POSITION

Subject:	FEBEG's comments on ELIA's public consultation on the methodology, data and scenarios for Adequacy-Flexibility study 2022-2032
Date:	30 November 2020

Contact:	Jean-François Waignier
Phone:	+32 485 779 202
Mail:	Jean-francois.waignier@febeg.be

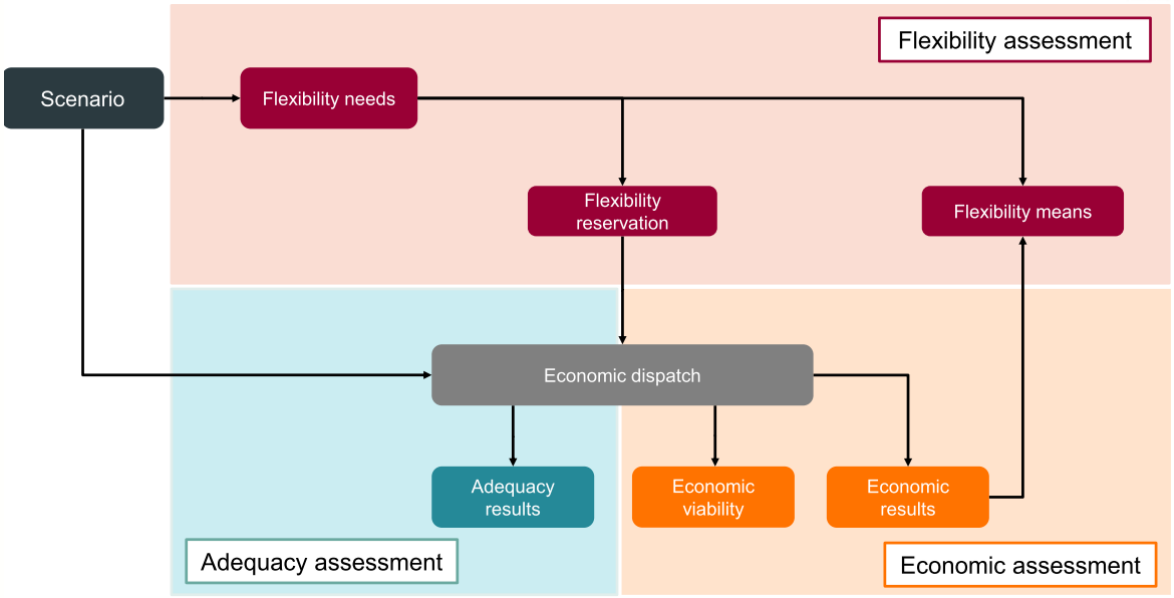
FEBEG thanks ELIA for having the opportunity to answer ELIA's Public consultation on the methodology, the basis data and scenarios used for the study regarding the adequacy and flexibility needs of the Belgian power system for the period 2022-2032[1].

The comments and suggestions of FEBEG are not confidential.

General comments

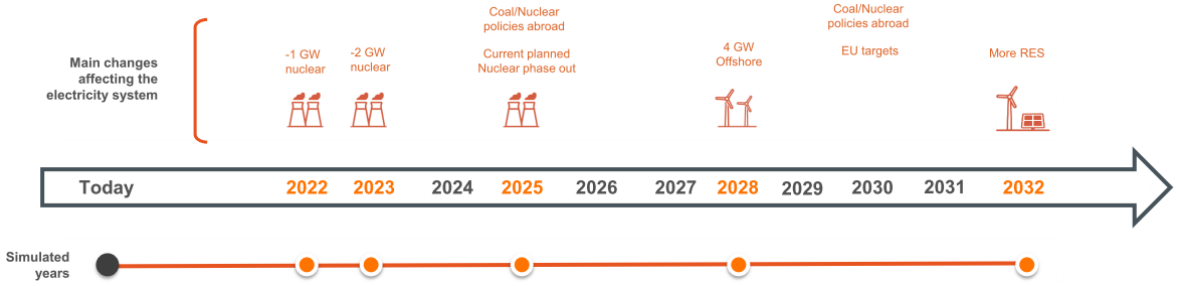
Comments and suggestions regarding the methodology

The study consists of several parts which are interlinked



[1] https://www.elia.be/en/public-consultation/20201030_public-consultation-on-the-methodology-the-basis-data-and-scenarios-used

Within the 10 years timeframe, 5 time horizons are proposed to be quantified following a central scenario with additional possible sensitivities based on the outputs from the public consultation.



The central scenario will be constructed for all proposed time horizons and be aligned with the latest Belgian NECP and other countries' NECPs/MAF study and should be considered as a 'current/stated policies' based on Belgian/European ambitions. Additional sensitivities will be defined to cover uncertainties on key assumptions.
Hypotheses of neighboring countries will be based on the latest published MAF study and complemented with new information for the different countries.

In order to embark the EERA-guidelines, the flexibility reservations will be replaced by an approach modelling upward FRR (aFRR + mFRR) in ANTARES (on top of FCR). This is specified in section 6 of the consultation document.

Comments and suggestions regarding the input data

Regarding the climate years

FEBEG is in the opinion that adequacy assessments should consider a relevant and wide range of historical climate years. The question on how to integrate the possible consequences of the global warming on security of supply and the selection of representative climate years should be consistent and aligned among European countries. FEBEG would like to remind that the adequacy studies should properly assess the situation of more extreme events like cold winters.

The recently adopted ERAA methodology indicates that the future PECD should reflect evolutions of the climate conditions although the final implementation choice by ENTSO-E (as 3 options are left) will be only known in the coming years.

Awaiting the final implementation choice by ENTSO-E, FEBEG supports Elia in considering the ERAA methodology to the extent possible but insists on a coordinated approach at European level. ELIA's proposed way forward to implement option 1 through the use of 200 synthetic climate years can be an interesting approach since this is based on the approach that the French TSO (RTE) has used since several years in its national adequacy assessment. Using an approach which has already been used and can benefit of practical experience brings undoubtedly added value. However, a clear disclaimer should be made by Elia in the report regarding to the implementation trajectory on this aspect of the ERAA methodology which has not started yet.

In addition, FEBEG recommends comparing the obtained results with the previous methodology, possibly through a sensitivity.

Comments and suggestions regarding the economic viability

FEBEG understands that the ERAA methodology proposes two approaches: (i) to assess the viability for each capacity (iteratively) or (ii) by minimizing the overall system costs (where all capacities are optimized at once) and that ELIA proposes to use the first approach which will consist of a similar set-up used in the previous study. For each iteration, the viability of all monitored capacities will be evaluated. After each iteration, new capacity would be added (if viable) or existing 'in the market capacity' would be removed from the system (if not viable). The loop of iterations will stop once all monitored capacity in the system is viable and no new capacity is viable.

For the evaluation of the viability will be determined by a metric that replicates as closely as possible the actual decision making of investors/market players in the Belgian energy market.
Considering the past discussions regarding this key aspect of the study, FEBEG welcomes that ELIA has requested external input to develop an updated methodology for the economic viability check and to account for investor's risk aversion in modelling economic decisions in a manner in line with the relevant ERAA stipulations. However, FEBEG also insists on a coordinated approach at European level.

FEBEG would like to underline the complexity of the assessment of economic viability and of investment decisions. Given the costs and time-horizons involved in the development of new assets or refurbishment of existing assets in electricity markets, investment decisions are complex and taken with extreme care. They are usually relying on a broad range of models, scenarios and criteria. However, a common thread in economic and financial valuation is that the more uncertain a revenue is, the more heavily it is discounted in any assessment of future revenues.

The development of new assets in electricity markets require large upfront costs and cover long payback periods (>20 years) beyond the liquidity horizon of forward markets, which is < 3 years). Investors clearly need a solid business case to approve such a financial commitment.
The standard industry practice is to consider a set of market scenarios and to evaluate the distribution of revenues and costs over the economic lifetime of the asset considered (e.g. CCGT covers approximately 20-25 years). Such an analysis aims to compute a distribution of expected gross margins over this lifetime. Depending on whether these margins are covering the fixed and investment costs, a new investment can be approved. This is also the case for investments to be performed on existing assets.

Integral parts of such an analysis are

(i) expected prices and revenues on the electricity markets, based on market fundamental;
(ii) the likely consequences of policy decisions (e.g. the energy transition); and
(iii) the impact of the market design.

Such analysis also includes the possibility of price spikes. However, given the uncertainty and infrequency of such price spikes, they are heavily discounted in any such assessment.

Metric for economic viability assessment

FEBEG understands that the hurdle premium is used to accommodate the limitations of the model proposed by Elia, and not an additional risk premium taken by investors. For this reason, it is difficult to properly assess the proposed percentage.

Additional revenues considered and types of capacities to be monitored

Revenues from ancillary services

Ancillary services should not be taken into account in EVA as not all capacities will receive this additional revenue stream.

Comments and suggestions regarding Cross border exchange capacity

FEBEG also recommends Elia to carefully model the expected available capacity in neighbouring countries in the short and medium term considering changing energy policies across Europe.
In particular, FEBEG refers to the fact that, due to Belgium's particular situation, the availability of interconnected capacity will be heavily dependent on the situation abroad, more in particular in France and Germany. To be more precise, in case French nuclear units are less available than announced, which has been the case in the last few years, France will have to rely more on imports to ensure its security of supply, via Belgium in most cases. This will lead to higher transit flows on the Belgian network and thus heavily reduce the import possibilities for specific Belgian capacity needs and thus require more domestic capacities within the Belgian balancing zone to be available to guarantee security of supply in such cases.

Comments on the XLS sheet

Regarding battery and market response capacity

FEBEG observes very optimistic assumptions on the evolution of batteries and market response capacity. FEBEG understands that these assumptions are based on expressed political ambitions that are translated in the PNEC. However, at this stage, there are no guarantees that these ambitions will materialize, in particular in absence of a regulatory and/or economic framework to stimulate the development of these capacities. This is especially true for the storage capacity, given the limited penetration of the different technologies at this stage.
FEBEG believes that this capacity increase could actually only materialize when an appropriate regulatory and/or economic framework – such as for example a capacity remuneration mechanism – would be implemented in Belgium at that horizon. Therefore, the considered assumptions related to storage and market response should be reviewed: only the capacity that would be developed based on existing market conditions should be used as input in the modelling.
With regards to the demand response, FEBEG recommends applying the 5% yearly increase compared to 2019-figures for the sensitivity and use a 2% yearly increase for the base-case scenario.

Regarding renewables

The PNEC objectives as defined for the 2030 horizon could induce a boost at the end of the decade only with a less favorable impact for the year 2025. In this respect, it should also be noted that the 2020 objectives have not been reached.
The objectives are ambitious, especially for onshore wind and biomass, but the NIMBY-effect – and in particular the delaying effects of the appeal procedures – should unfortunately not be underestimated.

It should furthermore be noted that, for the offshore wind growth ambitions, the execution of these projects will also depend on the timely execution of the Ventilus project. Experience has taught the sector that such large-scale projects will face the necessary challenges before they can be realized, the fierce opposition from both the local residents as from the communes against the Boucle du Hainaut is a good illustration of this.

Regarding peak demand and total electricity consumption:
Particular caution should be considered for the forecasts of peak demand (MW) as different plausible assumptions lead to different evolutions of this key driver.
While on one hand some might put forward that the electricity consumption could be reduced post-COVID due to reduced economic activities on one hand, the re-launch plan and the fact that the momentum could be used to accelerate the green-deal objectives with an increased rate for further electrification could on the other hand increase the peak demand and the energy consumption more than expected.

Regarding the economic assumptions
In FEBEG's opinion, the figures used for the economic assumptions of capex (€/kW) for new CCGTs and OCGTs are not in line with recent evolutions on the market (in particular regarding H/HL class CCGT and OCGT).

Suggestions regarding the sensitivities.

Considering the elements above, FEBEG would welcome following sensitivities:

- One sensitivity considering decreased foreign capacity availability should certainly be included as different exogenous elements could materialise such as reduced nuclear availability (we refer, amongst other, to decreased French nuclear availability and reduced nuclear availability in CH), additional gas closures abroad due to economic reasons, coal phase-out acceleration such as Germany and the Netherlands), …
- One sensitivity regarding the non-achievement of the CEP rules at the 2025 horizon in order to reflect the uncertainty on capacity calculation (e.g. 50 % RAM instead of 70%) as suggested by Elia in the consultation on the CRM Demand Curve.
- One sensitivity where the PNEC ambitions are not realized and/or grid developments are not timely realized (in particular regarding market response/storage/RES developments).
- One sensitivity on a post-COVID 19 relaunch/rebound effect ("high" demand).