



DELIBERATION NO. 2018-165

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

Present: Jean-François CARENCO, Chairman, Christine CHAUVET, Catherine EDWIGE, Hélène GASSIN and Jean-Laurent LASTELLE, Commissioners.

Translated from French: only the French version is authentic

1. BACKGROUND

Law No. 2017-1839 of 30 December 2017 ceasing the exploration and exploitation of hydrocarbon deposits and attributing various energy and environmental measures, has reformed the access system to natural gas infrastructure, which is now regulated.

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 concluded by France with a European Union Member State or a European Free Trade Association member, are provided for in a Multiannual Energy Programme (PPE) referred to in Article L. 141-1. These facilities are maintained in service by the operators.*

Multiannual Energy Programme can cover storage facilities which have been subject to reduced operating licences with capacities that have ceased to be marketed, as well as sites under development."

Article 9 of Decree No. 2016-442 of 27 October 2016 on the PPE¹ states that storage facilities falling within the scope of the regulation currently applies to all facilities in operation, three mothballed facilities and three development projects. In applying the provisions of Article L. 141-3 of the Energy Code, the initial period of the PPE expires in late 2018, when a new PPE will cover two consecutive five-year periods (2019-2023 and 2024-2028).

According to Article L. 421-7-1 of the Energy Code, each natural gas storage operator "establishes an annual investment programme that they submit for approval to the French Energy Regulatory Commission. CRE ensures that the necessary investments are made to effectively develop storage facilities and that access to them is transparent and non-discriminatory."

Storengy is one of three natural gas storage operators in France and runs the facilities at Beynes, Cerville, Céré-la-Ronde, Chémery, Etrez, Germigny-sous-Coulombs, Gournay-sur-Arondes, Hauterives, Saint-Illiers-la-Ville, Tersanne, Trois-Fontaines l'Abbaye, Soings en Sologne and Saint Clair sur Epte. The final three facilities are currently mothballed.

Given the addition of storage facilities to the regulation of 1 January 2018 and work to introduce third party access reforms to underground natural gas storage facilities undertaken by the French Energy Regulatory Commission (CRE) during the first quarter of 2018, the approval of investments by storage operators for 2018 is to be exceptionally made halfway through the year. Storengy was referred to CRE on 4 May 2018 with respect to its 2018 investment programme. The operator was interviewed by the CRE collegial board on Thursday 21 June 2018.

¹ Article 9 of Decree No. 2016-442 of 27 October 2016 on the PPE

2. THE MAIN COMPONENTS OF THE 2018 STORENGY INVESTMENT PROGRAMME

As part of work on underground natural gas storage infrastructure user tariffs², Storengy presented an investment budget for 2018 worth €93 m. By contrast, the investment programme provided by the operator for approval for the current year amounts to €100.2 m, an 8% rise compared to the user tariff report.

Budget lines (€m)	Storengy 2018 proposal
Major projects	21.0
Multiannual programmes	46.7
Small-scale industrial projects	11.3
Regional projects	7.1
Energy transition projects and R&D	1.0
General investments	12.9
Others	0.2
Total	100.2

2.1 Major projects related to regulated storage activities

2.1.1 Ongoing projects

These "major" projects amount to a total of €21 m for 2018 and are all largely under way. They concern, in particular:

- connecting the Etrez facility to the GRTgaz grid interconnector following reconstruction of the latter as part of the Val de Saône project undertaken by the transmission system operator (TSO), with a budget of €10.4 m for the period 2018-2020, including €1.6 m for 2018;
- washing two cavities at the Etrez facility to enable Storengy to fulfil a contract to provide brine, for a budget of €9.7 m for the period 2018-2020, including €2.8 m for 2018. Storengy concluded this contract in the 1970s to develop storage capacity;
- finalising the commissioning of two new saline cavities at the Hauterives facility, [confidential]. Expenditure for 2018 amounts to €5.7 m.

² Deliberation of 22 March 2018 on the decision concerning user tariffs for Storengy, TIGF and Géométhane underground natural gas storage facilities, as of 2018.



Budget lines (€m)	Storengy 2018 proposal
Etrez- Interconnector grid	1.6
Etrez - flushing cavities	2.8
Etrez - gas filling station	0.9
Hauterives – completion work	5.7
Beynes	1.8
Chémery	1.7
Feasibility studies /engineering	2.0
Others	4.5
Total	21.0

2.1.2 Projects under study

Ongoing studies account for a budget of €2 m in 2018 and focus, in particular, on:

- renovating the Chémery facility, which is one of the sites to have never undergone a thorough overhaul since it was commissioned;
- boosting saline site injection capacity, including installations to fill these facilities over an extended period [*confidential*];
- investments for collectors and compression facilities at the Gournay site, including improved availability as this site has never been substantially overhauled;
- renovation of the storage tank at the Cerville site (well heads, corroded manifolds and drain traps, outdated methanol system, separator efficiency);
- renovation of ageing surface installations on the Germigny facility to deliver more reliable performance.

2.2 Multiannual programmes

Multiannual programme expenditure amounts to €46.7 m in 2018.

Multiannual programmes are cross-cutting programmes that involve several facilities managed by Storengy's central teams to ensure consistency between these facilities on similar type projects. They partly address legal obligations or security matters and industrial safety.

The well programme focuses on inspection and maintenance of Storengy's operating and monitoring wells. The purpose is, in particular, to ensure compliance with regulatory measures. The operator has introduced an overarching monitoring and renovation programme to optimise the well renovation programme.

The collection and wet gas programme concerns natural gas collection pipes from underground storage facilities that connect the wells to the station. These installations are prone to corrosion and thickness loss, especially due to subsoil water rising with the natural gas, when withdrawing. Monitoring the thickness and corrosion of these facilities is one of the measures introduced by Storengy to meet industrial security and performance targets for underground storage facilities.

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



Budget lines (€m)	Storengy 2018 proposal
Well programme	15.7
Collection and wet gas programme	8.7
Industrial risk prevention programme	6.9
Technological risk prevention programme	5.3
Site security	4.4
Other programmes: - Industrial computing and automated systems programme - Compression programme - Tallying programme (transaction counts) - EIA programme (electricity, instrumentation and automated systems) - Surface wells programme	5.7
Multiannual programme total	46.7

2.3 Regional work activities

Regional work activities account for a budget of €7.1 m in 2018 and cover:

- ongoing maintenance and repair work managed directly by facility maintenance teams, liaising with the Maintenance Division;
- small-scale varied work activities without a preliminary study phase, involving a one single trade at a time. This could be, for example, renovating a laboratory ventilation system (€30 k), upgrading a pit to comply with regulations (€21 k), or fitting a canopy for a tank (€20 k).

The total amount for this work is stable, at €7 m to €8 m per year.

2.4 Small-scale industrial projects

Storengy is allocating a budget of €11.3 m 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. This applies, for example, to renovating fire and gas detection systems, as well as collecting and treating rainwater at the Tersanne facility.

2.5 Other projects

All these projects account for a provisional budget of €1 m for 2018.

2.5.1 Energy efficiency-related projects

Storengy requests approval for three energy efficiency-related projects:

- the installation of photovoltaic panels to use electricity generated on-site at Tersanne. This project is scheduled to be delivered in 2018-2019;
- a technical and economic study for a turbo-expander at Chemery. This project involves installing a turbine through which gas at high pressure, released from the storage facility, is held to produce mechanical energy and then transformed into electrical energy. Initial findings of the study indicate that 15 GWh of electricity can be generated for an investment amounting to €5 m at the current time. This power generation unit would dedicated to using electricity produced on-site, with any surplus being sold on the market. This project is scheduled to be delivered from 2019;



- the development of a summer heat recovery and storage system for re-use in winter, to heat office buildings. This project is scheduled to be delivered in 2018-2019.

2.5.2 Research and development-related projects

Storengy is planning studies to prepare to inject in the short run a mix of natural gas, biomethane and synthetic methane, then hydrogen, into storage facilities.

Furthermore, Storengy also proposes a MéthyCentre *Power-to-gas* project, comprising a methanation unit connected to a methanisation unit, to capture and re-use CO₂. The installation is due to be commissioned in 2020.

2.6 General investments

Budget lines (€m)	Storengy 2018 proposal
Computing projects	9.9
Office space redesign	3.0

Computing project-related expenditure amounts to €9.9 m in 2018, including €1.2 m to introduce collaborative and cross-cutting IT tools. The remaining projects comprise a budget of €8.7 m and focus, in particular, on commercial and industrial information systems, as well as static and dynamic modelling tools for the underground part of operator storage facilities.

In addition, Storengy began a project in February 2018 to reorganise its business activities, with the aim of legally separating regulated and unregulated activities (consultancy work benefiting France, British and German subsidiary storage companies and the development of new trades). In this instance, Storengy wants to reconfigure its head office for a budget of €3.5 m, €3 m of which is earmarked for 2018.

3. CRE'S ANALYSIS

3.1 Major projects related to regulated storage activities

3.1.1 Ongoing projects

Plans to develop storage capacity at Hauterives, which features in the multiannual energy programme ³, was commissioned in 2018. Expenditure planned for 2018 corresponds to completing work at the facility, [confidential].

In addition, Storengy is continuing to wash out two cavities at its Etrez facility. Given that existing cavities are ageing, Storengy justifies the need for this investment to maintain the facility's usable capacity and flow rate performance.

3.1.2 Projects under study

Projects being studied by Storengy, referred to in section 2 of the present deliberation, mainly highlight greater reliability of existing installations, a need to maintain storage facility performance, or greater site performance, such as increased injection flow rates at the Etrez facility.

CRE approves expenditure for these projects, for the most part already underway, for 2018.

CRE nevertheless highlights that to ensure security of supply, the PPE has set a target for discharge and usable capacity rates for the entire area of storage facilities regulated by the three storage operators. This situation raises the question of maintaining this level of performance at the least cost for the community. To complete these analyses, from 2019, CRE requires Storengy to supplement all project approval requests to maintain or improve performance with an alternative investment-free scenario featuring the subsequent effects on performance at the relevant facility.

3.2 Other projects

The guarantee to cover costs, introduced by the Law No. 2017-1839 of 30 December 2017, is restricted to infrastructure required for security of supply, such as that defined in the scope of the PPE. By contrast, covering the costs of business activities that do not contribute to this objective is not guaranteed.

Consequently, costs covered by the ATS tariff can only include projects related to Storengy's regulated underground natural gas storage activities, inasmuch as this helps ensure security of supply.

3.2.1 Energy efficiency-related projects

- Installation of photovoltaic panels at the Tersanne facility

Storengy requests approval for a project to install photovoltaic panels at the Tersanne facility. CRE considers that the project is unrelated to Storengy's regulated storage activities which seek to ensure security of supply. Furthermore, CRE reiterates that electricity generation forms part of the competitive business sector and, as such, are activities likely to come under Storengy's unregulated subsidiary.

- The installation of a turbo-expander at the Chemery facility

CRE considers that the project for a turbo-expander is part of efforts to optimise installations at the Chemery facility. Indeed, the turbo-expander will be installed in the facility's withdrawal infrastructure, to recover the energy held prior to injection into the transmission grid. This project helps reduce the operator's environmental footprint by re-using trapped energy.

Nevertheless, Storengy has not yet finalised its business plan and has informed CRE that the initial expenditure will be incurred in 2019. As a result, CRE approves the principle of plans for a turbo-expander and will scrutinize the project budget during approval procedures for investment expenditure in 2019. This will take place in late 2018.

³ Article 9 of Decree No. 2016-442 of 27 October 2016 on the PPE

- **Development of a heat recovery system**

CRE considers that the project is not directly linked to a storage operator's regulated activities, which seek to ensure security of supply.

3.2.2 Research and development-related projects

- **Studies on injecting new renewable gas into storage facilities (hydrogen, synthetic methane)**

CRE considers that these studies are directly linked to regulated storage activities when they are part of plans to change the type of gas to be stored in future. Indeed, the share of renewable gases injected into the grid will grow in the coming years and it is vital that storage operators can plan for possible consequences on storage infrastructure.

These studies have, in particular, enabled operators to accept biomethane at storage facilities since June 2017.

- **MéthyCentre Power-to-gas project**

CRE considers that this project is unrelated to regulated storage activities that seek to ensure security of supply. In addition, Storengy justifies the delivery of this pilot project by the need to highlight the industry's economic development potential. CRE considers that generating hydrogen or synthetic methane falls within the competitive business sector and, as such, constitutes activities likely to be covered by Storengy's unregulated subsidiary.

3.3 General investments

As concerns the computing programme, in response to CRE's request, Storengy proposed an apportionment formula for cross-cutting IT projects that benefit both regulated and unregulated activities. Based on staffing numbers in France, i.e. 78% for regulated activities, this results in a total of €0.9 m in 2018.

CRE considers that this formula based on the operator's staffing numbers in France, is relevant.

CRE subsequently approves expenditure related to the computing programme, for a budget of €9.6 m.

As concerns redesigning office space at Storengy's head office, this will benefit all its activities at the head office. As a result, the operator proposed applying the apportionment formula, at the request of CRE, to cover the costs of all its activities. The proposed apportionment formula is 60% for regulated activities, i.e. a budget of €2.1 m, including €1.8 m in 2018. The formula matches the distribution of staff between the two subsidiaries occupying the head office, i.e. 192 employees for the regulated part and 128 employees for the unregulated part.

CRE considers that this apportionment formula is appropriate.

CRE subsequently approves this project, for a budget of €2.1 m, including €1.8 m in 2018.

DECISION

- 1- According to Article L. 421-7-1 of the Energy Code, natural gas storage operators must submit their annual investment programmes for approval to the Energy Regulatory Commission (CRE).
- 2- CRE approves Storengy's investment budget for 2018, amounting to €97.7 m, excluding Storengy's initial request:
 - the "heat recovery system", "installation of photovoltaic panels at the Tersanne facility" and "Méthy-Centre power-to-gas" projects;
 - the proportion of cross-cutting investment expenditure (IT systems and redesigning office space) related to unregulated activities, following application of the apportionment formula proposed by Storengy.
- 3- This is broken down as follows:

Budget lines (€m)	Storengy 2018 proposal	Approved for 2018
Major projects	21.0	21.0
Multiannual programmes	46.7	46.7
Small-scale industrial projects	11.3	11.3
Regional projects	7.1	7.1
Energy transition projects and R&D	1.0	0.0
General investments	12.9	11.4
Others	0.2	0.2
Total	100.2	97.7

- 4- From 2019, CRE requires Storengy to supplement all project approval requests to maintain or improve performance with an alternative investment-free scenario featuring the subsequent effects on performance at the relevant facility.
- 5- The approval of the investment programme does not call into question the tariff treatment of this expenditure.
- 6- Any amendment to the investment programme must be submitted to CRE for approval.
- 7- CRE requires Storengy to provide it with a final implementation report by June 2019 for its 2018 investment programme. This must also include a progress report on the main projects.
- 8- The present deliberation will be published on CRE's website and Storengy will be notified. It will also be sent to the appointed government Minister, the Minister for Ecological and Inclusive Transition and the Minister of Economy and Finance.

Deliberated in Paris on 19 July 2018.
For the Energy Regulatory Commission,

The Chairman,
Jean-François CARENCO

