently, CRE recommends that the administrative authority:

- ensure that competitive conditions exist before issuing a call for tender and, therefore, adapt the biomethane injection capacity sought in each lot or territory. If these conditions are not met, the purchase tariff can be maintained, however it should be self-adjusting so that it can adapt to lower costs in the sector, thus avoiding any windfall effects;
- in any event ensure that calls for tender and purchase tariffs do not coexist for the same range of facilities, otherwise these rates will constitute *de facto* the minimum price that tenderers will offer.

Finally, CRE ruled in favour of the organisation of multiannual calls for tender that will help to increase the visibility of players.

However, CRE is not in favour of amending Article L. 452-1 of the Energy Code. The draft order did in fact provide for the completion of the first paragraph of this article, by adding that the usage tariffs for the natural gas network or natural liquefied gas facilities should also consider the costs of executing "*the contracts mentioned in the first paragraph of Title I of Article L. 121 46 of the Energy Code*", insofar as these costs correspond to those of an efficient network or facilities operator.

Thus, CRE considered that the clarification provided by Article 2 of the draft order was unnecessary because the costs resulting from the execution of the contracts referred to in Article L. 121-46 of the Energy Code already fell within the scope of the costs covered by the tariffs.

In addition, CRE recalled that Articles L.452-2 and L. 452-3 of the Energy Code confer it exclusive competence to determine the methods for establishing usage tariffs for the natural gas transmission and distribution systems and natural liquefied gas facilities, and states that CRE also decides on tariff changes.

Consequently, CRE proposed the deletion of Article 2 of the draft order.

NON-INTERCONNECTED TERRITORIES

Publication 10 July 2015

Communication on the methodology applied for the examination of an infrastructure project to control the demand for electricity consumption in non-interconnected territories

Pursuant to Title V of Article 4-quater of Decree No. 2004-90 of 28 January 2004, CRE assesses the normal full cost of an energy demand management action project applying, by default, a nominal remuneration rate before fixed capital tax at 11%.

This deliberation outlines the methodology that CRE applies for the analysis of infrastructure projects aimed at demand management of electricity consumption in the non-interconnected territories, as well as the elements to be provided in the CRE referral document.

It also aims to:

- assess the overhead costs avoided by the energy demand management project, in its lifespan, based on a reference power station representative of power stations;
- set up measures to monitor and control kWh actually avoided by the project;
- control the development of the Contribution to the public electricity service (CSPE) costs by implementing project leader compensation based on the kWh actually avoided each year;
- select the most efficient projects against the CSPE savings.

This methodology was established taking into account the contributions received from the players during two public consultations, launched by CRE on 24 September 2014 and 15 January 2015.

It applies to infrastructure projects aimed at energy demand management in the non-interconnected territories which cumulatively fulfil the following two conditions:

- help to reduce electricity consumption in the non-interconnected territories;
- develop an infrastructure that requires investment expenditure of at least one million Euros.

This deliberation established enforceable guidelines for the operators concerned. CRE will apply this methodology each time it assesses an operation, provided that no special circumstances of this operation or no consideration of general interest justifies derogation from it. This methodology is likely to be updated, in accordance with the decisional practice of CRE.

“Small” actions by energy demand management, which are not affected by this deliberation will be the subject of a subsequent deliberation concerning communication.

Furthermore, CRE will publish between 15 December and 15 January each year, for each non-interconnected territory, the marginal costs of production for the target reference year on typical days of the year and on tariff provisions for peak and off-peak hours.

NETWORK CONNECTION

8 July 2015

Approval of the ERDF scale for the billing of operations connecting users to the public electricity networks that are granted to it

Pursuant to Article 2 of the Decree of 28 August 2007, as amended, laying down the principles for calculating the contribution mentioned in Articles 4 and 18 of the law no. 2000-18 of 10 February 2000 on the modernisation of the public electricity service (now Articles L. 342-6 to L.342-8 of the Energy Code), the public electricity distribution system operator, ERDF, submitted on 30 June 2015 for the approval of CRE a new scale for the billing of operations connecting users to public electricity distribution networks granted to it.

Through this deliberation, CRE approves the ERDF scale for the billing of connection operations, except for the inclusion of the "special regulations" component within the scope of billing connection operations > 36kVA and extension operations in the high-voltage A domain (HVA).

Pursuant to the provisions of Article 9 of the Decree of 28 August 2007 as amended, this scale will come into force three months after its approval by CRE, that is 8 October 2015.

The proposed scale submitted by ERDF to CRE brings about significant increases in connection operation costs. These changes result from new calculation methods and new regulatory obligations.

Indeed, the update of prices under the proposed scale has resulted in increased costs for services and equipment billed for connection operations.

Following the comments of the players on the significant increase in costs, CRE has planned to set up a working group in which all electricity distribution network operators will be involved and which will address the method of construction and evidence supporting the proposed connection scale notified to it.

Regarding the allocation of costs relating to the Decree of 5 October 2011 on the execution of works in the vicinity of certain underground, overhead or underwater transport or distribution structures (DT-DICT), CRE considers that the exclusion of part of the costs incurred by the "DT-DICT" decree to be covered by the scale is justified by their exclusion from the scope of billing defined in Articles L. 342-1 and L. 342-11 of the Energy Code and by the Decree No. 2007-1280 of 28 August 2007, concerning the consistency of connection structures and the extension of connections to public electricity networks.

CRE considers that the changes made in the calculation method for trenching work can improve the representativeness of the costs of connection operations carried out by the operator.

CRE considers that the introduction of a chapter dedicated to electric vehicle charging infrastructure improves the transparency of billing for connection operations.

CRE requests ERDF to publish a flat rate for the costs relating to new legal, regulatory or local constraints already identified by ERDF. It also asks it to delete from its proposed

connection scale all paragraphs allowing it to add the estimated costs to the simplified cost formulas in the case of legal, new regulatory or specific local constraints.

OTHERS

25 February 2015

Communication on the development of smart grids

Following the deliberation of 12 June 2014 giving recommendations on the development of low voltage smart grids, as well as roadmaps transmitted by the transmission system operator and the electricity distribution system operators serving more than 100,000 customers, on the implementation of these recommendations, CRE defined the procedures for monitoring these roadmaps: CRE requested RTE and the electricity distribution system operators serving more than 100,000 customers to send it, by 1 November each year, an addendum presenting the progress of the planned actions, any possible schedule changes and the difficulties encountered. CRE will publish these agendas.

CRE requested additional actions.

CRE welcomed the proposals made by ERDF on 11 December 2014 on the development during the first half of 2015 of a pilot platform for dynamic data publication. It also supported the proposal by ERDF regarding data delivery experiments. Its objective is to assess their interest and to prevent, in collaboration with the French National Data Protection Commission (CNIL), the risks of reconstitution of confidential personal data. ERDF also proposed analysing the impacts of establishing a support mechanism for self-production on the connection solutions it offers to customers.

CRE also believes that studies carried out by local distribution companies serving more than 100,000 customers are likely to feed into the reflections of all the players. It encouraged the local distribution companies to analyse the deployment conditions of Smart grid technologies on the largest scale in their territories and to share the results.

CRE welcomed the prospect of the RTE's contribution to conducting a global cost-benefit analysis, continuing the work of the industrial plan Smart grids. It also called for all payers involved in the development of Smart grids in France to contribute to studies conducted in this context by sending affected network operators their assumptions helping them in the conduction of a cost-benefit analysis.

CRE asked the operators of island networks Électricité de France – Systèmes Énergétiques Insulaires (EDF SEI) and Électricité de Mayotte (EDM) to perform by 1 November 2015 a global cost-benefit analysis on the deployment of Smart grid technologies in their various territories, in particular on the deployment of electric vehicles and energy storage systems.

Finally, CRE states that the development of smart grids also extends to other energy networks. It requests each electricity and natural gas distribution network operator serving more than 100,000 customers to specify the optimisations of local energy systems necessary for the provision of better coordination between the various

networks and a pooling of some equipment. It also asked them to identify the impacts of a strong interaction between the various networks on the overall management of the electricity and natural gas networks. CRE will reflect with the transmission and natural gas system operators on the challenges and opportunities for smart grid development in their territories.

23 July 2015

**Communication on the answers provided by ERDF, GRDF
and their parent companies to questions on their compliance
with the provisions of Article L.111-64 of the Energy Code**

Pursuant to the terms of Article 26 (3) of the Directive 2009/72/EC of 13 July 2009, national regulators must monitor the activities of vertically integrated companies so that the distribution system operator *“cannot take advantage of its vertical integration to distort competition. In particular, vertically integrated distribution system operators shall not, in their communication and branding, create confusion in respect of the separate identity of the supply branch of the vertically integrated undertaking”*.

The interpretative note of the European Commission of 22 January 2010 on the separation regime (“unbundling”) indicates that the Trademark Law (at Community level) can serve as reference for the determination of whether there is confusion or not in a particular case.

At the beginning of 2015, CRE commissioned the opinion poll institute CSA to conduct a study designed to measure the potential existing confusion among the general public between the brands of the distribution system operators ERDF and GRDF and those of their parent companies.

This study showed in particular a real confusion in the minds of a significant portion of residential customers surveyed on the tasks handled by ERDF and EDF respectively but also by GRDF and GDF SUEZ.

In its successive reports since 2007 on compliance with the codes of good conduct and independence of the electricity and natural gas system operators, CRE had requested ERDF and GRDF respectively to end the factors causing confusing with their respective parent companies. In the latest 2013-2014 edition of its report, CRE had asked ERDF and GRDF to propose, by 1 June 2015 at the latest, the measures they intend to implement for the elimination of any confusion related to the brand, as well as an action plan to be implemented in order to eliminate the risk of association of the two companies by the general public, thus removing any possible confusion.

CRE stressed in its deliberation that the consumer association UFC-Que Choisir had referred in June 2014 to the Standing Committee for Dispute Settlement and Sanctions (CoRDIS) in order to have the excessive similarity between the ERDF and EDF brands sanctioned and to require ERDF to change its brand name.

Concerning ERDF, CRE considered that the structured communication plan submitted by the system operator aims to raise awareness among the general public of the missions of the distribution system operator and presents proposals to develop brand elements (concerning typography, some of the colours, the removal of the turbine and

the introduction of the signature « *l'électricité en réseau* ») and goes towards reducing the confusion. CRE however considered that the differentiation factors proposed by ERDF may not be sufficient to compensate for the factors that still cause confusion in the context where the brand "EDF" has exceptional distinctiveness.

Consequently CRE considered that the draft presented by ERDF for the development of its brand, without the modification of the EDF brand does not allow for the elimination of all risk of confusion of the brands of ERDF and EDF, prohibited by the provisions of Article 111-64 of the Energy Code.

Regarding the situation of GRDF and its parent company, CRE noted that GRDF had submitted a communication plan which aims to raise awareness among the general public of the tasks of the distributor.

CRE asked GRDF to elaborate on this communication plan, by October 2015, in order to explain the missions of the distribution system operator, clearly distinguishing them from the missions of the suppliers.

CRE considered that the change of name from GDF SUEZ to ENGIE is a way of resolving the issue of confusion between GRDF and its parent company.

26 November 2015

Rejection of the application for approval of the contract between RTE and EDF for the supply and transmission of electricity and associated services for the RTE sites with a contract power above or equal to 36 kVA

Pursuant to Articles L. 111-17 and L. 111-18 of the Energy Code, on 6 November 2015 RTE submitted to the CRE a contract for approval concluded between RTE and EDF for the supply and transmission of electricity and associated services for the RTE sites with a contract power above or equal to 36 kVA. (hereinafter "the Contract").

CRE rejected the request for the approval of the Contract between RTE and EDF on the grounds that:

- the Contract was concluded following a tender procedure during which RTE made no allotment. CRE considered that the regrouping of heterogeneous requirements within the same lot could restrict access to the market for certain suppliers;
- the suppliers were consulted on a need badly identified by RTE, thus depriving competing suppliers of the vertically integrated company of full and free access to the call for tenders organised by RTE, which is likely to harm the development of genuine competition;
- the Contract included the provision of services forbidden under Paragraph 1 of Article L. 111-18 of the Energy Code by EDF, for the benefit of RTE;
- finally, the awarding of the contract does not only concern the offer of electricity supply but also the ability of the provider to provide services.

Given all these points, CRE requested RTE to conclude, no later than 6 months after the publication of this deliberation, and after having conducted a new call for tenders, new contracts for the supply and transmission of the electricity necessary to power its sites with a contracted power of more than 36 kVA.

SUMMARY OF THE MAIN DECISIONS OF CORDIS

In 2015, the Standing Committee for Dispute Settlement and Sanctions (CoRDIS) of the CRE adopted new texts reforming its procedure: Decree No. 2015-206 of 24 February 2015 and the decision of 11 March 2015 on its rules of procedure.

Decree No. 2015-206 of 24 February 2015, through Decree No. 2015-1823 of 30 December 2015 on the codification of the regulatory part of the Energy Code, was codified in Articles R. 134-7 to R. 134-37 of the Energy Code. It is repealed as a result of this codification.

CORDIS, NUCLÉOSUN (NO. 05-38-14), 15 APRIL 2015

The company Nucléosun referred to CoRDIS on the dispute it was facing with the company ERDF concerning the connection conditions of four photovoltaic facilities to the public electricity distribution network.

In order to carry out these projects, four connection requests were made to the company ERDF. The latter only sent a single technical and financial proposal for all projects.

CoRDIS stated that ERDF cannot make a single connection study, and thus send only a single technical and financial proposal for several projects, if such a request had not been made by the company.

The Committee recalled that it was up to ERDF *“either to process the requests individually, or to propose to the producer beforehand the consolidation of its connection requests in accordance with the obligation of providing network users with the information necessary for effective network access, set out in Article L. 322-8 of the Energy Code”*.

CORDIS, NUCLÉOSUN (NO. 06-38-14), 15 APRIL 2015

The company Nucléosun referred to CoRDIS on the dispute it was facing with the company ERDF concerning the connection conditions of three photovoltaic facilities to the public electricity distribution network.

The company Nucléosun sent three separate requests for connection to the company ERDF. The latter sent the company Nucléosun three technical and financial proposals, one of which was sent with a three months delay.

CoRDIS held that the fact that the facility was connected did not render the request irrelevant concerning the disregard by ERDF of its own procedure.

CORDIS, VALSOPHIA, 6 MAY 2015

The company Valsophia developed a property planning for a portion of the energy consumed to be provided on site by a solar parking shed and photovoltaic roofing equipped with an electricity storage device.

Valsophia sent a connection request for this project to ERDF stating that it wished to have a single connection point for the supply of the property in order to fulfil the logic “positive energy”, resulting in the self-production and self-consumption of a portion of the energy on site. ERDF refused the requested technical solution.

ERDF considered that having a single point of connection for the entire site would amount to an illegal power retrocession.

After having found that there is no legal obstacle to the indirect connection of a consumption facility to the public distribution network and that this connection was not intended to challenge the principle of retrocession prohibition since it is provided with a meter service, CoRDIS stated that the connection scheme envisaged by the Valsophia company, *namely to have a single connection point for the supply of the property, can only [...] be implemented by subscribing to the annual account breakdown statement service. Indeed, the annual account breakdown statement service is the only one likely to enable consumers indirectly connected to the public distribution system to have the free choice of energy supplier pursuant to the provisions of Article L. 331-1 of the Energy Code*”.

By its decision of 6 May 2015, CoRDIS therefore required the ERDF company to send to the Valsophia company a technical and financial proposal with a single point of connection for the entire property project together with the provision of a metering breakdown statement.

CORDIS, BIO COGELYO NORMANDIE, 7 SEPTEMBER 2015

The Bio Cogelyo Normandie company referred to CoRDIS a dispute it was facing with the RTE company regarding the calculation of the coefficient of losses incurred for an indirectly connected facility.

This company was selected as winner of the call for tenders “CRE 2” in 2006 for electricity production facilities using biomass. The biomass power plant of the company Bio Cogelyo Normandie, with a power of 9,000 kW, is connected to the private electricity network of an industrial site, itself connected to the public electricity transmission system.

Bio Cogelyo Normandie approached the companies EDF, obligated purchaser, and RTE in order to establish contractual arrangements enabling the purchase of the energy produced. Then a dispute occurred over the legitimacy of a loss coefficient to account for potential losses online and during transformation.

The Bio Cogelyo Normandie company stated that there was no need to correct the metering data calculated at the output of the facility to determine the volumes of electricity billed under the purchase obligation.

In its decision of 7 September 2015, CoRDIS first recalled that it was the responsibility of the network operator to perform the measurement of the production from the Bio Cogelyo Normandie's facility. The Committee further stated that under the terms of the purchase agreement, any corrections to the measurement of the power or electricity supplied to the EDF company are necessarily included in the ancillary service contract providing for a breakdown statement service since the production facility of Bio Cogelyo Normandie is not directly connected to a public electricity network.

Regarding the location of the delivery point of the production facility, the Committee rejected the definition of the delivery point under the terms of the purchase agreement and recalled the jurisprudence of the Cour de Cassation and the Cour d'appel de Paris (Court of Appeal of Paris) concerning the indirect connection. It concluded that the delivery point is necessarily defined in the connection agreement and called upon the RTE company to send Bio Cogelyo Normandie such an agreement within two months.

The Committee also felt that the delivery point could be fixed, *"for reasons of economic and technical rationality"* at the output of the production facility of the Bio Cogelyo Normandie company.

CoRDIS decided that RTE should send to the BCN company:

- a connection agreement for the production facility indirectly connected to the public transmission system, specifying in particular the location of the delivery point;
- an amendment to the ancillary services contract including, if applicable, any corrections to be made to the power and the electricity supplied to the company EDF.

CORDIS, HYDRO DIESEL ÉLECTRICITÉ AND COURREGELEC, 18 NOVEMBER 2015

The companies Analyse Développement Réalisation Conseil (hereinafter ADCR) and Courregelec referred to CoRDIS two requests to resolve a dispute they faced with the company Réseau de Transport d'Électricité (RTE) regarding two consultations for the conclusion of a contract of actionable capacities on the adjustment mechanism regarding rapid and additional reserves for the periods from 1 April 2014 to 31 March 2015 and from 1 April 2015 to 31 March 2016.

The consultation for the period from 1 April 2015 to 31 March 2016 was also the subject of a request for protective measures. The Committee, by a decision dated 26 January 2015, rejected this request on the grounds that the companies ADRC and Courregelec did not prove *“that the procedure conducted by RTE is of a non-competitive, discriminatory or non-transparent character likely to establish a serious and immediate threat to the rules governing access to the network, likely to result in the suspension of the consultation”*.

Through the decisions of 18 November 2015, CoRDIS rejected the requests of the companies ADRC and Courregelec and stated that these two calls for tenders had been carried out according to competitive, non-discriminatory and transparent procedures.

The Committee held that RTE had not disregarded its obligation to implement competitive and non-discriminatory procedures by integrating within the same call for tenders production capacities and load shedding capacities.

CoRDIS recalled that RTE is not required to make a call for tenders adapted to every market player, but, pursuant to Article L. 321-11 of the Energy Code, it must ensure the availability and the implementation of the reserves necessary for the functioning of the network.

The companies also believe that the call for tenders was inconsistent as the value “DO min” was greater than the value “DO max”.

The notion of “DO min” corresponds to the minimum duration of the use of an offer. RTE requires that it is no more than 60 minutes as its needs for the activation of rapid and additional reserves rarely exceed this amount of time. It emphasised that offers lasting longer generate unnecessary costs to the extent that they remain activated after RTE's need has ended.

The notion that “DO max” corresponds to the maximum duration of the use of an offer. The company RTE requires that this maximum duration is not less than 30 minutes. This constraint is set to guarantee RTE that the offer can be activated *a minima* for 30 minutes. RTE argues that this duration prevents players from proposing offers whose availability would be too short (for example for only a few minutes) and guarantees a minimum quality level of the proposed offers.

The Committee considered that the values “DO min” and “DO max” have distinct objectives and that there was no inconsistency in the value “DO min” being higher than the value “DO max”.

COUR D'APPEL DE PARIS (COURT OF APPEAL OF PARIS), 10 SEPTEMBER 2015, ERDF / LES HAUTES SOURCES

The company Les Hautes Sources had referred to CoRDIS on a dispute it was facing with the company ERDF concerning the connection conditions of a photovoltaic production facility to the public electricity distribution network.

Article 7 of the rules of procedure of CoRDIS, adopted by the decision of 20 February 2009, provided that the referral should be accompanied *"by an extract less than three months old from the trade and companies register"*.

The company ERDF claimed that the referral by the company Les Hautes Sources was inadmissible because the extract from the trade and companies register was more than three months old, while the rules of procedure of the Committee provides that the referral should include an excerpt not older than three months.

In its decision of 14 May 2014, CoRDIS stated that Les Hautes Sources had, during the procedure, adjusted its referral by producing an extract less than three months old and therefore declared the referral admissible.

ERDF appealed against that decision to the Court of Appeal of Paris. The latter dismissed the appeal on the grounds that no legislative or regulatory provision *"precludes that the initial referral to CoRDIS be completed later with the items prescribed by the rules of procedure"*. The court stated that *"the failure of providing, upon the referral to CoRDIS, a registration extract dated no more than three months earlier does not affect the ability to take legal action"* of the originator of this referral and that entitlement to the legal personality by companies is tied to the registration in the trade and companies register and not to the production of an excerpt of registration.

COURT OF APPEAL OF PARIS, 21 OCTOBER 2015, SRD / POITOU ENERGY

The company Poitou Energy referred to CoRDIS a dispute which it was facing with the company SRD on the annual metering component paid by thirty-five photovoltaic production facilities.

In a decision dated 21 January 2015, CoRDIS ordered SRD to send to Poitou Energy, within two months of the notification of the decision, thirty-five amendments corresponding to the thirty-five connection contracts, of access to and use of the network for its photovoltaic production facilities. The Committee decided that these amendments would apply retroactively to the date of entry into force of each of the thirty-five contracts.

SRD, simultaneously with an annulment or reversal appeal, filed a request for a stay of execution at the Court of Appeal of Paris with the aim of suspending the obligation to modify the thirty-five contracts, until thorough examination as to the merits of the appeal.

The Court of Appeal of Paris rejected the request for stay of execution on the grounds that the applicant had not proved that the decision had led to manifestly excessive

consequences or that developments of exceptional gravity had arisen after the notification of the decision.

COUR DE CASSATION, APPEAL NO. 13-28790, PANACO / SICAE ELY

The real estate company (société civile immobilière, SCI) Panaco had referred to CoRDIS a dispute it was facing with the agricultural cooperative society of collective interest (société coopérative d'intérêt collectif agricole) for electricity of the departments of Eure-et-Loir and Yvelines (the SICAE ELY) on the conditions of connection of an individual house to the public electricity distribution network.

CoRDIS having rejected the request in a decision on 2 July 2012, SCI Panaco appealed to the Court of Appeal of Paris.

In a judgement of 28 November 2013 the Court of Appeal of Paris declared this appeal inadmissible on the grounds that the document filed at the court registry, entitled "statement of appeal to the Court of Appeal of Paris", *"mentions that this company, the appellant, declares, through this document "that it appeals the decision (...) against the SICAE ELY ordered pursuant to the provisions of Article 8 and the following articles of the Decree No. 2000-894 of 11 September 2000 and Article 542 of the Code of Civil Procedure" and notes that, notwithstanding the visa of the provisions of Article 8 and the following articles of the Decree of 11 September 2000, the appeal brought by SCI Panaco is not that prescribed by the law"*.

The Cour de Cassation reversed and annulled this judgement. It found that, despite the inappropriate nature of its name, *"the document formalising the appeal of SCI Panaco referred specifically to Article 8 and the following articles of Decree No. 2000-894 of 11 September 2000 and sought the annulment of the decision by CoRDIS"*.

COUR DE CASSATION, APPEAL NO. 24-20.421, ERDF / CRAMPON WIND FARM

The companies Crampon Wind Farm and Puchot Wind Farm had referred to CoRDIS with a dispute they faced with the company ERDF over the connection conditions of two wind power production facilities to the public electricity distribution network.

In a decision on 22 October 2012, CoRDIS held that the company ERDF had breached its transparency obligation in the processing of connection requests of the production facilities of both companies and required it to send them an amendment to the technical and financial proposal within fifteen days of notification of the decision.

Following the rejection of the appeal to the Court of Appeal of Paris, the company ERDF appealed to the Cour de cassation (Court of Cassation).

The Court of Cassation indicated that *"the ERDF company was required, under its duty of transparency, to provide to the producer, the requester of the connection, the elements enabling it to assess the legitimacy of the solutions it advocated in its technical and financial proposal, not only on the choice of connection solution, its consistency,*

its time and its cost, but also their justification". The Court stated that it was an obligation of means.

In the case, ERDF had breached its obligation by not allowing the companies to assess, before signing the technical and financial proposal, the alternative solution of retained connection, separate from the reference connection solution.

The Court recalled that *"ERDF, having received a request for connection relating to both the public distribution network and the public transmission system, should consider this request in connection with RTE in order to be able to create an adequate technical and financial proposal"*. This was not the case here.

Therefore, the appeal of ERDF was rejected.

LIST OF ORGANISATIONS INTERVIEWED BY CRE IN 2015

JANUARY 2015:

RTE/EDF SEI

FEBRUARY 2015:

GDF SUEZ/UNIDEN /DIRECT ENERGIE/EFET/DIRECT ENERGIE/NOVAWATT/ERDF/
EDF/EON/RTE/VOLTALIS/ACTILITY

MARCH 2015:

RTE/EDF

APRIL 2015:

DGEC/STORENGY/TIGF/ALPIQ/AFG/ARCELOR MITAL/ENI/UNIDEN/AXPO/GAZ DE
PARIS/GAZPROM/AFIEG/UPRIGAZ/TGP/EDF/GDF SUEZ/DIRECT ENERGIE/GNE/ES
ENERGIES/DALKIA/TEGAZ/LAMPIRIS/ANTARGAZ/SAVE/EON France/SOLVAY/RTE

MAY 2015:

ENGIE/RTE/ERDF/GRDF/DGEC/DGCCRF/GDF SUEZ/APCMA/UNARC ASSOCIATION/
UGAP/FNCCR/CCI/TOTAL/ENI/LAMPIRIS/PICOTY/ANTARGAZ/GAZ DE BORDEAUX/
ANODE/AFIEG/EDF/GAZ DE PARIS/EON/SPEGNN

JUNE 2015:

CSA/REGAZ BORDEAUX/ARTELYS/ADEQUATION/ERDF/GRDF/GRTGAZ/COUNCIL
OF STATE/EDF/ASN/RTE

JULY 2015:

ES/GDS/GRT GAZ/GRDF/RTE/EDF/ENGIE/ANODE/AFIEG/UNELEG/FNSICAE/
ANROC/QUE CHOISIR/AFOC/CNL/UNIDEN/DGEC/DGCCRF

SEPTEMBER 2015:

SCHWARTZ & CO/UGAP/CLEEE/ARC/FAMILLES RURALES/FNCCR/ARTELYS/EDF/
ERDF

OCTOBER 2015:

FRONTIER ECONOMICS/SCHWARTZ & CO/GRDF/EDF/RTE/ALPIQ/EQINOV/
EOLERES/SMART GRID ENERGY/ENGIE/ENERGY POOL/VOLTALIS/ACTILITY/DIRECT
ENERGIE/ERDF/VILLARD-BONNOT

NOVEMBER 2015

RTE/ENGIE/EDF/CNR/ALPIQ/ENGIE/ENERGY POOL/RIO TINTO/UNIDEN/GRT GAZ/
TIGF/ERDF/

DECEMBER 2015:

DGEC/DGCCRF/EDF/ENGIE/ANODE/CNAFAL/CNL/GRTGAZ/TIGF/FEDERATIONS
ELD/ERDF/CLEEE/AFIEG/DIRECT ENERGIE/RTE/URM/EDF PEI/DGEC/RTE

GLOSSARY

3RD ENERGY PACKAGE

Published in August 2009, the 3rd energy package aims to establish a level playing field in the EU Member States with a view to achieving the internal energy market. It consists of two directives on the electricity and gas markets (2009/72/EC and 2009/73/EC), two regulations, one on the conditions for access to network for cross-border exchanges in electricity (Regulation (EC) No 714/2009), and one on the conditions for access to the natural gas networks (Regulation (EC) No 715/2009), as well as Regulation (EC) No 713-2009 establishing the Agency for the Cooperation of Energy Regulators (ACER).

3X20

See Climate and energy package

ADJUSTMENT MECHANISM

RTE has power and energy reserves which can be mobilised when the balance between the production and consumption of electricity is at risk (loss of a production group or an element of the network, poor estimation of the level of consumption,...): the system services (primary and secondary reserves) and the adjustment mechanism (tertiary reserve). The primary and secondary reserves are activated automatically within seconds of the disruption of balance. The activation of the tertiary reserve is performed manually, by requesting producers and consumers connected to the network to activate their adjustment offers for their production or consumption, upward or downward, in order maintain the balance between production and consumption. Any player who has an offer on the adjustment mechanism has the free choice of the offer activation price (excluding the establishment of a ceiling for offers made by consumers under contract with RTE). When RTE activates an upward adjustment offer, that is to say an offer that can solve imbalances of a "production below consumption" kind, RTE remunerates the player who made this offer. Conversely, when RTE activates a downward adjustment offer, RTE collects the offer price. The charges and products related to the activation of adjustment offers are managed by RTE in the adjustments-differences account, a management account which aims to be balanced: the costs of imbalances are charged to players who are responsible for the process of calculation and settlement of differences.

AGENCY FOR THE COOPERATION OF ENERGY REGULATORS (ACER)

The Agency for the Cooperation of Energy Regulators (ACER) is a Community organisation with a legal personality, established by Regulation (EC) No 713/2009 and implemented in 2010. ACER has been operational since 3 March 2011. It is headquartered in Ljubljana, Slovenia. The objective of ACER is to assist the national regulatory authorities to perform and coordinate their regulatory tasks at community level, and if necessary, to take complementary actions. It plays a key role in the integration of the electricity and natural gas markets.

Its competences are as follows:

- elaborate and submit to the European Commission non-binding framework guidelines;
- participate in the development of the European electricity and natural gas codes in line with framework guidelines;
- take binding individual decisions on methods and the conditions of access and operational security of cross-border infrastructure if national regulatory authorities fail to agree or jointly request the intervention of the ACER;
- decide on exemptions, if the affected infrastructure is located on the territory of more than one Member State, if national regulatory authorities fail to agree or jointly request the intervention of the ACER;
- provide opinions to the ENTSOG (European Network of Transmission System Operators for Gas) and ENTSO-E (European Network of Transmission System Operators for Electricity), in particular on network codes and on the draft network development plan in the entire Community;
- monitor the implementation of the tasks of ENTSOs;
- monitor the regional cooperation of the ENTSOs;
- advise the European institutions on issues related to the domestic electricity and natural gas markets;
- monitor, in cooperation with the European Commission, the Member States and national regulatory authorities, the domestic electricity and natural gas markets, in particular retail prices for electricity and natural gas, access to the network, including access to electricity produced from renewable energy sources, and the respect for consumer rights.

ALTERNATIVE SUPPLIER

Suppliers that are not incumbent suppliers are considered alternative suppliers.

ARENH

Since 1 July 2011, suppliers have had the right to regulated access to incumbent nuclear electricity (ARENH) by purchasing electricity from EDF at a regulated price and for volumes determined by the regulator. Given that the production cost of nuclear electricity is lower than the price of electricity on the wholesale market to which private suppliers have access, this access provided by the law on the new organisation of the electricity market ("NOME") of 7 December 2010 must allow consumers to continue to benefit from the competitiveness of French nuclear plants whichever their electricity supplier, creating the conditions for real downstream competition and for all customer segments, individuals and businesses.

The law provides that CRE propose the prices, calculate the rights and control regulated access to incumbent nuclear electricity.

The main parameters of the regulated access to incumbent nuclear electricity are:

- The total annual ceiling of incumbent nuclear electricity sold by EDF to private suppliers: it was fixed at 100 terawatt hours, which represents about $\frac{1}{4}$ of the annual production of an incumbent nuclear plant.
- The volume of electricity requested by each private supplier benefiting from ARENH during a given delivery period, and which depends on the consumption of its customers. The law provides that this volume should reflect the share of nuclear production in the final electricity consumption representing on average, for 2011, 85% of the electricity consumption of customers.
- The price of ARENH: it must reflect the economic conditions of electricity production by the nuclear power plants EDF. It is calculated by adding the production costs of EDF's incumbent nuclear electricity.

In the absence of the decree in the Council of State provided for by the NOME law, specifying the identification and accounting method of these costs, CRE had to establish the method it considers appropriate to reflect the economic conditions of incumbent nuclear electricity production. This method led, according to the retained criteria, to a price for ARENH between €36/MWh and €39/MWh. The government justified the price of €42/MWh proposed in its decree of 17 May 2011 by taking into account expected investments required for ensuring the security of nuclear power plants.

CERTIFICATION

The certification procedure is designed to ensure that transmission system operators (TSOs) comply with the rules of organisation and independence vis-à-vis companies carrying out production or supply activities within the vertically integrated company to which they belong. The main purpose of the effective separation of transmission system management activities and production or supply activities is to prevent any risk of discrimination between users of these systems and to make independent investment decisions the only interest of integrated groups. The assessment of the independence of the transmission system operator covers three main topics, corresponding to the application of the organisational rules laid down in Articles L. 111-11 and L. 111-13 to L. 111-39 of the Energy Code. Firstly, the internal organisation on the governance rules of the TSO must comply with the rules aimed at guaranteeing the functional and organisational independence of the TSO. Secondly, the TSO must provide sufficient guarantees of its operational autonomy. Thirdly, the TSO must ensure the appointment of a compliance officer, in charge of monitoring compliance with the independence requirements and with the code of good conduct.

CONTRIBUTION TO THE PUBLIC ELECTRICITY SERVICE (CSPE)

Established by law no. 2003-8 of 3 January 2003, the Contribution to the Public Electricity Service (CSPE) aims to:

- offset public electricity service charges, which are supported by the incumbent suppliers, mainly EDF, Électricité de Mayotte and local distribution companies;
- offset a part of the costs related to the regulated interim tariff for the adjustment of the market (TaRTAM), once the offsetting of the charges for public electricity service had been carried out (in practice, the CSPE no longer offsets charges related to TaRTAM since 2009);
- finance the French Energy Ombudsman's budget

Public electricity service charges include:

- extra costs resulting from policies supporting cogeneration and renewable energy and extra costs resulting from "dispatchable" contracts;
- extra production costs in zones not interconnected to the French continental

metropolitan electricity grid, resulting from the national tariff equalisation scheme (Corsica, overseas departments, Mayotte, Saint-Pierre and Miquelon and the Breton islands of Molène, Ouessant and Sein). The tariffs in these zones are the same as in metropolitan continental France although the production costs are higher;

- revenue losses and costs incurred by suppliers because of the implementation of the social tariff for electricity and their participation in the mechanism established for people in situations of need;
- management costs of the Caisse des dépôts et consignations (Deposits and Consignments Fund).

COUNCIL OF EUROPEAN ENERGY REGULATORS (CEER)

The Council of European Energy Regulators (CEER) is an association created in 2000 at the initiative of national energy regulators of the Member States of the European Union and the European Economic Area. CEER structures include a general assembly, which is the sole decision-maker, a board, working groups specialised in different areas – electricity, gas, consumers, international strategy, etc. – and a secretariat in Brussels. A work programme is published every year. In accordance with its articles of association, decisions are made by consensus, failing that, by qualified majority vote.

DAY-AHEAD MARKET

Market on which exchange transactions as well as purchase/sale of quantities of electricity or gas deliverable the following day are performed.

ELECTRICITY TRANSMISSION AND DISTRIBUTION SYSTEM

System designed for the transmission of electricity between the sites of production and consumption. It consists of power lines that provide connections at given voltage levels and substations consisting of voltage transformers, connection and cut-off devices, measuring instruments, command and control equipment and equipment to compensate reactive energy. There are three system hierarchies:

- bulk transmission and interconnection system which routes large amounts of energy at 400 kV or 225 kV over long distances, with a little loss;
- regional distribution system that distribute energy at a regional level over 225 kV, 90 kV and 63 kV power lines, supplying the public distribution systems and large industrial customers;
- distribution systems at 20 kV and 400 V supplying end consumers with medium voltage (SME-SMI), or low voltage (household customers, tertiary sector and small industrial facilities).

ENERGY MIX

Or power mix. Distribution of primary energy in the consumption of a country, usually expressed in percentages.

ENERGY-CLIMATE PACKAGE

Published in June 2009, this set of 3 directives (2009/28/EC, 2009/29/EC and 2009/31/EC) and one decision (No. 406-2009/EC) aims to reduce the greenhouse gas emissions of the EU and to strengthen its energy security and its competitiveness through the development of renewable energy sources. It is commonly associated with the so-called “3x20 by 2020” objective: increasing renewable energy use in the EU’s primary energy consumption to 20%, reducing its greenhouse gas emissions by 20% compared to 1990 levels and increasing its energy efficiency by 20% by 2020.

EUROPEAN NETWORK CODES

Developed by the European Network of Transmission System Operators for electricity and gas (ENTSO), the European network codes are common rules relating to various cross-border issues listed in the Community regulations. They can become legally binding via comitology if the Agency for the Cooperation of Energy Regulators (ACER) makes a recommendation to this effect to the European Commission.

EUROPEAN NETWORKS OF TRANSMISSION SYSTEM OPERATORS (ENTSO)

There is a European Network of Transmission System Operators for Electricity (ENTSO-E) and for Gas (ENTSO-G). Transmission system operators cooperate at European Union level via the ENTSOs, to promote the creation and the operation of the internal electricity and natural gas markets and cross-border exchanges, and to provide optimum management, coordinated exploitation and a solid technical development of the electricity and natural gas transmission systems. Within this framework, the ENTSOs create European network codes, on the basis of the framework-guidelines laid down by the Agency for the Cooperation of Energy Regulators (ACER) and working closely with the latter.

FLOW-BASED MARKET COUPLING

Calculation method for cross-border exchange capacities based on flow. It enables the exploitation of interdependence between exchanges on several borders by devoting the physical capacity of interconnectors to commercial exchanges of the greatest economic value (that is where the price differential is the largest). Bids are in effect accepted considering their impact on the interconnectors in addition to their price and volume.

FRAMEWORK GUIDELINE

Developed by the Agency for the Cooperation of Energy Regulators (ACER), these non-binding guidelines set out clear principles and objectives with which the European network codes developed by European Network of Transmission System Operators for Electricity (ENTSO-E) and for Gas (ENTSO-G) must comply.

FRENCH ENERGY OMBUDSMAN

Independent administrative authority, the French Energy Ombudsman is originally responsible for recommending solutions to disputes relating to the performance of electricity or natural gas supply contracts and participating in informing consumers of their rights. Since the law on energy transition towards green growth dated 17 August 2015, the energy ombudsman is also responsible for recommending solutions to disputes relating to liquefied petroleum gas, fuel, wood and heating networks. All individual consumers, small businesses, merchants, certain SMEs, local authorities, non-profit organisations, co-ownership syndicates, may appeal to the Ombudsman. The Ombudsman's scope of competence is governed by articles L.122-1 to L.122-5 of the Energy Code.

GAS EXCHANGE POINT (PEG)

Exchanges on the wholesale natural gas market are performed at virtual points on the French gas transmission called gas exchange points (PEGs). This is where exchanges between gas suppliers occur and where gas is supplied to transmission system operators for daily balancing. Since the merger of GRTgaz' PEG South and PEG TIGF on 1 April 2015, there are two PEGs: PEG North and the Trading Region South.

GEOGRAPHICAL DISPERSION

The reduction of temporal fluctuations of intermittency and variability of energy production through the geographical dispersion of remote sources is called the dispersion effect. In fact, the unpredictable fluctuation of the production from “inevitable and unpredictable” sources of energy (that is to say, those whose production cannot be controlled and that depend on natural elements, such as wind farms or photovoltaic facilities) are statistically reduced when these productions are injected on the same electrical power grid. The greater the number of different energy sources, the more the average power output is smoothed.

INCUMBENT SUPPLIER

For electricity, the incumbent suppliers are EDF, the local distribution companies and their subsidiaries; for gas, (ENGIE), Tegaz, the local distribution companies and their subsidiaries. An incumbent supplier is not considered as an alternative supplier outside its incumbent service area.

INDEPENDENT ADMINISTRATIVE AUTHORITY (AAI)

An independent administrative authority (AAI) is a State institution, which on behalf of the state is responsible for ensuring the regulation of sectors considered essential and in which the government wishes to avoid intervening too directly. The AAIs have three characteristics. These are:

- characteristics of authorities: they possess a certain number of powers (recommendation, decision, regulation, sanction);
- administrative characteristics : they act on behalf of the State and certain competences attributed to the administration are delegated to them (e.g. regulatory power);
- independent characteristics: of controlled sectors but also of the government.

The AAIs are placed outside the traditional administrative structures and are not subject to hierarchical power. The government cannot give them orders, instructions or even simple advice. Their members cannot be removed.

LNG TERMINAL

A port facility used to receive and store liquefied natural gas, and transport it to the main network after regasification.

LOAD SHEDDING

Load shedding is the ability of consumers to adapt their consumption level (by forgoing some consumption or shifting the time) depending on external signals they receive. These signals may be automatic (remote control of consumer appliances) or economic (adjustment of price encouraging consumers to change their behaviour). Load shedding introduces flexibility in electricity demand both for industrial consumers and for individuals, enabling the consumption level to be adapted according to the needs of the system or price levels.

LOCAL DISTRIBUTION COMPANY

Private company or authority, also called non-nationalised distributor, which distributes and/or supplies electricity or gas in a particular territory, not served by ERDF or GRDF.

MAIN AND REGIONAL GAS TRANSMISSION AND GAS DISTRIBUTION NETWORK

- the main transmission network is a set of large-diameter, high-pressure pipes linking interconnection points with neighbouring networks, underground storage facilities and LNG terminals, and to which the regional transmission networks, distribution networks and high consumption industrial customers are connected;
- the regional transmission network is part of the transmission network used to transport natural gas to the distribution networks and high-consumption end customers;
- the distribution network is a set of medium and low pressure pipelines transporting gas to end customers and to other distribution networks, as necessary. It comprises mainly distribution pipes, connection pipes, riser pipes, pressure regulators and meters, valves and accessories.

MARKET COUPLING (EXPLICIT AUCTIONS, IMPLICIT AUCTIONS)

The coupling of several markets means the common handling of their supply and demand curves according to their economic relevance, that is to say, matching the highest purchase orders with the lowest sales orders, regardless of the market on which they have been placed, but taking into account the daily interconnector capacity. In other words, within the limits of the interconnector capacity made available, the compensation for an electricity exchange transaction may originate from a foreign exchange without the participants having the obligation to explicitly purchase the corresponding capacity at the relevant border. This is a form of implicit auction, as opposed to explicit auctions in which the players carrying out cross-border exchanges of energy must purchase the corresponding interconnector capacity.

MARKET OFFER

The prices of the market offers are set freely by suppliers as part of a contract.

NOME LAW

Law No. 2010-1488 of 7 December 2010 on the new organisation of the electricity market, called the NOME law, aims to enable effective market opening, since EDF, the incumbent operator in the market, has a near monopoly of the electricity production sector in France. As the European Commission considered following an investigation procedure concerning State aid, the existence of regulated tariffs combined with the lack of access of EDF's competitors to electricity sources as cheap as the incumbent nuclear facilities, constitutes an obstacle to the development of effective competition. The NOME law, resulting from the work of the Champsaur Commission, must therefore:

- provide alternative suppliers regulated access to incumbent nuclear electricity, called ARENH (see ARENH), on a transitional basis with a limited volume, under the same conditions as for the incumbent supplier EDF;
- preserve EDF's incumbent nuclear power plants (ensure funding for the existing plants by enabling EDF to secure its long-term commitments for the dismantling and management of waste and also to make the necessary investments required for extending the operating life of the reactors of its incumbent plants);
- maintain competitive prices in France for end consumers.

The NOME law provides, among others, for the maintenance of regulated sale tariffs for small customers (blue tariffs) and the elimination of regulated tariffs for large customers on 31 December 2015 (green and yellow tariffs).

OFFER UNDER REGULATED SALES TARIFF

The prices of electricity or gas offers under regulated tariffs are fixed by the government. For electricity, the main categories of regulated tariffs depend on the contracted power and the connection voltage. With the entry into force of Law No. 2010-1488 of 7 December 2010 on the new organisation of the electricity market (NOME law), the yellow and green tariffs will be removed from 1 January 2016.

For gas, there are two types of regulated tariffs:

- public distribution tariffs for residential and business customers connected to the distribution network and consuming less than 4 GWh per year;
- Subscription tariffs for business customers connected to the gas transmission system and those connected to the distribution system consuming more than 4 GWh per year. These tariffs are no longer available: only those customers who already have them may maintain their contract.

PROJECTS OF COMMON INTEREST (PCI)

Projects for the development of gas and electricity transmission infrastructure, the list of which is established by the European Commission after a selection procedure. These projects may benefit in particular from simplified authorisation procedures or, if necessary, special incentives and will be eligible for funding assistance.

PUBLIC SERVICE CONTRACT BETWEEN THE STATE AND GDF SUEZ (ENGIE)

Article 16 of the law of 3 January 2003 on gas and electricity markets and the public energy service and the decrees for the implementation of this law specify the public service obligations imposed on transmission and distribution operators and suppliers of natural gas. Article 1 of the law of 9 August 2004 on the public electricity and gas service and electricity and gas companies provides for their formalisation in a public service contract in particular on the following points:

- the public service requirements concerning security of supply, regularity and quality of the service provided to consumers;
- the means of ensuring access to the public service;
- the multiannual development of regulated gas sale tariffs;
- the policy on business research and development;
- the environmental protection policy, including the rational use of sources of energy and the fight against the greenhouse effect.

The current public service contract between the State and GDF SUEZ (ENGIE) covers the period 2010-2013. It may be extended for a period of six months, failing that a new contract shall be signed.

It aims to become over time the reference point of the commitments undertaken by GDF SUEZ SA (ENGIE), under the directly managed activities of and the activities relevant to the distribution system operator (GRDF), the transmission system operator (GRTgaz), the storage subsidiary (Storengy) and the subsidiary responsible for the exploitation and development of the LNG terminals (Elengy), with a view to ensuring the sustainability of public service missions that the legislator has entrusted it.

PURCHASE OBLIGATION

Legal and regulatory device obliging EDF and the local distribution companies to purchase electricity produced by certain production sectors (wind, photovoltaic, biomass...) at compulsory tariff and technical conditions.

REGIONAL INITIATIVE

Regional initiatives were implemented in 2006 by the European Commission and the European Regulators' Group for Electricity and Gas (ERGEG) to gradually shift from national markets to the European level in order to facilitate the integration of regional electricity and gas markets by means of concrete actions. CRE is actively involved in the regional initiatives of four of the seven electricity regions and two of the three gas regions.

REGULATION ON ENERGY MARKETS INTEGRITY AND TRANSPARENCY (REMIT)

European regulation No. 1227/2011, so-called REMIT (Regulation on Energy Markets Integrity and Transparency) came into force on 28 December 2011. This prohibits abuses on the gas and electricity wholesale markets, including:

- insider trading consisting of using inside information (that is to say, non-public information whose publication would likely have an impact of the price of the energy concerned) to intervene in the market to its advantage. Inside information must be published;
- market manipulations consisting of giving a misleading signal about the price or the balance of supply and demand on the energy markets.

This approach is inspired by financial regulation, adapted to the energy markets. The concept of inside information refers in particular to information relating to the physical facilities for production, transmission, storage and LNG terminals. It is linked to the transparency obligations set out by the 3rd energy package.

RENEWABLE ENERGY

Renewable energy sources comprise wind, solar, geothermal, aerothermal, hydrothermal, marine and hydraulic energy, as well as energy from biomass, landfill gas, gas from sewage and waste water treatment plants and biogas.

RETAIL MARKET

The retail market for electricity and natural gas is divided into two customer segments:

- residential customers, which are the consumption sites of individual customers;
- non-residential customers, which includes all other clients: businesses, large industrial sites, public services, etc.

SECURITY OF SUPPLY

Capacity of electricity and gas systems to continuously meet foreseeable market demand.

SMART ELECTRICAL GRIDS

Smart electrical grids are also called smart grids. These are public electricity networks with added functions from new information and communication technologies (NICTs). The aim is to ensure balance between electricity supply and demand at all times and to provide a safe, sustainable and competitive supply to consumers. Making grids smart entails improving the integration of energy systems and the participation of grid users. These grids must be thoroughly reconfigured to integrate large-scale decentralised production from renewable sources, and to promote supply that is adapted to demand by providing end consumers with tools and services enabling them to follow their personal consumption and therefore act accordingly.

SMART METERING

Smart metering is intended to allow the provision to consumers, at a minimum every month and no longer every six months, of accurate information on their consumption of electricity or gas, with the aim of improving the quality of billing and better control of energy consumption by customers. A smart metering system stores data (index, load curves), records information (interruption of supply, excess power), can be optionally configured, interrogated and operated remotely (bi-directional operation). Smart metering involves the introduction of smart meters capable of storing the information from measurements and the establishment of data transmission systems enabling the rapid and reliable flow of information contained in the meters between the users, the network operators and the suppliers.

SPOT MARKET

Short-term market, including short-term delivery operations.

SUPPLIER

Legal entity holding a licence for gas, or having registered at public authorities for electricity, which supplies at least one end consumer with electricity or gas, either from energy it produced itself or for energy it has bought.

TARIFFS FOR THE USE OF PUBLIC ELECTRICITY TRANSMISSION AND DISTRIBUTION SYSTEMS (TURPE)

In order to transport energy to its customers, a supplier pays a transport and distribution system operator for the use of its network and then passes on the cost to its customers. They apply identically to all customers. CRE sets these tariffs. They are calculated in a transparent and non-discriminatory manner, in order to cover all the costs borne by network operators insofar as the costs correspond to those of an efficient network operator.

TELEMETERING

Remote reading of the quantity of electricity injected into and withdrawn from the system, measured by meters. This metering method, often associated with meters that record load curves and not only indices, is primarily used by sites with a high level of consumption or by production sites.

TEN-YEAR NETWORK DEVELOPMENT PLAN (TYNDP)

The ten-year European plan for the development of the electricity transmission system published by ENTSO-E regarding the priority investment planning process for the electricity transmission infrastructure under the 3rd package. This plan must be published every two years but it is not committing.

THIRD PARTY ACCESS TO THE NETWORK

Right guaranteed to every user (eligible customer, distributor, producer) for the use of a transmission or distribution system against the payment for a right of access.

TRANSMISSION SYSTEM OPERATOR (TSO) OR DISTRIBUTION SYSTEM OPERATOR (DSO)

Company responsible for the design, construction, exploitation, maintenance and development of a transport or distribution system for electricity or natural gas, ensuring the performance of contracts concerning third-party access to these systems.

WHOLESALE MARKET

The wholesale market means the market where electricity and gas are traded (bought and sold) before being delivered over the network to end customers (individuals or companies).

ABBREVIATIONS AND ACRONYMS

- ACER:** Agency for the Cooperation of Energy Regulators
- ADEME:** Agence de l'environnement et de la maîtrise de l'énergie (French Agency for the Environment and Energy Management)
- AMF:** Autorité des marchés financiers (French Financial Markets Authority)
- AMM:** Automated Meter Management
- ANODE:** Association nationale des opérateurs détaillants en énergie (National Association of Retail Energy Operators)
- ARENH:** Accès régulé à l'électricité nucléaire historique (Regulated access to incumbent nuclear electricity)
- ATTM:** Accès des tiers aux terminaux méthaniers (access tariff to LNG terminals)
- ATRD:** Accès des tiers au réseau de distribution (distribution system tariff)
- ATRT:** Accès des tiers au réseau de transport (transmission system tariff)
- CACM:** Capacity Allocation and Congestion Management
- CAM:** Capacity Allocation Mechanisms
- CASC:** Capacity Allocation Service Company
- CDC:** Caisse des dépôts et consignations (Deposits and Consignments Fund)
- CEER:** Council of European Energy Regulators
- CMP:** Congestion Management Procedures
- CNIL:** Commission nationale de l'informatique et des libertés (French National Data Protection Commission)
- CoRDIs:** Comité de règlement des différends et des sanctions (Standing Committee for Dispute Settlement and Sanctions)
- CRE:** Commission de régulation de l'énergie (Energy Regulatory Commission)
- CSPE:** Contribution au service public de l'électricité (Contribution to the Public Electricity Service)
- CTA:** Contribution tarifaire d'acheminement (Routing Tariff Contribution)
- DG COMP:** Directorate General for Competition (European Commission)
- DG ENER:** Directorate General for Energy (European Commission)
- DGEC:** Directorate General for Energy and Climate
- DSO:** Distribution System Operator
- EC:** European Commission
- ENTSO:** European Network of Transmission System Operators
- ENTSO-E:** European Network of Transmission System Operators for electricity
- ENTSO-G:** European Network of Transmission System Operators for gas
- EUA:** European Union Allowance (European quota for CO₂ emissions)
- FTE:** Full-time equivalent
- GTC:** Groupe de travail Consommateurs (Consumer Working Group)
- GTE:** Groupe de travail Électricité (Electricity Working Group)

- GTG:** Groupe de travail Gaz (Gas Working Group)
- HVA:** High voltage A domain
- HVB:** High voltage B domain
- IS:** Information system
- ITO:** Independent Transmission Operator
- LV:** Low voltage
- NBP:** National Balancing Point (gas exchange point of the United Kingdom)
- NOME:** Nouvelle organisation du marché de l'électricité (New organisation of the electricity market)
- PEG:** Point d'échange de gaz (Gas Exchange Point)
- REMIT:** Regulation on Wholesale Energy Market Integrity and Transparency
- TPN:** Tarif de première nécessité (Social tariff for electricity)
- TSO:** Transmission System Operator
- TSS:** Tarif spécial de solidarité (Special solidarity tariff for gas)
- TTF:** Title Transfer Facility (gas exchange point for the Netherlands)
- TURPE:** Tarif d'utilisation des réseaux publics d'électricité (Tariff for the use of public electricity networks)
- TYNDP:** Ten-Year Network Development Plan
- WFTE:** Worked full-time equivalent

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