15 July 2025

Joint proposals from storage operators aimed at

easing the sales terms for storage capacities

Since the implementation of the regulation of natural gas storage in France, storage capacity has been marketed according to terms and conditions defined by the CRE.

Deliberations No. 2018-039 of February 22, 2018, and those of September 27, 2018, established sales terms based solely on fixed-date windows announced well in advance, regardless of market conditions.

A new Deliberation No. 2022-251 dated October 7, 2022, made these sales terms more flexible, allowing storage operators to offer up to 70% of their annual capacity with a minimum of two days' notice, and thus to adapt their auction schedules to market conditions.

At the Storage Consultation meeting on November 27, 2024, the storage operators presented a review of the sales campaign, along with a number of proposals aimed at further easing the sales terms, with the dual objective of: 1/ securing the sales of storage capacity, and 2/ maximizing revenue from auctions while minimizing compensation. These proposals were generally well received by the participants at the Storage Consultation meeting.

In order to incorporate feedback from the sales campaign from October 2024 to April 2025, the storage operators nevertheless wished to introduce some additional flexibility regarding the breakdown of sales over time, in addition to those presented at the Storage Consultation meeting.

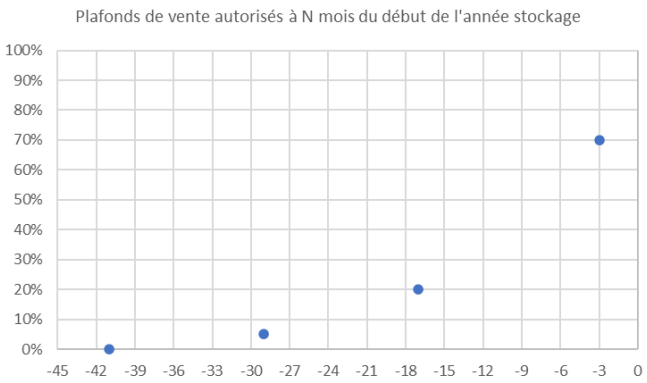
The storage operators therefore propose to the CRE the following adjustments to the sales terms, accompanied, in an appendix, by a proposed new wording for sales terms for storage capacities.

1/ Breakdown of sales over time

Objective: to be able to smooth sales over time more effectively, like other storage operators in Europe.

The current Deliberation stipulates that “Storage capacities of the year N/N+1 can be marketed from November N-4, with at least 95% remaining to be marketed from November N-3, 80% from November N-2 and 30% from January 1st N.”

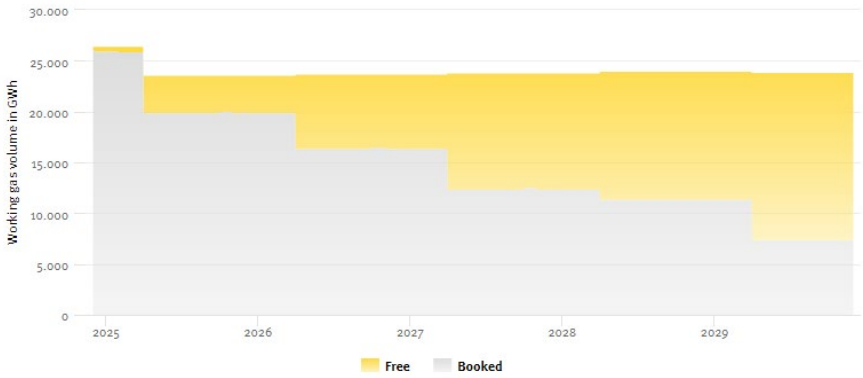
Sales can therefore be initiated approximately 3.5 years before the start of the storage year, but within a limit of 5% of capacity in the first year, then an additional 15% in the second year. This time distribution therefore forces French operators to have to market 80% of their capacity over the 17 months preceding the storage year (including 30% over the last 3 month).



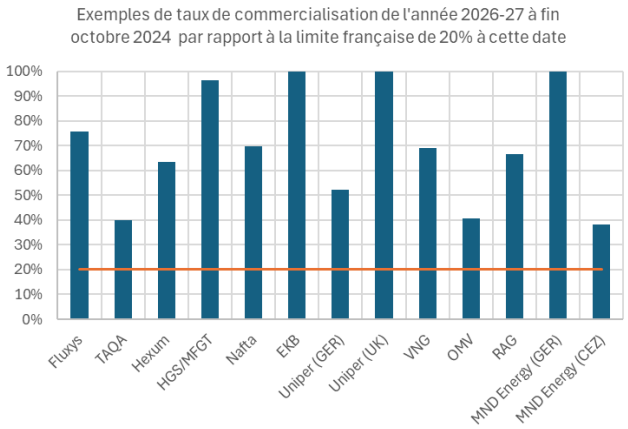
Having to wait until the storage year is approaching to offer capacity creates a risk for French operators if market conditions prove unfavorable in the months preceding the storage year, as has been the case three times in the last four years.

To reduce commercial risk, most major European storage operators spread their sales over time in order to gradually secure an increasing portion of their technical capacity.

For example, VNG displays on its website[1] the following profile for the distribution of its capacities between the marketed portion and that remaining available:



The information made available on their websites by storage operators is not always accessible, or is sometimes limited to short-term publication. However, if we look at some examples of capacity marketing rates for the year 2026-27 as of end of October 2024, we can see the lead taken by European operators compared to the 20% limitation applicable to French storage operators at this deadline:



Most European storage operators are gradually securing their sales, with some even offering multi-year capacity sales for periods of up to 10 years (2 to 10 years for Fluxys, 5 to 10 years for TAQA, etc.).

[1] Transparency | VGS Gasspeicher

At this point, we do not believe that the ability to market capacity over such long timescales is necessarily needed. However, we believe it is desirable to be able to commit our capacity more evenly over time than is currently possible.

Regarding the amount of capacities to be kept available for the quarter preceding the storage year[2]:

End-customer suppliers in France have perfect visibility of their customer portfolios from late December/early January, and it may seem wise to retain a portion of available storage capacity so that suppliers can fine-tune their flexibility purchases at the last minute.

Recent experience, however, shows that this provision is used by end-customer suppliers in France as a free option, which they use to varying degrees depending on market conditions. Indeed, in accordance with the rules defined by the CRE, nearly 40 TWh had been left available for the January and February 2025 fixed date auctions. However, less than 17 TWh were subscribed during these window sales, as detailed in the table below:

(TWh)	Capacity left available for fixed date auctions	Capacity allocated during fixed date auctions
Storengy	28.975	14.837
Teréga	11.000	1.980
Global France (share of capacity in France %)	39.975 (32%)	16.817 (~13%)

Forcing operators to leave such a large amount of capacity available for the quarter preceding the storage year therefore does not seem optimal, as it creates a risk of security of supply for the following winter if market conditions are not favorable (as of May 12, 2025, more than 194 TWh of storage capacity, or 17% of European technical capacity, had not yet been marketed for the current year, mainly in Germany and Italy according to the GIE's AGSI website).

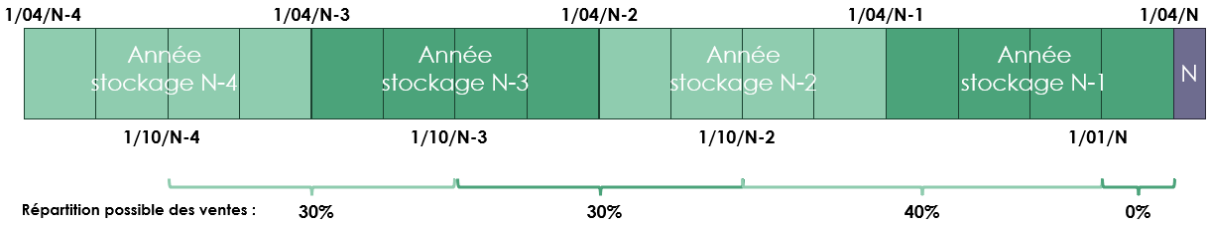
Storage operators therefore propose completely removing the requirement for capacity to remain available for the quarter preceding the offer, in order to maximize the marketing of capacity.

If this demand were deemed excessive, storage operators would propose reducing the amount of capacity that must remain available for sale to between 10% and 15%[3] for the quarter preceding the storage year (instead of the current 30%).

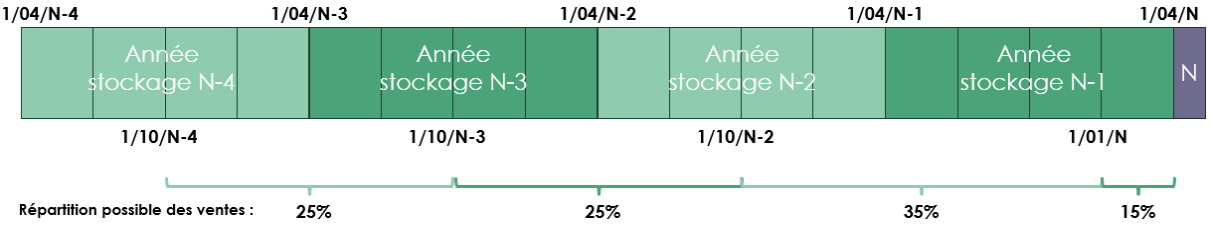
[2] This proposal goes beyond what was proposed in the Storage Consultation to incorporate feedback from the sales campaign that ended in April 2025.

[3] These thresholds are consistent with the 13% observed this year.

If storage operators are no longer required to keep available capacity for the quarter preceding the storage year, the breakdown of sales could be as follows:



Assuming that storage operators were to keep for instance 15% of the available capacity for the quarter preceding the storage year, the breakdown of sales could be as follows:



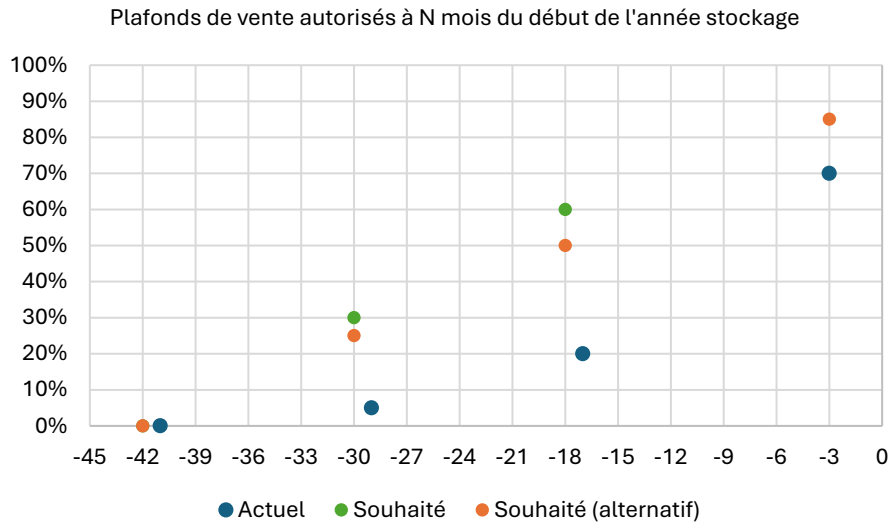
Note: adjusting sales references to October instead of November allows for alignment with Season products on the gas market.

We therefore propose that the current limitation be amended to read as follows:

"Storage capacities for year N/N+1 may currently be marketed starting in October N-4, with at least 70% remaining to be marketed starting in October N-3, and 40% remaining to be marketed starting in October N-2."

or, alternatively:

"Storage capacities for year N/N+1 may currently be marketed starting in October N-4, with at least 75% remaining to be marketed starting in October N-3, 50% remaining to be marketed starting in October N-2, and [10% to 15%] remaining to be marketed starting in January 1, N."



2/ Possibility of selling on a multi-year basis

Objective: to be able to sell some products over several years, like other storage operators in Europe.

The Deliberation currently in force only allows for the marketing of multi-year capacity in case of unsold capacities:

"At the end of the February N fixed date auctions, unsold annual N/N+1 products may be replaced by the same products but for a contractual period of 2, 3, or 4 years, beginning in N/N+1. The reserve price for the multi-year product is equal to the average of the reserve prices that would be defined for each year of the contract pursuant to this Deliberation. These products may only be offered for sale after the February N fixed date auctions, so that all capacities for year N/N+1 has been offered for sale at least once beforehand."

Many European storage operators occasionally offer capacity for several years. For example, Uniper regularly offers capacities over 2 to 3 years (2 TWh of 7Fields over 2 years on 10/12/24, 1.5 TWh of Epe H-Gas over 2 and 3 years on 12/09/24, 0.49 TWh of Epe L-Gas Fast Churn over 2 years on 18/07/24, 2 TWh of Epe H-Gas over 2 and 3 years on 06/06/24 and 18/06/24, etc.)[4].

In addition to the practical aspect of only having to hold a single auction for a product of N years instead of N auctions for an annual product, these multi-year sales are likely to increase auction revenues. Indeed, a multi-year product offers additional value for market participants, as they can optimize this product by shifting volumes from one year to the next (rolling).

Furthermore, when market conditions are unfavorable for a specific maturity, selling multi-year products allows for an "in-the-money" product, with the negative value of one year being offset by the positive value generated for other years. It was on this basis that multi-year products were authorized for the remarketing of unsold capacities. The current conditions (at the end of the February N fixed date auctions, only for unsold capacities) appear to us to be unnecessary constraints that reduce storage agility.

We therefore wish to have the following possibility:

Storage operators are free to offer their capacity for an annual period, or for a contractual period of 2, 3, or 4 years. The reserve price for the multi-year product is then equal to the average of the reserve prices that would be defined for each year of the contract pursuant to this Deliberation. These multi-year products can only be offered for sale if they comply with the capacity limitation (see breakdown of sales over time) imposed on storage operators.

[4] Uniper Storage Portal

3/ Making storage regulations easier to understand

There are many details in the regulation that were intended to reassure the market when regulation came into force.

Storage operators and market players have now reached a certain level of maturity with regard to the functioning of regulated storage in France. On the whole, they are satisfied with the way things are working, and storage operators would like to continue with their current operating methods.

To date, these regulatory details have not posed any particular difficulties, but they are constraints that could perhaps do so in the future. What's more, they make things less clear, and it seems to us that the regulations should only cover the essential points.

3-1/ Going into less detail about the calendar

Maintaining priority days between Storengy and Teréga throughout the year[5] seems sensible to us, as this rule makes it possible to avoid simultaneous auctions by the two operators, without unnecessarily restricting the operators, since days not used by one operator can be used by the other.

The fact of having to organize auctions in the form of fixed date during the months of January and February[6] seems to us to be an unnecessary constraint, which could, in certain market conditions, increase the risk of unsold capacities.

Indeed, storage operators share the view of many suppliers that these fixed date auctions provide visibility to stakeholders on the residual capacity remaining available a few months into the storage year, and can facilitate their purchasing and pricing strategies due to the rigid nature of the schedule imposed on storage operators.

Under normal market conditions, storage operators will naturally apply this method of offering residual capacity for sale, so this constraint seems unnecessary.

Conversely, this method may no longer meet the expectations of market participants in a few years, making this constraint problematic.

Furthermore, this strict schedule constraint leaves storage operators with a passive role when market conditions are unfavorable, even though the risk of poor sales for these residual capacities is highest as the start of the storage year approaches.

---

[5] "Two days are dedicated to the sales of Storengy's capacity. One day is dedicated to Teréga's capacity. Each year, a rotation changes the days of the week dedicated to each operator (for the period from October 2022 to September 2023, Wednesday for Teréga and Tuesday and Thursday for Storengy)."

[6] "The fixed date auctions in January N and February N begin on the second Tuesday of the month. Each window lasts three weeks and is held each week for three days, from Tuesday to Thursday (...). The operators publish the detailed schedule for the January N and February N auctions no later than one month before the start of the first January N auction. This schedule specifies the storage capacity marketed at each auction, with the deadline (the storage year for which the capacity is being sold), the name of the product, and the quantity offered for sale."

It therefore seems counterproductive to us to limit storage operators' ability through very rigid arrangements for selling capacity during this critical period preceding the start of the storage year, especially since they are already required to retain a significant portion of available capacity for this period.

We therefore propose that the regulations not require the organization of fixed date auctions, and that the current arrangements for selling capacity be extended to the quarter preceding the storage year, so as to give storage operators the opportunity to adapt as best as possible to customer needs and, where appropriate, to exceptional market conditions.

3-2/ Going into less detail about sales days organisation

The current regulations detail the organisation of auction days, and we believe it would be more appropriate to limit them to defining a minimum framework that allows for the adequate sale of storage capacity under all circumstances.

We therefore believe it is unnecessary to set three rigid time slots with closing dates of 11:00 a.m., 1:00 p.m., and 3:00 p.m., as well as an auction opening at 10:00 a.m. the day before.

Storage operators will likely maintain the closing times they themselves set when the regulation was introduced (11:00 a.m., 3:00 p.m., and possibly 1:00 p.m.), but they will have the flexibility to adjust the organization of their auctions if necessary.

Conversely, it seems appropriate to set a minimum duration during which participants can submit bids before the auction closes, in order to guarantee fair access to the auctions for all stakeholders. We propose that this minimum duration be 24 hours.

Regarding the volumes offered for sale during a single auction day, we also believe it is appropriate to remove the quantified limit of 10 TWh per day for the next annual maturity, and 5 TWh per day per maturity for subsequent maturities.

Storage operators are currently very far from these limits, which therefore do not constitute a particular constraint under normal market conditions.

Indeed, storage operators are committed to offering capacities adapted to market liquidity and meeting their objective of maximizing auction revenues.

However, it might be useful to remove this constraint, which could potentially prove unnecessarily limiting in atypical market conditions.

We therefore propose that the reference to quantified daily capacity limits be removed and replaced with more generic wording indicating that the daily capacities offered must be adapted to the different product maturities and to market conditions.

3-3/ Going into less detail about the products

In our opinion, the current regulations unnecessarily specify the number of standard storage products that can be offered per operator.

Storage operators are indeed encouraged to provide the simplest possible offers to the market, and multiplying the number of products would be counterproductive. Each operator therefore naturally regulates itself to limit the number of standard products.

However, the introduction of the possibility of selling multi-year capacities raises questions: should a product for one year and the same product for several years be considered distinct products? These products have the same daily performance, but characteristics of stock level constraints at different dates because their maturities are different. They could therefore be distinct products. But in this case, what is the maximum number of products that would be reasonable to define per operator? Specifying a numerical limit does not seem relevant to us, and we believe it is preferable to establish a rule of principle setting a target for results rather than a means.

We therefore propose that the regulations be limited to indicating that the offer must remain simple and readable, with products with sufficiently uniform characteristics to ensure the liquidity of the auctions, and the number of which remains reasonable.

Current regulations limit the sale of specific products to after the initial marketing phase, i.e. after the fixed date auctions of February (or at the end of February if fixed date auctions are deleted).

We believe this restriction is useful when these specific products compete with standard products (for example, for annual products related to the restart of storage facilities after long-term maintenance). Indeed, the commercial bonus is more advantageous for specific products than for standard products, to recognize the storage operator's efforts to optimize available capacity. It would therefore not be logical for these additional specific products to be marketed before the entire initial annual standard products has been offered for sale.

However, this restriction is not appropriate when the specific products are counter-seasonal (for example, the summer/summer products offered by Storengy). Indeed, these products do not reduce the scope of the annual standard products, and they provide the gas system with several physical benefits (anticipation of physical injections into French storage facilities, improvement of pressure conditions and therefore securing withdrawal performance during the winter, etc.).

We therefore believe it is wise to limit the time constraints on the sale of specific products to those products that potentially compete with the annual standard products, and therefore to products that are not counter-seasonal.

3-4/ Use of EEX reference for the reserve price

The reserve price structure for distant maturities seems relevant to us, but the reference to the index published by ICIS makes operators captive to this provider of paid data, even though similar market data is currently made available free of charge by EEX.

It therefore seems desirable to us to give operators the possibility of optimising their operating costs either by letting them choose, for the entire marketing campaign from October N to October N+1, the price publication reference for establishing the reserve price, and by indicating it for example in their auction rules, or by defining the reserve price on the basis of EEX quotations alone.

Since the publication of *Seasons* is in the form bid/ask at ICIS, and *Settlement* at EEX, it would be necessary to take into account a value of the BID/ASK if the publication used is that of EEX. The structure of the reserve price would thus be preserved, but the formula relating to the Spread(N)$_J$ would be, at the operator's choice, one of the two following (or only the second if the reserve price was fixed on the basis of the EEX quotes alone):

$$\text{spread(N)}_J = \frac{1}{10}\sum_{j=-1}^{-10}(WINTER\ bid(\text{N}) - SUMMER\ ask(N))\ tel\ que\ publié\ par\ ICIS$$

Or

$$\text{spread(N)}_J = \frac{1}{10}\sum_{j=-1}^{-10}(WINTER\ settlement(\text{N}) - SUMMER\ settlement(N) - BID/ASK)\ tel\ que\ publié\ par\ EEX$$

To ensure that this choice is neutral in terms of reserve price and therefore commercial bonus, the value of the BID/ASK constant proposed by the operators is 0.17 €. This value is established so that the choice of one or the other of the formulas is as neutral as possible, on the basis of the differences observed on the spreads, bid/ask at ICIS and Settlement at EEX, for the entire history of the operators' auctions on distant maturities (>N+1) since 2019.

[This provision will require an adjustment of the Deliberation about tariff for the calculation of the bonus].

4. Correction to the paragraph relating to priority access following an interstate agreement

It currently states:

Requests for storage capacity for year N must be submitted to the storage operator no later than one week before October 1, N, and, exceptionally, no later than November 8, 2022, for storage capacity for the year 2023-2024.

We propose the following correction:

Requests for storage capacity for year N/N+1 must be submitted to the storage operator no later than one week before October 1, N-1~~, and, exceptionally, no later than November 8, 2022, for storage capacity for the year 2023-2024~~.

5. Adjustment to the paragraph about L-gas storage (concerns Storengy)

The current Deliberation provides that the reserve price for the L-gas capacity auction opening on day D at 10 a.m. (and closing on day D+1 at 11 a.m., 1 p.m., or 3 p.m., see 4.2) for capacity in year N is as follows, in €/MWh:

$$PR(N)_J = \max(spread(N)_J - 0{,}70\ ;\ 0)$$

with $spread(N)_J$ =

• average over the last 10 days of quotation of the gas price difference between winter N (*settlement*) and summer N (*settlement*) and on the PEG, as published by EEX, reduced by 0.25 €/MWh.

$$\text{spread}(N)_J = \frac{1}{10}\sum_{j=-1}^{-10}(WINTER\ settlement(N) - SUMMER\ settlement(N) - 0{,}25)$$

When the reserve price formula was established, Storengy was marketing 13.4 TWh of Sediane B product, as the progress of the conversion of zone L to H-gas allowed it. As this conversion is nearing completion, the Gournay sur Aronde storage facility, which provides the storage service marketed under the Sediane B product, will itself be converted to H-gas in April 2027. The Sediane B product will therefore once again be offered for sale only for the year 2026-27, at a level of 6 TWh, as for the year 2025-26, a reduction of almost 60% compared to the initial capacity.

In order to allow Storengy to be more responsive in marketing the Sediane B product, and in view of the decrease in volume for this product, Storengy proposes to maintain the same reserve price formula structure, but over 4 days instead of the current 10. We also propose to publish the auction no later than 10 a.m. on D for a closing at 11 a.m., 1 p.m. or 3 p.m. on the same day.

The reserve price for the L-gas capacity auction opening on day D at 10 a.m. (and closing on day D at 11 a.m., 1 p.m. or 3 p.m., see 4.2) for capacities in year N would be as follows, in €/MWh:

$$PR(N)_J = \max(spread(N)_J - 0{,}70\ ;\ 0)$$

with $spread(N)_J$ =

• average over the last 4 days of quotation of the gas price difference between winter N (settlement) and summer N (settlement) and on the PEG, as published by EEX, reduced by 0.25 €/MWh.

$$\text{spread}(N)_J = \frac{1}{4}\sum_{j=-1}^{-4}(WINTER\ settlement(N) - SUMMER\ settlement(N) - 0{,}25)$$

[This provision will require an adjustment of the Deliberation about tariff for the calculation of the bonus].

APPENDIX : PROPOSAL OF SALES TERMS FOR STORAGE CAPACITIES APPLICABLE FROM OCTOBER 2025

1. CALENDAR

1.1 Initial sales of storage capacities

The initial sale of storage capacities for year N/N+1 (i.e. injections from April N) is carried out through the free sale of capacities during fixed date auctions which can be organized every working day of the week.

Either:

Storage capacities for year N/N+1 may currently be marketed starting in October N-4, with at least 70% remaining to be marketed starting in October N-3, and 40% remaining to be marketed starting in October N-2.

Or:

Storage capacities for year N/N+1 may currently be marketed starting in October N-4, with at least 75% remaining to be marketed starting in October N-3, 50% remaining to be marketed starting in October N-2, and [10% to 15%] remaining to be marketed starting in January 1, N.

All available capacities for year N/N+1 must have been offered before the end of February N.

Coordination of the operators

Auctions are held primarily on Tuesdays, Wednesdays, and Thursdays. Two days are dedicated to the sale of Storengy's capacity. One day is dedicated to Teréga's capacity. Each year, a rotation changes the days of the week dedicated to each operator (for the period from October 2024 to September 2025, Tuesdays for Teréga and Wednesdays and Thursdays for Storengy).

Each operator has priority on its dedicated day(s). It may use a sales slot initially reserved for the other operator but which ultimately goes unused. No operator has priority on Mondays and Fridays. If one of the operators wishes to hold an auction outside of its dedicated days, it coordinates with the other operator to ensure that several auctions are not held on the same sales slot. In the event of disagreement between the operators, they inform the CRE.

Sales schedule for storage capacities

Each year, in October N-1, Storengy and Teréga must publish on their websites information relating to the annual sales campaign:

- the list of products they offer for year N/N+1 with their characteristics, including throughput relative to volume;

- the list of products they plan to market during the campaign for the following years with their characteristics, including throughput relative to volume;

- a forecast sales schedule for these products.

Operators must also publish the auction rules on their websites.

Schedule for each auction of storage capacities

Only one product is sold per auction.

Operators must make best efforts to inform stakeholders as early as possible of the auction, and in any event, they will notify the auction no later than two business days (D-2) before an auction organized on the day D.

Auction participants may submit bids on the auction platform for at least 24 hours before the closing time of the auction.

Operators must offer capacity sales arrangements tailored to participants' needs (hours, number of auctions per day, etc.), and the capacities offered daily must be adapted to the different product maturities and market conditions.

Multi-year products

The same product may be offered over several years (multi-year product), over a contractual term of 2, 3, or 4 years, within the capacity limitation set above.

The reserve price for the multi-year product is equal to the average of the reserve prices that would be defined for each year of the contract pursuant to this Deliberation.

[Does this require an adjustment to the Deliberation about tariff?]

1.2 Postponement of the sale of unsold capacities

If capacities marketed during an auction are not fully allocated because demand is insufficient, Teréga and Storengy may put them back on sale, by communicating at the latest on working day D-2 for working day D. The rules of coordination between operators specified in 1.1.1 apply.

Iterative auctions

After three partially or completely unsuccessful sales, an iterative auction system may be introduced. Operators indicate the successive sales slots used, as well as the capacity offered for sale. The capacity remaining for sale in each auction will thus decrease according to the quantities allocated in previous auctions. Storage operators will notify the auction no later than business day D-2 (day D being the day of the first auction).

Non-standard products

Once the storage year has begun, operators may adapt their unsold commercial products in order to market capacity as non-standard products, even if the minimum natural gas thresholds required to guarantee security of supply are not met. Products offered for sale during this period must be designed to increase the level of capacity subscriptions or accelerate gas injection into storage facilities, in order to strengthen security of supply.

CRE requires operators to market these products with complete transparency, publishing, where possible, the precise characteristics of the products and the associated capacities one week before each sale. Furthermore, sales will be conducted under the same terms as the initial sales phase in terms of auction rules and reserve prices.

2. PRODUCTS AND SERVICES

2.1 Standard products

A so-called "standard" storage product corresponds to all N/N+1 capacities marketed at a given PITS with the same injection and withdrawal characteristics as presented by the operators in October N-1.

CRE considers that operators are best placed to define the product offering that will satisfy their customers. However, it emphasizes that the offers must remain simple and readable, with products with sufficiently uniform characteristics to ensure auction liquidity, and whose number remains reasonable.

2.2 Specific products

Teréga and Storengy may market "short-term" products that meet additional market needs if capacities prove technically available. These short-term products do not reduce the capacities offered during sales of standard products.

By way of illustration, such products may in particular be offered in the case of sites under construction which are put back into service during the year, in the case of available storage capacities greater than those anticipated during sales of standard products, or counter-seasonal offers.

These specific products can be marketed as soon as all the capacities of the standard products have been offered for sale, with the exception of counter-seasonal offers which can be offered before provided that they do not reduce the standard offer of the operators.

For these short-term products, the following terms apply:

- When a potential sale is published, a marketing period is set;

- The initial communication (including all information about the product and the capacity to be offered for sale) is made no later than business day D-2, for a sales period starting on business day D;

- The sale is then confirmed as soon as possible, and the auction must remain open for at least 24 hours.

In order to provide visibility to stakeholders, operators must publish the characteristics of short-term products as soon as possible.

2.3 Additional services

The additional services offered by Storengy and Teréga are free or paid services that add value to storage subscriptions without reducing the capacity offered for sale in the form of storage products.

Additional services must be offered according to transparent and non-discriminatory terms and conditions, published by the operators on their websites.

3. Auction rules

3.1 Auction type

(unchanged)

3.2 Detailed terms of the auction

(unchanged)

3.3 Constraints on publication of results

Operators must make their best efforts to publish on their website as soon as possible after the auction closes, and within one hour, the results: the quantity sold, the clearing price and the total demand. They must also inform each participant of the quantity allocated to them. They must also publish the aggregated demand curves for each auction at the end of each auction window, except for auctions where the operators consider that the number of participants is not sufficient to guarantee the confidentiality of the demands.

3.4 Auction platform

CRE therefore authorizes operators to each maintain their own auction platform, which must be harmonized, particularly with regard to the following features:

- the ability for a participant to submit their application using an Excel file, using a single template;

- the ability for a participant to modify their application after validation directly on the platform, without needing to call the operator, as long as the auction has not closed;

- the harmonization of user interface and the presentation of auction results.

3.5 Reserve price

Reserve price for auctions during the year preceding the injection period

CRE sets reserve price to zero for all N/N+1 capacity auctions starting in April N-1, except for L-gas storage (see 4.1).

Reserve price for auctions before the winter preceding the injection period

CRE sets a reserve price based on a cost-spread formula, with a floor at zero, for the storage capacity auctions N taking place before April 1, N-1.

The "cost" term in the formula is identical for all products, excluding L-gas storage (see 4.1). Indeed, the cost differentiation by product does not appear relevant. The cost at the PITS (Transport Storage Interface Point), in €/MWh, is lower for the slowest products, but these products have less market value. It is therefore irrelevant for these products to have a higher reserve price than faster products.

The costs considered to establish this reserve price are made up of three elements:

• the average entry and exit costs of the transmission network at the PITS for all H-gas products;

• the immobilization costs of stored gas, calculated by discounting the value of the immobilized gas, based on an estimate of the market value of the gas and its immobilization period;

• the price of the injection and withdrawal service, included in the services offered by operators, currently zero (see 3.3).

Taking these elements into account, CRE sets the "costs" term at 0.75 €/MWh.

The spread term taken into account is the average of the difference between the Winter product (bid) and the Summer product (ask) on the TTF marketplace over the 10 trading days preceding the opening of the auction. If the publication used is a Settlement type publication (no bid/ask details), then the bid-ask difference is taken into account, and is estimated at 0.17 € for the TTF. This spread calculation allows to be close to the value on the day of the auction, without being subject to only daily volatility, and known at the opening of the auction. The TTF marketplace is preferred to the PEG because it is more liquid on seasonal products S+2 to S+6 taken into account according to the deadlines.

The maturities taken into account for the spread are those corresponding to the storage year of the capacities, therefore the Summer N and Winter N products for the capacities of storage year N, except for the auctions during the first sales slots of the N capacities, between November N-4 and October N-3.

Indeed, in November N-4, the Summer N product corresponds to Season +7 and the Winter N product to Season +8. In October N-3, Summer N is a Season +6 and Winter N is a Season +7. These maturities have very little, if any, liquidity. For auctions of capacities N on the sales slots between November N-4 and October N-3, the spread taken into account will be the same as that of capacities N-1, i.e. the difference between Winter N-1 and Summer N-1.

The reserve price for the auction opening on day D (and closing on day D+1) for capacities in year N is therefore as follows, in €/MWh:

$$PR(N)J = \max (spread(N)J - 0{,}75 ; 0)$$

with spread(N)J =

• for sales slots from November N-3 to March N-1, average over the last 10 days of quotation of the gas price difference between Winter N (bid) and Summer N (ask) on the TTF,

either

$$\text{spread(N)}_J = \frac{1}{10}\sum_{j=-1}^{-10} (WINTER\ bid(\text{N}) - SUMMER\ ask(N))\ tel\ que\ publié\ par\ ICIS$$

or

$$\text{spread(N)}_J = \frac{1}{10}\sum_{j=-1}^{-10} (WINTER\ settlement(\text{N}) - SUMMER\ settlement(N) - 0{,}17)\ tel\ que\ publié\ par\ EEX$$

the choice between an ICIS or EEX formula being taken by the storage operator for the entire sales campaign from October N to October N+1, and indicated in its auction rules,

or

$$\text{spread(N)}_J = \frac{1}{10}\sum_{j=-1}^{-10} (WINTER\ settlement(\text{N}) - SUMMER\ settlement(N) - 0{,}17)\ tel\ que\ publié\ par\ EEX$$

For the sales slots from November N-4 to October N-3, spread(N)J = spread(N-1)J

For each auction, the operator will publish the reserve price at the opening of the auction.

4. SPECIAL CASES

4.1 L-gas storage

Access to L-gas storage involves two specific conditions:

• The H-gas to L-gas conversion service provider has guaranteed access to the L-gas storage capacity it deems necessary to carry out its mission;

• Any quantity of gas injected into the L-gas storage must be L-gas transported from the PIR Taisnières B, the PITPs of the L-gas network, or the H Conversion Point to B Service Point.

These conditions effectively limit access to L-gas storage capacity. For this reason, L-gas storage capacity is only sold for the following year, and with a reserve price indexed to a spread-cost formula.

In order to maintain priority access for H-gas to L-gas conversion service providers, the sales terms are as follows:

1. At least one week before the first auction for L-gas storage capacity, the H-gas to B-gas conversion service provider shall inform Storengy and the CRE of the capacity required to carry

out its mission. It undertakes to submit bids at least equal to its needs during the auction organized for this storage;

2. Storengy shall organize an auction for L-gas storage capacity;

3. Storengy calculates the clearing price and provisionally allocates capacity to participants based on the auction results, disregarding the aforementioned priority access, making it possible to define a clearing price that takes into account all the bids submitted by participants;

4. Following this provisional allocation, two cases arise:

a. if the H gas to L-gas conversion service provider is pre-allocated with capacity that at least covers its needs, the pre-allocation is considered final allocation;

b. otherwise, the H-gas to L-gas conversion service provider will be allocated up to its needs, at the price resulting from the auction, then allocating capacity in priority to bidders who are not H-gas to L-gas conversion service providers and who have submitted the highest bids.

The L-gas storage capacities for year N can be marketed from November N-1, in a single auction.

The spread-cost formula for setting the reserve price is similar to that used for multi-year marketing of H-gas capacities.

The "costs" term includes the same elements as for H-gas capacities. However, the entry and exit costs at the PITS are lower. Furthermore, this term also includes the cost of converting H-gas into L-gas. CRE sets the "costs" term for L-gas capacities at 0.70 €/MWh.

The spread term taken into account is the average of the difference between the Winter (*settlement*) product and the Summer (*settlement*) product on the PEG marketplace over the 4 trading days preceding the opening of the auction. As this calculation is based on settlement prices, the bid-ask spread must also be taken into account. This is estimated at 0.25 €/MWh for the PEG, which is therefore subtracted from the spread term.

The reserve price for the L-gas capacity auction opening on day D at 10 a.m. (and closing on day D at 11 a.m., 1 p.m. or 3 p.m., see 4.2) for capacities in year N would be as follows, in €/MWh:

$$PR(N)_J = \max(spread(N)_J - 0{,}70\ ;\ 0)$$

with $spread(N)_J$ =

• average over the last 4 days of quotation of the gas price difference between winter N (settlement) and summer N (settlement) and on the PEG, as published by EEX, reduced by 0.25 €/MWh.

$$\text{spread}(N)_J = \frac{1}{4}\sum_{j=-1}^{-4}(WINTER\ settlement(N) - SUMMER\ settlement(N) - 0{,}25)$$

4.2 Priority access following an inter-State agreement

Under bilateral agreements concluded by France with a Member State of the European Union or a Member State of the European Free Trade Association relating to the booking of storage capacity, operators in the States concerned, or their agents, may access storage capacity ahead of the auctions, within the limits of the quantities stipulated in the bilateral agreements. In accordance with CRE's decision of February 22, 2018, these capacities are then reserved at a P1 price determined according to the following formula:

$$P1 = RA \times \frac{1}{2}\left(\frac{X1}{X} + \frac{Y1}{Y}\right)$$

where:

• X1 is the volume requested by the agent from a storage operator (or group of storage operators when their marketing is joint; hereinafter the storage operator);

• Y1 is the throughput requested by the agent from the storage operator;

• X is the total volume of the storage operator's storages;

• Y is the total throughput of the storage operator's storages;

• RA is the storage operator's authorized revenue.

The request for storage capacity for year N/N+1 must be expressed to the storage operator no later than one week before October 1, N-1. These capacities reserved by the operators concerned or their agents are then not marketed during the auctions.