



The Commission de régulation de l'énergie (CRE) (*Energy Regulatory Commission*) consults market participants.

PUBLIC CONSULTATION N° 2019-014 OF 23 JULY 2019 REGARDING THE NEXT TARIFF FOR THE USE OF STORENGY, TEREGA AND GEOMETHANE NATURAL GAS UNDERGROUND STORAGE INFRASTRUCTURES

Translated from the French: only the original in French is authentic

The Law No. 2017-1839 of 30 December 2017 which ended hydrocarbon research and exploitation and included various provisions relating to energy and the environment, amended the regime for third-party access to storage, which has been regulated since January 1st, 2018.

Articles L. 452-1 to L. 452-3 of the Energy Code empower the Commission de régulation de l'énergie (CRE) to set the methodology for establishing tariffs for the use of underground natural gas storage facilities. . CRE can make changes to the tariff levels and structure which it deems justified with regard to, in particular, an analysis of the operators' accounts and any expected changes in operating and investment expenses.

Article L. 421-3-1 of the Energy Code provides that "*underground natural gas storage infrastructures that guarantee the security of supply of the territory in the medium and long term and compliance with bilateral agreements on security of natural gas supply [...] shall be provided for in the multiannual energy programme mentioned in Article L. 141-1. These infrastructures are maintained in operation by the operators.*"

When the regulation was initiated, Decree No. 2016-1442 of 27 October 2016¹ regarding the multiannual energy programme took into account within this scope all sites in operation and mothballed. Subsequently, the decree of 26 December 2018² removed the three sites under umbrella of Storengy (Trois-Fontaines, Saint-Clair-sur-Epte and Soings-en-Sologne) from the list of infrastructures provided for in the multiannual energy programming (PPE). The infrastructures in question continue to be regulated until the expiry of the notice period set at two years by decree³, i.e. until 31 December 2020.

In return for the obligation to keep storage sites in operation under the PPE, storage operators are guaranteed to have their costs covered, insofar as these costs are those of an efficient operator. Article L. 452-1 of the Energy Code provides that the difference between the revenue allowed revenue of storage operators and the revenue directly received by storage operators, in particular through capacity auctions, is compensated *via* the ATRT tariff, by a specific term called storage rate charge.

In a context of entry into regulation within constrained deadlines, CRE has adopted a short regulation period of 2 years (2018-2019) for the ATS1 tariff. The next storage tariff, known as the ATS2 tariff, will apply from 2020 for a period of 4 years.

Given the visibility required by market participants and the complexity of the issues to be addressed, CRE organised two public consultations:

- the first one, dated 14 February 2019, concerned the tariff regulatory framework applicable to regulated infrastructure operators for the next generation of tariffs. 41 responses were received;

¹ Decree No. 2016-1442 of 27 October 2016 regarding the multiannual energy programme

² Decree No. 2018-1248 of 26 December 2018 relating to gas storage infrastructures necessary for security of supply

³ Decree of 19 February 2019 relating to the notice period provided for in Article L. 421-3-1 of the Energy Code

- the second one, dated 27 March 2019, was aimed at gathering the opinion of the market participants on CRE's first orientations regarding the structure of the ATRT7 tariff as well as on the storage compensation charge. 66 responses were received.

Non-confidential responses to these two public consultations are published on the CRE website along with this consultation.

This consultation presents CRE's preliminary guidelines regarding the level of costs to be covered. It also aims to present, on the basis of its analyses and the feedback from market participants, the guidelines envisaged by CRE regarding the proposals presented during the public consultations of 14 February and 27 March 2019. CRE wishes to obtain the opinion of market participants before taking its final decision.

Main issues

The implementation of the gas storage reform has enabled the marketing and filling of storage facilities up to the levels necessary to ensure security of supply. It has also increased transparency on marketing methods and operators' costs. Carried out within tight deadlines in consultation with storage operators and market participants, this is a success that strengthens France's security of supply at a controlled cost to the community.

When the ATS1 tariff was drawn up, the short deadlines for implementing the storage reform did not allow CRE to carry out a detailed audit of operators' requests regarding net operating expenses, and therefore to propose a net operating expenses trajectory that was sufficiently relevant to apply effective incentive regulation. CRE has therefore adopted a specific regulatory framework for the ATS1 tariff period, the duration of which it has limited to 2 years, within which the differences between the projected and actual figures for all costs and revenues are adjusted *a posteriori*. The ATS2 tariff must make possible the implementation of the incentive regulatory principles applied to other regulated infrastructures, including a 4-year tariff period and incentives to control costs and ensure the quality of service provided to storage users.

The stagnation of consumption over the past 10 years and its anticipated decline by 2030, particularly in the context of energy transition objectives, make it essential to control the costs of all gas operators. They lead CRE to be particularly vigilant in the examination of any new investment project that will be submitted by storage operators in the future. Thus, CRE will be careful to ensure that the proposed offer and the investments envisaged by the operators are strictly aimed at the following two objectives: compliance with the objectives set by the PPE in order to ensure the security of supply in France and the response to industrial safety issues.

CRE considers that the pricing of underground natural gas storage must take these issues into account, in addition to the objectives of simplicity, predictability and continuity.

Tariff level

The natural gas storage operators, Storengy, Teréga and Géométhane, have each submitted a request for tariff evolution setting out their projected costs for the period 2020-2023 as well as their requests relating to the regulatory framework.

Taking into account the elements of the tariff proposals sent to the CRE by Storengy, Teréga and Géométhane would lead to a significant increase in the allowed revenue of +5.9% on average per year for Storengy, +6.6% on average per year for Teréga and +8.7% on average per year for Géométhane.

These requests are based in particular on increases in net operating expenses (excluding energy expenses) amounting to:

- +36.2% in 2020 compared to 2018 (+18.7% excluding dismantling costs), then +1.0%/year between 2020 and 2023 for Storengy;
- +30.0% in 2020 compared to 2018, then +3.9%/year between 2020 and 2023 for Teréga;
- +4.9% in 2020 compared to 2018, then +5.4%/year between 2020 and 2023 for Géométhane.

At this stage, CRE considers that these increase trajectories are too high, while gas consumption is on a downward trend and storage capacities are sufficiently sized.

In addition to its own analyses, CRE relied on studies by external consultants, whose conclusions, which are not binding for CRE, are published along with the present public consultation. These studies cover the following topics:

- an audit of the request in terms of operating expenses for Storengy, Teréga and Géométhane for the period 2020-2023;

- an audit of the request for remuneration rates of the regulated assets of the Storengy, Teréga and Géométhane natural gas storage operators. Storengy and Géométhane are requesting a weighted average cost of capital of 6.5% (actual before tax); Teréga's request is of 7.5%, compared with 5.75% for all operators in the ATS1 tariff.

At this stage, CRE is considering a lower increase in tariffs than that requested by the operators. It plans to:

- limit the increase in operators' net operating expenses, with the audit carried out by the external consultant representing a lower limit and the operators' request an upper limit;
- use a weighted average cost of capital (WACC) in the range of 4.1% to 4.9% (actual, before taxes). The method used to establish this range is unchanged from that used for the ATRT6 tariff. It is based on a WACC with a standard structure and ensures a reasonable return on invested capital, making it possible to maintain the attractiveness of energy infrastructures in France, while taking into account changes in financial parameters, in a context marked by a significant and lasting fall in market interest rates. This range also takes into account the planned reduction in corporate income tax (CIT) from 34.43% to 26.99% on average over the tariff period. This level corresponds to the range proposed for the ATRT7 rate, to which is added a premium relating to the specific risk of underground gas storage, set in the ATS1 at 50 basis points.

By way of pure illustration, by selecting the middle of the ranges considered by CRE at this stage, both in terms of the weighted average cost of capital and the trajectory of net operating expenses, the evolution of ATS2 allowed revenue could then be around +0.1% on average per year for Storengy, -0.4% on average per year for Teréga and +4.1% on average per year for Geomethane. Most of the gap with operators' requests comes from the level of WACC considered, which is lower than that requested by the operators.

Tariff regulation framework

For the ATS2 tariff, CRE plans to implement the main incentive regulatory mechanisms in effect in the ATRT6 gas transmission tariff: incentives to control operating and capital costs, incentives to ensure quality of service, and *ex post* coverage of certain variances *via* the clawback account. Market participants were in favour of this in their responses to the public consultation of 14 February 2019.

CRE also presents, in this consultations, the planned evolutions to the incentive regulatory system for the marketing of storage capacity: it plans to grant a bonus based on the auction premiums observed, subject to reaching the level of the safety net.

The current regulatory framework poses the risk of encouraging storage operators to over-invest, there is therefore a need to change it. With the objective of sending a more relevant investment signal, CRE has reflected upon the possibility of introducing a distinction between, on the one hand, the rate of remuneration for historical assets, for which the determination methodology would remain unchanged (i.e. a rate calculated on long-term data) and, on the other hand, the rate of remuneration for new assets that would be based on short/medium-term data which would apply for a period of 4 years for each new investment. An answer to this question must be found by the end of the consultation. At this stage, CRE does not plan to cover the dismantling costs in the ATS tariff of the three Storengy mothballed sites that will leave the scope of regulation after only 3 years in regulation and without any period of active operation under the regulated framework. However, for the other sites, CRE considers it justified at this stage, if operators were to set up provisions for dismantling, that they should be covered by the tariff in proportion to the duration of the presence of these assets in the regulation.

Paris, July 23, 2019.

On Behalf of the Energy Regulatory Commission,
Chairman,

Jean-François CARENCO

Answering the consultation

CRE would like to invite all parties involved to send their input by no later than **4 October 2019** :

- preferably by entering their contribution on the new platform set up by CRE: <https://consultations.cre.fr>
- or by email to: dr.cp2@cre.fr;

In the interests of transparency, the contributions will be published by CRE.

If your contribution involves elements whose confidentiality you want to preserve, a version concealing these elements must also be sent. In this case, only this version will be published. CRE reserves the right to publish elements that may prove to be essential to the information of all the shareholders, provided that they are not covered by secrets protected by law.

In the absence of a masked version, the full version is published, subject to information relating to secrets protected by law.

Interested parties are invited to respond to the questions justifying their responses.

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1. CONTEXT AND OBJECTIVES OF THE PUBLIC CONSULTATION

1.1 CRE competences

Article L. 421-3-1 of the Energy Code provides that *"the underground storage infrastructures for natural gas that guarantee supply security in the medium and long term and compliance with the bilateral agreements on security of natural gas supply concluded by France with a Member State of the European Union or a Member State of the European Free Trade Association shall be provided for in the multiannual energy programme referred to in Article L. 141-1. These infrastructures are maintained in operation by the operators[...]"*.

In return for the obligation to maintain in operation the storage sites considered necessary for security of supply in the PPE, storage operators are guaranteed to have their costs covered, insofar as these costs are those of an efficient operator.

Articles L. 452-1 to L. 452-3 of French Energy Code determine CRE's tariff-related powers.

Article L. 452-1 of the Energy Code provides that *"the tariffs for the use of transportation networks, the commercial conditions for the use of these networks, as well as the tariffs for ancillary services provided by the operators of these networks or by the operators of storage infrastructures mentioned in Article L. 421-3-1, shall be established in a transparent and non-discriminatory manner in order to cover all the costs incurred by the transmission network operators and the operators of storage infrastructures mentioned in the same Article L. 421-3-1, insofar as these costs correspond to those of efficient operators. These costs take into account the characteristics of the service provided and the costs related to this service, including the obligations set by law and the regulations as well as the costs resulting from the performance of public service missions and contracts mentioned in I of Article L. 121-46"*.

It specifies that *"the costs incurred by the operators of the storage infrastructures mentioned in Article L. 421-3-1 include in particular a normal compensation of the capital invested, the costs mentioned in the last paragraph of Article L. 421-6, [...]"*.

In addition, Article L.452-2 of the Energy Code provides that *"the methods used to establish the tariffs for the use of natural gas transportation networks, [...] shall be set by the Energy Regulatory Commission"* and specifies that *"the operators of the storage facilities referred to in Article L. 421-3-1 shall, at its request, send the Energy Regulatory Commission the information, in particular accounting and financial information, necessary for it to discuss changes in the tariffs for the use of natural gas networks or liquified natural gas installations."*

In addition, Article L.452-3 of the Energy Code provides that *"the Energy Regulatory Commission shall deliberate on tariff evolutions and on those of the ancillary services provided exclusively by the operators of these networks or installations, with, where appropriate, any changes in the level and structure of tariffs that it considers justified, in particular in the light of an analysis of the operators' accounts and the projected evolution of operating and investment costs"* and adds that *"the deliberations, which may take place at the request of natural gas transmission network or distribution operators or the operators of liquified natural gas installations or of storage installations mentioned in Article L. 421-3-1, may foresee a multiannual control of the tariff evolution as well as incentives in the short or long term in order to encourage operators to improve their efficiency [...]"*.

1.2 Purpose of the consultation

CRE wishes to obtain the opinion of shareholders on the guidelines it plans for the ATS2 tariff, as regards the regulatory framework and the level of costs to be covered.

The main changes planned for the next ATS2 tariff aim to:

- set the regulatory framework to encourage operators to control their costs and ensure the quality of service provided to their users;
- study the opportunity of an evolution of the incentive system for the marketing of storage capacities.

2. TARIFF REGULATORY FRAMEWORK

CRE has set the duration of the first ATS1 regulation period at two years. For this first financial year, CRE has adopted a pricing framework within which the differences between the projected and actual figures for all expenses and revenues are adjusted *a posteriori*. This mechanism guarantees a tariff level *in fine* strictly equal to the operator's actual expenditure and revenue, provided that they are effective.

At the end of this two-year period, CRE plans to set a regulatory framework for the ATS2 period similar to that applicable to other regulated infrastructures.

In its public consultation of February 14, 2019, CRE presented an assessment of the regulatory framework over the past 10 years and consulted market participants on the regulatory principles applicable to regulated infrastructures for the next generation of regulated tariffs.

In their responses, market participants shared the positive assessment of the regulatory mechanisms implemented by CRE in the various tariffs, which contribute on the one hand to controlling operators' expenditure and on the other hand to the quality of the service provided to their users. As such, they are in favour of CRE's proposal to renew the majority of these measures for the next infrastructure tariffs.

The stakeholders also commented on the various measures envisaged by CRE to complete the regulatory framework for the next tariff periods. The following paragraphs present the main reactions to the mechanisms envisaged, as well as the guidelines envisaged at this stage by CRE for the ATS2 tariff.

2.1 Main pricing principles

2.1.1 Determination of allowed revenue

In its deliberation regarding the decision on the ATS2 tariff, CRE will determine the forecast allowed revenue for each storage operator for the period 2020-2023, based on the tariff proposal submitted by the operators and its own analyses. The allowed revenue is intended to cover operators' costs insofar as they correspond to those of an efficient operator.

This estimated allowed revenue consists of net operating expenses (NOE), normative capital charges (NCC) and the clearing of the account for the regularisation of expenses and income (CRCP).

$$AR = NOE + NCC + CRCP$$

With:

- AR: provisional allowed revenue for the period;
- NOE: projected net operating expenses for the period;
- NCC: forecast normative capital expenses over the period;
- CRCP: clearing of the balance of the CRCP.

The allowed revenue is set by calendar year

2.1.1.1 Net operating expenses

The net operating expenses (NOE) are defined as the gross operating expenses from which operating income is deducted (in particular capitalised production and extratariff products).

Gross operating expenses are mainly composed of energy costs, external consumption, personnel expenses and taxes.

The level of net operating expenses used is determined on the basis of all the costs necessary for the business of storage operators insofar as, on the one hand, they concern the sites listed by the PPE and, on the other hand, pursuant to Article L. 452-1 of the Energy Code, these costs correspond to those of an efficient operator.

2.1.1.2 Normative capital charges

The normative capital charges (NCC) include the remuneration and depreciation of capital assets. The calculation of these two components is based on the valuation and evolution of the assets operated by Storengy, Teréga and Géométhane - the regulated asset base (RAB) - and the assets under construction (AuC), i.e. the investments made that have not yet led to the commissioning of assets.

NCC correspond to the sum of the depreciation of the RAB's constituent assets and the remuneration of fixed assets. The latter corresponds to the product of the value of the RAB by the remuneration rate determined on the basis of the valuation of the weighted average cost of capital (WACC) and the product of the value of the AuC by the cost of the debt.

$$NCC = \text{Depreciation of RAB} + RAB \times WACC + AuC \times \text{cost of debt}$$

In the absence of regulated operators of listed natural gas storage sites, CRE uses an indirect approach to define the rate of remuneration of the business, following on from the method applied under the regulated tariff for access to LNG terminal facilities (known as the ATTM tariff) and the ATS1 tariff.

To this end, CRE relies on the remuneration rate of the business of a natural gas transmission network operator. This is carried out by listed companies and has an economic nature similar to that of the business of natural gas storage and LNG terminals operators.

The method used to determine the rate of remuneration of assets is based on the WACC with a normative financial structure. Indeed, the TSO's remuneration level must, on the one hand, enable it to finance the interest costs on its debt and, on the other hand, provide its shareholders with a return on equity comparable to that which they could obtain for investments with comparable levels of risk. This cost of equity is estimated on the basis of the so-called "Capital Asset Pricing Model" (CAPM) methodology.

CRE does not intend to modify the principles for calculating the RAB and intends to renew the terms and conditions currently in force, as described in the tariff decision of 22 March 2018.

2.1.2 Remuneration of assets

2.1.2.1 Possible introduction of a differentiation between the remuneration of historical assets and new assets

In the ATS1 tariff, CRE set a single rate of remuneration that applies throughout the tariff period to all of each operator's RAB constituent assets, regardless of when they were commissioned. This single rate is calculated based on calculation parameters derived from long-term data.

Due to the use of long-term averages, the interest rate evolves with a significant inertia compared to the evolution of the rates observed on the market. Operators' average financing costs evolve with comparable inertia, as their ability to refinance their credit lines remains limited.

In its public consultation of February 14, 2019, and in the current context of continuously falling interest rates, CRE questioned the investment signals that this approach sends to operators.

In order to ensure that the remuneration framework sends a fairer signal to investment, CRE proposed, for the ATRT7 period, to introduce a distinction between, on the one hand, the rate of remuneration of historical assets, the determination of which would remain unchanged compared to the current methods of determining the rate of remuneration (i.e. a rate calculated on long-term data) and, on the other hand, the rate of remuneration of new assets which would be based on shorter-term data.

Some of the participants in the public consultation of February 14, 2019 questioned the complexity of such a mechanism. In particular, infrastructure operators and their shareholders have expressed their disapproval of this mechanism, which they consider too complex and unclear.

However, some shippers and consumer associations expressed their support for the mechanism envisaged by CRE insofar as it would send a fairer signal to investments.

If this mechanism were introduced:

- the rate of remuneration applied to new assets would apply for a rolling period (e.g. 4 years) so that the effect of the fair incentive to invest is constant throughout the tariff period, and does not decrease as the end of the tariff period is closer;
- for the ATS2 tariff period, and in order to best reflect the financing conditions, this rate could be 100 bps to 150 bps lower than the remuneration rate calculated on the basis of parameter values derived from long-term data and presented in 3.3.3.
- some parameters of this rate could also be indexed annually (risk-free rate for example) over the next tariff period;
- finally, following this 4-year period, the assets would be remunerated at the long-term rate.

CRE continues to question the introduction of this mechanism.

Question 1 What is your position regarding the possible introduction of a differentiation between the remuneration of historical assets and new assets for the ATS2 tariff?

2.1.2.2 Evolutions in the remuneration of asset under construction (AuC)

Under the remuneration framework currently applied to storage operators, all AuC (i.e. capital expenditures invested but not yet commissioned) are remunerated at the cost of the debt (nominal, before tax) applicable during the period to which the 50 basis points specific storage premium applies.

In its public consultation of February 14, 2019, CRE indicated that it would consider maintaining a remuneration for AuCat the cost of debt for long cycle investments (more than one year).

The majority of shippers and industrialists are in favor of this proposal, which encourages the timely implementation of investments. Infrastructure operators are for their part mainly opposed to a remuneration at cost of debt, considering it preferable to be remunerated at the same rate as for assets that have been commissioned.

For the ATS2 tariff period, CRE is currently considering maintaining the remuneration of the AuC at the cost of debt, to which the specific storage premium of 50 basis points applies, which provides an effective incentive for the rapid implementation of the investment projects of the various operators. However, it plans to restrict the base of the AuC to be remunerated only to the stock of assets corresponding to investments with a maturity of more than one year.

2.1.2.3 Processing of assets removed from inventory

2.1.2.3.1 Treatment of stranded costs

In its public consultation of February 14, 2019, CRE proposed extending the principles of coverage of stranded costs in effect in the ATRT6 tariff to all tariffs and covering sunk study costs that have been approved by CRE.

The majority of shippers and industrialists were in favour of the proposed principles for covering stranded costs. However, several infrastructure operators and shippers opposed the introduction of an incentive trajectory for asset removals before the end of their accounting lifetime. They request coverage via the CRCP, due to the uncontrollable nature of some of these costs. The majority of stakeholders are in favour of covering the costs of studies without further action that have been approved by CRE.

Consequently, CRE is considering, for the ATS2 tariff, the following treatment of stranded costs:

- recurring and predictable stranded costs related to small assets that would be removed from the asset inventory before the end of their accounting lifetime will be subject to a tariff trajectory;
- the sunk costs of studies for major projects that have received prior approval from CRE will be covered by the tariff via the CRCP;
- the coverage of other stranded costs will be examined by CRE on a case-by-case basis, based on substantiated reports submitted by storage operators.

The costs to be covered, where applicable, by the tariffs, are taken into account at their book value less any proceeds of sale.

2.1.2.3.2 Treatment of transferred assets

When an asset is sold by an operator, it leaves its assets, leaves the RAB and ceases, in fact, to generate capital costs (depreciation and remuneration). This sale may also generate a capital gain for the operator (difference between the sale price and the net book value).

For example, real estate assets, which are included in the RAB, depreciated and remunerated throughout the period of their presence in the operators' assets, are likely to generate a capital gain, which is sometimes significant, on the day they are resold.

CRE plans to take into account the proceeds from the sale of assets via the CRCP in order to allow consumers to benefit, at least in part, from the gains derived from the resale of these assets, insofar as they have borne the costs (the operators' allowed revenue covering the annual depreciation of the RAB assets).

As regards the amounts of proceeds from the sale of real estate assets that could be recovered by the tariff, they could correspond either to:

- the amount of depreciation covered and financed by the usage tariff during the service life of the asset;
- the percentage of the asset's financing by the tariff during the service life, applied to the net proceeds of the sale.

Question 2 Do you have any comments regarding the treatment of transferred assets envisaged by CRE for the ATS2 tariff?

2.1.2.3.3 Treatment of dismantling costs

Following the change in the scope of regulation in Decree No. 2018-1248, which removes the 3 sites in reduced operation in Storengy (Soings-en-Sologne, Saint-Clair-sur-Epte and Trois-Fontaines) from the scope of infrastructures necessary for security of supply, the latter will leave the scope of regulated sites at the end of the 2-year notice period set by the decree of 16 February 2019, i.e. at the end of 2020.

In its tariffs proposal, Storengy requests coverage in the ATS2 tariff of the dismantling costs of the Saint-Clair-sur-Epte, Soings-en-Sologne and Trois-Fontaines sites, which it estimates in a preliminary manner to be around €220

million⁴. Storengy is requesting coverage of €24 million per year for the ATS2 period for the dismantling of these sites.

First of all, CRE recalls that the removal of an infrastructure from the list of sites necessary for security of supply does not necessarily lead to a decision to dismantle it, which remains the operator's decision. Indeed, if the inclusion in the scope of the regulation requires, under Article L. 421-3-1 of the Energy Code, that the operator maintain the site in operation, there is no obligation if the site is not included in the scope of the PPE.

In addition, the 3 concerned sites entered into reduced operation before the regulation came into effect: they did not contribute to France's security of supply, and the costs for maintaining reduced operation were covered by the tariff. For these sites, therefore, there were no costs to Storengy as a result of the regulation.

CRE considers that the case of the three Storengy sites in reduced operation is very special: they will leave the scope of regulation at the end of 2020, after only 3 years in regulation and without any period of active operation in the regulated framework. Consequently, CRE does not intend at this stage to cover the costs of dismantling these 3 sites in the ATS tariff.

On the other hand, CRE recalls that a different treatment could be adopted for the other sites. In accordance with Article L. 421-3-1 of the Energy Code, the dismantling costs could not be covered once these sites have been removed from the regulated scope. However, at this stage, CRE considers it justified, if operators were to set up provisions for dismantling, that part of these provisions should be covered by the tariff in proportion to the duration of the presence of these assets in the regulation.

2.1.3 Principle of the CRCP

The level of the ATS tariff is set by CRE based on assumptions regarding the level of expenses and revenue. An a posteriori adjustment mechanism, the account for the regularisation of expenses and income (CRCP), has been introduced to take into account the differences between the actual costs and revenues recorded and the projected costs and revenues. The CRCP is also used for the payment of financial incentives resulting from the application of incentive regulation mechanisms.

In the ATS1 tariff, the CRCP balance is calculated on December 31 of each year. The balance of this account is cleared in year N+1, on the occasion of the annual tariff change, by reducing or increasing the allowed revenue, within the limit of a variation of +/- 5% in each operator's estimated allowed revenue. If this ceiling is reached, the balance of the CRCP not cleared during the year in question is carried forward to the following year. The ceiling of +/- 5% was set as part of the first storage tariff year, with an ad hoc regulatory framework in which all differences between actual and projected expenses were covered by the CRCP.

In order to ensure the financial neutrality of the mechanism, an interest rate equal to the risk-free rate taken into account in the calculation of the WACC applies to the balance of the CRCP. In addition, the balance of the CRCP at the end of the tariff period is taken into account when determining the allowed revenue for the following period. The CRCP balance is thus reset to zero at the beginning of each tariff period.

The clearance method for other network tariffs (TURPE in electricity and ATRD in gas distribution), with the exception of the gas transmission tariff (ATRT) and the LNG terminal access tariff (ATTM), is identical but with a more limited tariff evolution ceiling of +/- 2%.

In the public consultation of 14 February 2019, CRE proposed to harmonise the way in which the CRCP is cleared for all electricity network and gas infrastructure tariffs, by aligning the operation of the CRCPs for upstream gas infrastructure tariffs (ATRT, ATS, ATTM) with that of other network tariffs (TURPE, ATRD). In particular, CRE considered it preferable to apply an annual clearance ceiling of +/- 2% in order to limit excessively sudden tariff evolutions, which could raise difficulties in terms of acceptability. The majority of contributors were in favour of this proposal, in particular Teréga, which considers that the ceiling of +/- 5% is too high to guarantee the stability of operators' revenues and the level of storage compensation. On the other hand, Storengy and Geomethane would like to maintain a ceiling of +/- 5%.

As regards the level of the annual clearance ceiling, CRE considers that the transition to a regulatory framework with a tariff period of approximately 4 years (cf. 2.2.1) and an incentive to control operating expenses (cf. 2.3.1), reducing the scope of the CRCP, justifies a ceiling on the annual evolution of the tariff due to the clearance of the CRCP similar to that of the other infrastructure tariffs.

At this stage, CRE plans to clear the CRCP for the ATS2 tariff over a period of one year, within the limit of a tariff change, excluding inflation, of +/- 2%, taking into account the entire balance of the CRCP at the end of the tariff period to establish the allowed revenue for the following period.

⁴ Storengy plans to reactivate the Trois-Fontaines site to extract the gas contained in the cave and market it. Any proceeds from the sale will be, where appropriate, deducted from this amount.

2.1.4 Collection of allowed revenue

The collection of allowed revenues from Storengy, Teréga and Géométhane is carried out for each calendar year:

- on the one hand, through revenues collected directly by storage operators from their customers, mainly from the marketing of underground natural gas storage capacity by auction, the terms and conditions of which are set by CRE;
- on the other hand, in the event that the revenues received directly by operators are lower than their allowed revenue, through compensation collected by transportation system operators (TSOs) from their customers and paid back to storage operators. The procedures for collecting and paying this compensation were laid down in the decision of 22 March 2018 on the introduction of a storage tariff term in the ATRT tariff⁵. Conversely, in the event that the revenues collected exceed the storage operators' allowed revenue, the storage tariff term will be negative, to be returned to the users of the transportation networks.

Question 3 Do you support the main pricing principles that CRE is considering for the ATS2 tariff?

2.2 Tariff calendar

2.2.1 A tariff period of about 4 years

The duration of the tariff periods applicable to regulated infrastructures is harmonised at around four years. The only exception to this principle is the duration of the first ATS1 storage tariff, which was set at two years due to the entry into regulation of assets, which led CRE to define a simplified framework.

In its consultation of 14 February 2019 regarding the tariff regulation framework, CRE considered maintaining the duration of the tariff period at 4 years for the next generation of tariffs for the use of regulated infrastructures, including natural gas storage. In particular, CRE considers that this duration gives the market visibility on the evolution of infrastructure tariffs and gives operators the time they need to make productivity efforts.

A large majority of the contributors to the public consultation voted in favour of this proposal, sharing the arguments put forward by CRE.

Several stakeholders stressed the need for mechanisms within the regulatory framework to take into account the consequences of significant changes occurring during the tariff period.

CRE therefore intends to maintain its orientation regarding the duration of the tariff period for the ATS2 tariff.

In addition, it plans to renew the meeting clause in effect in the ATS2 tariff: thus, the possible consequences of new legislative or regulatory provisions or a judicial or quasi-judicial decision could lead to a review of the tariff trajectory for the last two years of the tariff period if the level of net operating expenses retained in the ATS2 tariff were to change by at least 1%.

2.2.2 Principles of the annual tariff evolution

2.2.2.1 Annual evolution of allowed revenue

CRE plans to change the ATS2 tariff annually, starting in 2021, according to the following principles:

- a) the allowed annual revenue will change each year from the initial trajectory as follows:

$$RA_N = RA_{IN} * (1 + k)$$

Where:

- o RA_N is the allowed revenue for year N during the annual evolution;
 - o RA_{IN} is the initial allowed revenue set by CRE for year N in its ATS2 decision;
 - o k is the change in the price list, expressed as a percentage, resulting from the clearance of the balance of the CRCP; k is between +2% and -2%.
- b) The CRCP calculation reference for the following year would be updated for the item "energy costs and CO₂ allowances".

⁵ Decision of the Energy Regulatory Commission of March 22, 2018 introducing a storage tariff term in the tariff for the use of the GRTgaz and TIGF transportation networks

- c) In addition, CRE may take into account, during the annual evolutions in the ATS2 tariff, evolutions related in particular to regulatory mechanisms that encourage marketing and quality of service.

Question 4
tariff?

Do you support the timetable and principles of tariff change envisaged by CRE for the ATS2

2.3 Incentive regulation to control costs

2.3.1 Incentive regulation of operating expenses

2.3.1.1 No CRCP coverage for the majority of expenses

The delays in implementing the ATS tariff and the lack of feedback did not allow CRE to propose a net operating items trajectory that was sufficiently relevant to apply effective incentive regulation: set at too high a level, the trajectory would have generated undue revenues for the operators. In contrast, if set at too low a level, it would not have covered operators' costs.

For the ATS1 tariff, CRE has adopted a tariff framework within which the differences between the projected and actual figures for all expenses and revenues are adjusted a posteriori via the CRCP. This mechanism guarantees a rate level in fine which is strictly equal to the operator's actual costs and revenues, but which has the drawback of not encouraging operators to control their costs, particularly in terms of operating expenses.

In its public consultation of February 14, 2019, CRE proposed to apply for all infrastructure tariffs, including storage, the principles of incentive regulation of net operating expenses currently in effect for other infrastructure tariffs: NOEs, with the exception of certain predefined expenses, are subject to a 100% incentive (CRE sets a trajectory for the tariff period and any deviation from this trajectory remains at the operator's expense). CRE also considers it essential to restart, for the next tariff period, from the level of efficiency achieved by operators during the previous tariff period.

The majority of the stakeholders who responded to the public consultation were either in favour or in favour but with reservations of CRE's proposal. These stakeholders consider that the mechanism currently in force for the majority of tariffs ensures that the operating expenses covered by the tariff correspond to that of an efficient operator. In addition, this mechanism encourages operators to optimise productivity gains and promote the best solutions for the system. The reservations expressed by some stakeholders mainly concern the productivity effort which, they believe, should be reasonable and calibrated.

Only one stakeholder is against the renewal of incentive regulation of net operating expenses. According to him, incentives are always based on financial criteria to the detriment of social criteria and staff numbers.

In view of the positive results over the past ten years and the favourable assessment of the stakeholders, CRE confirms its favourable orientation towards extending the principle of incentive-based regulation of net operating expenses to storage.

2.3.1.2 CRCP coverage of certain expenses

For the ATS1 tariff, the first year of regulated storage, CRE has adopted a tariff framework within which the differences between the projected and actual figures for all costs and revenues are adjusted a posteriori. The rate is therefore "100% CRCP", and no cost or income items is an incentive.

For the ATS2 tariff, CRE plans to apply an CRCP perimeter that complies with the general framework for all power grid and gas infrastructure tariffs, the principles of which were specified in the public consultation of 14 February 2019. Thus, CRE considers that the integration of an item into the CRCP must be assessed in the light of the following two parameters:

- predictability: a predictable item is one for which it is possible for the operator and CRE to predict, with reasonable confidence, the level of costs incurred and revenues received by the operator over a tariff period;
- control: a controllable item is an item for which the operator is able to control the level of expenditure/revenue over the course of a year, or has bargaining power or influence over its level, if it is derived from a third party.

These principles were widely shared by the contributors to the public consultation.

Moreover, CRE considers that the tariff treatment cannot be reduced to a single alternative as regards the coverage of the item, between 100% and 0% for the CRCP. Thus partially controllable and/or predictable items, CRE considers that it is appropriate to partially encourage operators.

At this stage, CRE is considering covering the following items with the CRCP, in the ATS2 tariff:

- capital costs, 100% taken into account, with the exception of those covered by the incentive regulatory mechanism for capital costs "excluding infrastructure" and for which only the inflation gap is taken into account (see section 2.3.2.3);
- energy costs (gas and electricity) and purchases and sales of CO₂ allowances. To encourage operators to control these costs, CRE is considering a similar treatment to the ATRT tariff, with CRCP covering 80% of the differences between the projected and actual figures;
- for operating expenses, the difference between the projected inflation taken into account by CRE and the actual inflation recorded, 100% covered by the CRCP;
- income from the compensation tariff term, 100% covered by the CRCP;
- costs and revenues resulting from contracts between regulated operators, 100% covered by the CRCP. This tariff treatment is generally neutral for users of regulated infrastructures.

In addition, CRE proposes not to take into account requests for inclusion in the CRCP from operators as regards the following items:

- costs relating to taxes. Indeed, in the public consultation of 14 February 2019 on the tariff framework, CRE indicated that it considered it to be a reasonably predictable and controllable expense item, since the operators' tax base is predictable;
- capitalised production, the coverage of which is requested by Storengy. This expense is not in the CRCP in the other infrastructure tariffs, as it is predictable and controllable by the operator;
- penalties paid to customers in the event of breaches of contractual obligations, i.e. when the operator is unable to deliver the marketed injection/withdrawal performance, in particular due to technical failures. Storengy and Géométhane are requesting coverage of these penalties. CRE considers that these costs are not the responsibility of an efficient operator and should not constitute an additional cost for the final consumer. It therefore plans not to cover these in the tariff. In addition, CRE plans to set out in the tariff the amount of penalties paid in the event of failure (see 2.5)
- gains or losses relating to purchases/sales of performance gas, requested by Storengy and Géométhane. These are operations carried out in order to ensure the performance of the storage facilities. Previously, they aimed to ensure a minimum of storage filling level, in a context of low storage capacity subscription, in order to limit the deterioration in performance at the end of winter. With the new auction marketing method, the probability of low subscription is greatly reduced. In addition, during the last winter, purchases/sales were made to provide the best possible response to technical failures and thus meet customer requests for withdrawal. These specific operations essentially make it possible to limit capacity reductions and therefore the penalties paid to customers. This item is therefore in the operator's hands in order to optimise the management of his storage facilities. CRE therefore considers that the storage operator must be encouraged on this item.

Question 5 Do you support the scope of coverage in the CRCP of expenses and income envisaged by CRE for the ATS2 tariff?

2.3.2 Incentive regulation of investments

The ATS1 tariff does not provide for an incentive regulation mechanism for investments.

CRE considers that controlling investment costs is a major challenge for the next tariff period, particularly with regard to the differences observed in 2018 and 2019 between actual or estimated expenses and the trajectories adopted in the ATS1 tariff.

Consequently, CRE plans to include in the ATS2 tariff the regulatory mechanisms described below, in line with those in force in the ATRT6 tariff, which it plans to extend for the most part in the ATRT7 tariff.

2.3.2.1 Incentive to control costs for investments with a budget of more than €20 million

In its public consultation of 14 February 2019 on the regulatory framework, CRE indicated that it wished to maintain for gas infrastructures the incentive mechanism defined by CRE for the ATRT6 period: projects with a significant budget (more than €20 million in transport) are audited in order to set a target budget, and a bonus or penalty is allocated to the operator based on the difference between the target budget and the actual expenditure recorded, with a neutral range of +/- 10% around the target budget. It planned to make it evolve at the margin, by reducing the neutrality range at the level of 5% around the target budget. The majority of contributors were in favour of this proposal.

CRE plans to apply these terms and conditions for the ATS2 tariff, including a neutrality range limited to +/-5%. As regards the implementation threshold, CRE plans to apply this incentive regulatory mechanism to all projects over €20 million.

2.3.2.2 Incentives for cost control outside major projects

The incentive scheme to control the costs of major projects worth €20 million or more mentioned above now covers a limited number of projects. In its public consultation of 14 February 2019⁶, CRE proposed to randomly audit projects or categories of investment projects whose budgets are lower than those of major projects. The majority of contributors were in favour of extending incentive regulation to smaller projects.

CRE therefore maintains its proposal to introduce an incentive mechanism based on the random selection of a few projects or project categories whose budget is below the €20 million threshold, in order to audit them and apply an incentive regulation comparable to that applicable to investment projects whose budget is above €20 million.

2.3.2.3 Incentive to control costs for "non-network" investments

The ATRT6 tariff decision introduced a mechanism encouraging TSOs to control their capital costs on the same basis as their operating expenses on a so-called "non-network" investment perimeter including assets such as real estate, vehicles and information systems (IS).

This mechanism encourages operators to optimise all costs as a whole in the interest of network users. It consists in defining, for the tariff period, the evolution trajectory of these capital costs which will be excluded from the scope of the CRCP. The gains or losses made are therefore retained 100% by the operators during the tariff period. At the end of the tariff period, the effective value of the fixed assets will be taken into account in the RAB, which allows, for subsequent tariff periods, a sharing of gains and a sharing of additional costs with users.

In its public consultation of 14 February 2019 on the regulatory framework, CRE considered renewing the main principles of this mechanism. The majority of contributors were in favour of this proposal.

CRE proposes to apply the mechanism existing for the ATS2 tariff in the ATRT6 tariff, which it intends to maintain in the ATRT7 tariff.

Teréga proposed a mechanism close to TOTEX (joint OPEX and CAPEX trajectory) to control its expenses relating to Information Systems, in which the assets would enter the operators' RAB in the amount set in the TOTEX trajectory, and not on the basis of expenses actually incurred. At this stage, CRE is continuing its work to analyse the feasibility of an experimental TOTEX mechanism for the ATS2 tariff.

Question 6 Do you support the investment incentive regulation mechanisms proposed by CRE for the ATS2 tariff?

2.4 Incentive regulation for quality of service

In the current tariff, no incentive regulation system for the quality of service of storage operators is provided for.

The purpose of incentive regulation of operators' quality of service is to improve the quality of service provided to infrastructure users in areas considered particularly significant for the proper operation of the gas market.

CRE thus plans to extend the incentive regulation system for quality of service to storage operators, following similar procedures to those applied to network operators. In particular, CRE defines the calculation methods and frequency of publication as well as the associated objectives.

⁶ Public consultation of 14 February 2019 n°2019-003 on the tariff regulation framework applicable to regulated infrastructure operators in France.

CRE may also combine a financial incentive with certain indicators, on themes deemed essential for the proper operation of the gas market.

In addition, the results of these indicators will be published on the operators' websites every month. They will prepare a qualitative analysis report on their annual performance to be published on their website.

2.4.1 Proposal for two indicators relating to the unavailability of storage sites

During the 2018-2019 withdrawal campaign, several withdrawal difficulties were encountered simultaneously on Storengy's storage facilities, which led to capacity restrictions subscribed by shippers. Several market participants regretted the delay and the level of information made available to them in this context.

CRE thus plans to introduce two indicators relating to the unavailability of storage sites. Within the framework of the consultation organised by the storage operators on 10 July 2019, market participants were in favour of the following proposals:

- an indicator of compliance with the maintenance programs of storage operators, calculated according to the variation (in percentage) in the capacity made available between the published planned maintenance program and the maintenance program performed. The monitoring of this indicator would be calculated annually and aggregated for each storage group;
- an indicator to monitor the availability of information in the event of technical incidents that could lead to a restriction of the withdrawal and injection rights of users of storage facilities.

At this stage, CRE plans not to provide financial incentives for these indicators at the start of the ATS2 tariff.

2.4.2 Environmental indicators

During the public consultation of 14 February 2019 on the tariff regulation framework, market participants shared CRE's position to improve environmental indicators.

Consequently, CRE plans to include the following indicators in the ATS2 tariff:

- monthly greenhouse gas emissions in relation to the volume of gas cycled;
- methane leaks (including diffuse losses, venting and accidents/incidents) as a proportion of the volume of gas cycled.

At this stage, CRE plans not to provide financial incentives for these indicators at the start of the ATS2 tariff.

Question 7 Are you in favour of the incentive regulation system for service quality, particularly environmental quality, envisaged by CRE for the ATS2 tariff?

2.5 Incentive regulation of the marketing of storage capacities

CRE points out that the primary objective of marketing is to maximise storage capacity subscriptions to ensure the country's supply security during the winter. In a second step, the objective of maximising the income from auctions is sought.

In order to encourage storage operators to achieve these two objectives, CRE has defined a mechanism for the ATS1 tariff that grants operators a bonus equivalent to a proportion of the income from storage capacity auctions, all the higher if the subscription rate for marketed capacity is high. This bonus is received from 75% of the marketed capacities sold, and at most equal to 5% of the revenues from the auctions, if all of its marketed capacities are sold.

Operators received €8.5 million in bonuses for marketing capacity in 2019, which was sold in full (€204 million in revenue).

Storengy wishes to maintain this incentive mechanism for marketing. Teréga proposes an evolution in the calculation based on the difference in market prices between summer and winter and a reduction in the percentage of revenue retained by storage operators.

CRE recalls that this mechanism was defined at the time when marketing of capacities by auction was introduced. This framework was intended to help achieve the objective of maximising capacity subscriptions in order to ensure the security of gas supply for France, as capacity subscriptions had been insufficient for several years. As such, the auctions for capacities for the 2019-2020 gas year were a success, as were the first multiannual auctions that took place in June 2019. CRE also wanted to encourage operators to make their best efforts to maximise the revenues from these auctions.

While the new marketing framework has now been stabilised, CRE believes that incentive regulation of marketing must evolve in order:

- on the one hand, to reduce the amount that had initially been set in a context of uncertainty for the actual subscription and filling of storage facilities;
- to be symmetrical by providing a penalty in case of poor performance of storage operators, and not just a bonus;
- on the other hand, to base this incentive on an indicator that better reflects the commercial performance of operators and no longer on auction revenue, which depends above all on the difference in market prices between summer and winter.

For the ATS2 tariff, CRE proposes an incentive based solely on the auction premium, i.e. the difference between the auction price and a theoretical market price. This theoretical market price could be calculated using a *spread-cost* formula, similar to the one used to calculate the reserve price of multi-annual capacity auctions with a non-zero reserve price. The operator would receive, for each bid, a bonus/malus equivalent to a share of the bid premium, whether positive (bonus) or negative (malus).

The cumulative incentive on all auctions (bonus or penalty) would only be paid to operators for one year of storage if the capacities sold have reached the threshold of the last published safety net (level in withdrawal rate and volume guaranteeing security of supply for the winter).

This incentive enhances the overall value of storage performance, but operators can also influence auction premiums through their commercial actions.

The purpose of this incentive is different from the incentive for quality of service of network operators, CRE considers that the orders of magnitude of these incentives must be higher for storage operators, given the importance of the objective of filling storage facilities. In recent years, gas network operators have received an average annual quality of service bonus of:

- 738 k€/year for GRTgaz (or 0.04% of allowed revenue)
- 636 k€/year for Teréga transport (or 0.26% of allowed revenue)
- 1,480 k€/year for GRDF (or 0.05% of allowed revenue)

CRE proposes that the bonus/malus be set at 1.0% of the premium obtained on each auction. Under this mechanism, operators would have received a total of €828k from the 2019 storage capacity auctions (0.2% of total allowed revenue).

Question 8 Are you in favour of storage operators receiving a bonus/malus equivalent to 1.0% of storage auction premiums when the level of the safety net is reached?

In addition, sold capacities may ultimately be unavailable, in particular due to technical failures, leading the operator to publish restrictions on its customers' injection or withdrawal rights. In this case, the contract may provide for penalties for the operator to pay compensation to his customer.

The ATS1 tariff did not include any provisions relating to the availability of the capacities sold. However, the value of the capacities marketed, and beyond that, the security of supply, depends on their actual availability.

CRE is considering setting in the ATS2 tariff the amount of penalties to be paid by a storage operator to a customer when the capacity it has purchased is ultimately not available. The penalty would be valued at the purchase price of the capacity, and proportional to the unavailable capacity.

For example, for a shipper who purchases a product A with storage capacity to be withdrawn over 5 months, 40% of which is not available for one month, the operator should pay a penalty equivalent to 40% of 1/5th of the total cost of product A paid by that shipper.

Question 9 Are you in favour of setting, in the tariff, the penalties to be paid by the storage operator to a customer in the event of unavailability of the capacity purchased by the customer?

2.6 Incentive regulation for R&D and innovation

In a context of rapid changes in the energy landscape, CRE attaches particular importance to the development of smart networks and the adaptation of infrastructures to the energy transition. Infrastructure operator must have the necessary resources to carry out their research and development (R&D) and innovation projects, which are essential to provide an efficient and high-quality service to users and to develop the tools for operating their networks. In return, network operators must make efficient and transparent use of these resources.

In order to meet these two requirements, the incentive regulation for R&D and innovation is currently based, for all operators, on:

- an asymmetrically encouraged R&D cost trajectory, whose unspent amounts over the period are taken back from operators while trajectory overruns remain entirely at their expense;
- the preparation of a detailed annual report for CRE, reporting the actions undertaken in the field of R&D, supplemented by a biannual public report.

In addition, a *smart grids* desk has been set up for electricity operators alone, enabling them to obtain additional financing, particularly for their *smart grids* demonstrator projects.

In its public consultation of February 14, 2019⁷, CRE proposed:

- to maintain R&D coverage terms for operators through *ex ante* trajectories with the return of unused budget;
- to make available the *smart grids* desk to gas operators;
- to improve transparency on operators' research programmes.

The majority of the stakeholders who responded to the public consultation were either in favour or in favour with reservations of CRE's proposals. Overall, contributors are happy with the way current mechanisms are working, which make it possible to enshrine R&D expenditure while providing flexibility for operators. They would like to see them renewed in the next tariffs. Market participants are also in favour of greater transparency for the R&D programmes of network operators. The reservations expressed by some stakeholders mainly concern the scope of expenditure and projects eligible for the various mechanisms and the confidential nature of certain innovations that make it difficult to exercise transparency.

CRE therefore plans to maintain its guideline. First, CRE proposes that the asymmetric incentive for R&D and innovation costs in the ATRT6 tariff should apply to the ATS2 tariff. They do not encourage operators to arbitrate between saving on their R&D expenditure and preparing for the future. In order to offer infrastructure operators more flexibility in adapting their R&D programs, CRE plans to introduce a revision of this trajectory mid-term.

Finally, CRE proposes to strengthen transparency and control of the effectiveness of operators' R&D and innovation spending in two ways:

- the annual transmission to CRE of technical and financial information for all ongoing and completed projects, instead of the R&D report to the existing CRE;
- the publication every two years of an R&D report for the public, in line with the mechanism currently in place for network operators. These reports should be harmonised between operators, in particular through standardised indicators, and enriched with concrete elements concerning the benefits of the projects for network users, as well as systematic REX of the demonstrators financed by the tariffs.

The definition of the format of these reports will be worked out by CRE and the operators.

In addition, in order to respond to market participants, who are concerned about maintaining a regulatory scope limited only to operators' expertise and therefore do not include activities in the competitive field, CRE plans to request operators to consult the market, at the beginning of the tariff, on the main research topics they plan to develop.

Question 10 Do you have any comments regarding the incentive regulatory framework for innovation and R&D envisaged by CRE for the ATS2 tariff?

⁷ Public consultation of 14 February 2019 n°2019-003 regarding the tariff regulatory framework applicable to regulated infrastructure operators in France.

3. TARIFF LEVEL

3.1 Operators' tariff demand and underlying main challenges

3.1.1 Storengy

Storengy identifies the following issues that lead it to request an allowed revenue that is 17% higher than the allowed revenue for 2018 in current euros:

- the marketing of storage offers at prices correlated to market prices (seasonal spreads) resulted in the sale of all capacities and the complete filling of storage facilities. The return to high levels of storage use by customers has placed heavy demands on storage assets and highlighted the need to increase the reliability of the underground storages and adapt the commercial offer;
- in addition, a separation between regulated activities in France (within Storengy France) and competitive activities (carried out by the parent company Storengy SAS) took place on October 1st, 2018. This split leads to a decrease in personnel expenses, mainly due to the transfer of employees and to increases in external expenses related mainly to the implementation of a service contract with Storengy SAS;
- the rate of remuneration as set by CRE for the ATS1 period aimed to cover only the risks specific to the storage activity, in particular economic, technical and geological risks, and did not take into account the possible changes in the scope of regulation. Storengy requests to increase the risk premium in relation to the transportation activity to 100 basis points compared to 50 basis points in the ATS1 tariff;
- a change in the scope of regulation with the exit of the 3 mothballed sites was decided by decree n° 2018-1248. A two-year notice period before the exclusion of these sites from the regulated scope was set by the decree of 16 February 2019. The allowed revenue trajectory requested by Storengy includes the coverage of the dismantling costs of the Saint-Clair-sur-Epte, Soings-en-Sologne and Trois-Fontaines sites, which it estimates to be €24 million per year over the ATS2 period. In the event that CRE does not adopt a mechanism to cover the costs associated with a change in the scope of regulation, Storengy requests an additional rate of remuneration premium of between 220 and 390 basis points for the risk of a possible change in the scope of regulation, including stranded costs and dismantling costs.

3.1.2 Teréga

Teréga identifies the following issues that lead it to request an allowed revenue that is 23% higher than the allowed revenue in 2018 in current euros:

- the company's restructuring project "Impacts 2025", which involves a new human resources policy, a restructuring of management, an internalisation of key skills and a strengthening of Teréga's presence in the territories;
- an increase in the risk of gas storage operators' business with exposure to the removal of assets from the regulated perimeter without defining the conditions for their removal. This lack of visibility, on infrastructures that are being depreciated, is a risk that other regulated infrastructures do not bear.
- an evolution in the way storage is used, with an increase in the use of storage to carry out market arbitrations. This use leads to an increase in reinjections during the winter;
- Teréga is calling for the specificities of the storage business to be taken into account by increasing rate of remuneration premium to 200 basis points (instead of 50) compared to natural gas transportation. Teréga also calls for the introduction of a mechanism to cover the cost of future dismantling with an inclusion of provisions charges for dismantling.

3.1.3 Géométhane

Géométhane identifies the following issues that lead it to request an allowed revenue that is 19% higher than the allowed revenue in 2018 in current euros:

- an evolution in the scope of regulation with the exit of development projects was decided by decree n° 2018-1248. Géométhane requests that, after expiry of the two-year notice period, remuneration be maintained for the ongoing fixed assets of the two caves developed as part of the "Manosque 2" project (for an amount of €2 million per year) and that the costs associated with keeping the caves in brine be covered so as not to lose the developments carried out (for an amount of €0.9 million per year). In the event that CRE does not adopt a mechanism to cover the costs associated with evolutions in the scope of regulation, Géométhane requests an additional rate of remuneration premium between 220 and 390 basis points;
- the rate of remuneration as set by CRE for the ATS1 period aimed to cover only the risks specific to the storage business, in particular economic, technical and geological risks, it did not consider the possible

reduction of the scope of regulation. Géométhane requests to increase the risk premium in relation to the transmission activity to 100 basis points compared to 50 basis points in the ATS1 tariff;

- finally, Géométhane plans to replace the compression equipment with the commissioning of an electro-compressor in 2022.

3.2 Operating expenses

3.2.1 Operators' request

3.2.1.1 Storengy

Storengy submitted its operating expenses forecasts for the next pricing period, separately identifying the costs associated with the dismantling of sites outside the scope of regulation and other net operating expenses.

- **Dismantling costs:**

Storengy considers it legitimate for the costs associated with the dismantling of sites outside the scope of the PPE to be covered by the regulation, as these storage sites were considered necessary for supply security in the previous PPE published on 27 October 2016.

Storengy is requesting coverage of these costs up to a lump sum of €24 million per year over the 4-year period (2020-2023). This solution takes into account the valuation of some of the assets that will be dismantled.

- **Net operating expenses:**

The estimated net operating expenses excluding dismantling costs presented by Storengy for the ATS2 period are as follows:

In current € millions	2018 Actual	2020	2021	2022	2023
Net operating expenses	175.3	196.4	196.9	200.5	207.0

Over the period 2020-2023, Storengy proposes a sharp increase in the net operating expenses trajectory, with a significant increase between the projected 2020 and the actual 2018 figure (+12.0%). Over the period 2020-2023, net operating expenses increased by +1.8% per year on average. This trajectory takes into account, in the case of the operating expenses for maintaining in operation⁸, the removal from the regulatory scope at the end of 2020 of the 3 mothballed sites.

The main items showing a change between 2018 and 2020 in Storengy's request are as follows:

- "maintenance", "operation" and "expertise": the €22 million increase is associated with greater demand for storage and the implementation of the service contract with Storengy SAS;
- In "personnel expenses", the €11 million decrease is related to the transfer of 174 employees to Storengy SAS;
- "operating income", the €10m decline is mainly explained by the decrease in services provided on behalf of third parties and inter-operator revenues;
- "energy costs", the €5 million decrease is associated with an exceptional depreciation and a tax recovery in 2018, partially offset by an increase in energy consumption.

3.2.1.2 Teréga

The projected net operating expenses presented by Teréga for the ATS2 period are as follows:

In current € millions	2018 Actual	2020	2021	2022	2023
Net operating expenses	37.2	49.7	52.4	52.9	54.6

⁸ The above trajectory does not include the costs of dismantling sites in reduced operation.

Over the period 2020-2023, Teréga proposes a very strong increase in the net operating expenses trajectory, with a significant increase between the projected 2020 and the actual 2018 figure (+33.6%). Thereafter, over the period 2020-2023, net operating expenses increased by +3.2% per year on average.

The main items showing an evolution between 2018 and 2020 in Teréga's request are as follows:

- "staff and common resources": the €5.6m increase is explained by an increase in operating expenses following the restructuring of Teréga;
- "operating income", the €2.9 million drop in revenues is mainly associated with a decrease in the re-invoicing of storage costs to the transportation activities;
- The €2.6m increase in "energy costs" is explained by the expiry of a favourable supply contract and a change in the allocation of costs at the Lussagnet site between transportation and storage activities;
- "safety and environment", this €0.6 million increase is linked to the purchase, from 2020, of voluntary carbon offsetting as part of the Be Positive programme.

3.2.1.3 Géométhane

The projected net operating expenses, presented by Géométhane for the ATS2 period, are as follows:

In current € millions	2018 Actual	2020	2021	2022	2023
Net operating expenses	16.5	17.1	17.7	19.4	20.1

Between the actual 2018 and the projected 2020, the net operating expenses increased by €0.6 million (+3.8%). The main items showing an evolution between 2018 and 2020 in the Géométhane request are as follows:

- "taxes": the €0.6 million increase is explained by an increase in revenues and the site's property tax base;
- "member services": the €0.5m increase comes from an increase in the costs of contracts to ensure the site's operation.

Over the period 2020-2023, Géométhane proposes a sharp increase in the net operating expenses trajectory, with a significant increase between the 2022 and 2021 forecasts (+9.8%) associated with the commissioning of a new compressor leading to an increase in taxes and energy costs. Over the period 2020-2023, net operating expenses increase by +5.5% per year on average.

3.2.2 Challenges identified by CRE and analytical approach adopted

3.2.2.1 Evolution of the scope of regulation

The regulatory framework requires storage operators to maintain in operation the storage sites identified as necessary for security of supply in the PPE. In return for this obligation, operators are guaranteed to have their costs covered, thanks to compensation received via the tariff for the use of the natural gas transmission networks. The energy code specifies that the costs covered by the tariff are limited to those of the sites listed in the PPE.

The decree of 26 December 2018 removed from the list of infrastructures provided for by the PPE:

- the three sites under the umbrella of Storengy (Trois-Fontaines, Saint-Clair-sur-Epte and Soings-en-Sologne);
- Teréga's "Lussagnet phase 1" project;
- Géométhane's "Manosque phase 2" project.

The infrastructures in question continue to be regulated until the end of a notice period set at 2 years by the decree of 19 February 2019⁹, i.e. until the end of December 2020.

⁹ Decree of 19 February 2019 relating to the notice period provided for in Article L. 421-3-1 of the Energy Code

3.2.2.2 The energy transition affects the operation of gas infrastructures and requires increased vigilance on future costs

The energy transition, with the foreseeable decrease in gas consumption, forces gas infrastructure operators to think differently.

In order to control the evolution of future tariffs, in a context of decreasing consumption, operators should be encouraged to control future investments and limit the risks of stranded costs, particularly as far as gas.

3.2.2.3 Approach adopted by CRE for the analysis of net operating expenses

CRE has requested operators to submit their tariff proposals with regard to the latest figures, justifying any significant difference compared to the 2018 figure and breaking down each item to the first euro, in order to ensure that any additional needs cannot be covered by resources freed up on actions that are ending.

CRE commissioned the firm Schwartz and Co to carry out an audit of the operating expenses of natural gas storage infrastructure operators. This audit took place between April and July 2019. The auditor's report, based on the first version of the operators' requests, is published for each of the operators along with this public consultation document.

This audit provides CRE with a clear understanding of the operators' operating expenses and revenues recorded during the ATS2 period and the projected operating expenses presented by the operators for the upcoming tariff period (2020-2023). The results of this audit aim:

- to provide expertise on the relevance and justification of the trajectory of operators' operating expenses for the next tariff period;
- to assess the level of actual (2018) and projected (2020-2023) costs;
- to make recommendations on the efficient level of operating expenses to be taken into account for the ATS2 tariff.

CRE also analysed certain specific items, in particular Research and Development (R&D) expenditures, energy costs and dismantling costs.

3.2.3 Summary of the results of the external audit and additional adjustments by CRE on specific items

3.2.3.1 Storengy

Results of the external audit

At the end of his audit, the auditor recommended the following trajectory for Storengy's operating expenses over the ATS2 period:

Net operating expenses excluding energy (€m current)	2020	2021	2022	2023
Storengy's request	166.5	166.2	167.8	172.4
Actual 2018 inflated	144.2	146.5	149.0	151.7
Auditor trajectory (excluding framework agreement adjustment, before efficiency)	157.8	159.6	162.1	164.9
Auditor trajectory (before efficiency)	151.8	153.5	155.7	158.4
Auditor trajectory (after efficiency)	151.8	152.3	152.7	153.0
Impact on Storengy's request (after efficiency)	-14.7	-13.9	-15.1	-19.4

- **Analysis of the framework agreement entered into between Storengy France and Storengy SAS**

Following the split of Storengy into two entities on October 1st, 2018, a framework agreement was entered into covering all of Storengy SAS's services for Storengy France SA (a subsidiary of Storengy SAS which groups regulated activities in France).

For Storengy France, the split generated decreases in personnel expenses, mainly due to the transfer of associated employees and increases in external expenses mainly related to the implementation of the framework agreement.

The auditor analysed the impact of the implementation of the framework agreement between Storengy France and Storengy SAS on the level of Storengy France's net operating expenses. The calculation was made on the basis of an overall assessment comparing the 2018 net operating expenses with and without split.

As a result of this analysis, the framework agreement results in a net annual additional cost of approximately €5.7 million in 2018 compared to the previous situation, according to the auditor.

The auditor considers that the implementation of this agreement should not lead to an increase in the NOEs covered by the tariff and that this additional cost would therefore not be justified.

- **Analysis by object of expenses**

The main adjustments relate to the items "other operating expenses" and "personnel costs".

Overall, the trajectories adopted by the consultant lead to an adjustment of the request for €28.5 million, excluding the adjustment on the framework agreement, in total over the period 2020-2023, or 4.2% of Storengy's request.

Other operating expenses

This section includes several types of costs: consumables (used in particular for dehydration and desulphurisation of withdrawn gas), maintenance costs, taxes, information system costs, etc.

The trajectory requested by Storengy shows significant increases in all items compared to the 2018 results. The consultant requested the operator to justify these variations, but considered that the justifications were insufficient.

Consequently, the consultant established a trajectory based on the latest results, indexed to inflation, to which he added the additional costs justified by the operator (costs of interventions on wells in particular).

Personnel costs

Storengy indicates in its pricing application that the increase in business associated with the entry into regulation and filling of storage facilities and the increase in investments leads to a need to strengthen the operational teams in charge of maintenance and industrial safety. Between 2018 and 2020, 38 recruitments are planned, in particular to increase the number of employees on the sites.

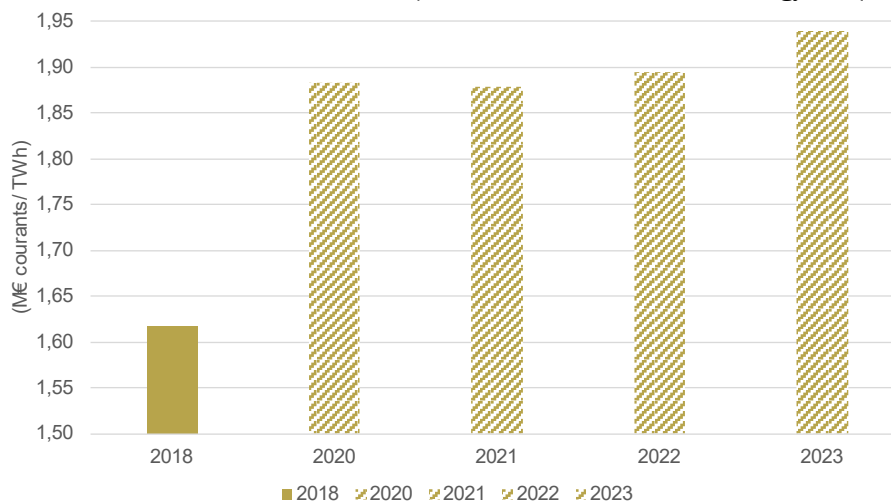
The auditor considered that the majority of the recruitments mentioned in the request were justified by actual operational needs. However, he did not retain some of them (30 retained out of the 38 requested), in particular those aimed at preparing the return to service of the Trois-Fontaines site, which leaves the regulated perimeter at the end of 2021 and which Storengy requested to be taken over during the notice period.

The trajectory chosen by the consultant is therefore higher than in 2018, due to the additional staff. It leads to an adjustment of €9 million over the period 2020-2023.

- **Analysis of operator productivity**

In addition to the analysis by object of expenses, the consultant measured the evolution of Storengy's overall productivity in relation to its operating expenses, by analysing the evolution of the ratio of net operating expenses per TWh of useful volume. In order to analyse productivity, the consultant chose a scope of business that he considers constant and whose most variable costs and revenues have been excluded (energy costs, etc.).

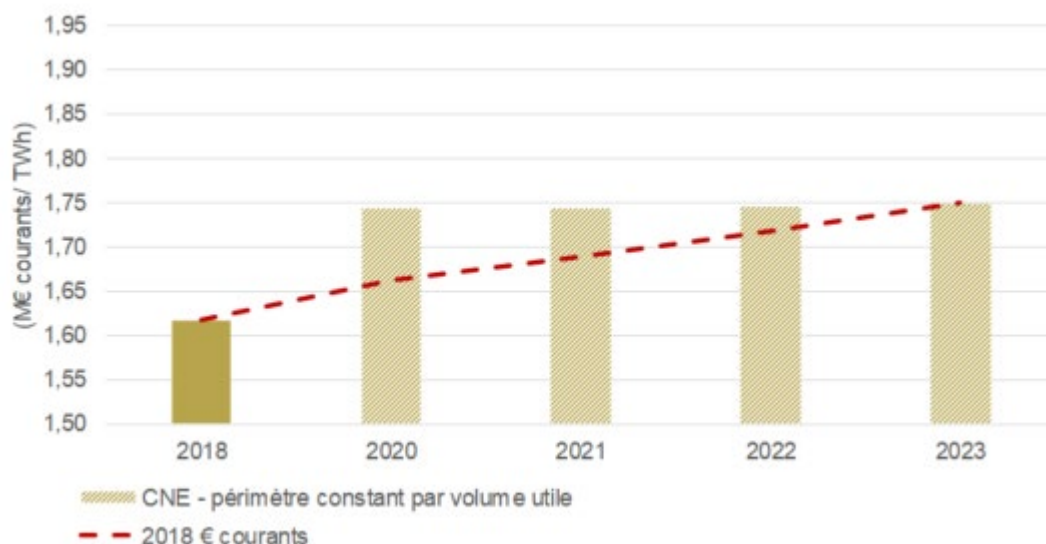
Evolution of the indicator in current k€/useful volume based on Storengy's request:



The figure above shows that Storengy's tariff demand would lead to a sharp deterioration in productivity compared to 2018 expressed in current euros, due to the increase in NOEs while the useful volume remains stable.

The consultant recommends to aim at a minimum stability of the operator's productivity and to define a target for improving the operator's productivity over the period 2020-2023, which aims to return to the 2018 productivity level expressed in constant euros by 2023. He recommends an average annual productivity improvement target of €2.4 million.

Evolution of the indicator in current k€/useful volume based on the S&Co trajectory integrating the efficiency objective:



Additional adjustments by CRE

- Energy costs

Over the period 2020-2023, Storengy proposes an increase in energy costs compared to the 2018 results, with a 25.9% increase between the projected 2020 and the actual 2018 figures, then over the period 2020-2023 an average increase of +5.2% per year.

Storengy justifies the increase in energy costs by returning storage facilities to a high level of activity. Storengy thus retains a storage¹⁰ amplitude of 100% of the useful volume (UV).

Storengy's request	2018	2020	2021	2022	2023
Gas (€M)	7.1	8.1	8.3	8.6	9.1
Volumes (GWh)	451	391	392	393	392
Electricity (€M)	13.9	18.8	18.1	19.5	20.7
Volumes (GWh)	170	214	203	203	203
CO ₂	-	0.2	1.6	1.9	2.2
Other (taxes, depreciation...)	14.0	2.7	2.7	2.7	2.7
Total energy costs	23.7*	29.8	30.7	32.7	34.7

*After reprocessing exceptional costs associated with the depreciation of a gas inventory in Soings-en-Sologne

CRE plans to make several adjustments as regards this request:

¹⁰ Difference between the low filling point of stocks (April 1st) and the high filling point (November 1st)

- the hypothesis of 100% filling of the storage facilities in UV at the beginning of winter seems reasonable. On the other hand, it does not seem relevant to retain a low point as observed in a particular year (3% observed in 2018, a year characterised by a low storage filling rate at the beginning of winter and a cold late winter). CRE plans to use an amplitude of 85% (corresponding to 100% filling of storage facilities and an average low level observed over the 2012-2019 period);
- the adjustment of volumes leads to the correction of the CO₂ allowance purchase trajectory in line with the reduction in gas consumption;
- prices observed on gas markets for the years 2020 to 2023 have fallen by 15% compared to the level of Storengy's tariff application. Gas prices will be updated based on market levels (average of calendar prices in June).

These adjustments lead to a 21% lower trajectory than Storengy's request, i.e. €27.6 million over the period.

	2018	2020	2021	2022	2023
Gas (€M)	7.1	6.1	6.2	6.1	6.1
Volumes (GWh)	451	333	333	333	333
Electricity (€M)	13.9	15.3	14.9	15.6	16.6
Volumes (GWh)	170	184	172	172	172
CO ₂	-	0.0	1.0	1.4	1.7
Other (taxes, depreciation...)	14.0	2.3	2.3	2.3	2.3
Total energy costs	23.7*	23.7	24.4	25.4	26.7

* After reprocessing of exceptional costs associated with the depreciation of a gas inventory in Soings-en-Sologne.

• R&D

The R&D activities carried out under the Storengy SAS - Storengy France service contract cover the following:

- safety, health and the environment: controlling the impact of industrial activity on the environment and strengthening safety on sites;
- underground storage performance: predict the operational performance of storage over time and according to different operating scenarios. Projects include for instance the development of tools for modelling subsoil characteristics (water, H₂S, THT content, etc.) and new treatment and control techniques;
- the performance of surface storage facilities: design, development, operation and maintenance of surface storage facilities for gas storage.

Storengy's request also includes participation in a hydrogen injection/withdrawal project at one site.

With regard to the service contract entered into with Storengy SAS, CRE considers that the themes giving rise to additional costs correspond to permanent work already started in 2018: consequently, CRE plans to retain for the expenses associated with this contract the actual 2018 figure, corrected with the adjustment proposed by the consultant on the framework agreement.

In addition, CRE considers it acceptable for storage operators to study the consequences of hydrogen injection into gas networks on their storage facilities during the next tariff period. However, it notes that all gas infrastructure operators are anticipating work on this subject. CRE will ensure the proper coordination of work between operators, to make sure that research efforts are carried out at the most effective cost to the community.

- Summary of the preliminary analysis

Storengy's request would lead to an 18.7% increase in non-energy operating expenses to be covered in 2020 compared to the level of expenses recorded in 2018, followed by an average annual increase of 1.2% over 2020-2023.

At this stage of its analyses, CRE considers that this request is not justified.

The conclusions of the audit report gave rise to a contradictory discussion with the operator during the month of June 2019. The operator was thus able to comment on the results of the consultant's work, and questioned some of the adjustments identified by the consultant in the context of this contradictory exchange.

The level finally adopted by CRE will depend on the results of the ongoing analyses on the adjustments recommended by the auditor, as well as on other adjustments considered by CRE if appropriate.

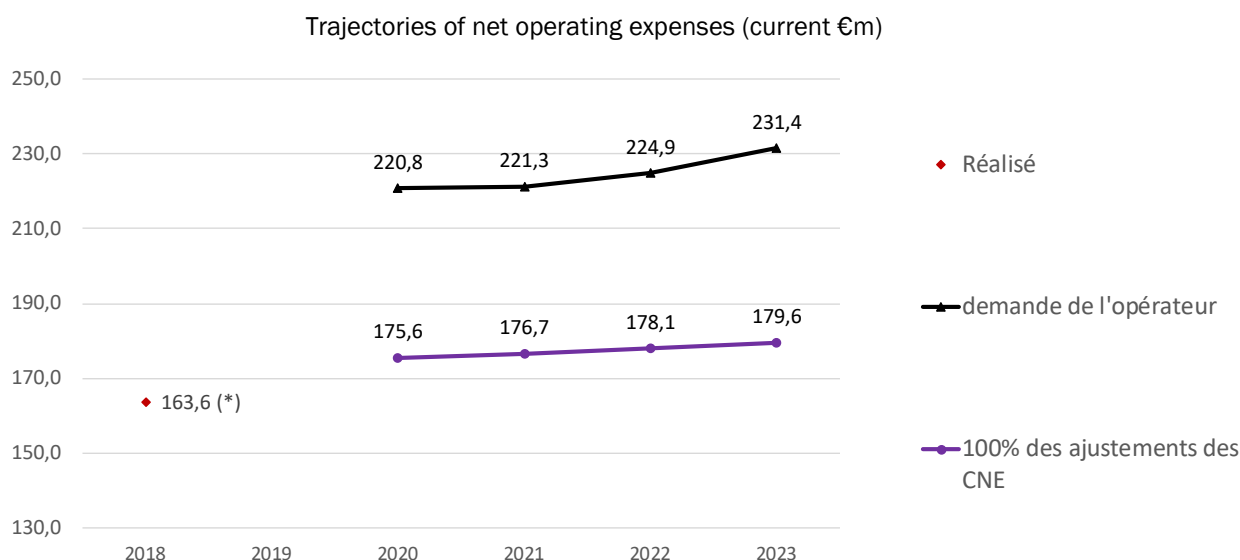
At this stage, CRE considers that Storengy's net operating expenses could range from an "upper limit" corresponding to operators' demand to a "lower limit" based on:

- all the conclusions of the external audit of the operator's net operating expenses;
- an additional downward adjustment by CRE on the energy expense, for a cumulative amount over the ATS2 period of €27.7 million;
- an additional downward adjustment by CRE on the R&D expense for a cumulative amount over the ATS2 period of €1.7 million.

For Storengy, the low bracket is therefore €177.5 million and the high bracket is €224.6 million on average per year over the period 2020-2023.

These levels remain higher than those recorded in 2018, which amounted to €175.3 million.

The trajectories relating to these levels of net operating expenses are as follows:



(*) excluding exceptional items of €11.7m on energy costs.

3.2.3.2 Teréga

Results of the external audit

At the end of his work, the auditor recommended the following trajectory for Teréga's operating expenses over the ATS2 period:

Net operating expenses excluding energy (€m current)	2020	2021	2022	2023
Teréga request	42.5	45.1	45.7	47.7
Actual 2018 inflated	33.6	34.1	34.7	35.3
Auditor trajectory (before efficiency)	38.8	40.0	41.3	41.8
Auditor trajectory (after efficiency)	38.8	38.3	38.4	38.4
Impact on Teréga's request (after efficiency)	-3.7	-6.8	-7.3	-9.3

- Analysis by object of expenses

The difference in the trajectory resulting from the analysis **by object of expenses** (excluding energy) compared to Teréga's tariff proposal corresponds to a cumulative decrease of €19.0 million over the period 2020-2023, or 10.5% of Teréga's request.

The main adjustments concern the items "personnel and common resources", "production costs" and "overhauls and major repairs".

Personnel and common resources

The personnel and common resources are largely determined at the global level at Teréga, then apportioned between the transmission and storage activities using a distribution key.

Consequently, the adjustments recommended by the auditor for the storage activity are consistent with those for transmission.

In particular, in its tariff proposal, Teréga is requesting a net increase of 40 employees for the ATS2 and ATRT7 period, including 19 to support the reorganisation of the Operations Department (DOP).

The consultant considered that the 19 positions linked to the support unit for the deployment of the reorganisation of the DOP do not correspond to a permanent need and should therefore not be the reason for recruiting internal staff, and that Teréga should plan recruitment by aiming for a stability of its workforce at the 2019 level, which means coordinating recruitment and retirement. The consultant therefore retains a net increase in staff limited to 21 employees over the ATS2 period.

Production costs

This item includes current technical expenses (consumption and raw materials, production, maintenance and up-keep, industrial IT and technical studies) and safety/environmental expenses (inspection integrity management, deposit monitoring, HSEQ).

The trajectory requested by Teréga is significantly higher than in 2018 (+10%). The consultant requested Teréga to justify this evolution. At the end of his analysis:

- the consultant considers that the justification for the expenditure of current technical costs is insufficient. He therefore uses a trajectory based on the 2016-18 average of actual expenditure, indexed to inflation;
- in the safety and environment section, the consultant excludes the additional costs related to Teréga's purchase of voluntary carbon offsetting, which do not have to be covered in the tariff.

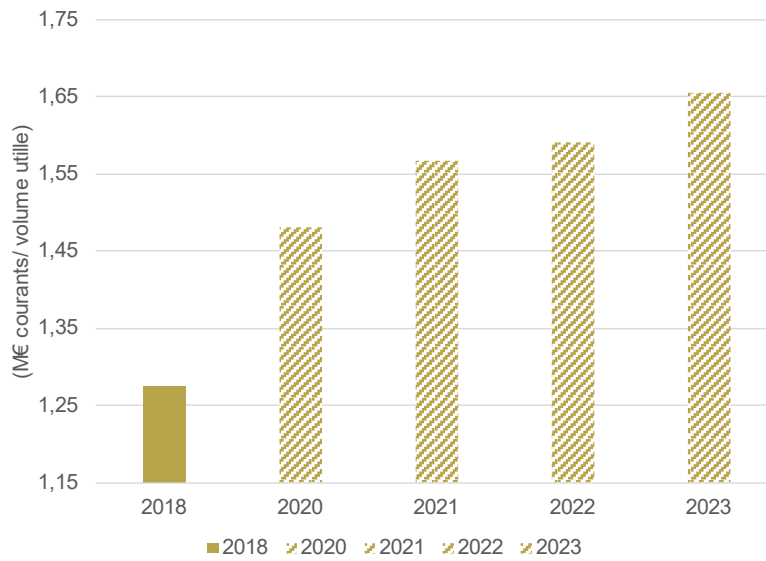
Overhauls and major repairs

The trajectory requested by Teréga is significantly higher than in 2018 (the average over the period is 55% higher). The consultant asked Teréga to justify this evolution. At the end of his analysis, the consultant considered that the justifications provided by Teréga were insufficient, and established a trajectory based on the 2016-18 historical average by indexing it to inflation.

- **Analysis of operator productivity**

In addition to the analysis by object of expenses, the consultant measured the evolution of Teréga's overall productivity in relation to its operating expenses, by analysing the evolution of the ratio of net operating expenses per TWh of useful volume. In order to analyse productivity, the consultant selected a constant scope of activity whose most variable costs and revenues were excluded (energy costs, transport-storage contract, etc.).

Evolution of the indicator in current k€/useful volume based on Teréga's request:



The figure above shows that Teréga's tariff proposal would lead to a sharp deterioration in productivity compared to 2018, due to the increase in NOEs, while the useful volume remains stable.

The consultant therefore recommends aiming at a *minimum* stability of the operator's productivity and defining a target for improving the operator's productivity over the period 2020-2023, which aims to return to the 2018 productivity level by 2023. He recommends setting a productivity improvement target of €2.0 million per year on average.

Evolution of the indicator in current k€/useful volume based on the S&Co trajectory integrating the efficiency objective:



Additional adjustments by CRE - Energy costs

Over the period 2020-2023, Teréga proposes a sharply rising trajectory of energy costs, this evolution resulting from a significant increase (+58.6%) between the projected 2020 and the actual 2018 figure. Over the period 2020-2023, energy costs fall by an average of -0.9% per year.

Teréga justifies the increase in energy costs by:

- the expiry of an electricity contract whose terms were more favourable than current market conditions;
- an increase in electricity consumption associated with both:



- the elimination of the breakdown of electricity consumption between transportation and storage at the Lussagnet site, which ensures compression for both activities¹¹ (from 2020 all electricity consumption at the site will be allocated to storage);
- and the commissioning of an electro-compressor to replace the gas compressor used for transmission (gas consumption previously used for transmission).

Teréga Request	2018	2020	2021	2022	2023
Gas (€M)	0.4	0.4	0.4	0.4	0.4
Volumes (GWh)	25	25	25	25	25
Electricity (€M)	4.1	6.7	6.7	6.7	6.5
Volumes (GWh)	65	79	79	79	79
CO ₂	-	-	-	-	-
Other (taxes, depreciation...)	0.0	0.1	0.1	0.1	0.1
Total energy costs	4.5	7.2	7.2	7.2	7.0

CRE plans to make several adjustments to this request, in line with the elements selected for transmission:

- Teréga maintains storage consumption levels above the average for 2015-2018 without providing any quantified justification for the need. CRE therefore plans to retain a storage consumption equivalent to the average consumption of 2015-2018;
- prices observed on gas markets for the years 2020 to 2023 have fallen by 15% compared to Teréga's tariff application level. CRE will update gas prices based on market levels (average of calendar prices in June).
- CRE plans to correct the ARENH price assumption and retain the level currently in effect.

These adjustments lead to a 23% lower trajectory than Teréga's request, representing an adjustment of €6.7 million over the period. This trajectory is detailed in the table below.

	2018	2020	2021	2022	2023
Gas (€M)	0.4	0.4	0.4	0.4	0.4
Volumes (GWh)	25	21	21	21	21
Electricity (€M)	4.1	5.1	5.1	5.1	4.9
Volumes (GWh)	65	62	62	62	62
CO ₂	-	-	-	-	-
Other (taxes, depreciation...)	0.0	0.1	0.1	0.1	0.1
Total energy costs	4.5	5.6	5.6	5.6	5.4

- **R&D**

Teréga provides in its tariff application for R&D expenses in the amount of: 700k€ per year of OPEX (vs €865k in 2018). These expenses are associated with:

- the finalisation of ongoing projects approved during the ATS1 period;

¹¹ The elimination of this internal transfer has no impact on the amount of operating expenses for Teréga's transmission and storage activities, as CRE has ensured that the same changes are made in the trajectories requested for the transmission activity.

- the ramp-up of projects related to the integration of new gases.

In particular, Teréga's R&D programme includes participation in a pilot project to inject and store hydrogen in a salt cave.

CRE plans to exclude from Teréga's R&D programme its participation in the pilot project for the injection and storage of hydrogen in salt caves (€0.1 million per year). Indeed, CRE considers that storage operators must study the consequences of hydrogen injection into gas networks on their storage facilities. However, Teréga's storage is not a saline cave.

• **Summary of the preliminary analysis**

Teréga's request would lead to a 30.0% increase in non-energy operating expenses to be covered in 2020 compared to the level of costs recorded in 2018, followed by an average increase of 3.8% per year over 2020-2023.

At this stage of its analyses, CRE considers that this request is not fully justified.

The conclusions of the audit report gave rise to a contradictory discussion with the operator during the month of June 2019. The operator was thus able to comment on the results of the consultant's work, and questioned some of the adjustments identified by the consultant in the context of this contradictory exchange.

The level finally adopted by CRE will depend on the results of the ongoing analyses as regards the adjustments recommended by the auditor, as well as regards other adjustments considered by CRE if appropriate.

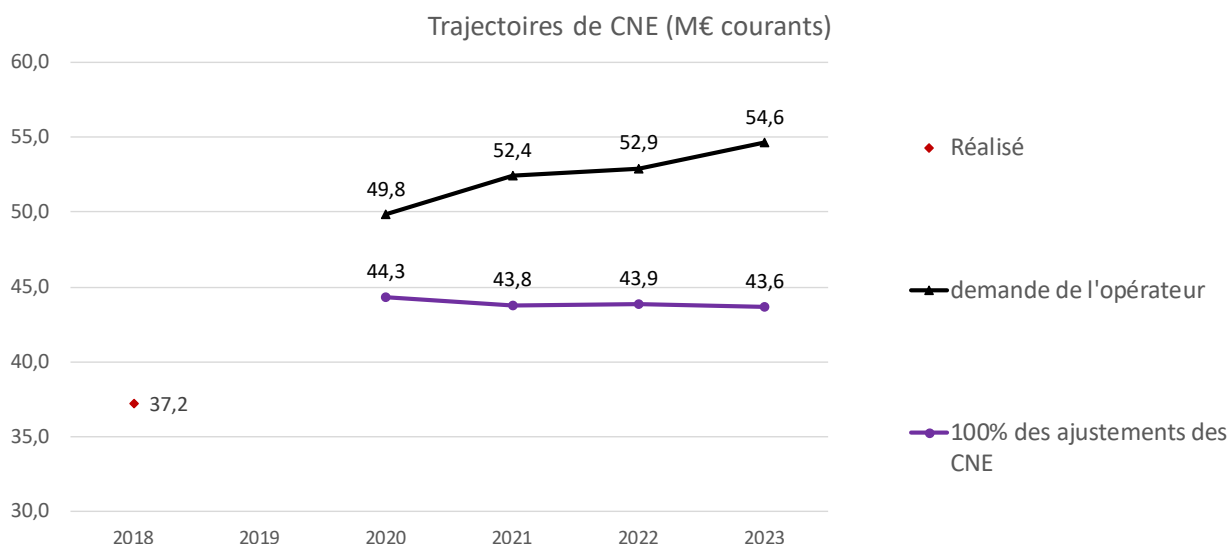
At this stage, CRE considers that the level of operators' net operating expenses could range from an "upper limit" corresponding to Teréga's request to a "lower limit" established on the basis of:

- all the conclusions of the external audit of the operator's net operating expenses;
- an additional adjustment by CRE on the energy expenses, for a cumulative amount over the ATS2 period of €6.7m for Teréga;
- an additional adjustment by CRE regarding the R&D expenses for a cumulative amount over the ATS2 period of €0.1m for Teréga.

For Teréga, the low bracket is therefore €43.9 million and the high bracket is €52.4 million on average per year over the period 2020-2023.

These levels remain significantly higher than those recorded in 2018, which amounted to €37.2 million (€38.9 million taking into account changes in the breakdown of energy costs between transmission and storage).

The trajectories relating to these levels of net operating expenses are as follows:



3.2.3.3 Géométhane

Results of the external audit

At the end of his work, the auditor recommended the following trajectory for Géométhane operating expenses over the ATS2 period:



NOE excluding energy (€m current)	2020	2021	2022	2023
Géométhane request	16.3	16.8	18.5	19.1
Actual 2018 inflated	16.0	16.2	16.5	16.8
Auditor trajectory (before efficiency)	16.3	16.8	18.4	19.1
Auditor trajectory (after efficiency)	16.3	16.8	18.4	19.1
Impact on the Géométhane request (after efficiency)	-0.0	-0.1	-0.1	-0.0

- **Analysis by object of expenses**

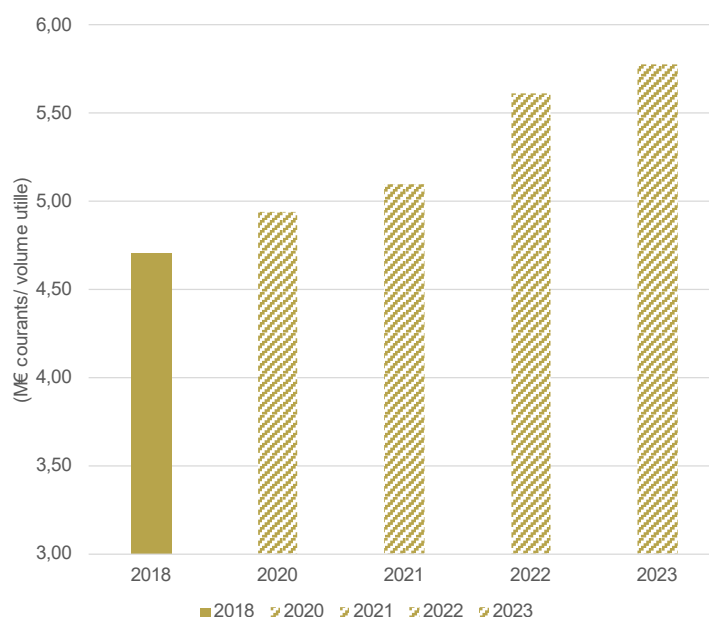
The difference in the trajectory compared to Géométhane's tariff application corresponds to a decrease of €0.04 million in 2020 and a decrease of €0.24 million in the cumulative total amount over the period 2020-2023, or 0.3% of Géométhane's request.

Adjustments are limited to corrections of indexation assumptions for certain items.

- **Analysis of operator productivity**

In addition to the analysis by object of expenses, the consultant measured the evolution of Géométhane's overall productivity in relation to its operating expenses. To do this, he measured the level of productivity achieved by Géométhane in 2018 and compared it to the projected level of productivity based on Géométhane's tariff application.

Evolution of the indicator in current k€/useful volume based on Géométhane's request:



The figure above shows that Géométhane's tariff application would lead to a deterioration in productivity, especially from 2022 onwards. This change is explained by the increase in taxes due to the commissioning of a new compression asset as part of the renovation program, even though the useful volume remains stable.

Since the indicator selected to measure productivity does not take into account the impact of the implementation of compression, the auditor does not recommend applying an objective of improving additional efficiency as compared to the proposed trajectory following the analysis by object of expenses.

Additional adjustments by CRE

- **Energy costs**

Over the period 2020-2023, Géométhane proposes an energy cost trajectory with a 14.6% decrease between the projected 2020 and the actual 2018 figure and an average increase of +6.0% per year over the period 2020-2023. The trajectory shows a +14.8% increase between the 2023 and 2022 projected figures due to the commissioning

of a new electro-compressor leading to an increase in electricity costs that exceeds the decrease in natural gas costs.

Géométhane justifies the increase in energy costs by returning storage facilities to a high level of activity. Géométhane thus retains an amplitude of storage (difference between the low point on April 1st and the high point on November 1st) at 100% of the useful volume (UV).

Géométhane request	2018	2020	2021	2022	2023
Gas (€M)	0.64*	0.59	0.60	0.62	0.32
Volumes (GWh)	27.3	24.6	24.6	24.6	11.9
Electricity (€M)	0.14	0.15	0.16	0.16	0.64
Volumes (GWh)	1.5	1.5	1.5	1.5	5.9
CO ₂	-	-	-	-	-
Other (taxes, depreciation...)	0.09	0.11	0.11	0.11	0.04
Total energy costs	0.99	0.84	0.87	0.90	1.01

Géométhane shall submit to CRE by the end of 2019 a study to assess the relevance of commissioning an electro-compressor to maintain the performance defined in the MEP at the lowest cost. Pending these elements, the evolutions in energy costs associated with this commissioning are maintained.

CRE plans to make several adjustments to this request:

- the hypothesis of 100% filling of the storage facilities of UV at the beginning of winter seems reasonable. On the other hand, it does not seem relevant to retain a low level as observed in a particular year (3% in 2018). CRE corrects the trajectory based on an amplitude of 85% (corresponding to 100% storage filling and an average low level observed over the 2012-2019 period) by maintaining the ratios between amplitude and consumption established by Géométhane;
- prices observed on gas markets for the years 2020 to 2023 have fallen by 15% compared to the level of Géométhane's tariff application. CRE updated gas prices based on market levels (average of calendar prices in June).

These adjustments lead to a lower trajectory of 18% compared to Géométhane's request, i.e. €0.6 million over the period. This trajectory is detailed in the table below.

	2018	2020	2021	2022	2023
Gas (€M)	0.64	0.45	0.45	0.45	0.22
Volumes (GWh)	27.3	20.9	20.9	20.9	10.1
Electricity (€M)	0.14	0.15	0.15	0.15	0.58
Volumes (GWh)	1.5	1.5	1.5	1.5	5.2
CO ₂	-	-	-	-	-
Other (taxes, depreciation...)	0.09	0.11	0.11	0.11	0.05
Total energy costs	0.99	0.70	0.71	0.72	0.85

- R&D

Géométhane provides in its tariff proposal for R&I expenses of €800k/year compared to €220k/year in 2018. These expenditures are associated with the maintenance of basement and surface facilities programmes. Géométhane's participation in the Hygreen project leads to an increase in the renewable gas programme.

The Hygreen project focuses on the production and storage of hydrogen from photovoltaic electricity. Géométhane's participation in this project aims to assess the impact of hydrogen on wells and surface facilities and to assess the technical, economic and regulatory conditions necessary for hydrogen storage.

CRE considers it acceptable for storage operators to study the consequences of hydrogen injection into gas networks on their storage facilities. However, CRE notes that all operators are anticipating work on this subject. CRE will ensure the proper coordination of work between operators, to make sure that research efforts are carried out at the most effective cost to the community, and will continue its analyses.

Summary of the preliminary analysis

Géométhane's request would lead to a 4.9% increase in non-energy operating expenses to be covered in 2020 compared to the level of expenses recorded in 2018, followed by an average increase of 5.4% per year over 2020-2023.

At this stage of its analyses, CRE considers that this request is not justified.

The conclusions of the audit report gave rise to a contradictory discussion with the operator during the month of June 2019. The operator was thus able to comment on the results of the consultant's work, and questioned some of the adjustments identified by the consultant in the context of this contradictory exchange.

The level finally adopted by CRE will depend on the results of the ongoing analyses on the adjustments recommended by the auditor, as well as on other adjustments envisaged by CRE, as appropriate, notably on the basis of the analysis of the effectiveness of the implementation of the electro-compressor.

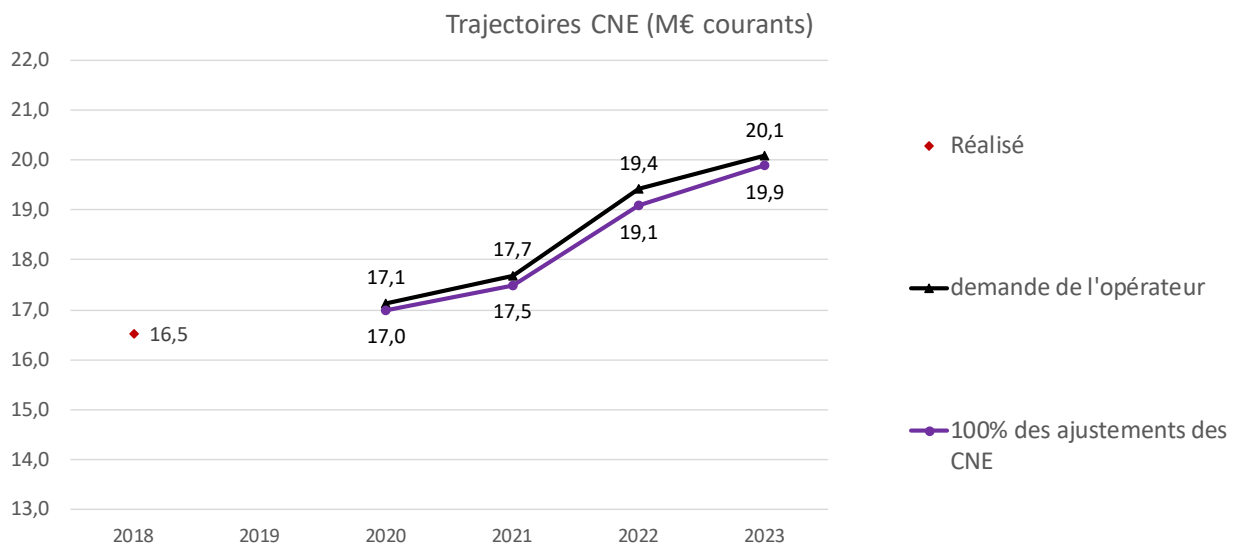
At this stage, CRE considers that the level of operators' net operating expenses could be between an "upper limit" corresponding to the operators' request, and a "lower limit" established on the basis of:

- all the conclusions of the external audit of the operator's net operating expenses;
- an additional adjustment by CRE on the energy expenses, for a cumulative amount over the ATS2 period of €0.6 million for Géométhane;

For Géométhane, the low bracket is therefore €18.4 million and the high bracket is €18.6 million on average per year over the period 2020-2023.

These levels remain higher than those recorded in 2018, which amounted to €15.5 million.

The trajectories relating to these levels of net operating expenses are as follows:



3.3 Weighted average cost of capital

3.3.1 Operators' request

3.3.1.1 Storengy and Géométhane

Storengy et Géométhane's requests were established using a weighted average cost of capital (WACC) for gas transmission of 5.5% (actual, before tax), plus a specific premium of 100 basis points for the specific risks of the gas storage business, i.e. an overall rate of 6.5% (actual, before taxes). This request is based on the conclusions of a study commissioned by the gas operators with an external consultant. In their tariff applications, Storengy and Géométhane also use the 4.95% rate (nominal, before taxes) for the remuneration of asset under construction (AuC). In the event that CRE does not adopt a mechanism to cover the costs associated with a change in the scope of regulation, Storengy and Géométhane request an additional WACC premium between 220 and 390 basis points.

3.3.1.2 Teréga

Teréga's request was established using a weighted average cost of capital (WACC) for transmission of 5.5% (actual, before taxes), plus a specific premium of 200 basis points for the specific risks of the gas storage business, i.e. an overall rate of 7.5% (actual, before taxes). This request is based on the conclusions of a study commissioned by the gas operators with an external consultant and a study commissioned by Teréga only. In its tariff application, Teréga also requests that the rate for the remuneration of the AuCC be set at the same level.

3.3.2 Summary of the results of CRE's external audit

As part of the work to prepare the ATS2 tariff, CRE is examining the assumptions and parameters for calculating the operators' remuneration rate. To this end, it asked an external consultant to carry out an audit and analysis of the storage operators' remuneration claims and conclusions of their advisors.

The work carried out by the consultant took place between May and July 2019. The consultant's report is published along with this public consultation document. After auditing the operators' requests, the consultant concludes that the actual pre-tax WACC range for the gas transmission business is between 2.69% and 4.39%.

As regards the risk premium specific to the storage business, to be added to the WACC for transmission, the consultant concludes with a range of 29 to 101 basis points.

3.3.3 Rate of pay envisaged at this stage

CRE attaches the greatest importance to the stability of its principles for determining the WACC in order to give visibility to market participants. The method used in previous tariffs, based on the WACC with a normative structure, is thus renewed.

CRE does not intend to accept, for the ATS2 tariff, the operators' WACC requests (6.5% and 7.5%, actual before taxes, requested respectively by Storengy and Géométhane on the one hand and Teréga on the other hand). In particular, CRE considers that these requests do not take sufficient account of the observed evolution in market interest rates since the period during which the ATS2 tariff was determined.

Nor does CRE intend to adopt the lower limit of the bracket recommended by the consultant appointed to audit operators' requests. This low bracket would constitute an unjustified disruption to the WACC of the ATS1 tariff.

For the ATS2 tariff, CRE is moving at this stage towards a WACC value that could be between 4.1% and 4.9% (actual, before tax) to remunerate the regulated asset base of both operators, including a 50 basis points premium for risks specific to the gas storage business. This level of premium, which is identical to that set by CRE for the ATS1 period, is justified by CRE's assessment of the risks, in particular economic, technical and geological risks, of operating natural gas storage sites as compared to the gas transmission business.

The bracket, down from 0.85 bps to 1.65 bps compared to the WACC of the ATS1 tariff (5.75% actual, before taxes), takes into account in particular:

- the significant and lasting decrease in market interest rates compared to the levels prevailing at the time the ATRT6 tariff was set, the rate of which was used as a reference when the ATS1 tariff was set;
- the reduction of the corporate tax rate, in accordance with the legislation in effect;
- a revision of the inflation assumption used in the WACC calculation compared to that used for the ATRT6 tariff, the rate of which was used as a reference when the ATS1 tariff was established (as a reminder, 1.1%).

An illustrative scenario is built with a WACC of 4.5% (actual, before tax), in which the cost of debt assumption (nominal, before taxes) used to remunerate the AuCs is 3.0%.

3.4 Investments and capital expenditure standards

3.4.1 Storengy

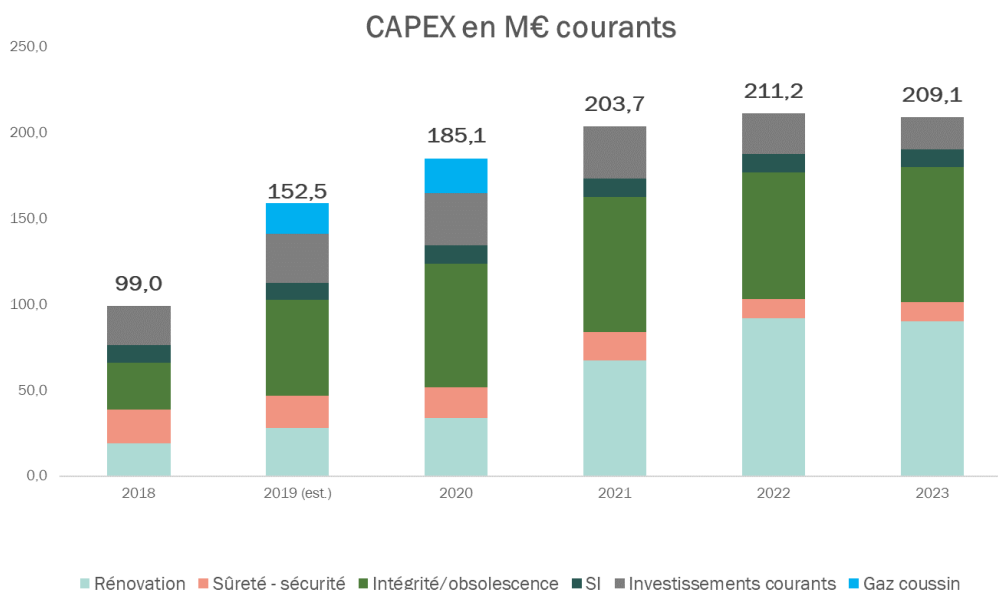
3.4.1.1 Trajectory of investment expenditure

Storengy's investment expenditure trajectory over the ATS2 period is marked by an increase in expenditure, with average expenditures of €202 million per year over this period, compared to €98.3 million in 2018 and €152.5 million projected in 2019.

Storengy expects the following capital expenditures over the next pricing period:

In current € millions	2020	2021	2022	2023	Annual average ATS2	Annual average ATS1 (*)
Renovation	33.8	67.4	92.1	90.4	70.9	23.6
Safety - security	18.0	16.7	10.9	10.9	14.1	19.2
Integrity/obsolescence	71.9	78.6	74.0	79.0	75.9	41.6
Cushion gas	20.0	-	-	-	5.0	8.8
IS	10.8	10.9	10.5	10.1	10.6	10.1
General investments	30.6	30.1	23.7	18.7	25.8	25.8
Non-recurring investments	-	-	-	-	-	2.1
Hazards	-	-	-	-	-	-5.4
TOTAL	185.1	203.7	211.2	209.1	202.3	125.8

(*) average of investment programmes carried out in 2018 and approved in 2019.



In particular, Storengy plans:

- an increase in renovation expenditure, with an average annual expenditure of €71 million over the ATS2 period compared with €24 million over the ATS1 period. This increase in investments is driven by the specific renovation projects of Chémery (€91 million over the period), Gournay (€49 million over the period) and the compression of the Tersanne, Hauterives and Etrez salt sites (€79 million over the period);
- a decrease in expenditure for the Safety and Security purpose, with an average expenditure of €14 million per year over the ATS2 period compared with €19 million over the ATS1 period. This decrease in investments is mainly due to the end of the technological risk prevention plan in 2021 (TRPP);

- an increase in spending for the Integrity/obsolescence purpose, with an average expenditure of €76m per year over the ATS2 period compared to €42m over the ATS1 period. This increase in investments is mainly due to an increase in maintenance operations on wells, with €41 million over the ATS2 period, compared with €19 million in the previous period, the number of operations rising from 5 in 2019 to 8 in 2020 and 12 in 2023. In addition, Storengy plans to finalise the collection and wet gas programme, for €16 million per year over the period;
- a decrease in expenses related to the purchase of cushion gas: Storengy plans to purchase an additional 1 TWh of cushion gas in 2020;
- a stabilisation of expenses related to IS investments and current investments, with an average expenditure of €36 million over the ATS2 period, similar to the average expenditure of the ATS1 period.

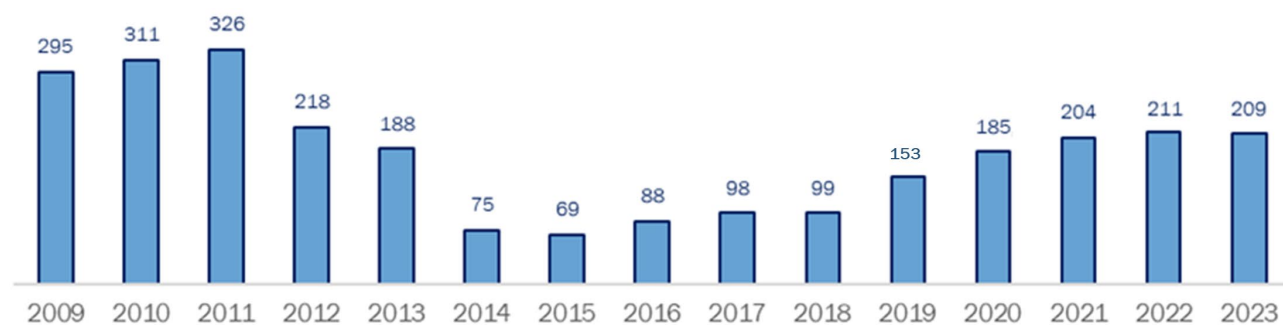
3.4.1.2 Trajectory of capital costs

The investment requests previously submitted, combined with a weighted average cost of capital of 6.5%, result in Storengy's request for the following regulatory capital costs:

In current € millions	2020	2021	2022	2023	Annual average ATS2
RAB trajectory of Storengy	3 704	3 783	3 882	3 909	3 820
Storengy NCE Request (WACC of 6.5%)	392.0	401.3	416.8	427.7	409.5

3.4.1.3 Preliminary analysis by CRE

CRE notes that the trajectory proposed by Storengy corresponds to a strong increase in investments compared to the period preceding the entry into regulation of storage facilities on January 1st, 2018. After a phase of under-investment between 2014 and 2018, Storengy is back to the level of expenditure observed over the 2009-2013 period.



However, CRE is concerned about certain needs identified by Storengy, in particular with regard to projects to renovate the Chémery and Gournay sites and to compress the Tersanne, Hauterives and Etrez salt sites, which contribute to increase the level of average expenditure by more than €47 million per year over the ATS2 period compared with the ATS1 period.

CRE points out that the investments made by storage operators must pursue the following two strict objectives: ensure the safety and security of the installations and guarantee the achievement of the objectives of the PPE as regards the useful volume and withdrawal rate necessary for security of supply. CRE requested Storengy to study the possible adaptations of its offer, which could make it possible to reduce the amount of investments.

At this stage, CRE does not modify the investment trajectory, but continues its analyses. It recalls that Article L. 421-7-1 of the Energy Code provides for the approval of the annual investment budgets of natural gas storage operators. It is in this context that CRE decides on Storengy's level of investment.

In accordance with its guidelines regarding the incentive regulation of investment costs for the ATS2 period (see 2.3.2), certain projects may be audited to define a target budget, such as the three renovation projects mentioned above, whose budgets are estimated by Storengy to be €200 million for Chémery, €58 million for Gournay and €80 million for the compression of the salt sites.

3.4.2 Teréga

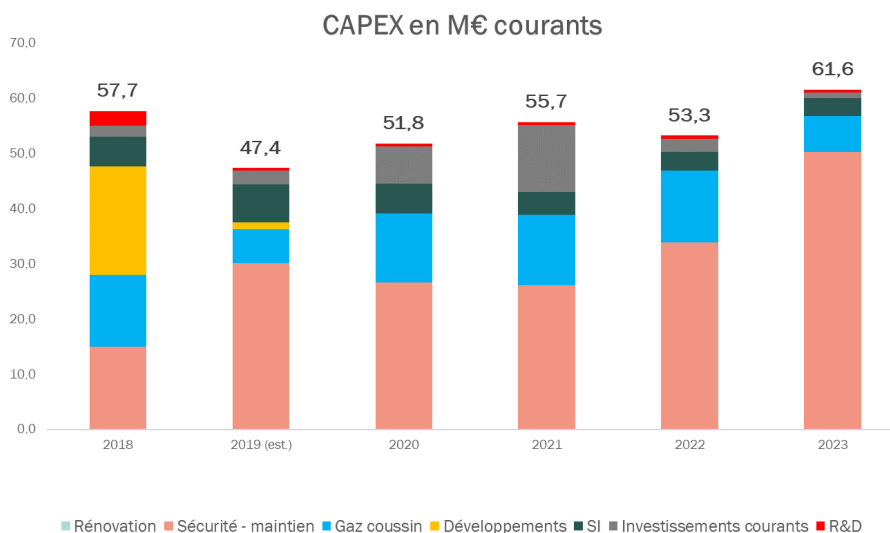
3.4.2.1 Trajectory of capital expenditure

Teréga's capital expenditure trajectory over the ATS2 period is marked by a slight increase in capital expenditure, with an average expenditure of €56 million per year over this period, compared with around €52 million per year over the ATS1 period.

Teréga expects the following capital expenditures over the next tariff period:

In current € millions	2020	2021	2022	2023	Annual average ATS2	Annual average ATS1 (*)
Developments	0.5	0.5	0.6	0.5	0.5	11.0
Security and maintenance	26.7	26.2	33.9	50.3	34.3	23.6
Cushion gas	12.5	12.7	13.0	6.6	11.2	9.6
Business IS	5.4	4.1	3.3	3.3	4.0	6.5
General investments	6.8	12.2	2.5	0.9	5.6	2.0
TOTAL	51.8	55.7	53.3	61.6	55.6	52.5

(*) average of investment programmes carried out in 2018 and approved in 2019.



In particular, Teréga plans:

- a decrease in development expenses, with an average expenditure of €1 million per year over the ATS2 period compared to €11 million over the ATS1 period. This decrease corresponds to the discontinuation of development investments on the "Lussagnet 1" project, in line with the change in the scope of storage infrastructures necessary for security of supply defined for the 2019-2024 period. In addition, Teréga has planned to stabilise R&I expenditure, with an average expenditure of €1 million (corresponding to the total development spending envelope) over the ATS2 period, identical to the level of expenditure over the previous period;
- an increase in Security and Maintenance expenses, with average expenses of €34 million per year over the ATS2 period compared to €24 million over the ATS1 period. This increase in investments is driven by an increase in the Ancillary Facilities program, whose average annual budget increases from €4 million per year over the ATS1 period to €21 million per year over the ATS2 period;
- an increase in expenditures related to cushion gas injection, with an average expenditure of €11 million per year over the ATS2 period compared to €10 million over the ATS1 period. Teréga considers that the use of storage facilities since the implementation of the single market on November 1st, 2018 undermines the operation of the field and requires additional injections into the Lussagnet site, with 0.46 TWh per year between 2020 and 2028;

- a decrease in IS investments, with an average expenditure of €4m per year over the ATS2 period compared to €7m over the ATS1 period, offset by an increase in real estate expenses, which rose from €2m per year over the ATS1 period to €5m over the ATS2 period, mainly due to a corporate reorganisation.

3.4.2.2 Trajectory of capital costs

The investment requests previously submitted, combined with a weighted average cost of capital of 7.5%, result in Teréga's request for the following regulatory capital costs:

In current € millions	2020	2021	2022	2023	Annual average ATS2
Teréga's RAB trajectory	1 256	1 284	1 317	1 341	1 300
Teréga's request for a NCE (WACC of 7.5 %)	142.1	145.7	149.9	154.0	147.9

3.4.2.3 Preliminary analysis by CRE

The overall level of capital expenditure proposed by Teréga is increasing, with an average annual expenditure up 6% compared to the ATS1 period. CRE is questioning this trajectory, in particular significant increases in certain categories of expenditure:

- security and maintenance expenses, whose average annual budget increases by 45% between the ATS1 and ATS2 periods. CRE thus notes that the average annual expenditure allocated to the Ancillary Installations programme has increased by a factor of almost 5 between the two periods, without Teréga having specified all the projects contained in this envelope;
- expenses related to the injection of cushion gas each year. Teréga considers that the low stock levels reached at the end of winter 2017-2018 have led to withdrawal difficulties due to the low pressure level and the flooding of some wells. On the basis of this observation and a first geoscience study which shows a decrease in the water table level, Teréga estimates that 0.46 TWh of cushion gas must be injected annually between 2020 and 2027 into the storage to compensate for the annual decrease in the water table. Considering that the situation observed in the spring of 2018 was exceptional, due in particular to the low level of storage capacity at the beginning of winter and a cold spell in spring, CRE questions the volume and pace requested by Teréga and has commissioned an external audit on the geoscience study and the relevance of Teréga's injection strategy. The conclusions of this audit led CRE to request Teréga to carry out additional work on the characteristics of its offer and to present it to CRE before any new request for cushion gas injection¹²;
- real estate investment expenses, whose average annual budget increases by 206% between the two periods, due to Teréga's Impacts 2025 business plan. CRE questions the effectiveness of these expenses.

At this stage, CRE does not modify the investment trajectory. It recalls that Article L. 421-7-1 of the Energy Code provides for the approval of the annual investment budgets of natural gas storage operators. It is within this framework that CRE decides on Teréga's level of investment.

In accordance with its guidelines for the incentive regulation of investment costs for the ATS2 period (see 2.3.2), certain projects may be audited to define a target budget, such as, for instance, the projects to renew the 5 compressors at Lussagnet, to reinforce and renovate the power supply, to set up a back-up dehydration unit and to build additional pipelines between storage and High Pressure Transmission.

3.4.3 Géométhane

3.4.3.1 Trajectory of capital expenditure

Géométhane's capital expenditure trajectory over the ATS2 period is marked by an increase in capital expenditure, with an average expenditure of €30 million per year over this period, whereas it was around €16 million per year over the ATS1 period.

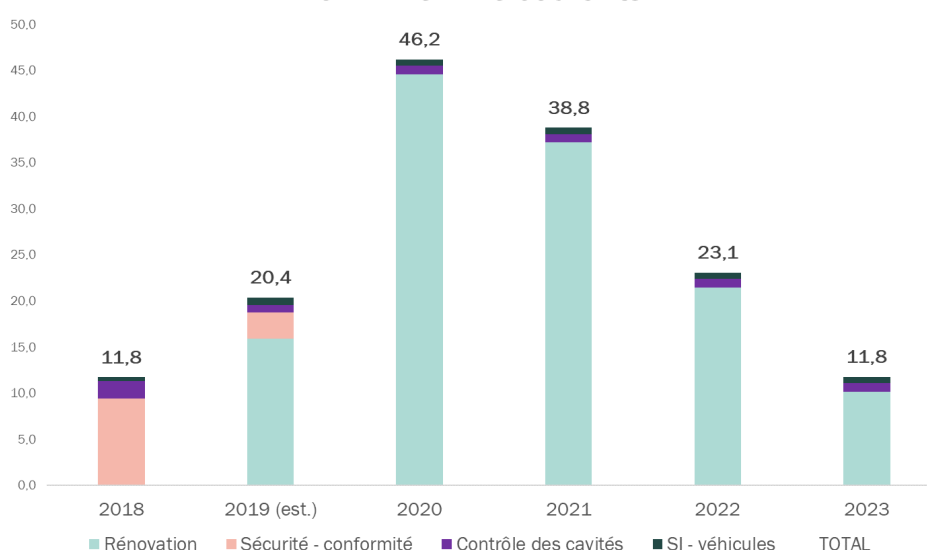
¹² CRE deliberation of 19 July 2018 approving Teréga's investment programme for 2018

Géométhane anticipates the following capital expenditures over the next pricing period:

In current € millions	2020	2021	2022	2023	Annual average ATS2	Annual average ATS1 (*)
Checking the two caves	0.9	0.9	0.9	0.9	0.9	1.4
Renovation programmes	44.6	37.2	21.5	10.2	28.4	7.9
Development of existing facilities	-	-	-	-	-	5.3
Study budget	-	-	-	-	-	5.3
Current investments (IS/vehicles)	0.7	0.7	0.7	0.7	0.7	0.6
TOTAL	46.2	38.8	23.1	11.8	30.0	16.1

(*) average of investment programmes carried out in 2018 and approved in 2019.

CAPEX en M€ courants



In particular, Géométhane anticipates:

- a slight decrease in expenditure related to the control of the two caves, which remains around €1 million per year over the ATS2 period, similar to the level of average expenditure over the ATS1 period. These expenses aim to perpetuate the maintenance in brine that allows Géométhane not to lose the developments carried out so far on the Manosque site;
- an increase in renovation programmes, with an average expenditure of €28m per year over the ATS2 period compared to €8m over the ATS1 period. This increase is linked to Lot 1 of the Optimisation and Reliability of the site programme, whose average annual expenditure increases from €0.4 million per year over the ATS1 period to €7 million per year over the ATS2 period and aims to carry out fire protection work, take into account regulatory constraints and make certain equipment (boilers) more reliable, and to the New Surface Facilities programme, whose average expenditure increases from €2 million per year to €16 million per year, and aims to replace an electrical compression unit;
- a stabilisation of current investments (IS and vehicles), whose average expenditure remains around €1 million per year.

3.4.3.2 Trajectory of capital costs

The investment requests previously submitted, combined with a weighted average cost of capital of 6.5%, result in the following regulatory capital costs for Géométhane:

In current € millions	2020	2021	2022	2023	Annual average ATS2
Géométhane RAB Trajectory	205.5	234.3	238.5	326.6	251.2

Géométhane NCE request (WACC of 6.5%)	28.2	31.2	33.0	38.2	32.7
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3.4.3.3 Preliminary analysis by CRE

Although the average annual expenditure increased by 86% between the ATS1 and AT2S periods, CRE notes that these expenditures mainly concern the renovation programmes at the Manosque site.

The following renovation programmes were approved by CRE in its decision of January 31, 2019¹³ with regard to the approval of the Géométhane 2019 investment programme:

- the work preparation programme, for which Géométhane has planned to stop spending in 2022;
- the Dorsales programme, for which Géométhane has planned to stop spending in 2020;
- studies of the site optimisation and reliability program, including the CRE approved lot 1 for a budget of €5.4 million, including €5 million in 2020. Géométhane plans two other lots for a total budget of €24.4 million, the work of which is aimed at making the treatment workshop necessary for the extraction and replacement of various devices (generator set and fire pumps) more reliable;
- studies related to new surface installations (compression). Géométhane plans €65 million over the period for the implementation of this programme. In its decision of 31 January 2019, CRE informed Géométhane that the results of the studies should make it possible to judge the relevance of the programme to maintain the performance defined in the PPE at the lowest cost.

At this stage, CRE does not modify the investment trajectory, but continues its analyses. It recalls that Article L. 421-7-1 of the Energy Code provides for the approval of the annual investment budgets of natural gas storage operators. It is within this framework that CRE decides on the level of investment in Geomethane.

In accordance with its guidelines for the incentive regulation of investment costs for the AT2S period (see 2.3.2), some projects and programmes may be audited to define a target budget, such as the renovation programmes mentioned above.

3.5 CRCP

3.5.1 Operators' request

- Storengy

In its request for ATS2, Storengy did not estimate the CRCP for 2019. Its trajectory does not take into account the clearance of the CRCP in 2020.

- Teréga

In its tariff application, Teréga estimated the balance of the CRCP on 31 December 2019 at minus €3.8 million, deducted from the expenses to be covered. The latter is mainly composed of:

- net operating expenses lower than the trajectory;
- of regulatory capital costs lower than the trajectory;

Teréga's CRCP report for the ATS1 period and request under ATS2:

In current € millions	2018	2019 (estimated)
Amount of the CRCP	-4.6	-3.8
CRCP Annuity	-4.6	-3.8

In its application for ATS2, Teréga takes into account the clearance from 2020 of the total amount of CRCP still to be cleared, i.e. an amount of €3.8 million to be returned.

- Géométhane

¹³ CRE deliberation of 31 January 2019 approving the investment programme for the year 2019 for Géométhane

In its application for ATS2, Géométhane did not estimate the CRCP for 2019. Its trajectory does not take into account the clearance of the CRCP in 2020.

3.5.2 Analysis by CRE

- Storengy

The balance of the CRCP on 31 December 2019 estimated by CRE in calculating Storengy's allowed revenue amounts to €1.7 million, which will come in addition to the expenses to be covered. This level of CRCP is obtained by taking into account:

- o net operating expenses lower than the trajectory in 2019;
- o the marketing bonus for 2019.

This amount of CRCP is preliminary and may change in CRE's final decision.

- Teréga

The balance of the CRCP on 31 December 2019 estimated by CRE in calculating Teréga's allowed revenue amounts to €4.7 million, which will be deducted from the expenses to be covered. The difference compared to Teréga's request is mainly due to the inclusion of the marketing bonus for 2019. This amount of CRCP is preliminary and may change in CRE's final decision.

- Géométhane

The balance of the CRCP on 31 December 2019 estimated by CRE in the calculation of Géométhane's allowed revenue amounts to €0.4 million, which will be added to the expenses to be covered. This level of CRCP is obtained by taking into account:

- net operating expenses in excess of the trajectory;
- capital costs lower than the trajectory;
- the marketing bonus for 2019.

However, this amount of CRCP is preliminary and may change in CRE's final decision.

3.6 Allowed revenue

3.6.1 Operators' request

3.6.1.1 Storengy

The operator's request results in a +17% increase in allowed revenue in 2020 compared to 2018 and an average annual increase of +2.5% over the ATS2 period.

In current € millions	2019 AR	2020	2021	2022	2023	TCAM 2019- 2023
NOE		220.8	221.3	224.9	231.4	+5.4%
NCE		392.0	401.3	416.8	427.9	+5.0%
CRCP clearance		0	0	0	0	
Allowed revenue	524.4	612.8	622.6	641.7	659.3	+5.9%
Evolution of allowed revenue		+16.9%	+1.6%	+3.1%	+2.7%	

3.6.1.1 Teréga

The operator's request results in a +23% increase in allowed revenue in 2020 compared to 2018 and an average annual increase of +3.5% over the ATS2 period.

In current € millions	2019 AR	2020	2021	2022	2023	TCAM 2019- 2023
NOE		49.8	52	52.9	54.6	+5.6%
NCE		142.1	145.7	149.9	154.0	+6.5%
CRCP clearance		-3.8	0	0	0	
Allowed revenue	161.5	188.0	198.1	202.8	208.6	+6.6%
Evolution of allowed revenue		+16.4%	+5.4 %	+2.4 %	+2.9 %	

3.6.1.1 Géométhane

The operator's request results in a +18.9% increase in allowed revenue in 2020 compared to 2018 and an average annual increase of +8.8% over the ATS2 period.

In current € millions	2019 AR	2020	2021	2022	2023	TCAM 2019- 2023
NOE		17.1	17.7	19.4	20.1	+6.2%
NCE		28.2	31.2	33.0	38.2	+10.7%
CRCP clearance		0	0	0	0	
Allowed revenue	41.8	45.3	48.9	52.4	58.3	+8.7%
Evolution of allowed revenue		+8.4%	+7.9%	+7.2%	+11.3%	

3.6.2 CRE analysis: illustrative scenario

At this stage, taking into account its analyses, CRE does not intend to retain the operators' requests and considers that:

- NOEs will be included between the operators' request (€224.6 million for Storengy, €52.4 million for Teréga and an average of €18.6 million for Géométhane over the period 2020-2023) and the adjusted trajectory (€177.5 million for Storengy, €43.9 million for Teréga and €18.6 million for Géométhane over the period 2020-2023);
- the WACC will be in a range between 4.1% and 4.9%.

For illustrative purposes only, the allowed revenue s of storage operators could evolve according to the following tables on the basis of a WACC assumption in the middle of the range and a NOE trajectory retaining 50% of the adjustments:

- **Storengy**

In current € millions	2020	2021	2022	2023	TCAM 2019-2023
NOE	186.0	186.8	189.3	193.3	+0.7%
NCE	311.9	319.1	332.3	341.1	- 0.8%
CRCP clearance	+1.7	0	0	0	
Allowed revenue	499.6	505.9	521.6	534.4	+0.5%
Evolution of Allowed revenue	-4.7 %	+1.3 %	+3.1 %	+2.4 %	

- Teréga

In current € millions	2020	2021	2022	2023	TCAM 2019-2023
NOE	47.0	48.1	48.4	49.1	+2.8%
NCE	101.3	103.8	107.0	109.7	-2.2%
CRCP clearance	-4.7	0	0	0	
allowed revenue	143.6	151.9	155.4	158.8	-0.4%
Evolution of allowed revenue	-11.1 %	+5.9 %	+2.3 %	2.2 %	

- Géométhane

In current € millions	2020	2021	2022	2023	TCAM 2019-2023
NOE	17.0	17.6	19.2	19.9	+5.9%
NCE	20.4	22.7	24.1	29.2	+3.5%
CRCP clearance	0.4	0	0	0	
allowed revenue	37.8	40.3	43.3	49.1	+4.1%
Evolution of allowed revenue	-9.6 %	+6.6 %	+7.4 %	+13.4 %	

CRE plans to smooth the tariff evolution over the period of the ATS2 2020-2023 tariff, in order to avoid significant tariff movements in the opposite direction at the beginning of the period.

Question 11 Do you support the guideline envisaged by CRE concerning the level of costs to be covered for the ATS2 period for Storengy, Teréga and Géométhane?

4. SUMMARY OF QUESTIONS

- Question 1** What is your position regarding the possible introduction of a differentiation between the remuneration of historical assets and new assets for the ATS2 tariff?
- Question 2** Do you have any comments regarding the treatment of transferred assets envisaged by CRE for the ATS2 tariff?
- Question 3** Are you in favour of the main tariff principles that CRE is considering for the ATS2 tariff?
- Question 4** Do you have any comments regarding the timetable and tariff evolution principles envisaged by CRE for the ATS2 tariff?
- Question 5** Do you support the scope of costs and revenue covered by the CRCP envisaged by CRE for the ATS2 tariff?
- Question 6** Do you support the investment incentive regulation mechanisms proposed by CRE for the ATS2 tariff?
- Question 7** Do you support the simplification and evolution of the incentive regulation system for service quality, particularly environmental quality, envisaged by CRE for the ATS2 tariff?
- Question 8** Are you in favour of storage operators receiving a bonus/malus equivalent to 0.5% of storage auction premiums when the level of the safety net is reached?
- Question 9** Are you in favour of setting in the tariff the penalties to be paid by the storage operator to a customer in the event of unavailability of the capacity purchased by the customer?
- Question 10** Do you have any comments regarding the incentive regulatory framework for innovation and R&D envisaged by CRE for the ATS2 tariff?
- Question 11** Do you support the guidelines envisaged by CRE concerning the level of costs to be covered for the ATS2 period for Storengy, Teréga and Géométhane?