ROMGAZ

Societatea Națională de Gaze Naturale Romgaz S.A. - Mediaș - România



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To The General Meeting of Shareholders

Information on the Implementation Stage of CTE Iernut Development Project within the Electric Power Generation Branch

It is absolutely necessary for Romania to focus its efforts on maintaining and developing the energy mixture and using with maximum efficiency the primary energy resources in order to reduce the import dependency and to ensure the energy security of the country.

On this line, one of the main strategic directions of S.N.G.N. ROMGAZ S.A., as provided in "The Development Strategy for 2015 - 2025", posted on the company's website, is to consolidate its position on energy markets. In this case, in the field of electric power generation Romgaz aims "to make the activity more efficient by implementing some investments to increase the CTE lernut Power Plant efficiency to a minimum of 55%, by compliance with the environment requirements (NO_X CO₂ emissions) and improving safety in operations" based on the analysis of the power plant status and its current performances which shows the following key aspects:

- The comparison between the power output efficiency (specific fuel consumption) of the existing groups within the power plant and the global output capacity of combined cycle gas turbine power plants (55%-59% efficiency) resulted in a difference of 15-20 efficiency points in favour of the combined cycle plants.
- The benefits of using the combined cycle are not only the increase of energetic efficiency but also the increase in operating flexibility of the groups as well as a reduction in pollutant emissions (CO₂, NO_x, etc.).

The analysis of the CTE Iernut development scenarios is deemed necessary and opportune to improve the economic-technical parameters, increase the duration of operation and comply with the provisions of Directive 2010/75/EU of the European Parliament on industrial emissions.

It has to be mentioned that the necessity of reducing the electricity production costs correlated with the necessity of reducing the hydrocarbon consumption as well as the improvement of this activity requires adopting a high performance technology with minimal specific consumption.

As a consequence of the above, in order to develop the CTE Iernut Power Plant (hereinafter referred to as **CTE Iernut**) within the Power Generation Branch (hereinafter referred to as **S.P.E.E. Iernut**) following actions have been taken:

1. Adoption by taking into account the economic environment of that moment of Resolution No. 26/December 18, 2016 of the Board of Directors, Article 6, which approves:

- The legal form "Joint venture", considering the mitigation of the risks associated to S.N.G.N. ROMGAZ S.A. and the access to funds provided in the National Investment Plan (NIP);
- Authorizing the Executive Management of S.N.G.N. ROMGAZ S.A. to prepare the documentation necessary to select a consultant. The Consultant shall elaborate together with Romgaz the criteria/procedures necessary to select the partner/investor for the commencement of CTE lemut development project;
- 2. Resolution No. 1/January 26, 2015 of the EGMS which approves the procurement by Romgaz of legal counsel services, legal and professional assistance, to start the CTE lernut development project within SPEE lernut Power Plant under the legal form "Joint Venture" (Annex II);
- 3. On March 2015, Romgaz started to conduct the procedures required by public procurements concerning Consultancy Services required for the selection of a partner to refurbish CTE Iernut, under the legal form Joint Venture:
 - Elaborate the Specification;
 - Answers, clarifications made by the National Authority for Regulating and Monitoring Public Procurement (Autoritatea Nationala pentru Reglementarea si Monitorizarea Achizitiilor Publice- ANRMAP) regarding the tender documentation;
 - Bid opening session, September 8, 2015;
 - Electronic Tender, October 19, 2015;
 - Contestations submitted by the bidder to the National Council for Solving Complaints (Consiliul National pentru Solutionarea Contestatiilor CNSC) on November 18, 2015;
 - On December 10, 2015, CNSC denied the contestation submitted by the bidder considering it as insubstantial and by Decision no. 2117/C42299 decides to carry on the award procedure;
- 4. On December 2015, Romgaz' experts (hereinafter referred to as Romgaz or Company) began to conduct the procedures to prepare the Financing File to access non-refundable funds from the National Investment Plan (NIP) in accordance with the legal procedures and requirements.

As a consequence of the above, Romgaz's experts undertook actions necessary for:

- Updating the Feasibility Study of the Investment as of May 2016;
- Obtaining the Environmental Permit. Therefore SPEE lernut requested from the Environmental Protection Agency (EPA) Mures, the initial evaluation of the investment to obtain the Environmental Permit. Consequently, EPA Mures issued the Decision no.1089/February 26, 2016 of the initial evaluation stage by which settled the necessity of starting the procedure of the environmental impact assessment appropriate for the above mentioned project. Thus, Romgaz elaborated an explanatory report for this purpose, intending to contract services to elaborate the Impact Study in order to continue the procedure necessary to obtain the Environmental Permit. (It was necessary to restart the award procedure due to the fact that there was only one bidder who contested the period for elaborating the Study. For the moment the award procedure has been restarted)
- Elaborating the necessary documentation for the Connection Technical Evaluation Report
 Transelectrica, estimated to be completed until September 15, 2016.

- 5. The Service Contract (regarding the selection of a partner to perform the refurbishment, under the legal form of Joint Venture) between Romgaz and KPMG Adivsory SRL and Nemoianu Toncescu, Mihaila, Olteanu SPRL was signed as of January 15, 2016.
- 6. The adoption of the Resolution No.8/March 24, 2016 of the Board of Directors, Article 22, which approves the refurbishment of lernut Power Plant (CTE lernut) by building a new power plant in a very constructive version, combined cycle gas turbines (CCGT) at an installed power of maximum 430W and gross electric efficiency at a nominal load of minimum 55% under a legal form of Joint Venture;
- 7. Request explanation to ANAP (The National Agency for Public Procurement). Taking into account the special complexity of the Project, Romgaz requires ANAP explanations as far as concerns the possibility to apply the competitive dialogue procedure as well as acting accordingly considering the authority's directions or to choose one of the two identified procedures, quantifying the advantages and disadvantages, with the effort to comply with the terms, procedures, negotiations etc.

In accordance with letter no. 3063/April 22, 2016, ANAP structures its answer rather towards the organization of a competitive dialogue-type award procedure, resulting in a public procurement contract.

8. Information regarding the announcement publication of the public procurement contract award: "Development of CTE Iernut by building a new power plant with combined cycle gas turbines" in the Electronic System for Public Procurement (SEAP).

Taking into account that Law No. 99/2016 on sectorial procurement came into force on May 23, 2016 and the temporary interruption of SEAP during May 26, 2016 – June 15, 2016, the Commission decided to approve the Award Documentation and the Information to the Board of Directors regarding the impossibility to publish the documentation in SEAP due to system break down, until June 15, 2016.

- 9. In accordance with Resolution No. 11/12.05.2016 of the Board of Directors, Romgaz submitted the request concerning the modification of Article 12, paragraph (3) of Government Decision 1096/2013, as amended and supplemented, for approving the mechanism of transitional allocation of free emission allowances for greenhouse gas electricity producers for the period 2013-2020, including the National Investment Plan by taking into account the following:
 - the importance of the new lernut investment as regards the positive impact on the National Energetic System by:
 - improving the conditions of power stability and quality of electricity as well by ensuring some important reserves of reactive power for power adjustment;
 - increasing the adequacy level of SEN, given the operation with a fuel alternative to those existing in SEN, by ensuring the supply with electricity in the periods when a deficiency exists in other types of power plants (hydro electric energy reduced in the

dryness periods, photovoltaic energy reduced in the periods with high cloudiness, wind energy reduced in the periods with low speed of wind);

- balancing the high variability of production of electricity from renewable production sources through superior technical capabilities of fast loading/reloading groups
- The necessity to apply for grants NIP;
- The file for grant application which must include documents which resulted further the execution of the work contract with the partner/associate selected by SNGN Romgaz S.A. (contract EPC Engineering Procurement Construction and the assumed funding structure);
- The fact that procedure for selecting a partner/associate to develop CTE is a complex and long procedure and with a high risk of failure to conclude during the left period until the end of the year 2016;
- The period for performing the procedure is influenced by the number of the qualified and preselected candidates, the period for negotiations, the period for approvals of competent bodies (BoD/GMS) possible complaints submitted to ANAP;
- The existence of a high risk which may cause failure for Romgaz to meet the calendar and legal terms, which are very close due to possible delays in performing the award procedure (restart, clarifications) and delays due to negotiations with the selected partners, possible complaints.

The initiative aims to amend Article 12 (3) to read as follows: "The beneficiaries of the investments provided in the National Investment Plan, which have not commenced the investment may apply for the grant in order to conclude a financing agreement within two years and six months from the date of commencement of the investment provided in annex 3".

The reply of the Ministry of Energy, registered under number 261491/31.05.2016, apart from reiterating the provisions of Government Decision 1096/2013, was as follows:

" [...] for SNGN Romgaz SA to receive a grant for the investment "Combined Cycle Gas Turbine" provided in NIP with commencement year 2014, it is necessary to comply with the provisions of applicable law mentioned above."

10. Performing the Necessary Actions for Updating the Feasibility Study on Refurbishment/Retrofitting of CTE Iernut Energetic Groups in Various Technological Versions"

Taking into account the recently changes as well as those anticipated for the near future on the electricity and gas market, as well as following technical features:

- Gross electric efficiency at nominal load: minimum 56%;
- Specific emission (tCO₂/ MWh): maximum 0.360 tCO₂/ MWh;
- Maximum NO_x emissions: 50 mg/Nmc, CO: 100 mg/Ncm; (in accordance with the Directive 2010/75/UE implemented by Law 278/2013)
- Ensuring financing from own sources;

it is necessary that the analysis of the possibilities for refurbishment/retrofitting the CTE lernut, the technological and financial versions to be substantiated through analyses regarding the development in Romania of the following:

- electricity consumption;
- electricity market;
- gas market;
- level of the discount rate;
- natural gas price to be used for electric energy production;
- electric energy prices and tariffs;
- CO₂ emission certificate prices

The best identified investment scenario has the following advantages:

- Electric power production efficiency of about 56% within the limits provided by the BAT-BREF documents;
- Good flexibility in operation of the planned installation;
- Putting into service of installation provided in the best scenario may be done in phases

Financing shall be made 100% from own sources.

By Updating the Feasibility Study on Refurbishment/Retrofitting of CTE lernut Energetic Groups in Various Technological Versions, there have also been performed specific analyses.

10.1 The financial analysis has been performed on the outline of the new investment using the cost-benefit method and taking into account the discount technique.
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The following resulted from the Financial Flow analysis:

- The Financial Flow of the Investment is positive after the completion of the investment works.
- The Cumulated Financial Flow of the Investment is positive after the first 9 years of exploitation (starting from 2029), meaning that the investment recovery from generate sources (net profit and depreciation) is made after 9 years from putting into operation.

The impact of financing structure modification on the efficiency indicators has been analysed. Therefore, the financial analysis has also been prepared for the case of investment financing from NIP and own funds. The estimated share of NIP financing resources is of 25% from eligible expenses.

The obtained indicators emphasise an increase of the investment project profitability in case of NIP grants application.

10.2 The economic analysis assessed the project as regards the economic impact on the company. Therefore, the economic analysis has been made from the point of view of the company as a whole and not only as regards the infrastructure owner, as in the case of the

financial analysis. The economic analysis identified the external benefits of quantifiable value, resulted from decreased CO_2 and NOx emissions due to the enhanced gross electric efficiency.

The analysis of the Flow of Revenues and Economic Expenses shows that after completion of investment works, the annual revenues together with external benefits generated by project implementation cover entirely the yearly operating expenses resulting in positive values of the revenues and expenses flow for each year of the operating period.

The analysis of the indicators resulted from the economic analysis shows that the project is profitable (VNAE>0, RIRE> discount rate, ratio B/C-E > 1, DR shorter than the operating period).

10.3 The scope of the **sensitivity analysis** was the identification of critical variables and their potential impact on the modification of financial efficiency indicators.

A sensitivity analysis has been performed on the variation of the financial efficiency indicators with the investment value modification and the natural gas price modification.

Based on the analysis results, the following can be concluded:

- The "investment value" parameter is a critical VNAF/C parameter. It varies more than 1% with a ±1% variation of the investment value.
- The "natural gas price" parameter is a critical parameter (VNAF/C and RIRF/C vary more than 1% with a ±1% variation of the natural gas price).
- **10.4** The **risk analysis** was concerned with the estimation of probability distribution of financial performance indicator modifications.

The risk analysis results have been presented as a simple probability distribution, cumulated probability distribution and standard deviation for the VNAF/C efficiency indicator.

All the above mentioned elements recommend the implementation of the investment detailed in the Feasibility Study.

11. Pursuant to the Resolution of the Board of Directors No. 11/2016, Article 15 (d), requiring the identification an implementation scenario for the development project in case there are no bidders in the procedure of attracting an investor/partner, or bidders have certain conditions and they do not comply with all ROMGAZ SA requirements, there have been identified five implementation scenarios, and two haven been submitted for analysis to the Board of Directors.

Scenario 1 The scope of procurement under this scenario is the following:

"Turn-key project implementation, namely: Equipment Design and Delivery and Performance of Works Required for Project Implementation - (Works Contract), with or without Project Financing under the conditions agreed between the parties under the Joint Venture Agreement (Acord de Asociere in Participatie) to be concluded by such parties and shall be the Annex to the Works Contract."

The financing structure in this case will be: Romgaz own sources + <u>NIP</u> + <u>with or without associate's financing</u>;

Scenario 2 Works Contract to implement the turn-key project, i.e. Equipment Design and Delivery and Performance of Works Required to Implement the Project

The financing structure in this case will be: Romgaz own sources + NIP by complying with the legal requirements¹;

In this case, a new open procedure shall be conducted immediately. The optimistic term for concluding such a contract is of 90 days from submitting the bidding documentation to SEAP.

As a result of the analysis performed by the Board of Directors in the meeting of June 23, 2016, the Board decided as follows:

- SNGN ROMGAZ SA shall develop and operate CTE lernut without concluding a joint venture agreement with other natural or legal persons.
- SNGN ROMGAZ SA shall finance the investment regarding CTE lernut development from own sources and by accessing NIP funds.
- The executive management shall take all measures required to conclude as soon as possible the turnkey works contract having as scope the development of CTE lernut (EPC), under the scenario proposed by the executive management, i.e. building a new, combined-cycle CCTG power plant having a maximum 430 MW installed capacity and a minimum 55% gross electric efficiency at nominal load.
- The executive management shall take all necessary measures to ensure that the turnkey works contract (EPC) award shall comply with all legal principles and provisions applicable in the field of sector-specific procurements.

In this regard, SNGN ROMGAZ SA shall proceed to award a public procurement contract as provided by Law 98/ 2016 on Public Procurement and the Implementation Rules, approved under Government Decision 395/2016.

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¹ A requirement provided in the Government Decision No. 1096/ 2013 is that a request of NIP financing shall have annexed either a contract concluded with the EPC company (Engineering, Procurement, Construction) or a supply contract for the main equipment and/or service suppliers, having a contract value in amount of minimum 20% of the investment value, VAT excluded.

The main actions to be undertaken before the end of 2016 in order to conclude a Works Contract (EPC) and to submit the NIP financing application are the following, as detailed in the Annex hereto :

- > Award documentation to be transmitted to the Electric System for Public Procurement (SEAP);
- Verification of documentation and Participation Announcement to be published by the National Agency for Public Procurement (ANAP);
- > Participation Announcement to be published in the Official Journal of the European Union (OJEU);
- Submission of bids;
- ➢ Bid evaluation;
- > Preparation and approval of Procedure Report, notifications and contestation period;
- Concluding the works contract;
- Completion and submission of the NIP financing application file by October 31, 2016;

During this period, all necessary actions shall be taken to obtain the other permits and approvals required to implement the project. After concluding the EPC works contract, certain works will be performed such as land improvement works, environmental protection improvement works and land restoration works, ensuring the necessary utilities, etc.

Chairperson of the Board of Directors Aurora NEGRUT

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* SEAP- The Electronic System for Public Procurement (Sistemul Electronic de Achizitii Publice)

** ANAP- The National Agency for Public Procurement (Agentia Nationala pentru Achizitii Publice)

***OJEU- The Official Journal of the European Union

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