



DELIBERATION NO. 2019-178

Deliberation of the French Energy Regulatory Commission of 17 July 2019 adopting a decision on the mid-term implementation report of Storengy's storage investment programme for 2019

Present: Jean-François CARENCO, Chairman, Christine CHAUVET and Catherine EDWIGE, Commissioners.

Translated from the French: only the original is authentic

1. BACKGROUND AND LEGAL FRAMEWORK

Article L. 421-3-1 of the French Energy Code states that *"underground natural gas storage infrastructure facilities that ensure the country's security of supply in the medium and long-term, together with compliance with bilateral agreements on security of supply of natural gas [...] are provided for in a Multiannual Energy Programme referred to in Article L. 141-1. These facilities are maintained in service by the operators"*.

Decree No. 2018-1248 of 26 December 2018¹ has withdrawn the three mothballed sites operated by Storengy from the list of facilities in the Multiannual Energy Programme (PPE). These are Trois-Fontaines, Saint-Clair-sur-Epte and Soins-en-Sologne. The facilities in question will continue to be regulated until the agreed two-year notice period provided for by Order expires², i.e. until 31 December 2020.

According to Articles L. 134-3, 3 and L. 421-7-1 of the French Energy Code, underground natural gas storage facility operators must submit their annual investment programmes to the French Energy Regulatory Commission (CRE) for approval. As such, CRE *"ensures that the necessary investments are made to effectively develop storage facilities and that access to them is transparent and non-discriminatory"*.

In its deliberation of 19 July 2018³, CRE approved Storengy's investment programme for 2018, amounting to €97.7 million and requested the operator to submit a final implementation report for its 2018 investment programme by mid-2019.

The documentation provided by Storengy on 30 November 2018 for its 2019 investment programme, together with additional information supplied on 10 January 2019, did not allow CRE to identify specific investments required to comply with safety and security requirements, and PPE objectives. As a result, CRE was unable to reach a decision on the amount of investment.

In its deliberation of 31 January 2019, CRE approved

- the undertaking of necessary investments specifically required for the safety and security of Storengy's facilities, and for the strict compliance with obligations stated in the PPE;
- the injection of a volume equivalent to 1 TWh of cushion gas for an estimated amount of €20 million.

CRE also required Storengy:

- to justify that investments made are specifically required for the safety and security of facilities and in strict compliance with obligations stated in the PPE.
- to work on the attributes of its offer to make it reliable and focused on PPE targets to optimise investment;

¹ Decree No. 2018-1248 of 26 December 2018 on gas storage facilities required for security of supply

² Order of 19 February 2019 on the notice period provided for in Article L. 421-3-1 of the French Energy Code

³ Deliberation of the French Energy Regulatory Commission of 19 July 2018 approving Storengy's investment programme for 2018

- to provide an interim implementation report on the present decision before July 2019, including, in particular, the outcomes of work on its offer.

On this basis, CRE stated its intent to take a new decision on the proposal of a comprehensive investment programme for 2019.

On 24 May 2019, Storengy subsequently submitted a final implementation report to CRE for its 2018 investment programme and for its investment programme for 2019. The operator reported variances between approved and actual levels of investment made in 2018. Storengy provided an updated version of its investment programme for 2019.

2. MAIN FINDINGS FROM THE 2018 INVESTMENT PROGRAMME IMPLEMENTATION REPORT

In its deliberation of 19 July 2018, CRE approved investment expenditure for 2018, amounting to €97.7 million. The actual expenditure incurred for 2018 amounted to €98.9 million, 1.3% more than the approved budget.

The breakdown per investment goal for 2018 is as follows:

Budget lines (€M)	Approved for 2018	Achieved in 2018
Upgrade plan:	21.0	19.0
- <i>Upgrades under review</i>	2.0	1.6
- <i>Major ongoing projects</i>	19.0	17.4
Programmes:	46.7	46.9
- <i>Integrity and obsolescence</i>	30.1	27.2
- <i>Safety and security</i>	16.6	19.7
Current investment:	30.0	33.0
- <i>Regional work activities</i>	7.1	9.2
- <i>Small-scale industrial projects</i>	11.3	11.2
- <i>IT systems</i>	9.6	10.4
- <i>Other, including office refurbishments</i>	2.0	2.2
Total	97.7	98.9

The variances recorded are due to normal investment project management procedures and do not require comment from CRE.

3. KEY COMPONENTS OF THE 2019 INVESTMENT PROGRAMME

Storengy has provided CRE with a revised investment programme for 2019. The budget provided by Storengy amounts to €152.5 million (including €17.6 million for cushion gas). This is €4.2 million higher compared to the request submitted in January 2019.

The breakdown per investment goal for 2019 is as follows:

Budget lines (€M)	2019 initial request	Revised 2019 request
Upgrade plan:	27.2	28.2

- Upgrades under review	6.6	5.0
- Major ongoing projects	20.6	23.2
Programmes:	67.4	74.5
- Integrity and obsolescence	52.6	55.9
- Safety and security	14.8	18.6
Current investment:	33.7	38.6
- Regional work activities	6.5	8.7
- Small-scale industrial projects	17.3	20.0
- IT systems	9.6	9.7
- Other, including office refurbishments	0.3	0.2
Cushion gas	20.0	17.6
One-off investments		4.2
Adjustments		-10.6
Total	148.3	152.5

The variances recorded are primarily due to:

- accounting for delays in completing the upgrade plan for 2018 (+€2.6 million) and the "integrity and obsolescence" programme (+€3.3 million);
- a rise in the safety and security budget (+€3.8 million) concerning more complex earthworks;
- a readjustment of budget line allocations for "regional work activities" (+€2.2 million) and "small-scale industrial projects" (+€2.7 million) following defects that occurred in winter 2018-2019;
- savings made in purchasing the cushion gas due to advantageous market price (-€2.4 million);
- an additional "one-off investments" budget line related to corrective maintenance following outages that occurred in winter 2018-2019 (+€4.2 million);
- an additional "adjustments" budget line whereby the operator accounts for the possibility to not implement all the projects at the milestones in 2019 (-€10.6 million).

3.1 Upgrade plan

Projects contained in the upgrade plan account for a total of €23.2 million for 2019 and are all underway. They concern, in particular:

- connecting the Etrez facility to the new GRTgaz interconnector grid, which should be in service in 2023. Estimated final costs are €18.3 million, with expenditure amounting to €4.1 million in 2019. Curtailing this investment may result in limited injection capacity in the network, combined with the impossibility of reaching the GRTgaz network pressure;
- replacing regeneration units at the Saint Illiers facility for a budget of €10.8 million over the period 2018-2020, including €6.1 million in 2019. Failure to complete this investment would result in using currently operating regeneration facilities. Given their fragile state, they could be subject to short-term outages (for safety reasons, breakdowns, environmental emission breaches), leading to the suspension of operations at the facility;

- the commissioning in 2020 of two new saline cavities at the Hauterives storage facility, with a final estimated costs of €32.5 million. Expenditure for 2019 amounts to €4.8 million;
- upgrading the methanol network at the Gournay facility, which has had several leaks. The total budget for this work is €3 million over the period 2019-2020, including €1.0 million in 2019. If this project is not undertaken, the facility may no longer be able to inject methanol into wet gas facilities to offset withdrawal capacity reductions due to the build-up of methane gas hydrates.

Studies indicate a budget of €5.0 million in 2019 and primarily include:

- improvements to the Chémery facility, which is one of the sites that has not had a comprehensive upgrade since it was commissioned in 1968 (€2.0 million);
- injection capacity reliability at saline facilities by adding or replacing compression stations (€1.6 million);
- investment in treatment facilities and compression stations at the Gournay facility, which has also not had a thorough upgrade (€1.0 million).

3.2 Multiannual programmes

Multiannual programmes are cross-cutting programmes that involve several facilities. They are managed by Storengy's central teams to ensure consistency between these facilities on similar type projects. Storengy states that the vast majority of these projects address regulatory, safety or industrial security matters.

3.2.1 "Integrity and obsolescence" programme

The 2019 integrity and obsolescence programme can be broken down as follows:

in €M	Revised 2019 request
"Integrity and obsolescence" programme:	55.9
<i>The "Wells" programme</i>	24.5
<i>The "Collection and wet gas" programme</i>	16.1
<i>Other programmes</i>	15.3

The "wells" programme concerns upgrades to Storengy operation and control wells. The purpose is, in particular, to ensure compliance with regulatory measures.

The "collection and wet gas" programme concerns pipelines to collect natural gas stored underground, connecting wells to the station. These facilities are exposed to corrosion and thickness wastage, especially when natural gas is withdrawn and draws up groundwater with it.

Other programme focus on:

- the well-surface interface (€4.1 million);
- industrial and automatic IT systems (€4.0 million);
- compression (€3.4 million);
- metering, for transactions, in particular (€3.3 million).

3.2.2 "Safety and security" programme

The "Safety and security" programme for 2019 can be broken down as follows:



in €M	Revised 2019 request
Safety and security programme:	18.6
<i>Technological risk prevention measures</i>	2.4
<i>Industrial risk prevention measures</i>	10.6
<i>Site security</i>	5.6

The Industrial Risk Prevention Programme (PPRI) was introduced following industrial security audits at storage facilities operating in 2015/2016. This subsequently led to Storengy's industrial security policy being updated.

The Technological Risk Prevention Programme (PPRT) focuses on reducing the probability and/or seriousness of a major incident and controlling its ramifications at industrial facilities.

The site security programme stems from audits carried out by local administrative services (Prefectures and DREAL) at all storage facilities. The findings of these audits contribute to improve industrial site security.

3.3 Current investments

3.3.1 Regional work activities

Regional work activities account for a budget of €8.7 million in 2019 and cover:

- ongoing maintenance and repair work managed directly by facility maintenance teams, in conjunction with the Maintenance Division;
- various small-scale work activities not requiring a study phase, primarily related to regulatory compliance.

3.3.2 Small-scale industrial projects

Storengy is allocating a budget of €11.3 million for all projects that fall outside the above categories and which require a preliminary study phase prior to delivery, to pinpoint the technical solution to be applied. These projects require several trades and, as such, project organisation measures.

Small-scale industrial projects arise from recorded operational anomalies on equipment, where the state of facilities requires an overhaul or upgrade in line with changes to regulations.

3.3.3 IT systems

Expenditure on IT system projects accounts for €9.7 million in 2019. IT system projects mainly focus on industrial system security, the operational equipment efficiency and maintenance, as well as data and industrial management system improvements.

3.4 Cushion gas

Low storage facility filling rates in early winter 2017-2018, together with a cold snap at the end of the winter, resulted in exceptionally low gas storage levels in spring 2018. Storengy consequently realised that it was unable to withdraw entire working gas volumes. Indeed, technical limitations occurred below filling levels of 10% at Cerville and 3% at Chémery (pressure loss below the minimum pressure for supplying compressors, water levels exceeding treatment capacity and flooding in wells), meaning that the last TWh of gas contained in the storage cavities at both facilities could not be withdrawn. To resolve this problem, Storengy plans to inject 1.3 TWh and 0.7 TWh of cushion gas at Chémery and Cerville respectively over the period 2019-2020.

In 2019, Storengy completed the purchase of 1 TWh for €17.6 million. The variance compared to the budget of €20 million is due to an advantageous price when purchasing the gas.

4. CRE'S ANALYSIS

CRE recalls that to ensure security of supply, the PPE sets performance targets for withdrawal rates and usable capacity for the entire perimeter of the storage facilities regulated by the three storage operators. Achieving these targets must be fulfilled at the lowest cost for the community, while storage operator investment programmes must contribute to this objective.

As such, in its deliberation approving the 2018 investment programme, and reiterated in its deliberation to approve the 2019 investment programme, CRE requested Storengy to provide an alternative scenario with all project approval requests for maintaining or improving performance, especially cushion gas injections. This investment-free scenario must include the subsequent effects on performance at the relevant facility.

The documentation provided by Storengy on 30 November 2018 for its 2019 investment programme, together with additional information supplied on 10 January 2019, did not allow CRE to identify specific investments required to meet PPE security objectives. The submission also indicated an investment amount of €148.5 million which was considerably more than the trajectory provided for in the ATS1 (+65%). Based on the information provided, CRE was unable to reach a decision on the investment amount.

In its deliberation of 31 January 2019, CRE approved:

- the undertaking of necessary investments specifically required for the safety and security of Storengy's facilities, and for the strict compliance with obligations stated in the PPE;
- the injection of a volume equivalent to 1 TWh of cushion gas for an estimated amount of €20 million.

It requested Storengy:

- to justify that investments made are specifically required for the safety and security of facilities and for the strict compliance with obligations stated in the PPE.
- to work on the attributes of its offer to make it reliable and focused on PPE targets to optimise investment;
- to provide it with an interim implementation report on the present decision before July 2019, including, in particular, the outcomes of work on its offer.

Since January, Storengy has provided CRE with detailed information for each budget line of its investment programme. More specifically, Storengy has provided the required information to justify that the investments requested are strictly necessary for the safety and security of facilities and in strict compliance with obligations stated in the Multiannual Energy Programme (no rise in usable volume or injection and withdrawal rates).

Storengy has provided alternative scenarios with its individual project requests to maintain performance. These assess the effects on performance at the sites in question when investment is not undertaken.

In terms of additional input on the attributes of its offer to make it reliable and focused on PPE targets to optimise investment, Storengy has provided CRE with information on the development of its commercial offer.

The additional information provided by Storengy in January 2019 has enabled CRE to confirm that the requested investment is indeed necessary for the safety and security of facilities and meets obligations stated in the PPE. As a result, CRE approves Storengy's revised investment budget for 2019.

CRE requires Storengy to continue its work on quantifying the effect of a reduced commercial offer (withdrawal and injection rates) to optimise investments.

It also requires Storengy to supplement its future investment programmes with an analysis of alternative options, such as technical solutions, heightened maintenance, alternative scales for projects or a revised commercial offer, particularly as part of studies on upgrade plans.

Storengy has allowed for failure to complete part of the investments contained in its programme with an adjustments budget line. This format enables CRE to conduct in-depth, line-by-line, monitoring of the investment programme. In future, CRE requests Storengy to present its investment programme by including adjustments with the budget lines in question.

CRE'S DECISION

According to Articles L. 134-3 and L. 421-7-1 of the French Energy Code, storage operators must submit their annual investment programmes to the French Energy Regulatory Commission for approval.

For 2018, CRE notes that the variance between actual investment expenditure and the revised investment programme for 2018 is primarily due to delays to work tasks, additional costs in safety, security and upkeep programmes and a rise in ongoing investment linked to greater corrective maintenance measures than were initially planned.

CRE notes that the implementation of Storengy's investment programme complies with the approved programme. This is broken down as follows:

Budget lines (€M)	Approved for 2018	Achieved in 2018
Upgrade plan:	21.0	19.0
- <i>Upgrades under review</i>	2.0	1.6
- <i>Major ongoing projects</i>	19.0	17.4
Programmes:	46.7	46.9
- <i>Integrity and obsolescence</i>	30.1	27.2
- <i>Safety and security</i>	16.6	19.7
Current investment:	30.0	33.1
- <i>Regional work activities</i>	7.1	9.2
- <i>Small-scale industrial projects</i>	11.3	11.3
- <i>IT systems</i>	9.6	10.4
- <i>Other, including office refurbishments</i>	2.0	2.2
Total	97.7	98.3

For 2019, in its deliberation of 31 January 2019, CRE approved the injection of a volume of cushion gas equivalent to 1 TWh for an estimated sum of €20 million and required the operator to:

- justify that investments made are specifically required for the security and safety of facilities and for the strict compliance with obligations stated in the PPE;
- to work on the attributes of its offer to make it reliable and focused on PPE targets to optimise investment;
- to provide it with an interim implementation report on the present decision before July 2019, including, in particular, the outcomes of work on its offer.

The additional information provided by Storengy in January 2019 has enabled CRE to confirm that the requested investments are necessary for the safety and security of facilities and meet obligations stated in the PPE. As a result, CRE approves Storengy's revised investment budget for 2019. This is broken down as follows:

Budget lines (€M)	2019 programme
Upgrade plan:	28.2
- <i>Upgrades under review</i>	5.0
- <i>Major ongoing projects</i>	23.2
Programmes:	74.5
- <i>Integrity and obsolescence</i>	

- <i>Safety and security</i>	55.9 18.6
Current investment:	38.6
- <i>Regional work activities</i>	8.7
- <i>Small-scale industrial projects</i>	20.0
- <i>IT systems</i>	9.7
- <i>Other, including office refurbishments</i>	0.2
Cushion gas	17.6
One-off investments	4.2
Adjustments	-10.6
Total	152.5

CRE requires storage operators to provide an alternative investment-free scenario with all project approval requests for maintaining or improving performance. This must include the subsequent effects on performance at the relevant facility together with assessments of alternative options, such as technical solutions, heightened maintenance, alternative scales for projects or a revised commercial offer.

CRE requires Storengy:

- continue its work on quantifying the effect of a reduced commercial offer (withdrawal and injection rates) to optimise investments;
- to present its investment programme by including adjustments with the budget lines in question.

The approval of the investment programme does not prejudice the tariff treatment of this expenditure.

Any amendment to the investment programme must be submitted to CRE for approval.

CRE requires Storengy to provide it with a final implementation report on its 2019 investment programme before July 2020. This report will also include a progress update on the main ongoing projects.

The present deliberation will be published on the CRE's website and Storengy will be notified. It will also be sent to the Minister of Ecological and Inclusive Transition and the Minister of Economy and Finance.

Deliberated in Paris on 17 July 2019
For the Energy Regulatory Commission,
The Chairman

Jean-François CARENCO