

PRESENTATION SHEET

for project

"Daily withdrawal capacity increase - Bilciurești UGS - Modernizing the infrastructure of the natural gas storage system"

1. **Cod ENTSOG: UGS - F- 311; Cod PIC: 6.20.7** - the 5th PCI List ;
2. **TYNDP 2022: „Bilciurești daily withdrawal capacity increase”;**
3. **Category:** Gas Infrastructure
4. **Project Promoter:** SNGN ROMGAZ SA - Natural Gas Underground Storage Subsidiary DEPOGAZ Ploiești SRL
5. **Countries involved:** România, RO
6. **Technical description of project:**

The project aims to increase the daily delivery capacity of gas in Bilciurești UGS from 14 million Scm/day up to 20 million m³/day, correlated with an increase in storage capacity of 108 million Scm/cycle.

In order to ensure a high degree of operational safety and to enlarge the existent natural gas infrastructure, it is necessary on one hand, to develop new surface facilities that will take over the additional flow and on the other, to upgrade the other existing facilities.

From a technical standpoint, the project consists in drilling 4 new wells, in the modernization of 39 existing wells as well as of the surface infrastructure according to European safety and control requirements, the expansion, modernization and optimization of the separation units and of the fiscal metering unit, a new pipeline between Bilciurești UGS and Butimanu Compressor Unit, the modernization of M3 cooling system and the digitalization of the natural gas storage process at Bilciurești UGS.

The project will be implemented in phases and includes the following:

- Systematization of intake/ discharge (exhaust) manifolds, injection/withdrawal of gas;
- Modernization of 3 TEG dehydration units (in 57, 101, 145 groups Bilciurești);
- Modernization of metering panel at Butimanu;
- Drilling and equipping 4 new wells;
- Collector Butimanu - Bilciurești with a diameter of 24”;
- Modernization of the gas storage groups at Bilciurești;
- Battery separators injection/extraction;

- Modernization of 39 existing wells;
- Modernization of the M3 Butimanu cooling system;
- Digitalization of the natural gas storage process at Bilciurești UGS;

7. Project location:

From a geographical point of view Bilciurești UGS is in Dâmbovița County, approximately 40 km WNW of Bucuresti and 35 km SSW of Ploiești.

8. Project objectives:

- Increasing the security of supply through the development and diversification of natural gas resources in the SE of Europe, ensuring a better energetic independence and mitigating the risks of gas flow interruption during peak periods with reference to different disruptive scenarios;
- Expanding the portfolio of gas storage services with complex services that integrate, among others, flexibility in operation and network balancing services. The new surface infrastructure will provide a high degree of flexibility that will allow a fast reversal of the storage cycle (and therefore allow injection during withdrawal cycle and withdrawal during injection cycle);
- The project contributes to a reduction of greenhouse gas and pollutant emissions, aligned to the context of European decarbonization policies and the overall increase in costs of ETS emission certificates. The implementation of the project will allow the role of natural gases or of gases from renewable sources to increase significantly;
- The project contributes to N-1 rule on a regional level, according to EU Regulation 1938/2017. The implementation of the project allows the N-1 indicator to increase from 106,3% up to 114,58%;
- The implementation of the project lowers the dependence on gas imports during the cold season.

9. The contribution of the project to the European and regional energetic security:

This project of modernization of the gas infrastructure within Bilciurești UGS brings a major contribution to the increase of daily withdrawal capacity and improves the flexibility of the gas storage activity in the SE of Europe, stimulating and accelerating also the development of newly found resources both offshore, in the Black Sea and also onshore, in Romania, by optimizing the necessary investments for harnessing such reserves, facilitating a constant production through the following:

- Bilciurești UGS is connected to the "Bulgaria – Romania – Hungary - Austria Corridor", the BRUA project that is being developed in our country by NTS TRANSGAZ and which includes the construction, in phases, of a new transmission pipeline for natural gas between Podișor technological node and SMG Horia as it aims to increase the transmission capacity

in RO – HU interconnection point, Csanadpalota-Horia, and to ensure the physical, bidirectional transmission of gases between RO-HU and RO-BG interconnection points.

- The increase of gas storage capacity by 108 million Scm/cycle up to a total UGS capacity of 1,418 million Scm/cycle.
- The implementation of the Project will contribute to the increase of the daily withdrawal capacity by about 20%, at national level.

10. Sales Market: internal and regional market;

11. Strategy for purchasing the equipment: PUBLIC TENDERING;

12. Final date of feasibility study (update): 05.05.2017 - (update 26.08.2020);

13. Start date of the project (FID): 2017- project is implemented in phases;

14. Estimated finalization date: 2027;

15. Estimated value of the project (CAPEX): 142 mil. Euro;

16. Financing sources:

- own sources – 59.04 mil. Euro;
- bank credit – 45.00 mil. Euro;
- UE grant funding - 37.96 mil. Euro.

17. Production and operation after the implementation of the project:

- Additional withdrawal capacity of around 108 million Scm/cycle and additional daily withdrawal capacity of around 6 million Scm obtained through the implementation of the project will be included in the list of available technical capacities.
Operation of the UGS will be provided by SNGN ROMGAZ SA – Natural Gas Underground Storage Subsidiary – DEPOGAZ Ploiești SRL.
- TPA regime is regulated according to decision 141/2021.

18. Current status of the project:

The project of modernizing the gas storage infrastructure system within Bilciurești UGS is programmed to unfold in phases, as following:

Phase I

Works from Phase I have started in 2017 and are programmed to be finished in 2024. Total value of the works included in this phase is 30.8 mil. Euro.

Brief description of the stage of the works included in Phase I:

1. The modernization works for 3 natural gas dehydration units were completed, works totaling approx. 11.9 million Euros;

2. The following are works in progress:

- 2.1. Modernization of the technological installations at Butimanu compression station premises, in the amount of approximately 3.3 million Euros, scheduled for completion in 2024;
- 2.2. Drilling of 4 new wells at Bilciurești UGS, worth 13.7 million Euros, their completion being scheduled for Q4 - 2023 ;
- 2.3. Modernization of the fiscal gas metering system in the Bilciurești UGS, in the amount of 2.5 million Euros, completion scheduled for Q1 – 2024

Phase II

Works on Phase II started in 2022 and are scheduled to be completed in 2027.

Following the participation in call organized by the European Interconnection Mechanism, CEF Energy 2022, DEPOGAZ has obtained approval for non-refundable partial financing of the works related to the second phase of the Project.

The total value of the works is 110.5 million Euros, the value of non-refundable financing (Grant) being 37.96 million Euros.

Currently, the design and technical assistance services have been contracted, in the amount of 1.6 million Euros, with a completion date of 2027.

17. Environmental protection:

The project complies with the environmental legislation, in force, of the European Union.

General Manager,

Technical Manager,

22.02.2023