

Subject: CREG study on the operational profitability of existing CCGT's in Belgium
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Main messages

The CREG study on the operational profitability of existing CCGT's in Belgium is a theoretical exercise based on historical data only showing an operational margin for the past years and the next few years. CREG considers fixed costs as sunk costs ignoring the cost of past investments. For this reason, the study doesn't demonstrate in any way that existing CCGT's will remain in the market or that there's a signal to build new power plants. In the context of the ongoing debate on a Belgian energy pact, it is important to be aware of the limits of CREG study and to look at the broader picture.

Introduction

On the 16th of November, 2017 CREG published its study ((F)1628) on the operational profitability of existing CCGT's in Belgium. CREG concludes that an average existing CCGT in Belgium is still able to generate sufficient revenues to operate in the energy only market and to cover the associated variable fixed operational costs together with a provision for future major overhaul.

FEBEG thanks CREG for this theoretical exercise, but also wants to point to the limits of this study. In order to avoid any misinterpretation or misunderstanding – which would be very unfortunate in a context of an ongoing debate on an energy pact for Belgium – FEBEG would like to put forward some background and comments.

Study is a theoretical back testing exercise

The CREG study is based on modelling – with historical data – of the operational revenues of CCGT's. On top of that, CREG uses the best data available as input for its study, hence the assumption of an ideal optimal performing CCGT. CREG, for example, estimates the variable fixed operational costs at 6 MEUR/year for a 400 MW CCGT while RTE evaluates the same cost at 14 MEUR/year.¹ Temporary market circumstances – e.g. unplanned outage of nuclear power plants in Belgium and France – also influence the outcome of the back testing.

Although such an exercise can be useful, it doesn't allow (1) to generalize conclusions to all existing CCGT's in Belgium, (2) to draw conclusions on the future profitability of existing CCGT's and their ability to remain operational, (3) to state that the energy only market will provide sufficient price signals to ensure security of supply, and (4) to conclude that the mechanism of strategic reserves increases the profitability of CCGT's staying the market or will guarantee the security of supply in Belgium on the longer run.

¹ RTE, Bilan prévisionnel de l'équilibre offer-demand d'électricité en France, Edition 2017, p. 83.

Study only focusses on short-term profitability

CREG only investigates if the revenues out of the market are sufficient to cover operational costs, including regular maintenance. In its study, the CREG ignores all fixed costs, e.g. development costs, project costs, investment costs, ... The fleet of existing CCGT's is also aging: therefore some units will be confronted with new fixed costs, e.g. major refurbishment.

FEBEG wants to emphasize that a CCGT is not profitable as long as it has CAPEX that are not covered by operational revenues. CREG thus assumes that all fixed costs are 'sunk costs' which is not acceptable from an investors' perspective. It also demonstrates that there's at the moment no business case to invest in building new CCGT's².

Policy decisions should be based on forward-looking studies

It is difficult to see what policy conclusions could be drawn from a theoretical back-testing exercise that solely focusses on short-term profitability of CCGT's, defined as the simple coverage of operational costs. The Belgian fleet is aging and at the 2025 time horizon even the most recent CCGT's would be close to mid-life. Assuming that a simple coverage of operational costs is sufficient to keep CCGT's in the market, is suggesting that no new units should be built.

This message is opposite to the most recent prospective studies, e.g. Elia, Federal Bureau of Planning, Academics, ... These studies provide more valuable information for policy makers as they are based on integrated forward-looking models that reflect the best possible view on the long term profitability of specific types of assets.

CCGT's operate in an increasingly risky environment

The economic and regulatory framework for CCGT's becomes - and this also confirmed by CREG - more and more risky and challenging.

1. An increasing share of the revenues of existing CCGT's is coming from the short-term market in case of cold spells or outages of other power plants. At the moment there's no long term price signal that justifies a business case for investments in a new CCGT or in the extension of the lifetime of an existing CCGT.
CREG states that '*an investment of 40 MEUR for a lifetime extension of an existing CCGT with 100.000 hours has a write-off period of 6 to 8 years*'. In the current circumstances an investor will never spend this amount without having the perspective on a positive business case on such relatively long period. Conditions in the past are no guarantee for the future.
2. The legal and regulatory framework for power plants is continuously evolving: new connection requirements are being developed; operational rules are being modified; new proposals are being prepared to regulate decommissioning, cocooning and the flexibility of power plants to temporarily modify their capacity. The lack of stability and visibility on the rules of game are discouraging investments.
3. The Belgian CCGT's suffer from competitive disadvantages as they cannot compete in a level playing field with CCGT's in neighboring countries: (1) France and the United Kingdom have implemented a capacity market, (2) neighboring countries have no - or a very low - injection tariff and (3) CCGT's in other countries are not subject to such severe rules and huge risks as regards decommissioning, cocooning and the flexibility of power plants to temporarily modify their capacity.

² J. Albrecht, Stable electricity prices despite massive phase out in Belgium and neighboring countries, 30th of March, 2017 and Elia, Study on the need of adequacy and flexibility in the Belgian electric system - period 2017 to 2017, 18th of April, 2017.

Conclusion

In such a difficult and challenging context – and without long term price signal – the future of the Belgian CCGT's doesn't look positive. Therefore, FEBEG considers it dangerous to send out positive messages on the future of the Belgian CCGT's, especially with the ongoing debate in Belgium on security of supply and the implementation of a capacity market.

The study of the CREG only highlights a part of a complex reality. FEBEG invites all stakeholders to look at the global picture of the context in which the existing CCGT's have to operate as well as of the challenges for the security of supply. Ultimately, it will be the operators that will decide to invest or disinvest, and their decisions will not be based on a back testing exercise but on an evaluation of all economic parameters underpinning their business case.

FEBEG remains convinced that the existing CCGT's have an important role to play to ensure security of supply during the ongoing energy transition but not only as a part of the strategic reserves. The strategic reserves are a transitory measure securing electricity supply at short term, as confirmed by the European Commission: on the longer term strategic reserves are an inefficient measure with a limited scope. But far more important, the strategic reserves as such will not trigger timely investments in new capacities to facilitate the energy transition.

Therefore FEBEG calls the Belgian Government to use the valuable time bought with the strategic reserves to prepare the implementation of a capacity market that meets the requirements of the European Commission, i.e. that is technology neutral, is open to new and existing capacities, enables cross-border participation and allows generation, demand side flexibility and storage to participate on a level playing field.
