AGING

TO MEET ENERGY CHALLENGES





CONTENTS

MESSAGE FROM THE PRESIDENT MESSAGE FROM THE BOARD						
DECISIONS AND RULINGS OVERVIEW OF ENERGY IN FRANCE						
REGULATING HOW CRE WORKS: INDEPENDENCE AND EXPERTISE	18	ADAPTING NETWORKS: PERFORMANCE AND QUALITY OF SERVICE TO SUPPORT THE ENERGY TRANSITION	6			
CHAPTER 2 SUPPORTING		CHAPTER 5				
ENERGY MARKETS IN THE FACE OF COVID-19	34					
		INTEGRATING THE ZNIS IN THE ENERGY TRANSITION: THE DIRECTION OF CRE	7			
CHAPTER 3						

ANNEX:

INNOVATING
GREATER EFFORTS
TOWARDS INNOVATION
AND ENERGY TRANSITION

CRE REPORTS 86

48

MESSAGE FROM THE GHAIRMAN

"MAINTAINING THE BALANCE **OF A SYSTEM IN CRISIS WHILE PREPARING FOR THE FUTURE WAS** THE DRIVING FORCE **BEHIND CRE'S WORK** IN 2020."

Some years are difficult to assess, as they seem to extend beyond the calendar dates. 2020 was supposed to be the year of the 20th anniversary celebration of the Energy Regulatory Commission (CRE) and the opening of the energy markets. It was the year of the health crisis and the difficult decisions in the face of a disease whose effects have atrophied and confined a changing world. At the time of writing, France is beginning to breathe again, but, as in a never-ending day, the tragic parenthesis that opened in the spring of 2020 is still not closed.

However, while our daily lives were disrupted, life went on, the production of goods and services went on, transport went on, public services went on, health care went on, school went on, "year in and year out. And to keep these vital activities going, the energy system had to hold. It did. And the regulator responsible for the smooth functioning of energy markets was there to support it.

This activity report is above all an opportunity for me to pay tribute to the dedication and professionalism of CRE's personnel, who have reinvented their working methods to ensure the continuity and rigour of their tasks, and have thus enabled the CRE Board to discuss 333 decisions in 2020, 31 more than in 2019! Continuing to regulate to maintain the balance of a system in crisis while preparing for the future has been the driving force behind CRE's actions in 2020.

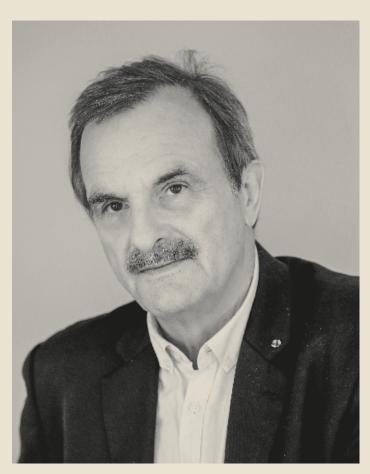
I would also like to pay tribute to all the players in the energy system, in production, transmission, distribution, storage, energy supply and services, who have kept the system functioning, despite an unprecedented shock to both supply and demand and the cascading consequences on energy consumption, electricity production and gas supply. One of the most visible consequences has been the

disruption of nuclear plant maintenance. Similarly, the deployment of certain new renewable energy projects or network reinforcement projects had to be delayed. Finally, the risk of unpaid energy bills due to the economic difficulties of companies and households cannot yet be fully assessed as long as the crisis persists. Faced with this situation, CRE has sought to support the players and consolidate the applicable regulatory frameworks, despite the disputes, to ensure a safety net in a market whose volatility has increased significantly in 2020, while granting flexibility to energy suppliers, within the limits of the possibilities offered by the legislative texts.

Life went on, and so did the activities of CRE. And if the world seems to have taken a break for more than a year, the future cannot be left out. The carbon neutrality required by 2050, set by public policy, is the horizon for CRE's action and consumer protection in the short, medium and long term is its compass.

Cultivating the future means adapting our energy system to the major upheavals of the energy transition in mainland France and in the off-grid zones. This transition must combine efficiency - with controlled costs - and solidarity - thanks to tariff equalisation and a fair contribution from all.

The massive development of renewable production and the decentralisation of the energy system are strengthening the role of the transmission and distribution networks, both gas and electricity. In 2020, CRE worked on the development of new electricity network usage tariffs (TURPE) to enable operators to modernise their infrastructures, while optimising investment decisions and thus controlling the final cost for users. TURPE 6, adopted in January 2021 and applicable on 1 August 2021 for four years, will enable RTE and Enedis to invest



considerable sums – 100 billion euros in total over 15 years – and to support the development of renewable energies and electric mobility, while mobilising all the available flexibility levers, such as production modulation, storage, consumption curtailment, aggregation and European interconnections. In the field of gas, the right to inject biomethane allows the development of a virtuous sector and the efficient adaptation of gas infrastructures to the objectives of the Multiannual Energy Plan (PPE).

Cultivating the future, is to build the European energy market by applying its three guiding principles: integration, solidarity and competition for the benefit of consumers.

In terms of competition, 2020 saw the continued development of market offers in France, with the end of regulated electricity sales tariffs (TRVE) for companies with more than ten employees in application of European law and the Energy and Climate Law. This development is driven by green offers, which are attractive to consumers, but whose role in the energy transition raises questions of transparency and precision for which CRE is requesting clarification. In addition, a reform of regulated access to historical nuclear electricity (ARENH) is now inevitable bas it is not functioning correctly.

The integration of European markets took a new step forward in 2020 with the implementation of the Clean Energy Package.
CRE is actively contributing to the implementation work, within ACER or CEER, in order to optimise the operation of interconnections and exchanges between countries to

reduce the costs of the electricity system, better integrate renewable energies and strengthen the security of supply for all.

Cultivating the future means allowing all players to innovate. CRE's role is to support these innovations with an appropriate regulatory context and to ensure that they develop under optimal technical, economic and financial conditions for the community. To do this, CRE has supported the implementation of a system called the "regulatory sandbox", which allows players to derogate from the regulations to experiment with new projects. Nine innovative projects were selected in 2020. The work of CRE's

Foresight Committee, whose third season was launched in 2020, also makes it possible to question changes in the regulations, share major trends, and anticipate and assess structural changes related to the energy transition.

The off-grid zones are the laboratories of this energy transition. Although their energy mix is still very carbon intensive, they are at the forefront of new solutions for integrating intermittent energy into small-scale networks. CRE is working alongside local authorities to find solutions that combine a reduction in dependence on fossil fuels, security of electricity systems and control of public expenditure.

Finally, cultivating the future means building relationships of trust with all players, and in particular with political decision-makers, at French and European level, in order to inform their choices. In a world where the credibility of public statements is called into question, where reality is diluted by constant commentary on current events, and where expertise is measured by television ratings and its resonance on social networks, CRE's impartiality, independence and transparency make an objective contribution to the public debate on energy. In 2020, the National Assembly or the Senate took evidence on eight occasions from CRE on the impact of the Covid crisis, the economic outlook for the energy sector and the results of the opening up of the markets. CRE maintains regular exchanges with European institutions, both with MEPs and with the European Commission departments responsible for energy issues (DG ENER and DG COMP). This dialogue goes beyond French and European borders for exchanges at the international level, in multilateral cooperation bodies such as RegulaE.Fr (Francophone Energy Regulators Network), MedReg (Mediterranean Regulators) or ERRA (Energy Regulators Regional Association), and in a framework of twinning, in order to share the French model and draw inspiration from good practices in other countries. This strong credibility has resulted in the acquisition of new powers for CRE in 2020, in particular

to settle the CSPE dispute or to review the historical photovoltaic contracts, whose excessive remuneration weighs on public finances.

As an independent administrative authority, CRE must report on its actions. Its annual activity report is one of the manifestations of the principle of transparency that it strives to uphold. Being transparent does not mean being self-effacing. CRE will continue to share its analyses to shed light on the responses to future energy challenges. In the meantime, let us hope that we can quickly enjoy the present again and, above all, rediscover the pleasure of physical meetings. For of all energy sources, human heat is the most efficient and least expensive. And yet, today, it is the one we lack most.

JEAN-FRANÇOIS CARENCO,

President of the Energy Regulatory Commission

THE ROLE OF THE CEC IS THEREFORE NOT ONLY TO BE A TECHNICAL BODY WITH RECOGNISED QUALITIES IN THE FIELD, BUT ALSO TO BE A COG IN THE WHEEL OF THE CONFIDENCE OF THE PLAYERS AND CITIZENS IN THE ENERGY SYSTEM.



From left to right: Ivan Faucheux, Christine Chauvet, Jean-Laurent Lastelle, Catherine Edwige and Jean-François Carenco

While 2020 was a very special year for the energy sector and consumers, above all it demonstrated the resilience of the energy system. This resilience is due not only to the performance of its operators, to a market that has continued to function, but also to a regulation that continues to build on its values of independence, impartiality and transparency.

Transparency is all the more necessary because the health crisis has given rise to theories and attitudes of extreme distrust of institutions. If this was already a strong demand from civil company players, it is all the more important in the energy sector because its organisation is technically and economically complex. The issue of ARENH, and the conflicting relations between EDF and alternative suppliers, is a perfect example of this complexity, without the impact on consumers being obvious. The many reports published by CRE in 2020, ranging from the analysis of the opening up of the markets to compliance with the European 70% criterion, have been the subject of constant attention as to their readability, on the one hand, and their accuracy, on the other.

The Board has also been keen to preserve the stability of its decision-making during this troubled period. Stability does not mean immobility, but it is also necessary to ensure the confidence of energy players in the regulation regime that concerns them. This stability makes all the more sense if it is accompanied by a capacity to anticipate and experiment with new modes of regulation. Firstly, the regulatory sandbox window was an opportunity to open up regulation to experimentation. At the end of 2020, out of 41 applications submitted, an initial analysis phase had identified 19 of these applications (concerning 20 projects) that met the eligibility criteria.

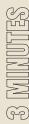
Following this in-depth analysis, CRE has decided to grant exemptions to nine of the ten projects under its jurisdiction in March 2021.

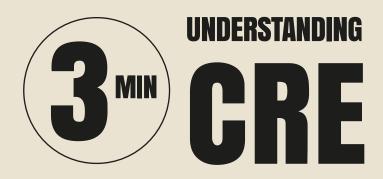
The ability to anticipate and adapt also requires international cooperation: whether in the European context of ACER, in the more

international context of MedReg, ERRA, RegulaE.Fr or the OECD, the Board is resolutely committed to ensuring that these cooperative ventures are not only a means of strengthening CRE's skills, but also and above all of exchanging information, identifying best practices and anticipating changes in our energy system. Regulatory changes must not be imposed, but anticipated with reason and method. Finally, this capacity for anticipation is also the result of the work of the Foresight Committee, which is a place for open dialogue on subjects on which there is no consensus, but which require rational debate and lead the CRE Board to think about regulation in the future.

The impartiality and independence of CRE are also factors of confidence for the players in a period that may lead to fundamental changes for the two pillars of our energy system: nuclear and gas. CRE has invested heavily in the development of biogas and the establishment of zones allowing the connection of new methanation units, with a potential that goes well beyond the objectives of the PPE. CRE has also been very much in demand for the analysis of the costs of the historic nuclear power plant in the context of the EDF reform. All this work requires the ability to have an impartial technical viewpoint and to develop analyses in the midst of massive financial or structural stakes and interests. Independence then allows these analyses to be transformed into operational conclusions.

The role of CRE is therefore not only to be a technical body with recognised qualities in the field, but also to be a cog in the wheel of the confidence of the players and citizens in the energy system. At a time when the health crisis has increased mistrust of experts, the Board has sought throughout 2020 to continue to uphold the values of transparency, independence and impartiality so that its decisions are not only technically sound, but also meaningful and trustworthy for everyone.





OUR PRINCIPLES

INDEPENDENCE

vis-à-vis the energy industry and the government for the implementation of our mission as defined by the law.

TRANSPARENCY

the work and procedures for preparing decisions and opinions.

IMPARTIALITY

ensure neutrality, fairness and objectivity of decisions and opinions.

OUR WORK

PARTICIPATING

in the construction of the European internal energy market.

IMPLEMENTING

support mechanisms for renewable energy by assessing procurement.

REGULATING

gas and electricity networks, which are monopolies: and ensuring their quality of service.

ENSURING

the proper information of consumers.

CONTRIBUTING

to the smooth functioning of the electricity and natural gas markets for the benefit of the end consumer.

OBJECTIVES

GUARANTING

the independence of network operators.

ESTABLISHING

harmonised rules for the operation of networks and markets to ensure the free movement of energy between the countries of the EU Member States.

ENSURING

competition between energy suppliers for the benefit of consumers.

WATCHING

to ensure that consumers receive the best service and pay the right price.

STATUS

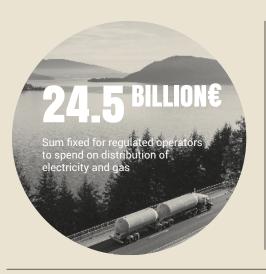
INDEPENDENT ADMINISTRATIVE AUTHORITY



See the 2019-2020 report on compliance with the Electricity and Natural Gas System Operators' Codes of Conduct and Independence.

See the general presentation of CRE and its principles on www.cre.fr/La-CRE/.

See the legal activity report.



21,345,000 [€]

BUDGE

The sums necessary for the operation of CRE are proposed by the Commission to the Minister of Finance to be included in the Finance Law. The appropriations allocated are entered in the general government budget. CRE is subject to audit by the Court of Auditors.

156

AGENTS (non-Board members) as of 31 December 2020

333

DECISIONS in 2020

57 COMMITTEE

MEETINGS

20
PUBLIC CONSULTATIONS

7

CoRDIS DECISIONS 16

Cordis Referrals

MARKET PLAYERS SURVEYED BY THE BOARD SUBMISSIONS TO PARLIAMEN

TO PARLIAMENT BY THE PRESIDENT, THE DIRECTOR GENERAL AND CRE DEPARTMENTS

2 INDEPENDENT BODIES

THE BOARD

Five members, with no more than three of the same gender, appointed for their legal, financial and technical qualifications, define the major orientations and adopt decisions and opinions, drawing on the expertise of the directorates, which are placed under the authority of the President and the Director General.

THE CORDIS

The Dispute Settlement and Sanctions Committee is composed of four full members and four alternate members, with as many members of the Council of State as of the Court of Cassation.

They are responsible for settling disputes relating to access to and use of the public electricity and gas networks between operators and users, and for sanctioning breaches of the Energy Code.



DEGISIONS

AND LITIGATION RULINGS 2020



02 DEC.

COUNCIL OF STATE Total Direct Energie

Withdrawal of appeals against:

- CRE Decision of 26 October 2017 on the access component of the public natural gas distribution networks for the management of customers under a single contract from 1 January 2018;
- CRE Decision of 26 October 2017 amending CRE Decisions of 25 April 2013, 22 May 2014 and 10 March 2016 on the equalised tariffs for the use of public natural gas distribution networks:
- CRE decision of 18 January 2018 on the component of access to the public natural gas distribution networks for customer management under a single contract.

Legend:

CRE CORDIS 27 FEB,

COURT OF APPEAL OF PARIS Enedis vs Joul

Partial dismissal against the decision of the CoRDiS of 13 July 2018 applying the validation law and finding a breach by the company Enedis of its obligation of non-discriminatory treatment.

17 APRIL

COUNCIL OF STATE Afieg and Anode

Dismissal of the appeal against CRE decision of 26 March 2020 concerning ARENH.

09 JULY

ADMINISTRATIVE COURT OF APPEAL OF PARIS Sasu Stef Transport Alpes, Sasu Stef Logistique Givors, Sasu Stef Transport Langres, Bellevue Distribution, Syndicate of Co-Owners pf the Aix Ouest Shopping Centre

Dismissal of appeals against the decisions of the Paris Administrative Court rejecting the appeals for reimbursement by the CSPE Direction of guarantees of origin.

22 OFT.

COURT OF APPEAL OF PARIS Total Direct Energie and ENI vs GRDF

Withdrawal of the appeal against the CoRDIS decision of 18 June 2018 specifying the financial conditions for customer management services to customers in single contracts.

OS NOV

COUNCIL OF STATE
Total Direct Energie

Withdrawal of TDE's appeal against the sanction imposed by CoRDiS on 15 July 2019 on GRDF.

22 DEC.

COUNCIL OF STATE Total Direct Energie

Withdrawal of the appeal against CRE's decision of 5 December 2018 approving the model contract for access to GRDF's public distribution networks for customers under a single contract.

23 JAN.

COURT OF APPEAL OF PARIS Total Direct Energie and ENI vs GRDF

Partial dismissal of the appeal against the CoRDis decision of 18 June 2018 specifying the financial terms and conditions of customer management services under a single contract. Stay of proceedings on the request for a penalty payment.

20 March

COUNCIL OF STATE Teréga

Dismissal of the appeal against CRE Decision 2018-069 of 22 March 2018 on the introduction of a storage tariff term in the tariff for use of the GRTgaz and TIGF transmission networks.

25 JUNE

COURT OF APPEAL OF PARIS ENI vs GRDF

Refusal of a constitutional appeal in the context of an appeal against the CoRDIS decision of 1 July 2019 on the remuneration of customer management services performed on behalf of GRDF.

28 SEDT

COUNCIL OF STATE Enerplan

Dismissal of the appeal against the CRE Decision of 7 June 2018 deciding on the pricing of self-consumption.

19 NOV

COURT OF APPEAL OF PARIS

Pays de Montmédy Solaire 7 vs RTE; Éoliennes des Tulipes vs RTE

Annulment of the CoRDiS decision of 29 October 2019 on the S3REnR. Dismissal of the appeal against the CoRDiS decision of 23 January 2020 on the S3REnRs and substitution of the reasons for the Decision.

31 DEC.

COUNCIL OF STATE Eni Gas & Power France

Annulment of the CRE Decision of 26 October 2017 on the component of access to the public electricity distribution networks for the management of customers under a single contract in the HTA and LV voltage domains as of 1 January 2018. Dismissal of the appeals against:

- the CRE Decision of 26 October 2017 modifying the CRE Decision of 17 November 2016 deciding on the tariffs for the use of public electricity networks in the MV and LV voltage ranges;
- CRE Decision of 18 January 2018 on the component of access to the public electricity distribution networks for the management of customers under a single contract in the MV and LV voltage ranges.



OF ENERGY IN FRANCE

ENERGY MIX

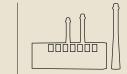
Electricity generation in 2020



67.1% NUCLEAR 335.4 TWh



13% **HYDRO** $65.1^{\,\text{TWh}}$



7.5% FOSSIL FUELS 37.6 TWh



7.9% WIND POWER 39.7^{TWh}



2.5% SOLAR 12.6^{TWh}



20/0 **BIOENERGIES** 9.6^{TWh}



61,370 MW **NUCLEAR**

18,934.7 MW **FOSSIL FUEL**

10,386.9 MW

SOLAR

25,731.8 MW

WIND POWER

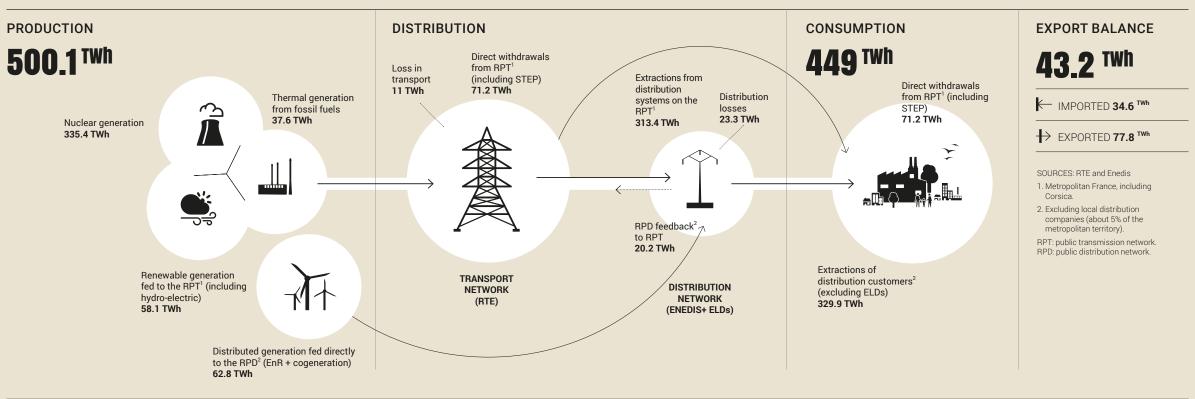
SOURCE: RTE 2020 electricity balance sheet

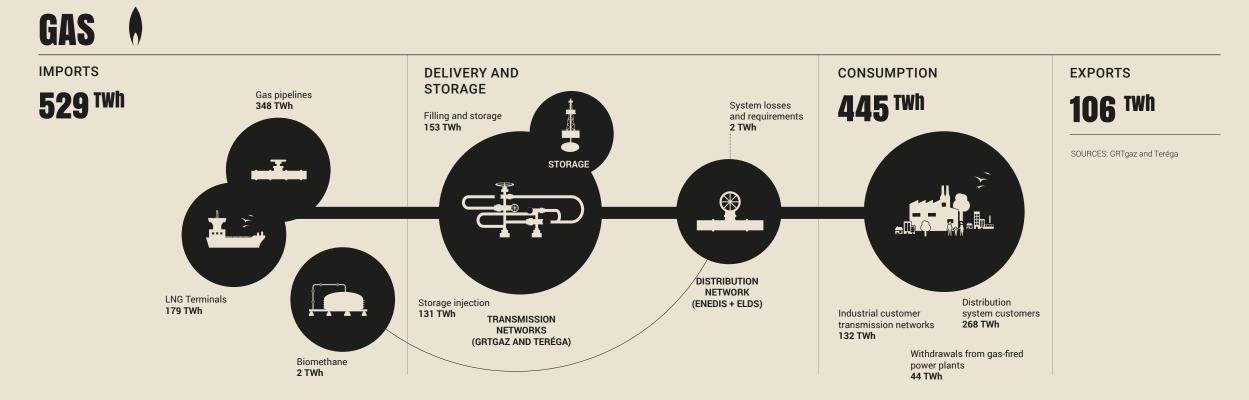
HYDRO

17.616.1 MW

BIOENERGIES

ELECTRICITY †



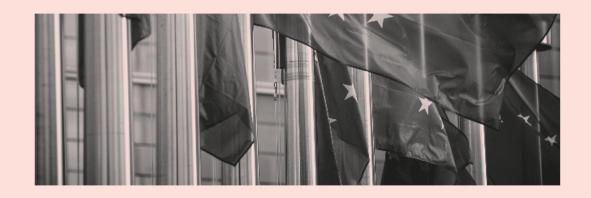


THE FUNCTIONING OF CRE: INDEPENDENCE AND EXPERTISE

CRE is the independent administrative authority responsible for the proper functioning of the electricity and gas markets, which have been opened to competition. It relies on two independent bodies: the Board, whose missions are constantly being strengthened, and the Dispute Settlement and Sanctions Committee (CoRDS), whose activity has increased since its creation in 2006. Independence does not mean isolation, and CRE maintains a close dialogue with the public authorities responsible for energy policy and with the European institutions.

Its expertise, dynamism and openness have enabled it to adapt its operations to support the energy sector in 2020, in a context of health and economic crisis.





THE BOARD AND THE DEPARTMENTS

Since its creation on 24 March 2000, CRE has been responsible for ensuring that the electricity and gas markets in France function properly, for the benefit of end consumers and in compliance with energy policy objectives.

Its five-member Board, which includes the President, makes its decisions based on the expertise of CRE's departments. The members of the Board are appointed for their specific skills in relation to the energy sector for a non-renewable six-year term.

Find out more about CRE's management committee.

CORDIS

CoRDiS has the CRE departments to help with the work entrusted to it (Article L.133-5 of the Energy Code).

PRESIDENT
Thierry Tuot

MEMBERS

Henriette Chaubon Henri de Larosière de Champfeu Hélène Vestur

ALTERNATE MEMBERS

Marie-Christine Daubigney Nicolas Maziau Laurent-Xavier Simonel

CABINET

GENERAL SECRETARIAT

Raphaëlle Epstein-Richard

COMMUNICATION AND INSTITUTIONAL RELATIONS DEPARTMENT

Olivia Fritzinger

- Information and Press Unit
- Digital Unit
- Institutional Relations Unit

PROGRAMME DEPARTMENT CSPE DEPARTMENT

François-Xavier Bieuville

- Reimbursement device
- Mass Litigation
 Management

HUMAN RESOURCES DEPARTMENT

e Sophie Pataridzé

- Career management
- Social dialogue
- Continuing Education
- Payroll
- Internal communication

I RESOURCE RCES DEPARTMENT

- Site management
- IT and risk
- Finance

BOARD OF CRE

PRESIDENT

Jean-Francois Carenco

MEMBERS

Christine Chauvet
Catherine Edwige
Ivan Faucheux
Jean-Laurent Lastelle

ETHICS

Gilles Clavreul

DEPARTMENTAL MANAGEMENT

Foresight and Innovation Department

LEGAL AFFAIRS DEPARTMENT

Alexandra Bonhomme

- Litigation
- Access to markets
- Networks and infrastructures
- Energy transition
- Secretariat of the Commission

NETWORK MANAGEMENT

Nicolas Deloge

- Coupling and balancing
- European interconnections and networks
- Electricity transmission
- Upstream gas infrastructures
- Connection and smart grids
- Distribution

MARKET DEVELOPMENT AND ENERGY TRANSITION DEPARTMENT

Dominique Jamme

Emeline Spire

- Retail markets
- Pricing and competition
- Renewable energy and consumer support schemes

WHOLESALE MARKET SURVEILLANCE DEPARTMENT

Kseniya Khromava

- Market analysis and monitoring tools
- Follow-up and in-depth investigations

ECONOMIC AND FINANCIAL AFFAIRS DEPARTMENT

Laurent Ménard

- Financial analysis
- Audit of operators' costs
- Cost of capital appraisal

AFFAIRS AND COOPERATION DEPARTMENT

EUROPEAN AND

INTERNATIONAL

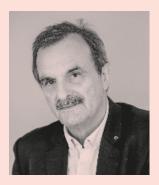
Claire Hellich-Praquin

- Europe
- International
- Cooperation

GUAPTER 1

22

BOARD MEMBERS



JEAN-FRANÇOIS CARENCO , President of CRE

Appointed 16 February 2017 by the President of the Republic.

A former student at ENA (class of 1979, Michel de l'Hospital), Jean-François Carenco began his career at the administrative court of Marseille. He was then seconded as Director General of the Montpellier district from 1985 to 1988, before becoming Deputy Secretary General for Economic Affairs (1988-1990), then Secretary General of New Caledonia (1990-1991). In 1991, he was appointed sub-prefect and secretary general of the Yvelines prefecture (1991-1996). Appointed Prefect of Saint-Pierre and Miguelon in 1996, he successively held the positions of Prefect of Tarnet-Garonne (1997-1999), Prefect of the Guadeloupe region (1999-2002) and Prefect of Haute-Savoie (2002-2004). He then headed Jean-Louis Borloo's cabinet at the Ministry

of Employment, Labour, Social Cohesion and Housing (from June 2005 to July 2006), before being appointed Prefect of the Haute-Normandie region, Prefect of Seine-Maritime (from July 2006 to May 2007), then Prefect of the Midi-Pvrénées region, Prefect of Haute-Garonne (2007-2008). In 2008, he became director of the cabinet of Jean-Louis Borloo, Minister of State for Ecology, Energy, Sustainable Development and Town and Country Planning. In 2010, he was appointed Prefect of the Rhône-Alpes region, Prefect of the Rhône At the same time, in October 2013, he was put in charge of the Pack Second Chance mission to combat delinguency by the Minister Delegate for the City. He was appointed Prefect of the Île-de-France region AND Prefect of Paris in 2015.



CHRISTINE CHAUVET , member of the CRE Board

Appointed on 6 February 2015 by the President of the Senate.

A graduate of the University of Nanterre, Christine Chauvet began her career with the industrial group Unilever, where she developed communications.

She continued her career as a company director in the import-export sector. In 1992, she became president of the Women Entrepreneurs
Association. In 1994, she became a member of the Île-de-France
Regional Economic and Social
Council, which she chaired from 2002 to 2008.

In May 1995, she was appointed Secretary of State for Foreign Trade in Alain Juppé's first government, a position she held until November 1995. She then chaired the French Foreign Trade Centre at the end of the 1990s, then the supervisory board of the Compagnie Nationale du Rhône from 2002 to 2012. From 2013 to 2014, she headed the development of renewable energy at Gaz réseau distribution France



CATHERINE EDWIGE , member of the CRE Board

Appointed on 7 February 2017 on the proposal of the Minister for Overseas Territories.

An engineer and graduate of INSA in Lyon, Catherine Edwige has made a career in the energy distribution sector. She started in 1983 in the field of generation at EDF, in Martinique, where she held several technical and management positions, then moved to distribution (DEGS) in Normandy. In 1998, she was appointed head of the generation department of EDF Guadeloupe.

From 2000 to 2004, she was Director of the GDF-EDF service centre in Cannes. Then, in 2004, she became director of the Mediterranean region of the same group.

From 2008, she was a member of GRDF's Executive Committee and held the position of Business Process Director until 2011. She was promoted to Director of the Rhône-Alpes, Burgundy and Mediterranean regions of GRDF (2011-2014).



JEAN-LAURENT LASTELLE , member of the CRE Board

Appointed on 16 June 2017 by the Speaker of the National Assembly.

A graduate of Sciences Po Paris and an ENA alumnus (Republic class, 2007), Jean-Laurent Lastelle began his career as head of the bioethics office at the Ministry of Health, where he was then tasked with implementing an internal control plan at the Directorate-General for Health (2011).

He then became chief of personnel to the director of banking services at the Caisse des dépôts et consignations from 2011 to 2013.

In 2013, he joined the third chamber of the Court of Auditors (teaching, education, culture and communication) as external rapporteur.

He then served as an adviser in charge of finance, state reform, education and culture (2013-2017), and then as deputy chief of personnel (2017) in the office of National Assembly President Claude Bartolone.



IVAN FAUCHEUX , member of the CRE Board

Appointed on 5 August 2019 on the proposal of the Minister of Ecological Transition and Solidarity.

Engineer General of Mines, graduate of the École Normale Supérieure and a mathematics graduate, Ivan Faucheux began his career in 2000 at the Prefecture of the Île-de-France Region as a project manager, responsible for budgetary monitoring of the State-Region plan contract, environmental policies and investment support.

In 2002, he joined the Ministry of Economy, Finance and Industry as head of the microelectronics office.

In 2006, in the same ministry, he was appointed deputy director of the transport equipment, energy and eco-industries sectors in the Directorate General for Competition, Industry and Services. He then joined the Prime Minister's Office at the General Commission for Investment, as director of the Energy and Circular Economy programme (2010-2018). In 2018, he joined the General Council for the Economy, giving expert and advice to the Government.

HUMAN RESOURCES

Since 1 January 2017, CRE has been attached to Programme 217 "Conducting and steering policies for ecology, sustainable development and mobility." The Ministry of Ecological Transition is responsible for steering it, taking into account the specific nature of CRE's work and the imperative of preserving its independence, in accordance with European Directives 2019/944 and 2009/73 of 13 July 2009 and Article L.133-5 of the Energy Code. Thus, CRE's jobs and operating appropriations are covered by Action 27 "Regulation and control of energy markets", an operational programme budget and an operational unit that reflect the principle of independence of the structure.

In 2020, the employment ceiling was increased to 154 FTEs (full-time equivalent), with CRE benefiting from an additional post to carry out its work. In addition, four employees were temporarily recruited to handle the large-scale litigation concerning

the CSPE department. As of 31 December 2020, CRE had 156 employees (excluding members of the Board), including 73 women and 83 men.

In order to cope with the expansion of its work, CRE is continuing its efforts to recruit the best technical and economic skills in the energy sector and to develop its forecasting capabilities. In 2020, for 40 open positions, it received more than 2000 applications. The health crisis has not slowed the pace of recruitment, nor has it lowered the very high level of requirements for the positions being offered. Its employees, contractual agents under public law (89% of the workforce), are mainly recruited from companies. Their average age is 34.7 years.

4 YEARS

AVERAGE YEAR OF SERVICE of personnel (not Board members)

9 PERS.

MOVING TO OTHER IAAS or to the public sector

13

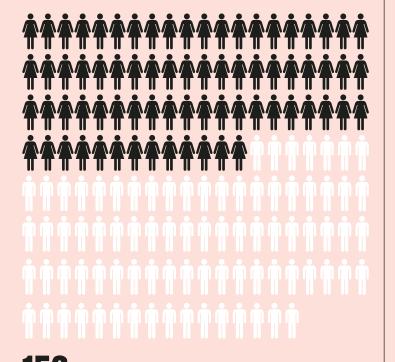
INTERNAL JOB CHANGES 7 of which were promotions

2

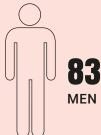
SECONDMENTS to European bodies

1

POSITION for a European official



156
EMPLOYEES
(EXCLUDING MEMBERS OF THE BOARD) AS OF 31 DECEMBER 2020





73

WOMEN

34.7

AVERAGE AGE

40

POSITIONS CREATED

2000

APPLICATIONS RECEIVED



CORDIS, **DISPUTE RESOLUTION** AND SANCTIONS COMMITTEE

Like the other regulatory authorities working in the economic field, CRE is endowed by law with the power to impose administrative sanctions, which is an essential complement to effective regulation.

Modified procedures in 2020

The CoRDiS, created by Law 2006-1537 of 7 December 2006, is a body independent of the CRE Board. It settles technical and financial disputes between network operators and users concerning of 25 October 2011 on access to and use of the public electricity and natural gas networks. It thus enables CRE to guarantee transparent and non-discriminatory access to the electricity and natural gas networks, which

is essential for the opening up of competition.

It also has the power to sanction breaches of the Energy Code and, since 2013, breaches of the REMIT Regulation the integrity and transparency of wholesale markets.

It has four members: two from the Council of State and two from the Court of Cassation. In addition.

since 2013, four alternate members are appointed according to the same rules as the full members. Like the members of CRE. the members of CoRDiS and their alternates are appointed for a non-renewable term of six years.

The Order of 22 July 2020 2020-891, issued in application of the Energy and Climate Law of 8 November 2019, clarifies the procedures followed at CoRDiS, in particular with regard to the conduct of adversarial exchanges, the role of the designated member responsible for investigating sanction procedures, and the methods of publication of these sanctions with regard to the rules on secrets protected by law and the protection of personal data. It also allows CRE to lodge observations at the Court of Cassation or to appeal against a decision of the Paris Court of Appeal.

16 referrals and 7 decisions, including one sanction, in 2020

In 2020, the activity of the CoRDiS was marked by a slowdown in the number of Board decisions due to the pandemic, several withdrawals, as well as by more referrals at the end of the year.

In line with its decisions in 2019, CoRDiS settled disputes relating to the payment of the share of shared facilities under the S3REnR1 It also issued decisions on the conditions of access to the electricity distribution network, including a request for precautionary measures², and on the unavailability of this network³. The monthly legal monitor L'Énergie du

droit and CRE's legal activity report for 2019 provide more information on CoRDiS decisions.

→ Visit the CRE blog.

→ See the legal activity report.



- 1. Decision 09-38-19, Éoliennes des Tulipes vs RTE of 23 January 2020; Decision 11-38-19, Poste de Cressy vs RTE of 17 February 2020; Decision 02-38-20, Web Grid vs RTE of 22
- 2. Decisions 04-38-20 and 05-38-20, Mr. and Mrs. G. vs Enedis of 6 July and 22 October 2020.
- 3. Decision 03-38-20. Pevrelevade Gentioux wind farm vs Enedis of 22 July 2020



REFERRALS and 7 decisions. including one sanction, in 2020

28

THE INSTITUTIONAL LIFE OF CRE

As an expert authority on the energy markets in France and Europe, CRE contributes to the legislative work that guides French energy policy. To promote the integration of European markets, it cooperates regularly with the European authorities. It also promotes the regulatory culture in neighbouring countries of the European Union and the French-speaking world by sharing best practices.

Active dialogue with **Parliament**

CRE attaches particular importance to dialogue with members of parliament, who regularly call on it when examining texts, for information missions and commissions of inquiry related to energy.

In 2020, CRE attended eight parliamentary hearings. These allow parliamentarians to benefit from CRE's expertise in the context of their work. At the beginning of 2020, CRE was interviewed by the Senate's Energy Study Group for discussions on current events and issues in the sector.

On two occasions in the spring, it was heard by the working groups of the National Assembly and the Senate on the consequences of the Covid-19 health crisis on the French energy sector. It provided parliamentarians with an overview of the sector and explained the exceptional measures it took during this period (deferral of supplier invoices by network operators, derogatory measures relating to ARENH).

In July 2020, the Economic Affairs Committee of the National Assembly heard the President of CRE on the 2019 activity report. On this occasion, an assessment of the French energy system twenty years after the opening of the markets and the establishment of CRE was made.

See the latest hearings (spring hearing on the health crisis in the Senate and spring hearing on the health crisis in the National Assembly, July 2020 on the 2019 activity report).

CRE also contributes to the examination of the State budget during the drafting of the Finance Laws. In 2020, it was heard four times by the National Assembly and the Senate on the conduct and management of policies for ecology, development and sustainable mobility, as well as on the economic and budgetary outlook for the energy sector. During these hearings, it contributed its expertise on more specific subjects, such as proposals in favour of flexibilities and storage, the ARENH mechanism, the development of the hydrogen sector following the announcement of the national recovery plan, and the evaluation of the forecast amount of public service energy charges.

CRE also informs parliamentarians of its work on the transposition of European texts at the national level. In 2020, it was heard on the transposition of the European Clean Energy Package. Its participation in events organised with parliamentarians also enables it to contribute to the democratic debate. Finally, it submits its publications and decisions to Parliament and presents them to the relevant committee.

Successful collaboration with other IAAs

CRE regularly collaborates with the other independent administrative authorities (IAA). The 2017 law provides for "pooling measures with other independent administrative authorities or public authorities, or with those of a Ministry". Thus, the IAAs share their skills and practices: numerous working groups are regularly convened and these have included HR, IS, ethics and logistics.

In addition, the law provides for CRE and the Competition Authority (ADLC) to work together on abuses of dominant positions and practices that impede free competition in the electricity and gas sectors. CRE and the ADLC are also often asked to give their opinion on the same draft decrees, and the Energy and Climate Law provides for their collaboration to be strengthened in the context of the drafting of reports on the evaluation of the electricity sales tariff system.

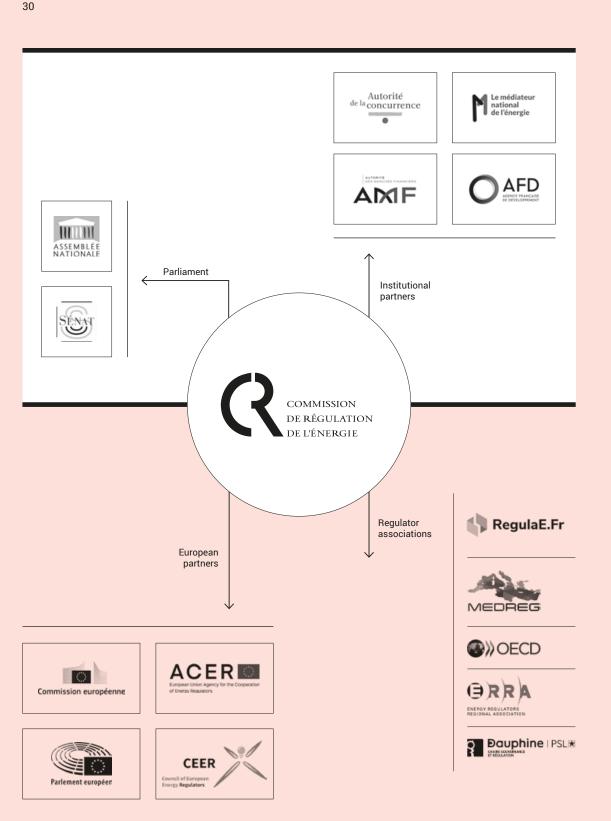
in the context of its duty to monitor the wholesale markets. CRE regularly shares its information and expertise with the Financial Markets

Authority (AMF). The REMIT regulation on the integrity and transparency of the wholesale energy market provides that the national regulatory authorities and the competent financial authorities of the Member States "cooperate to ensure a coordinated approach".

Regulating by adaption to the exceptional health context

In 2020, the CRE Board ensured complete continuity of its activity by holding 57 committee meetings and adopting 333 decisions (31 more than in 2019). The Board and CoRDiS meetings operated remotely, using secure digital tools.

CRE's departments have adapted to the new working conditions so as not to slow down the pace of the CRE Board's decisions. The investment efforts in IT mobility tools made by CRE in 2018 and 2019 have enabled a rapid and effective transition to remote working at CRE.



CRE and the National Energy Mediator (MNE) are very involved in informing consumers affected by the gradual disappearance of regulated gas tariffs and the restriction of eligibility for regulated electricity sales tariffs provided for by the Energy and Climate Law. Together they lead a group of suppliers and consumer associations, whose work has resulted in an educational guide.

See the educational guide for business consumers.

Finally, the IAAs share their practices and expertise through other initiatives. In May 2020, CRE and seven regulators from other sectors published a memo entitled "The Paris Agreements and the climate emergency: regulatory issues". In it, they present their action levers for the ecological and energy transition, and express their common wish to participate more actively in informing the general public.

Finally, work with the other IAAs focuses on cross-cutting issues. In 2020, Dominique Jamme, Director General of Services at CRE, chaired the Regulators' Club, which brings together the IAAs and the Governance and Regulation Chair at Paris-Dauphine University. The club members discussed the regulation of platforms and the role of regulators in reviving the economy.

A player committed to European and international cooperation

Since its creation, CRE has been involved in the European energy regulators' cooperation bodies: the Council of European Energy Regulators (CEER), a non-profit association created in 2000, and the Agency for the Cooperation of Energy Regulators (ACER), a decentralised EU agency created in 2011. It actively participates in the work of these bodies, as well as in their governance bodies.

It maintains regular exchanges with the European institutions, both with parliamentarians and with the European Commission departments in charge of energy issues (DG ENER and DG COMP), and contributes to strengthening French influence on energy issues.

Its commitment now extends

to the international arena, where it disseminates its expertise, contributes to the emergence of larger markets and, more generally, to France's international influence. Its international cooperation activities are developing, within multilateral organisations or within the context of bilateral twinning, with the support of international donors - mainly the French Development Agency and the European Commission. CRE is particularly active in the network of French-speaking energy regulators, RegulaE.Fr, which it chaired in 2020, and in the network of Mediterranean energy regulators, MedReg. In 2020, it also joined the regional

association of regulators, the Energy Regulators Regional Association (ERRA).

It is also involved in the Network of Economic Regulators (NER) of the OECD.

See Décryptages 61: International cooperation, CRE leads the way.

New rules for ethics review

The ethical framework for public officials changed significantly in 2020.
As a direct consequence of Law 2019-828 of 6 August 2019 on the transformation of the civil service and its implementing texts, in particular Decree 2020-69 of 30 January 2020, the most notable changes concern movement between the public and private sectors.

Thus, for the vast majority of employees who wish to pursue their careers in the private sector, ethics checks are now carried out internally with the help of CRE's ethics officer. Any difficult situation may lead a referral to the High Authority for Transparency in Public Life (HATVP).

For the members of the Board and certain positions in the organisation of CRE, referral to the HATVP is mandatory.

In 2020, the President of CRE approved seven personnel departures to private sector companies out of 35 departures.

"I THINK WE ARE LUCKY TO BE IN A PUBLIC AUTHORITY THAT IS NOT AFRAID TO TALK ABOUT INNOVATION".



MARTIAL FOURNIER
DE SAINT JEAN,
COORDINATOR AT THE
LITIGATION DEPARTMENT

What is your professional background and why did you choose to join CRE?

After an internship in a law firm, during which I dealt with cases relating to the energy sector from a commercial point of view, I wanted to look at these subjects from a more administrative angle, hence my application for an end-of-study internship at CRE's Legal Affairs Department (DAJ). When I went to the interview, I had no idea that I would still be at CRE four years later. Through an internship, then a work-study programme and finally a position as project manager in the Legal Affairs Department, I discovered the immensity and complexity of the energy sector, which was totally unknown to me.

In addition to the very concrete dimension of the issues we deal with, at the end of the network there are consumers, it is the link between the technical, legal and economic aspects of our work that continues to

fascinate me and fully reflects a generalist training. The diversity of the topics covered is also very appreciable. Finally, it is the atmosphere at the DAJ which makes me start every day with a smile.

How has your work changed during 2020?

If I had to compare, I would say that CRE was quite ready, at least from a technical point of view, for distance working during the lockdown period. The system we had already tested allowed us to continue working, which was valuable. Collectively, we were able to deal with the major issues that came up during the year.

So, of course, we had to reinvent our working relationships, accept, for example, that we could no longer obtain information as easily and therefore learn to be patient, until a new rhythm was created. I think that, for me, this was the most difficult point of adaptation, because it was the most different from what I had known until then. Finally,

this experience may have allowed me to better prioritise really urgent matters.

We also had to reinvent relationships at work when we understood that we had to temporarily forget the dynamic and joyful life of management. Management 2.0 and team life 2.0 required a real time of adaptation, even for a generation more "connected" than the previous ones. It was essential to be part of the long term and if the life of the group was perhaps more difficult to animate, I've found that individual relationships did not suffer from it.

The year 2020 will finally have given us the opportunity to innovate to carry out our missions. The process of making work at CoRDiS virtual was in this respect a good example of the construction of an alternative procedure to enable the committee to continue its work. I think we are lucky to be in a public authority that is not afraid to talk about innovation. In addition to the richly varied topics that the regulator can bring to public debate, CRE has built up a genuine culture of innovation, the spirit of which even permeates its operation, and that is very positive.

What projects will you be working on in 2021?

The activity of the litigation department is punctuated by disputes and referrals to the CoRDIS. I am less involved in disputes relating to the CRE Board's decisions, where the number of cases has decreased following a series of decisions in favour of the regulator in recent years. As for the CoRDIS, the number of referrals has not decreased, and the subjects relating to connection to the public electricity distribution network that concern me are as varied and technical as ever. The evolution of CoRDIS procedures after the publication of an Order in 2020 will also have to be monitored in 2021.

From a more contentious point of view, the year 2021 will be marked by the launch of the platform dedicated to the processing of mass litigation relating to the CSPE Directorate.

This vast project is entering the system commissioning phase, with all the legal and operational issues that may arise.

The activity of the DAJ also leads me to work on more cross-cutting subjects. For the third year, CRE will publish its legal activity report, which will be widely read.

Finally, in 2021, I will have the opportunity to work on the subject of data and, more specifically, personal data. Although CRE has already undertaken many actions in this area, the challenge of data processing suggests that further action will be needed in this area.

ENERGY MARKETS IN THE FACE OF COVID-19



The health crisis has had a significant impact on the wholesale and retail electricity and natural gas markets. In this exceptional context, the regulator fulfilled its duty, contributing to the adaptation of the energy system and ensuring that the regulatory mechanisms necessary for the proper functioning of the markets were maintained.

WHOLESALE **MARKETS** HEAVILY **AFFECTED**



The wholesale electricity and gas markets play a central role in the functioning of the French energy system: they ensure the balance between supply and demand. However, the health crisis has had an impact on the main components of this market: energy consumption, electricity production and gas supply, leading to significant fluctuations in wholesale prices.

Changes in the economic environment have led to exceptional volatility in spot and forward electricity prices. During the health crisis, spot markets remained accessible and no auctions were cancelled. They also fulfilled their function of sending the energy price signal and matching supply and demand.

However, prices on the wholesale electricity and gas markets varied significantly

The spot price has fluctuated widely, linked to changes in the economic situation, particularly during the first lockdown period when electricity consumption was up to 20% lower than normal.

Low demand and high renewable generation (7.7 TWh, instead of 6.5 TWh over the same period in 2019) have forced "controllable" power generation to adapt.

Gas and coal generation fell by 53% compared to the same period in 2019 and nuclear generation fell by 18% between 17 March and 11 May to 49.5 TWh,

an all-time low for this period. This new balance between supply and demand, together with the sharp drop in commodity prices, led to a very sharp drop in prices on the spot markets: the average price in France over this period was 15.3 euros per MWh (37.8 euros per MWh in 2019). Negative prices were seen for 102 hours in 2020 (27 hours in 2019).

Futures markets were also affected, first by the slowdown in the global economy and the fall in commodity prices at the start of the health crisis (the price of the 2021 annual product, which was 45.7 euros per MWh on 2 January 2020, fell to 37.4 euros per MWh on 18 March), and then by concerns about the availability of nuclear capacity, as the

plant maintenance programme was severely disrupted by the health measures. Finally, the prospect of a vaccine and an economic recovery led to a rebound in commodity prices. Thus, between November 20 and December 28, the 2021 annual revenue increased by 39%, from 42 euros per MWh to 53.22 euros per MWh.

-20%

CONSUMPTION OF ELECTRICITY (in the first lockdown)

7.7 TWh

ELECTRICITY

produced by renewable energies (in the first lockdown)

-530/0

PRODUCTION gas and coal (in the first lockdown)

PEG

Wholesale gas pricing has also been severely disrupted

The health crisis accentuated the decline in wholesale gas prices that began in early 2020 due to the drop in Asian demand and the high level of storage in France. These high storage levels were the result of mild weather and a global oversupply. In April 2020, consumption was 35% lower than in April 2019 and, in a context of exceptionally low commodity prices on the world markets, spot prices in France ended at 5.5 euros per MWh in April, an exceptionally low level.

Futures markets were also affected in connection with lower oil prices and the prospect of an economic recession. This decline became more pronounced with the health measures throughout the first half of 2020 and continued into the early summer, despite the end of lockdown, in the wake of oversupply and the collapse of the oil price. Thus, product prices for delivery in June and 2021 traded in May averaged 4.7 euros per MWh, and 12.1 euros per MWh respectively.

In the third quarter, gas prices demand. Thus, as of rebounded, mainly due to a drop in LNG supply from the main supplier countries, in response to weak prices and demand. Prices at the PEG (gas exchange point) for the spot product and the 2021 annual product thus increased in August to reach levels of 9.7 euros per MWh and 14 euros per MWh respectively at the end of the month. From October onwards, the general increase in the price of incidental raw materials in Norwegian production units and the increase in LNG prices led to higher forward gas prices.

This increase is also the result of a strong cold snap in Asia, which increased global

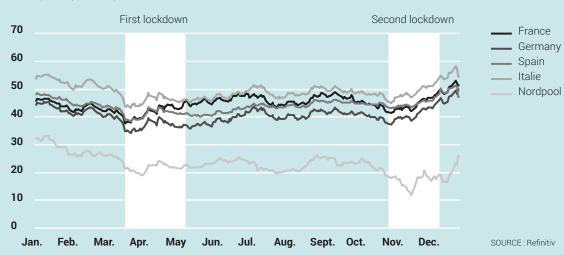
31 December 2020, the price of the monthly product delivered to the PEG in January 2021 was 19.2 euros per MWh and the price of the annual product 2021 was 17.3 euros per MWh.

- → Décryptages n°63: "Energy consumption and the effects of lockdown"
- Report on the functioning of the wholesale electricity and natural gas markets 2019.



Evolution of calendar electricity prices for one year in Europe, in 2020

Price (euros per MWh)



M+1 forward gas prices in France (PEG), the United States (Henry Hub) and Asia (JKM), in 2020

Price (euros per MWh)



EVOLUTION OF REGULATORY MECHANISMS IN RETAIL **MARKETS**

The health crisis disrupted certain regulatory mechanisms, leading to unprecedented litigation. Faced with this situation, CRE was able to grant flexibility to energy suppliers, within the limits of the possibilities offered by the legislative texts.

in the context of its monitoring mission, CRE noted that the competitive dynamic was continuing on the retail markets, with the end of the TRVs for gas and business players for electricity, and the development of green offers on the supply market.

ARENH: STRUCTURAL LIMITATIONS PLUS CYCLICAL CONFLICTS

ARENH (regulated access to historical nuclear electricity) was set up to allow consumers to benefit from what is known as the "nuclear rent", i.e. a stable price that is mostly lower than the market price of electricity. Today, this system, unchanged since 2012, is a source of significant dysfunction.

At the time of its introduction, there were only three alternative suppliers in the market, compared to 43 in 20204. The latter supply nearly 40% of domestic consumption5.

The 100 TWh ceiling now appears to be too low in relation to the number of suppliers in the market: indeed, since 2019, the ARENH volumes requested by alternative suppliers exceed it (146.2 TWh for the year 2021).

Towards a revision of the

In its July 2020 report⁶, CRE observed that reaching the ARENH ceiling had led to malfunctions on the retail electricity market, to the detriment of consumers, with notably rising, unstable and unpredictable prices.

It therefore recommended increasing the ARENH ceiling to better reflect the current state of competition development, as provided for in the 2019 Energy and Climate Law, by authorising the Ministers of Economy and Energy to raise it to 150 TWh.

In addition to these structural limitations of the system, facilities for ARENH volumes.

the drop in electricity consumption due to the health crisis and the lockdown measures was added: this drop forced some suppliers to sell part of their unconsumed ARENH supply on the wholesale markets, at a price well below the regulated purchase price of 42 euros per MWh. In view of the measures to defer payment of energy bills for businesses affected by the health crisis, CRE opened up the possibility for suppliers, particularly small ones, to benefit from payment

Differing interpretations of force majeure

At the same time, some suppliers asked EDF to activate the force majeure clause included in the ARENH framework agreement in order to suspend their ARENH supply for the duration of the force majeure. Given the difference in interpretation between EDF and the suppliers as to the existence of a force majeure situation, CRE indicated in its decision of 26 March⁷ that it could only "note at this stage the disagreement between the parties to the contract". The application of the force majeure clause is the subject of an ongoing dispute between EDF and several suppliers.

In order to specify the clauses of the ARENH framework agreement applicable in the event of a force majeure event, CRE conducted a public consultation from 30 July to 15 September 2020, seeking opinions from players. In October, it proposed8 an amendment to the ARENH framework agreement, which was approved by the Minister for Energy in November9.

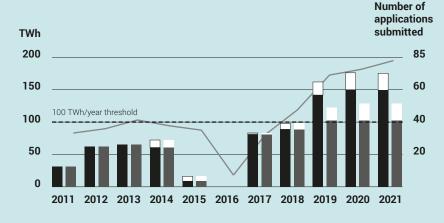
See the ARENH report.



- 4. 43 as of 30 June 2020, not including ELDs (local distribution system operators).
- 5. CRE, Observatoire des marchés de détail, Q3 2020.
- See the publication.
- 6. CRE report 2018-2019 on the functioning of the French retail electricity and natural gas markets.
- → See the publication.
- 7. CRE Decision 2020-071 of 26 March 2020 on measures in favour of suppliers in view of the effects of the health crisis on the electricity and natural gas markets.
- See the publication.
- 8. CRE Decision 2020-250 of 1st October 2020 concerning the proposal for a decree on the conditions of sale and the model framework agreement for regulated access to historical nuclear
- See the publication.
- 9. Decree of 12 November 2020 amending the Decree of 28 April 2011 taken in application of II of Article 4-1 of Law 2000-108 relating to the modernisation and development of the public electricity service.

42

Changes in ARENH volumes requested and delivered



Volumes requested for consumption

Volumes delivered for consumption

☐ Volumes requested for losses

Volume delivered for losses

-- ARENH ceiling

— Number of ARENH applications received

SOURCE: CRE

Flexibility granted by CRE during the health crisis

The emergency law of 23 March 2020 to deal with the Covid-19 epidemic empowered the Government to take measures to help businesses particularly affected by the epidemic. The Order of 25 March 2020 gave microenterprises affected by the health crisis the possibility of deferring or spreading out, without penalty, payment of their gas and electricity bills.

In its Decision of 26 March 2020, CRE, concerned about a fair distribution of the effort, asked the main electricity and gas transmission and distribution system operators to offer energy suppliers who reschedule their bills in accordance with the Order. the same deferral conditions as those provided for in this text. The rescheduling of the distribution bill is at no cost to the suppliers and concerns only the part of

the consumers' bill referred to in the Order.

In addition. CRE has made certain terms and conditions while. Thereafter, of the ARENH system more flexible. It removed the penalties for excessive demand for the year 2020. It also offered suppliers who so requested conditions for deferring invoices similar to those for transmission contracts. It also invited EDF to grant additional payment facilities to suppliers whose situation justifies it.

Continued opening of supply to competition and preparation for the end of certain fixed-price contracts in the supply sector.

The strong development of market offers in 2019 had led to significant mobility for individual consumers, even though regulated electricity sales tariffs (TRVE) nevertheless remain the majority.

In 2020, and particularly in the second quarter, the health crisis slowed down competitive dynamics for a competitive momentum returned to pre-crisis levels. The trend towards diversification of offers and the success of green offers. the main growth driver for market offers, was confirmed, and their number continued to grow for both electricity and natural gas.

However, in view of the end of the regulated gas sales tariffs (TRVG), scheduled for 30 June 2023 by the Energy and Climate Law, the rate of subscription to a market offer remains below the objective set by the Law of less than 1 million customers still on the TRV. CRE wishes to prepare for this deadline by ensuring that consumers are properly informed in conjunction with the National Energy Ombudsman (MNE).



ELECTRICITY CONSUMERS

in France and 11.5 million natural gas consumers.



NUMBER OF RESIDENTIAL CONSUMERS

who have subscribed to a 100% green electricity offer (3.9 million)

DOMESTIC SUPPLIERS

of all energy for the residential segment and 54 for the business seament.



of residential consumers who use both types of energy in their homes have a single supplier.

The competitive dynamic in the business customer segment is significant for natural gas in all segments, with a market share of over 70% for alternative suppliers, and for electricity for large and medium-scaled sites, with a market share of over 50%.

MILLION

New market offers have reached 1.4 million additional residential sites for electricity and 500,000 for natural gas in 2020.



OF RESIDENTIAL CONSUMERS

(10.6 million) have a market offer for electricity supply and 69% (or 7.5 million) for natural gas.



BUSINESS CONSUMERS

(2.5 million) have a market offer for the supply of electricity and business consumers can no longer benefit from the regulated natural gas tariffs since 1 December 2020.



SWITCHING

Indicators of customer mobility have increased steadily in recent years. For 2020, it was 11.5% for electricity and 15.0% for gas for residential customers. For business customers, it was 15.9% for gas and 10.5% for electricity.



ELDS (LOCAL DISTRIBUTION **SYSTEM** OPERATORS)

Competition is almost non-existent in the residential segment, representing less than 1% of the market share in electricity and 4% in natural gas. Alternative suppliers are more present in the business segment, with nearly 40% of the market share for both energy sources



THE ENERGY AND CLIMATE LAW

END OF REGULATED SALES TARIFFS

1 December 2020: business gas consumers.

1 January 2021: business electricity consumers.

(+10 employees, with an annual turnover exceeding 2 million euros).

1 July 2023: residential gas consumers.

SOURCE: Data collected from distribution and transmission system operators and suppliers.



For business customers, competition is well established in all segments of the natural gas market and in the market for medium and large electricity consumers. However, for two-thirds of small business customers. TRVEs remain in place: the end of TRVEs for around 1.2 million of these customers on 31 December 2020 has led to increased competition. Business consumers prefer fixed-price offers for electricity and indexed-price offers for gas, as well as suppliers who offer real clarity on their bills. With the creation of purchasing groups, the use of third-party

specialist companies, etc., companies are updating their purchasing practices.

CRE welcomes this development, which raises the quality of services offered by suppliers to a high level and reflects the normal play of competition on the supply market.

For greater transparency of green offers

In 2020, many green offers were made available to consumers, including green electricity offers.

However, their content and their role in the energy

transition raise questions of transparency and accuracy for consumers. Green offers are booming and reflect the appetite of consumers, whether they are individuals, companies or local authorities, for renewable energy. They are one of the main vectors for the development of competition in the market for the supply of electricity to individuals. For their part, several large companies are rethinking their energy supply and are contracting directly with RE producers via power purchase agreements (PPA).

In its November 2020 report on the retail market, CRE recommends increasing the transparency of these so-called green offers for the benefit of consumers. The guestion of whether these offers increase the share of RE in the energy mix remains uncertain, at least in the short term. Indeed, the system of guarantees of origin is the only effective mechanism for the traceability of green energy on the European electricity market. It works well, but it also applies to existing installations, especially hydroelectric ones.

The current surplus of guarantees of origin does not allow consumers to be assured that a green offer will contribute to the development of new renewable generation facilities.

CRE is not opposed to a label that would complete the context of guarantees of origin in order to promote green offers that would enable additional RE production objectives to be met.

In order to respond to the willingness of consumers to voluntarily participate in the development of renewable energies, the financing of new renewable resources not supported by the government must, under the additionality criterion, play a central role under the RE label.

Ademe has proposed a label that would highlight this criterion. However, CRE considers that it does not fully meet the challenges raised by the so-called green offers: indeed, if the labelled offers are based on installations benefiting from public support, they will not contribute more to the development of RE than any other conventional offer.

See Décryptages 64 : "CRE places consumer protection at the heart of its considerations'

The crisis has affected the French and European markets

The health crisis has been the subject of numerous exchanges between regulators at European and international level.

In June 2020, the Council of European Energy Regulators (CEER) set up a working group to examine the effects on energy markets, which differ from country to country depending on the severity of the measures taken.

Chaired by a member of the CRE Board, Jean-Laurent Lastelle, the working group delivered its first report in March 2021. It highlights that demand and market prices for electricity and gas fell in many European countries in the first half of 2020 and that the health crisis is not the only cause. In the majority of countries, authorities, regulators and suppliers have first sought to protect consumers, including by introducing or extending measures to prevent disconnections in the event of non-payment.

For its part, the network of Francophone energy regulators, RegulaE.Fr, chaired in 2020 by Catherine Edwige, a member of the CRE Board, has set up a platform for exchanging best practices on the measures taken by regulators and their governments to deal with the consequences of the crisis on the energy sector.

Finally, the network of Mediterranean energy regulators, MedReg, published a report presenting the measures taken to maintain continuity of supply and reduce the economic impact of the crisis on consumers and energy market players (wholesale markets, network operators, suppliers).



"OUR COLLECTIVE ABILITY TO ADAPT IN THE FACE OF UNUSUAL CIRCUMSTANCES ALLOWS US TO OVERCOME 'ANYTHING'"



ANTOINE CHALEAT, COORDINATOR OF THE CSPE DEPARTMENT

What is your professional background and why did you choose to join CRE?

Previously, I have exclusively had experience in consulting firms, especially in the public sector. I had the chance to carry out operational and strategic missions for various ministries, but also for former state monopolies, where new competition, coupled with the volatility of consumer behaviour, requires them to rethink their models.

I worked for almost five years in this context before joining CRE through a former client. When he told me about CRE, I had to jog my memory to remember that I had already heard those three letters during a meeting when I was working for an energy supplier. Curious, I asked him to tell me more and I immediately agreed with the proposed assignment, but also, more generally, with the role of CRE in the general interest. I therefore quickly decided to apply and it was with great pleasure that I joined CRE in October 2019.

What do you do in the CSPE programme?

While the first few days of my arrival, my work consisted of integrating what had been already done on the programme and identifying the complex, multi-stakeholder environment I would have to deal with, the next 18 months were an opportunity to focus on framing and conceptualising a solution to resolve a mass dispute.

This scoping phase included a technical dimension consisting of setting up a reimbursement platform, but as the weeks went by it turned out to be much broader. Indeed, the scoping had to be managed at 360 degrees and take into account the legal, financial and even strategic dimensions of the programme.

The management of all these aspects required the support of competent resources on each of the subjects, whether within CRE itself, the ministries concerned or within

the context of the partnership set up with the Services and Payment Agency, which was responsible for developing the platform. The CSPE department's mission therefore also consisted of reconciling the positions of each party while ensuring the validity, consistency and feasibility of the various recommendations made by the players involved in the project.

From arbitration to arbitration, from meeting to meeting, the processes were transformed into an expression of need, then into specifications, before being materialised in various ways to enter the real "operation" phase: website, communication supports, training of agents, etc.

The objective of these last two years has been to structure a solution that best meets the initial need and anticipates the situations we will be facing. Well aware that on a mission of this type, the context cannot cover 100% of the need, the next few months will be decisive and will allow us to validate the work done, while making the necessary adjustments that we had not anticipated.

For all these reasons, my mission at CRE is actually very similar to what I had experienced in a consulting firm, with two differences: for the first time, I am on the same side as the final decision-makers, and for the first time, I will be closely following the operational phase following the scoping in which I participated. These differences, which may seem minor, are nevertheless an undeniable source of motivation and empowerment, two elements that I was also looking for when I joined CRE.

How did you manage your work during this particular year and in addition to your new temporary assignment at CRE?

While my schedule included a lot of travel to the development teams, plans were severely hampered by the health crisis, to say the least.

At the beginning, I was extremely disappointed not to be able to physically visit the teams to follow developments, and I was sometimes afraid of losing the thread. After these doubts, we gradually managed to find a satisfactory rhythm and to rethink our way of working. The interdependence we have with our partner, who develops the solution, has forced us to maintain a form of proximity. For example, videoconferences have successfully replaced physical meetings. I often wonder about the real loss of efficiency. Although it's undeniable, is it significant? This question must remain unanswered, but I believe I have learned a lesson from this experience: our collective ability to adapt to an unusual situation allows us to overcome anything.

GREATER EFFORTS TOWARDS INNOVATION AND ENERGY TRANSITION

Defined by the Energy Code, CRE's missions have been strengthened to support the changes in the energy sector adopted by Parliament. The 4th energy package, currently being transposed, will also extend its powers.

In order to carry out its work fully, CRE is looking ahead to the future of the sector and anticipating the consequences of the necessary energy transition. Its Foresight Committee illustrates its desire to prepare the future of the energy system.



INNOVATION, A LEVER FOR THE ENERGY **TRANSITION**

CRE contributes to initiatives that encourage the development of new sectors, as well as the creation of innovative services, applications and products for the energy transition. Here are just three examples.

procedures. CRE questions the maturity of the sector and the relevance of organising tenders in the immediate future. It therefore recommends a transitional phase of private contracts. It is also in favour of establishing objective, quantifiable and nondiscriminatory selection criteria, price being the most important.

provides for the use of tender

Finally, CRE is in favour of extending the tasks of natural gas infrastructure and network managers to allow hydrogen injection, in compliance with safety conditions.

Regulatory sandbox: nine innovative projects selected

The energy sector is undergoing major changes. Technological developments are bringing new solutions, and network usage is changing radically, giving rise to new needs, particularly in terms of flexibility.

The legal context must be able to keep pace with these rapid changes and facilitate experimentation with innovative technologies and services for the energy transition and smart grids.

For several years, CRE has wanted to set up a system like the one in the United Kingdom. Provided for in Article 61 of the 2019 Energy and Climate Law, the regulatory sandbox aims to identify and remove. on an experimental basis, certain regulatory obstacles that are holding back innovative projects. In particular, it authorises CRE to grant, under certain conditions, temporary exemptions to the conditions of use and access to electricity and gas networks.

In 2020, CRE identified 41 initial innovative projects on topics as varied as renewable gas, electricity storage, electric vehicles and grid connection. It has decided on

the initial eligibility of these projects on the basis of criteria relating to innovation, benefits for the community and the existence of regulatory obstacles.

Of the 20 projects eligible for the scheme, two come under the exclusive jurisdiction of CRE, ten under the exclusive jurisdiction of DGEC, and eight under the shared jurisdiction of CRE and DGEC. After an in-depth analysis, CRE decided to grant exemptions in the areas under its jurisdiction to nine projects¹⁰.

See the press release: Regulatory sandbox: CRE grants exemptions to nine innovative projects.

The hydrogen sector: CRE seeks to support the development of the sector

Building on the 2019 Energy and Climate Law, the Order of 17 February 2021 on hydrogen provides the legal context for the development of decarbonised hydrogen, in line with the national strategy announced in September 2020 by the Government.

Referred to for an opinion on the draft decree, CRE issued its recommendations on 24 September 2020

It considers that the distinction between renewable and low-carbon hydrogen is unnecessary. The primary objective is to decarbonise hydrogen used in industry: this objective can be achieved with both nuclear and renewable electricity.

The Government is considering a physical traceability system, where possible, and a system of guarantees of origin where these could be sold separately. For CRE, the juxtaposition of these two systems is a source of complexity likely to generate unnecessary additional costs.

To support the development of the sector, the draft order





10. CRE Decision 2021-59 of 11 March 2021 concerning the decision to grant exemptions for applications submitted to CRE in the context of the first window of the regulatory experimentation system provided for by the Energy and Climate Law.



See the publication.

These experiments will be monitored, and feedback provided by CRE, to make recommendations on possible changes to the regulations. In addition, in the first half of 2021, an initial assessment of the operation of the system will be carried out before opening a second call for applications.

CRE is pleased that the players have seized this opportunity to facilitate their innovation projects.

Integration into open data and open-source communities

Wholesale markets are essential to the functioning of the European energy system. Participants execute their

trading strategies by adjusting their positions according to commodity prices and other factors influencing the variation of supply and demand.

The monitoring of these markets relies on efficient analysis of the massive data flows that are generated.

In this context, CRE has chosen to develop several tools to visualise the availability of generation assets, weather conditions and consumption forecasts in Europe.

It makes its data available to European market players, academics and developers interested in interpreting energy data at github.com/cre-os.

This transparency approach connects field players via a modern exchange infrastructure, enhances the value of public data sets and also contributes to their better interpretation.



Foresight Committee, Season 3

CRE's Foresight Committee, launched in 2017, set itself the task of bringing together the regulator, energy companies, network operators, producers and suppliers, consumer associations, elected officials and public authorities to make a success of the energy transition and take advantage of the digital revolution. Independent of government and of the Board, this Committee is a real tool for questioning changes in regulation: it opens its approach to CRE's international counterparts to compare and share best practices, and to anticipate and assess structural changes linked to the energy transition.

Its working groups hear numerous experts and academics in order to enlighten decision-makers in their actions in favour of innovation for the energy system. This panel of experts, who are regularly interviewed, highlights the consensus and the fault lines at the heart of the issues addressed. They provide CRE, and the community of energy companies it leads, with information on innovative technological, economic and industrial trajectories for the next 10, 20 and 30 years.

FOUR WORKING GROUPS

In 2020, the Committee launched its third season with forward-looking working groups on four themes: marine energies, new cities and networks, downstream metering and the hydrogen vector. Two threads guide this third season to address, in a systemic approach, the issues raised by each working group, the first, examining innovation from the perspective of French industrial strategy. The second, the appropriation of the energy transition by citizens, integrates a sociological dimension to the work. This sociotechnical approach reinforces the findings and recommendations of the reports, with regard to the issues of appropriation of innovation, acceptability of risk and a better understanding of its foundations and changes in consumer behaviour.

	WG1 —	— WG2 —	— WG3 —	WG4	MOVING	TOTAL
MEETINGS	5	6	5	6	0	22
HEARINGS	11	27	8	17	4	67

SOURCE: CRE's Foresight and Innovation Department

MEETING LOCAL PLAYERS

In 2020, the Committee travelled twice to the region to meet local players in charge of projects. In Dunkirk, they saw the GRHYD Power-to-Gas (grid management by hydrogen injection). In Saint-Nazaire and Noirmoutier, they met the industrialists involved in the development of marine renewable energies and the players concerned in offshore wind projects.

Despite the pandemic's effect on consultation work, the Committee continued its work in a paperless environment in 2020. The mobilisation of the working group members has highlighted the interest of the energy community. The co-chairs of the four working groups will present the conclusions of their reports at a meeting scheduled for the summer of 2021.

→ See the Foresight Committee website at www.eclairerlavenir.fr.

NEW WORK IN THE PUBLIC INTEREST

By launching the transaction-CSPE portal, CRE is beginning to reimburse sums overpaid between 2009 and 2015, in order to put an end to over 55,000 complaints. Another highlight was the publication of the latest orders transposing the European Clean Energy Package, which increase CRE's powers.

creation of the CSPE and origin of the dispute

1996

ELECTRICITY SECTOR OPENED to competition

2009-2015

MASS LITIGATION concerning the CSPE

2015

CRE MADE RESPONSIBLE FOR DISPUTES 2016

CSPE REFORM

LAUNCH OF THE CSPE PARTIAL REIMBURSEMENT PLATFORM

Created by law in 2003, the contribution to the public service of electricity (CSPE) is a tax paid by all final consumers of electricity that finances various social, territorial and environmental purposes. The Amending Finance Law of 2015 reformed the regime for 2016 and subsequent years.

Mass Litigation

This tax levy has given rise to numerous disputes: more than 55,000 taxpayers have filed prior claims for compensation to obtain a partial refund, of which 15,000 have been the subject of litigation brought before the administrative courts by companies and individuals.

In July 2018, the Court of Justice of the European Union and then the Council of State (Messer ruling) confirmed that claimants could be partially reimbursed from the CSPE in proportion to the share devoted to purposes other than its environmental purpose. The Council of State also specified the methods for calculating this partial reimbursement, which is limited to the years 2009 to 2015 and to requests made no later than 31 December 2017.

A digital and secure infrastructure of unprecedented scope

The 2019 Energy and Climate Law and the Order of 26 February 2020 empowered the CRE President to settle refund requests and to initiate payment of the corresponding sums. The Decree of 30 October 2020 provided for the terms and conditions of reimbursement via a platform. Online from February 2021, this totally secure platform allows

companies and individuals to submit their refund requests and CRE to process them.

Subject to the admissibility of the requests and the completeness of the application, CRE now accepts requests for partial reimbursement of the CSPE and processes them. This is limited to 7.42% of the tax paid for 2009, 18.50% for 2010, 21.38% for 2011, 5.77% for 2012, 28.04% for 2013, 24.89% for 2014 and 29.45% for 2015.

CRE has set itself the goal of handling 1,500 cases per month and could thus reach the end of this mass litigation by the end of 2022.

See the CSPE platform.

2018

DECISIONSof the CJEU and the Council of Statet

2020

REGULATION AND DECREE for the energy-climate law

2003

CREATION OF THE CSPE

2019

CREATION OF THE CSPE
DEPARTMENT AND THE ENERGY
and Climate Law

2021

LAUNCHING OF THE "TRANSACTION-CSPE>"
PORTAL for processing CSPE refund requests

SOURCE: www.cre.fr

THE REVISION OF CERTAIN PHOTOVOLTAIC POWER **PURCHASE AGREEMENTS**

More than 234,000 photovoltaic contracts made under the tariff decrees of 2006 and 2010 benefit, each year, from a state support of more than 2 billion euros. The 2021 Finance Law provides for the revision of contracts with excessive profitability. This revision concerns installations with a minimum power of 250 kWp. This threshold means about 1050 contracts must be revised (200 in the offgrid zones, 850 in metropolitan France) which will benefit, for another ten years, from annual public support amounting to 950 million euros.

CRE understands the public interest motive linked to the excessive profitability of the contracts, which is the reason for their being called into question in the difficult economic context linked to the health crisis. It will contribute to the examination of the applications concerned and will study their specific profitability situation. The modalities of these examinations will be fixed by decree.

1050

CONTRACTS for the purchase of photovoltaic electricity would have to be revised

CLEAN ENERGY PACKAGE: MORE POWERS FOR CRE

On 14 June 2019, the last texts of the European Clean Energy Package were published in the Official Journal of the European Union. These eight regulatory texts aim to give Europe the means to achieve the objectives set by the Paris Climate Agreement. With the publication of the last three transposition orders on 4 March 2021, France has completed a long legislative marathon. CRE's powers have now been strengthened in several areas.

Ensuring consumer protection

The Electricity Market Directive puts consumers at the heart of the energy markets and gives them an opportunity to play a more active role through citizens' energy communities and self-consumption, to better control their energy consumption and expenditure and to be better informed about market developments.

One of the innovations is the possibility of subscribing to dynamic pricing contracts that follow the evolution of electricity prices on the wholesale markets.

CRE has been tasked with monitoring these new contracts, which have been the subject of much discussion, in particular their impact on consumers' bills and any abusive practices. In particular, it must publish an annual report assessing these contracts and the compliance of supply prices

with the requirements of the directive.

Overseeing the development plans of the electricity distribution networks

The Directive also regulates the procurement of flexibility services by distribution system operators (DSOs), controls new development plans for electricity distribution networks and specifies provisions on electricity storage and charging points for electric vehicles.

CRE's approval and control powers have been strengthened. It will examine distribution network development plans and may request that they be modified. It will also supervise the links between flexibility and storage services on the one hand, and the DSOs that use them on the other, in order to avoid discriminatory practices.

Every two years, it will publish a report to assess progress towards smarter electricity grids, promoting energy efficiency and the inclusion of renewable energy.

Optimising the operation of interconnections. strengthening European cooperation

The regulation on the electricity market radically reforms its organisation to adapt it to the increase in the share of renewable energy in electricity production. It also strengthens regional cooperation between Member States to ensure greater

flexibility in intra-European electricity trade. In particular, these measures aim at a better integration of short-term markets, they create new rules for the operation of interconnections and they strictly regulate national capacity mechanisms to avoid market distortions.

CRE must approve, with its counterparts, the proposals of the transmission system operators for the revision of tariff zones and the derogations to the 70% capacity threshold set for cross-border exchanges. It will also contribute to the framing and drafting of ACER's biennial report on the methodologies for drawing up transmission and distribution tariffs, as well as to the development of the conditions for using congestion rents.

The CRE report on the costs of nuclear energy

The malfunctions of the ARENH system, which will end in 2025, and the challenges of EDF's major refurbishment programme have led the public authorities to prepare a new nuclear regulation. It will concern all of EDF's nuclear power plants in France, including the Flamanville EPR, and must be validated by the European Commission.

The price at which nuclear production is valued is a key parameter of regulation. On 19 November 2019, the Government asked CRE to evaluate the costs of the existing nuclear fleet and the fair remuneration to be retained in its future economic regulation.

CRE analyses in detail the production costs of the existing nuclear fleet, the industrial and economic issues related to the Grand Carénage, the outlook for the deliverability of the nuclear fleet. and the construction costs of the Flamanville EPR. It also presents a methodology for determining the level of capital profitability for the new regulations.

As a result of its analyses, CRE has calculated that the cost of producing existing nuclear electricity should be set at around 48 euros per MWh (at 2019 value). This price corresponds to CRE's estimate of the costs actually incurred by EDF for the operation of its nuclear plants over the period 2022-2026, including the Flamanville EPR.

CRE considers that the price for EDF's nuclear energy should reflect the costs of an efficient operator.

58

"THE SIZE AND CENTRAL POSITION OF CRE IN THE ENERGY SYSTEM BRINGS A SHARPENED UNDERSTANDING OF THE PROBLEMS BEING ENCOUNTERED."



THOMAS CHABRIER, COORDINATOR OF THE PRICES AND COMPETITION DEPARTMENT

What is your professional background and why did you choose to join CRE?

I have been working in the Prices and Competition Department for ten years now.

My first experience was monitoring the natural gas retail markets. It then evolved, and for some time now I have been in charge, with three other colleagues, of the regulated electricity sales tariffs (TRVE) in Metropolitan France and in the ZNIs (the off-grid zones: Corsica and the DOM).

During my career, I have participated in the construction of various models useful to our work. They concern the evaluation of the supply costs of suppliers on the electricity markets, (necessary for the construction of the VERTs in continental France), as well as the simulation of the operation of electricity production parks. This last tool is useful to define the structure of the VERTs in the ZNIs, to evaluate the avoided costs of energy demand

management or storage projects, or to carry out analyses on plant development projects.

I chose to join CRE to work in a public service institution that defends strong principles, in particular independence and impartiality. Its size and central position in the energy system give it a thorough understanding of the issues. My work is very rewarding and covers topical issues in a stimulating environment, both in terms of the issues dealt with and the people I work with.

How have you adapted your work during 2020?

We received laptops from 2019, replacing our fixed workstations, with access to remote working tools for video conferencing, among others. From the start of the lockdown in March 2020, we continued our work from home without interruption. We were also able to continue to exchange with our external contacts.

Nevertheless, new working habits had to be put in place. A certain period of adaptation was necessary to fully master all the new rules and codes imposed by this new situation. In a very practical way, I had the opportunity to call on our IT department several times They always patiently found solutions to my problems, even the most urgent ones.

The meetings of the CRE commission are also held remotely. The tools put in place allow normal exchanges with the Board and the serene presentation of all the work carried out by the departments.

what projects will you be working on in 2021? How do you see the energy sector in the coming years after the past year, and more specifically the retail market?

While continuing my current work, I will be working on more specific projects in 2021. In particular, I am participating in a mission launched last March for which CRE has a role as mediator between the government of French Polynesia and the current concessionaire.

I joined CRE in March 2011 at an exceptional time: a few months after the signature of the NOME Law (New Organisation of the Electricity Market), which considerably changed the way the French markets operate, and only three days after the Fukushima disaster. I have seen how much the French energy system has changed since then and the increasingly important role that CRE has had to play in this landscape. This trend is continuing, and even tending to accelerate, with very ambitious projects concerning, for example, the production of hydrogen or the development of flexibility, a direct consequence of the massive development of renewable energies and new uses.

The health crisis does not seem to have called this dynamic into question; on the contrary, it has amplified it.

Finally, on the retail markets, regulated sales tariffs have changed considerably. While they will be eliminated for natural gas by 2023, they will be maintained for electricity consumers on a reduced eligibility basis. The relevance of maintaining these tariffs will be regularly re-examined. CRE, as an independent regulator, will therefore have an ever-greater responsibility in the future to ensure that these markets function properly.

NETWORKS: PERFORMANCE AND QUALITY OF SERVICE TO SUPPORT THE ENERGY TRANSITION

In a rapidly changing context, CRE is encouraging electricity and natural gas transmission and distribution system operators to maintain a high level of security for their infrastructures and to become strong players in the energy transition. They must keep their costs under control so as not to add to consumers' bills.

Incentive regulations on tariffs, investments and market access rules support them in this dynamic.



62

SUPPORTING ELECTRICITY SYSTEM OPERATORS IN THE ENERGY TRANSITION

The massive development of renewable energy production and the decentralisation of the electricity system reinforce the role of electricity transmission and distribution networks in ensuring that supply and demand meet in complete security. Hence the need for the operators to develop their infrastructures, while optimising their investment decisions to control the costs borne by users. CRE assists them in these essential developments for the energy transition, particularly when examining their investment projects and setting the tariffs for network use.

Process for setting tariffs used by public electricity networks (TURPE 6)

14 February 2019 31 March 2019

Public consultation on the regulatory context for regulated network operators.

23 May 2019 12 July 2019

First public consultation on the structure of the TURPE 6 HTB and TURPE 6 MV-LV tariffs.

17 October 2019 2 December 2019

Public consultation on quality of service and innovation for electricity system operators.

19 March 2020 15 May 2020

Second public consultation on the TURPE 6 HVB and TURPE 6 MV-LV tariff structure.

April-August 2020

Audits of the operating costs of RTE and Enedis by Schwartz & Co.

1 October 2020 12 November 2020

Public consultation on TURPE 6 HVB on all aspects of the tariff: its level, regulatory context and structure.

8 October 2020 16 November 2020

Public consultation on TURPE 6 HTA-BT on all aspects of the tariff: its level, regulatory context and structure.

17 December 2020

Decisions on TURPE 6 HTB and TURPE 6 HTA-BT pre-CSE.

21 January 2021

Final decisions on TURPE 6 HTB and TURPE 6 HTA-BT.

23 April 2021

Publication in the Official Journal of the two TURPE 6.

SOURCE: CRE

Examination of the ten-year development plan for the RTE network

In its ten-year network development plan (SDDR) published in July 2020, RTE, the public electricity transmission system operator, plans to invest 36 billion euros over 15 years in the energy transition. These investments are mainly related to the energy transition and the renewal of infrastructures to guarantee the growing integration a high level of service quality and security of supply.

In its Decision of 20 July 2011, CRE considered that the transformations induced by:

- energy transition and the connection of renewable energies (RE), including marine:
- the need to renew the network require major investments to enable the networks to support the energy transition and maintain their level of performance.

CRE ensures that RTE has the means to achieve these objectives. However, CRE also indicated that given the scale of the investments, it is essential that RTE modifies its investment policy, that it moves all the levers at its disposal to reduce the associated expenditure, that it prioritise the investments that are most useful to the community and that it carry them out under the best cost conditions.

RTE will have to limit the reinforcement of its network to what is strictly necessary, as well as its environmental footprint, thanks to the technological evolutions brought about by the various sources of flexibility: production modulation, storage, consumption shaving, aggregation of decentralised flexibilities. In particular, the use of optimal sizing will facilitate of renewable energies into the networks and will make it possible to save nearly 7 billion euros over 15 years.

The TURPE of the energy transition

In accordance with the provisions of the Energy Code, CRE is responsible for setting the method for establishing tariffs for the use of public electricity transmission and distribution networks, known as TURPE HTB and TURPE HTA-BT.

- In 2016 and 2018, it defined the fifth generation of tariffs applicable to electricity transmission (TURPE 5 HTB¹²) and distribution (TURPE 5 HTA-BT¹³) until 31 July 2021.
- To prepare the new generation of electricity tariffs, CRE began its work with stakeholders very early on, given the visibility that is essential for market players and the complexity of the issues. In 2019 and 2020, it organised five public

consultations to gather the opinions of energy system players on the regulatory context, the level of future tariffs and their structure. It also took into account the energy policy guidelines transmitted in June 2020 by the Minister of Ecological Transition and Solidarity, and submitted its draft decisions to the Higher Energy Council.

On 21 January 2021, CRE adopted two decisions concerning the TURPE 6 HVB transmission tariff and the TURPE 6 MV-LV distribution tariff for electricity, applicable from 1 August 2021 for a period of four years.

Firmly focused on the energy transition, these tariffs give network operators the means to connect and accommodate renewable electricity production on their networks and to support the growth of electric mobility and self-consumption. They also allow them to deal with the ageing of their networks and, more generally. to maintain them.

→ See the press release: CRE publishes its draft decisions on the future tariff for the use of electricity networks (Turpe 6).



Moderate rate increases. incentive regulation

Against a background of a sharp rise in investment, CRE has been careful to limit the change in TURPE, which remains small. This moderate change was made possible by the financial environment favourable to investments in the energy transition, by the almost complete deployment of Linky and by the tax cuts provided for in the 2021 finance law (corporate and production taxes).

It is also the result of incentive regulation mechanisms, the positive results of which have led CRE to renew the main principles, in particular by encouraging operators to control their operating costs. In addition,

the tariff regulation context encourages them to prioritise their investments and to carry them out under the best cost conditions. CRE has also strengthened the incentives aimed at guaranteeing a high level of supply and service quality, and has introduced a new regulatory incentive for innovation.

With the energy transition, the digital transformation and the evolution of uses, users need more than ever relevant pricing signals for network use and investments, whether it is for equipment, insulation and energy efficiency expenses or storage and distributed generation.

CRE has therefore made major changes to the tariff

structure, taking advantage of the new data provided by the operators. The aim of these changes is to provide tariff signals that better reflect the costs that the use of the networks generates for the community, in compliance with the principle of tariff equalisation. The introduction of a tariff based on the long-term marginal costs of the networks at all voltage levels and the generalisation of the four-band hourly option at low voltage by 2024 meet these challenges.

11. CRE Decision of 23 July 2020 examining the ten-year development plan for the RTE transmission system drawn up in 2019.

See the publication.

12. CRE Decision of 17 November 2016 on the tariffs for using the public electricity networks in the HV voltage range.

See the publication.

13. CRE Decision of 17 November 2016 on the tariffs for using the public electricity networks in the MV and LV voltage ranges.

See the publication.

CRE Decision of 28 June 2018 deciding on the tariffs for the use of public electricity networks in the MV and LV voltage ranges.

See the publication.

Linky: substantial and concrete benefits for users

Since the end of 2015, the rollout of Linky meters consists of replacing all existing consumer meters (LV ≤ 36 kVA) with advanced meters by 2024. To date, more than 30 million smart meters have been installed, in line with the project's initial schedule. Mass rollout will be completed by the end of 2021 for Enedis and, by the end of 2024 for the ELDs.

The efficiency gains associated with this rollout must be duly returned to users, and it is all the more important to take them into account as the TURPE 6 HTA-BT period will see the start of the clearing of the Linky regulated smoothing account from 2023.

CRE has verified the reality of the gains and found that the overall objectives of the Linky business plan were complete in terms of savings in operating expenses and partial in terms of non-technical losses. These gains will materialise as of the TURPE 6 HTA-BT period and will reduce Enedis' operating expenses by nearly 5.0% compared to 2019. They are linked in particular to the reduction in the cost of reading and minor interventions, now carried out remotely. In addition, there are gains linked to the reduction of fraud and billing errors, which could account for nearly 3.0% of Enedis'

Balancing the European electricity system: new challenges for the networks

operating expenses in 2024.

The development of renewable energies reinforces the role of the networks in the management of the electrical system and its balancing. The use of flexibilities to serve the electrical system must necessarily be developed.

In 2020, RTE activated the interruption service twice for French consumers, thus contributing to ensuring the stability of the European network. In service since 6 January 2020, the Terre balancing exchange platform was joined by RTE on 2 December 2020: cooperation between European network operators to guarantee the balance between generation and consumption at all times is thus strengthened.

CRE welcomes the continued integration of the European markets¹⁴, which contributes to reducing the costs of the electricity system and its greenhouse gas emissions, and to strengthening security of supply.

CRE has been working on the implementation of the Clean Energy Package and, in view of Brexit, on adapting the operating rules for interconnections with the UK with its British counterpart. As a result, electricity exchanges between the two countries will continue without difficulty on 1 January 2021, despite the UK's exit from the internal electricity market.





14. As highlighted in CRE's 2020 report on electricity and gas interconnections





MILLION Linky meters installed (December 2020)

PREPARING THE FUTURE OF GAS **NETWORKS**

Working for the benefit of consumers, the French energy system and security of supply, CRE encourages operators to control their costs, innovate and actively engage in the energy transition.

A framework for the right to introduce biomethane into networks

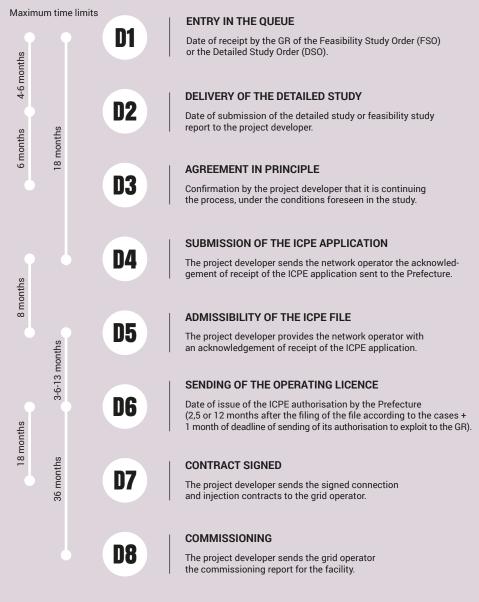
The multi-annual energy plan published in 2019 sets a target of 6 TWh of biogas injected into natural gas networks by 2023, and 14 to 22 TWh by 2028. To achieve this, the networks must be adapted: meshing,

backflow or extensions.

The EGalim Law created a producers' right to introduce biogas with mutualisation of associated network reinforcements: natural gas network managers carry out the reinforcements necessary to allow the injection of biogas produced near their networks, subject to compliance with an economic efficiency criterion.

This new right gives rise to several measures, including connection zoning. Established by decree in 2019, it makes it possible to define, on each territory, on the one hand, the most relevant network from a technical and economic point of view to connect biogas production facilities and, on the other hand, the conditions of their injection.

Details of the stages of progress of a biomethane injection project



SOURCE: CRE report of 19 December 2018 on the technical and economic assessment of biomethane production facilities.

See the CRE report of 19 December 2018 on the technical and economic assessment of biomethane production

70

At the end of 2019, CRE set the context for the implementation of the right to injection to facilitate the development of the sector and the adaptation of gas infrastructures under the best economic conditions for the community. This was implemented in 2020.

In order to study the possibilities of implementation of this right to injection on each territory, the network managers have made a map to inform the players of the possibilities of reception of biogas in each zone of the territory.

The purpose of this CRE request was to give them the opportunity to find out the technical and economic conditions available for pooling the costs necessary to reinforce the networks in the tariffs.

They have submitted the first zonings to CRE for validation in the summer of 2020. At the rate of one decision per month, CRE has validated the reinforcement plans for 190 zones: if they are implemented, they will enable 945 projects to inject approximately 26 TWh of biomethane per year.

Estimated at 811 million euros, of which nearly 400 million euros is for reinforcement. the associated investments include a dozen backflow facilities and more than a hundred distribution facilities. At the end of 2020, CRE has validated 140 reinforcement works: 128 on the distribution network for more than 70 million euros and 12 on the transmission network for about 36.5 million euros. In 2021, CRE published an assessment of the right to injection, two years after the EGalim Law.

European Commission discusses gas storage reform

Since 2018, the activity of underground natural gas storage facilities necessary for security of supply is regulated and their list is set by the Multiannual Energy Programming.

This long-awaited reform is an undeniable success and a significant improvement in the functioning of the market:

Since 2018, all storage capacity has been sold, which guarantees that the storage facilities are filled, and therefore the security of gas supply for winter peaks. Another advance: the unit cost of security of supply, set transparently by CRE, has fallen across the board.

The European Commission's Competition Directorate considered that the scheme constituted State aid and expressed doubts about its proportionality and its effects on gas trade and competition between Member States. In early 2020, the Commission opened a formal investigation procedure.

CRE and the French authorities have demonstrated that the method for setting operators' income is objective, stable and in line with European practices. They have also established that there is no negative impact on trade and competition, as capacities are sold at their market price in a non-discriminatory manner for all European players. In addition, the contribution of neighbouring countries is taken into account in the sizing of the storage requirement.

The new tariff for the use of regulated LNG terminals

At the end of 2020, CRE set the new tariff for the use of the Elengy regulated LNG terminals (ATTM6). Applicable since 1 April 2021 for a period of four years. it represents an annual turnover of nearly 210 million euros and aims to meet several challenges.

The first issue is simplicity and attractiveness, because the pricing of LNG terminals and their access rules play an important role in the proper functioning of the wholesale gas market, particularly in a situation where almost all the gas consumed in France is imported.

The second challenge is to control costs and ensure flexibility of supply, as European LNG terminals are in direct competition with each other, particularly in the context of the development of new uses (transhipment. retail LNG). The ATTM6 tariff sets a controlled load trajectory and implements several changes to improve the flexibility of services and adapt them to new uses. In addition, the withdrawal activity is no longer regulated since 1 April 2021.

The third issue raised by the ATTM6 tariff is to give Elengy the means to maintain a high level of safety, to implement its investment and

maintenance policy, particularly for the Montoir terminal, which is now 40 years old, and to carry out its research and development projects in order to include its activity in the energy transition.

Finally, CRE has adopted incentives for quality of service with two priorities: reducing environmental impacts and complying with maintenance programmes.



"THROUGHOUT THIS DEMANDING EXERCISE, WE WERE ABLE TO RELY ON OUR CONTACTS TO PROVIDE US WITH ALL THE DETAILS NECESSARY FOR CRE DECISIONS."



NINA GANCHOU, COORDINATOR AT THE DISTRIBUTION NETWORKS DEPARTMENT

What is your professional background and why did you choose to join CRE?

It was my attachment to the notion of public service and a long-standing interest in energy issues that led me to join CRE in the autumn of 2018, as a project manager in the Distribution Department. This team produces the tariffs for gas and electricity distributors and, to do this properly, monitors all the subjects related to their activities. As the networks play an essential role in supporting the current transformations in the energy world, we must constantly ask ourselves what these transformations imply in terms of regulation, always bearing in mind the interests of the consumer so as not to fall for "fads". I have therefore had the opportunity to work, among other things, on changes in GRDF and Enedis tariffs, the deployment of advanced meters and the right to injection for biomethane producers.

The topics are varied, stimulating and likely to satisfy the curiosity that led me to the RCE.

How have you adapted your missions during 2020?

In many ways, 2020 was a new year. The main challenge has been to adapt to the widespread use of remote working. However, despite a slight disorganisation in the early days, I have the impression that both CRE and the operators quickly got in form and that our work did not suffer in the situation. I experienced this in particular while working on the operational implementation of the right to inject biomethane.

Indeed, CRE has been entrusted in 2019 with the validation of the biomethane development schemes at local level, otherwise known as "connection zonings".

This means that from now on, operators must connect biomethane producers to the networks in accordance with the zoning approved by CRE. To do this, these zoning plans must exist and be approved within a timeframe compatible with the development of the sector. The theoretical context was therefore perfectly clear at the beginning of 2020, but the operational mechanism had yet to be built.

We therefore had to work with the operators to set up standardised tools for transmitting the information and to increase the efficiency of data processing. Particular attention was paid to the initial zoning, since the challenge was to become familiar with the format of the data transmitted, before being able to industrialise the process. It is typically at these moments that we had to adapt our way of working. Where we would normally have had the reflex to meet between project managers behind a screen to analyse the zoning together, we had to mobilise new digital tools to reproduce these moments of joint reflection. The distance also led us to formalise and trace our internal exchanges, which proved invaluable in the long term to ensure the continuity of the analysis.

Throughout this demanding exercise, we were able to rely on our contacts to provide us with all the details necessary for CRE's decisions, despite our unusual working conditions.

At the end of 2020, the balance sheet is positive and we are collectively rewarded with a system that works well.

What projects will you be working on in 2021?

2021 will be a year of breaks and continuities. First of all, we will complete with the gas

and electricity ELDs the tariff cycle started within the department in 2019 with GRDF's ATRD-6 and continued in 2020 with Enedis' TURPE 6. The experience gained in previous years will be very useful and will allow us to work on 12 tariffs or allocations at once. However, if the methodology remains the same, the issues to be dealt with will be different because the ELDs, whether gas or electricity, are particularly exposed to changes in the energy world. They therefore present technical and economic particularities that must be taken into account in their tariffs.

In addition, we are continuing discussions with Enedis to prepare for the consultation on its new network development plan. Here too, there is both a break and continuity, because this new exercise is a great opportunity to reflect on the link between changes in the sector and the way in which the distribution networks must adapt to them.



THE ZNIS IN THE ENERGY TRANSITION: THE DIRECTION OF CRE

In accordance with the objectives of the 2015 law on energy transition and green growth, which aims for 100% renewable energy in 2030 for these zones, CRE is supporting the off-grid zones (ZNIs) in the energy transition, with particular attention to the security of the electricity system and the control of public expenditure.



A REGULATORY CONTEXT **FAVOURABLE TO** THE ENERGY TRANSITION IN THE **OFF-GRID ZONES**

CRE plays a leading role in the preparation of multi-year energy plans. In 2020, it made several recommendations on the proposals of certain territories.

Another highlight of the year was the publication of its new methodology for analysing electricity production projects, which gives project developers visibility and accelerates the energy transition in the regions.

EPP: for an energy transition with controlled costs

The Multi-Year Energy Programmes (MYEPs) set out energy policy objectives and identify issues and risks to guide the work of the various stakeholders in the off-grid

They thus set out the trajectories for developing renewable energies over different timeframes and, if necessary, strengthening the thermal power plant fleet to guarantee security of supply.

The EPPs for the 2023 targets have almost all been adopted. The Energy Code requires their revision to adjust the 2019-2023 targets and add a five-year programming period, 2024-2028.

In association with this revision work, CRE is carrying out economic impact studies of the EPP projects whose trajectories have a direct of the public service. It analyses them in particular with regard to the criteria of security of supply, cost and optimal use of resources. In 2020, it made several recommendations on the targets proposed by some territories:

 In Reunion Island, CRE first analysed the ambitions of the draft revision of the EPP and contributed to the elaboration of ambitious and realistic objectives for the development of renewable energies (RE).

In addition, it participated in discussions on the integration of the growing share of intermittent energy sources and on security influence on the energy costs of supply in the context of the conversion of the Bois-Rouge and Gol thermal power investments owned by Albioma. These investments, which run on coal and bagasse (sugarcane residue), will replace coal with biomass from 2024 and will continue to use bagasse and supply steam to sugar mills during the sugar harvest.

- In French Guiana, CRE identified the need to specify the need for "guaranteed power" noted by the EPP in Western Guiana in order to bring projects to the fore as soon as possible. In order to answer these questions and to further clarify the revised EPP, the Electricity System Operator published an analysis of the need in April 2020, at the request of the EPP co-editors.
- · CRE conducted a similar study for the territory of Saint-Pierre and Miguelon and assessed the impact of the draft EPP on the utility's energy costs.

In 2019, CRE had carried out similar work for Corsica. Guadeloupe and Mayotte, and will continue in 2021 to support the territories in preparing their PPEs.



256€/MWh

AVERAGE COST OF GENERATION of electricity in off-grid zones in 2019

Power Generation Projects: a New Approach to Cost Review...

The NRIs must use technological solutions for electricity production adapted to their island nature. Thus, a significant part of the electricity production assets is developed within the context of private contracts concluded between the producer and the past suppliers of the zone (EDF SEI, Electricité de Mayotte, Eau et électricité de Wallis et Futuna).

This situation gives rise to additional electricity production costs compared with mainland France, resulting in an average cost per MWh produced in the NRIs that is higher than the cost included in the regulated electricity sales tariffs guaranteed

by tariff equalisation for electricity consumers resident in these territories. Subsidised from the government budget, these additional costs include the additional production costs of the incumbent suppliers and those linked to the electricity purchase contracts concluded between a third-party producer and the incumbent supplier in the area.

In order to give visibility to project developers, CRE adopted, on 23 April 2015, a methodology for analysing generation projects aimed at specifying the procedures for referring, examining and clearing these projects.

After five years of application marked by the diversification of the projects examined

and the expiry of the first purchase obligation contracts in the off-grid zones, it was necessary to review this methodology. CRE gathered the opinion of the various players via a public consultation conducted from 7 May to 1 July 2020 and finalised its new methodology at the end of 2020.

It now applies to each draft contract, internal protocol or amendment subject to a decision on the evaluation of the normal and complete cost. By clarifying the applicable rules, this revision gives visibility to project developers, facilitates project appraisal and accelerates both the development of new production methods and the energy transition in these territories.

... and a revision of the rate of remuneration

The development of the new methodology for analysing generation projects was an opportunity for CRE to specify the way in which it will apply the Decree of 6 April 202015 on remuneration rates. This text reforms the conditions for remuneration of generation projects, storage infrastructures and electricity demand management in the off-grid zones, which CRE applies to determine the components of their remuneration. In particular, for generation facilities, it puts an end to the uniform remuneration system at a rate of 11%, which had not been revised since 2006.

On several occasions, CRE had recommended that it be revised downwards to take account of changes in the economic situation linked to the fall in the risk-free rate and to provide for modulation by territory and by technology.

The Decree of 6 April 2020 now sets a differentiated remuneration according to the territories, to take into account the specificities and risks related to each off-grid zone, and according to the nature of the projects.

It provides that CRE will propose to the Minister for Energy a project premium of up to 300 base points, which shall be included in the calculation of the applicable remuneration rate.

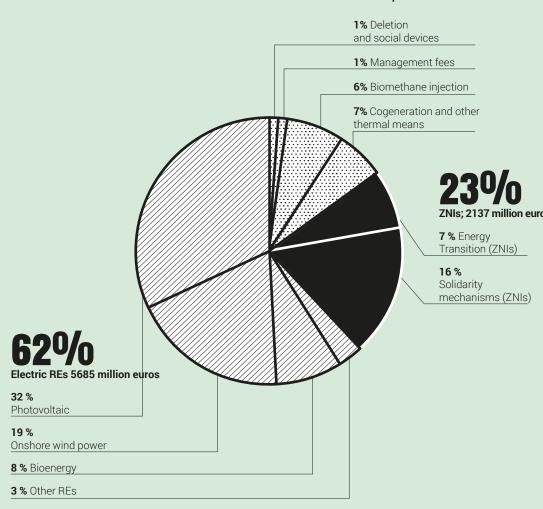
To give visibility to project developers, CRE has published, with its new methodology for analysing production projects, a reference grid which specifies, by sector and by technology, the levels of premiums that can be allocated to each project.

33

15. Decree of 6 April on the rate of return on tied-up capital for electricity generation facilities, for infrastructure designed to control demand for electricity and for storage facilities controlled by the system operator in off-grid



15% Other expenditure 1314 million euros



SOURCE: CRE

CRE estimates the amount of charges to be compensated in 2021 at 10,561 million euros, including 2137 million euros for the off-grid zones. This assessment takes into account the forecast amount of charges borne by operators in 2021 (9135 million euros, +12% compared to the amount of charges recorded for 2019), as well as the regularisation of charges (1.4 billion euros) for the years 2019 and 2020. This is mainly due to the significant drop in market prices, the compensation being equal to the difference between the guaranteed price and the market price compared to those expected at the time of the assessment of the charges to be compensated in 2020.

The ZNIS

Corsica, the overseas departments and regions (Guadeloupe, Reunion, Mayotte), the territorial authorities (Martinique, French Guiana), the overseas communities (Saint-Pierre and Miquelon, Saint-Barthélemy, Saint-Martin, Wallis and Futuna), as well as the islands of Ouessant, Molène, Sein and Chausey are not connected to the metropolitan electricity grid (or in a very limited way in Corsica).

GUAPTER 5

80

ENCOURAGING THE GREENING OF THE ENERGY MIX

Their carbon-intensive energy mix makes it more necessary than ever to support the ZNIs in achieving their energy objectives. This is precisely the role of CRE.

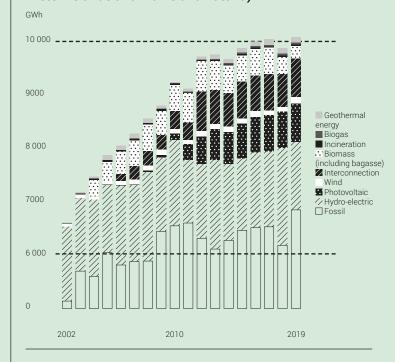
Similarly, it gives its opinion on the right size and relevance of support schemes for renewable energies, and examines calls for tenders. It also assesses projects for over-the-counter contracts for electricity production, storage and actions to control electricity consumption.

A carbon-based energy mix that must change (about 75%)

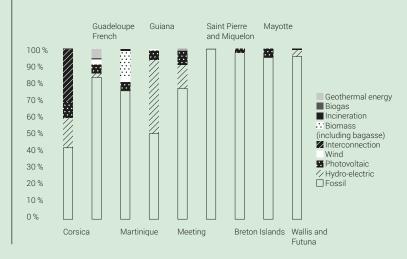
Renewable energies cover 25% of the ZNI electricity mix in 2019. On the rise since the early 2000s, the growth in their share stalled in 2019 and its pace remains insufficient to meet the ambitious targets set by the Energy Transition Law for Green Growth (LTECV).

This figure covers different realities for each territory, reflecting in particular different topographical and climatic characteristics. For example, French Guiana and Corsica limit the share of fossil fuels in their electricity generation mix thanks to their large hydroelectric capacity, while the other ZNIs struggle to reduce the share of fossil fuels to less than 80%, with the exception of Reunion.

Evolution of the electricity mix in the ZNIs 2002-2019 (excluding Saint-Pierre and Miquelon, the Breton islands and Wallis and Futuna)



Significant disparities by territory (2019 figures)



SOURCE: CRE

in hand

actions in Corsica.

82

Improve support schemes for the most mature REs

As in metropolitan France, the support mechanisms for the most mature renewable energy sectors, photovoltaic and wind power, are allocated through open windows and calls for tenders correlate it with the life examined by CRE.

when controlling electricity

consumption and reducing

energy utility costs go hand

On 10 December 2020, CRE deliberated on the compensation

These actions mobilise 71.5 million euros of investment from

for the energy renovations, a reduction of 178 million euros

in public service energy costs is expected.

of public service charges linked to the implementation of six control

For wind power in cyclone zones, CRE issued a favourable opinion in 2020 on a draft decree revising the feed-in tariff in force since 2013. This draft order aims in particular to extend the duration of support to better of the facilities and to support

facilities without storage devices.

It lowers the remuneration offered to a level deemed reasonable by CRE.

For photovoltaics, almost 62 MW of installations (+.8% compared to 2019) made a full application for connection via the open window in 2020. The organisation of an open window for installations on buildings up to 500 kWp, instead of 100 kWp currently, should revitalise the development of small and medium-scaled photovoltaic installations. CRE recommends that the evolution of feed-in tariffs in the off-arid zones be decoupled from that of mainland France, in order to territorialise the development of renewable energy.

Joining a long-standing recommendation of CRE, the territorialised photovoltaic calls for tenders have been set up in 2019 by the Minister of Energy. Territory by territory, they indicate the target power with a view to achieving the photovoltaic sector development objectives set by each PPE. In 2020, CRE has proposed to the Minister of Energy to designate nearly 144 MWp of projects on 143 sites, in all ZNIs. These projects should contribute to increasing the share of renewable energies in the total mix of these territories by about 2.0%.

Once again in 2020, CRE noted the enthusiasm of project developers for ground-mounted installations, which are more attractive in terms of cost and on

degraded land; they represent more than 75% of the accepted applications. In areas where land sprawl is a major constraint, they will facilitate the acceptability of the massification of photovoltaic energy. CRE is in favour of increasing the maximum eligible power for ground-mounted projects, currently limited to 5 MWp. In order to give visibility to the sector and not to slow down the development of these installations, it would like the dates of the next calls for tenders to be announced as soon as possible.

Relaying the CRE tender, the Prefecture of Mayotte has made the roofs of 22 public secondary schools available to project leaders. The success of this tender shows, once again, the importance of the action of local public players in the success of the energy transition in the territories.

Over-the-counter contracts: as an illustration, to support the energy transition in the territories, ten renewable generation projects were approved in 2020.

In 2020. CRE decided in favour of the development of no less than ten projects of various technologies. They will increase the renewable electricity production capacity in the off-grid zones by 137.5 MW and the share of renewable electricity in their mix by 6.3%. Some examples.

In Saint-Pierre, on the island of Reunion, a biogas and solid recovered fuel (SRF) recovery unit with a capacity of 16.7 MW is part of the

waste treatment strategy initiated by the ILEVA syndicate. It will constitute an alternative to the policy of all landfill and will be supplied by the CSR of the south and west of the island, as well as by the biogas produced by the methanation unit of the southern waste centre. In Wallis and Futuna, a territory that does not benefit from a feed-in tariff or a call for tenders for photovoltaic energy, CRE has examined a project for three groundmounted photovoltaic power investments. With a capacity of 1,900 CW, they will increase the installed solar power capacity in the archipelago tenfold and raise the proportion of renewable electricity in its mix to 20% (currently 5%).

In 2020, CRE also examined the project to renew the wind farms (11.7 MW) of Ersa and Rogliano. It will allow to increase by 20% the production of the previous installation and places Corsica in good position to reach its objective of 30 MW installed in 2023.

Another highlight of the year was CRE's decision to convert the two units (99.5 MW) at the Bois-Rouge power plant on Reunion Island to biomass. Commissioned in 1992 and 2004 respectively, they are fuelled by coal and, during the sugar season, by bagasse (sugar cane residue). The supply will be ensured by imported biomass, in addition to local biomass and bagasse. The conversion to biomass is planned for 2023 for both units, and will contribute to achieving the target set by

the EPP for 2023:to produce 53% of the electricity from biomass in investments currently using coal.

Biomass is also being used in French Guiana, where the Easywatt plant will use wood from 270 hectares of forest that have been cleared for conversion to agricultural land. 3,000 tonnes of biomass will be used to power 0.5 MW gasification micro power investments each year.

It should also be noted that the Larivot project in French Guiana has been approved.

APPROVED PROJECTS of renewable energy production

SHARE OF BIOMASS IN THE ELECTRICITY **PRODUCED** in coal-fired power plants by 2023

the government over four years. They should make it possible to reduce electricity consumption by 58.6 GWh per year, or 2.6% of Corsica's consumption. Over their lifetime, estimated at 30 years

They will be supported by the Agency for Sustainable Development, Urban Planning and Energy (AUE), which assists in the deployment of complex actions, such as the comprehensive and efficient renovation of collective housing and individual houses or the renovation of public lighting. From technical and financial design assistance to the selection of contractors and acceptance of the work, the AUE will accompany beneficiaries throughout the process. It will also promote the scheme and the sectors via a communication campaign, networking of the sectors and training of contractors.

This Decision extends the adoption, in January 2019, of the territorial compensation frameworks aimed at fostering MDE in the NIAs.

"THE NEW TOOLS **HAVE ALLOWED US TO KEEP THE SOCIAL CONNECTIONS, BUT** THEY WILL NOT REPLACE THE EXCHANGES AND **CONNECTIONS THAT ARE CREATED ON SITE."**



OPHÉLIE PAINCHAULT , **DEPUTY HEAD OF DEPARTMENT, IN CHARGE OF ZNIS (OFF-GRID ZONES)**

What is your professional background and why did you choose to join CRE?

I arrived there in 2013 in the context of an internship to work on a prospective subject at the time: the implementation of offshore networks between several countries to transport wind production in the North Sea. This subject is now back in the spotlight with the implementation of the first interconnection of this type between Belgium and Denmark at the end of 2020. It is clear that the energy sector is evolving rapidly! After spending some time on the investigation of photovoltaic tenders, I then worked on the issues of opening up the retail electricity and gas markets to competition, in particular by accompanying the first stages of the abolition of regulated sales tariffs. In April 2018, I finally joined the team in charge of non-interconnected areas, which I now manage, with its multiple and exciting subjects.

How have you adapted your work during

The year 2020 was very special and challenged our working methods and our way of operating to go 100% remote. Fortunately, in the off-grid zones, we were already somewhat used to this mode of operation by videoconference with our contacts in the islands and the teams in mainland France. From the beginning of 2020, CRE has supported operators who have had to adapt to travel restrictions and have suffered significant delays in their construction of new production facilities. This was the case, of course, for network operators, but also for developers, such as Albioma with the conversion of its coal-fired power plant in Le Moule, Guadeloupe, Voltalia and its biomass power plant in Cacao, French Guiana, and numerous storage projects in the various territories. The tender schedule was postponed to give developers time to adapt to the health conditions. The health crisis also had a significant impact on the

deployment of energy demand management actions, which slowed down sharply in 2020: due to the cessation of activities and the difficulty of carrying out work, but also which put a strain on the financing capacity of companies or individuals. CRE has therefore reviewed the financial incentives for certain demand management actions in order to help revitalise certain sectors.

This has also affected our cooperation work, for example with Mauritius, which was to start in April 2020 with an expert mission. However, we were able to adapt by proposing to replace the diagnostic visit with a series of regular meetings, organised by my colleagues from the Directorate for European and International Affairs and Cooperation by videoconference, with the URA and the various players in the Mauritian energy sector. These initial exchanges made it possible to initiate discussions and provide a vision of the major issues and risks in the Mauritian electricity sector, while awaiting the expert mission on site.

The circumstances of the year 2020 did not allow for the field missions that CRE tries to carry out regularly in order to take the measure of the realities of the island territories, to apprehend and better understand the problems inherent in each of them and to propose measures adapted and relevant to their scale. This observation is regrettable, but we plan to relaunch these missions as soon as conditions allow.

Finally, the year 2020 was marked by many changes in the team and the arrival of new agents who had to be welcomed and accompanied under special conditions. The new tools have enabled us to maintain the social link, but they will not replace the liveliness of the exchanges and links created during the work at Rue Pasquier, which I hope will return soon.

What projects will you be working on in 2021? How do you see the energy sector in the years to come after the past year and more specifically in the off-grid zones?

In my opinion, the past year has only reinforced the importance of making rapid progress on decarbonising the electricity mix of these territories and on their energy autonomy, in order to be able to deal with new crises.

The ZNIs are still very carbon-intensive territories and dependent on fossil fuel imports, but the ambitions are considerable and the levers important. The PPE projects currently being drawn up provide for 100% decarbonised electricity mixes in Reunion Island, for example, or in Guadeloupe: this raises major issues concerning the integration of energy sources, particularly intermittent ones, into the grid. But solutions exist today and network managers are working on the implementation of innovative solutions. Some small networks are already ready to operate without fossil fuels (in New Caledonia, for example). One of the real challenges, after these particular years, will be to reconcile economic recovery and energy efficiency to limit the growth in consumption. CRE has set up ambitious frameworks for the implementation of energy demand management actions, and we will have to ensure that they are properly deployed despite the difficulties that the crisis may have caused for some players.

→ See the press release: CRE approves a massive energy nanagement programme for the ZNIs.

CRE REPORTS

→ Find direct links to the reports at ra2020.cre.fr



July 2020 **Activity Report 2019**



July 2020

Report on the functioning of the wholesale electricity and natural gas markets



December 2020
Annual Legal Activity
Report



July 2020
Report taken in
application of Article
R.336-39 of the Energy
Code analysing
the causes
and the issues involved
in reaching the ARENH
system ceiling



November 2020

Report on the functioning of the French retail electricity and natural gas markets - 2018-2019 report



July 2020
Report on
electricity and gas
interconnections



December 2020

Report on the implementation of the minimum threshold of 70% of interconnection capacities for exchanges at French borders: assessment and prospects

SUPPRIMER

The sole purpose of this document is to inform the public of CRE's activities. Only CRE Decisions are binding.

This document can be downloaded from the CRE website: www.cre.fr

You can follow CRE's news at:

**Gere_energie*
or from the

in Energy Regulatory Commission

CRE's Communication and Institutional Relations Department Graphic design and production: Bastille Agency

Photo credits:
CRE: François Daburon
Is: © LoveTheWind, Flory, stockstudioX,
PeskyMonkey, SolStock, g-stockstudio,
guruXOOX, Veronique DANSAC-BON,
xijian, Dragan Smiljkovic, Viktoriia Hnatiuk,
COMiCZ, Tramino, Nikada, HAYKIRDI,
BrianAJackson, chameleonseye

Final text prepared April 2021 Printed in June 2021



15, rue Pasquier – 75379 Paris Cedex 08 – France Tél.: +33 (0)1 44 50 41 00 www.cre.fr