

Febeliec answer to the Elia public consultation on the scenarios, sensitivities and data for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2026-2027

Febeliec would like to thank Elia for this consultation on the scenarios, sensitivities and data for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2026-2027. Febeliec, as in previous year, strongly regrets that Elia still, as for all other adequacy related studies and analyses, only conducts a consultation on the input data, now complemented with some sensitivities and scenarios, and does not conduct a consultation on the methodology itself. Febeliec continues to strongly regret that Elia has chosen yet again not to involve the stakeholders in the development of this methodology, other than the stakeholders imposed by the law (FPS Economy plus coordination with CREG). Even though no such legal obligation exists, Elia could (and according to Febeliec, should) have opted for a much larger involvement from all stakeholders, in order to obtain a much stronger buy-in from stakeholders in the methodology, the study and its results.

Febeliec will provide its input on the proposed excel-file by Elia, but this does not mean that Febeliec agrees with the applied methodology and should in no case be interpreted as such. Febeliec has understood that Elia is to apply the methodology it has developed unilaterally for its bi-annual Adequacy and Flexibility Study, this time for the period 2022-2032, on which Febeliec in the past has made ample comments and provided ample questions, many of which still have not been resolved or even have not been answered in detail, thus also leaving at least the same comments and questions on this consultation. Moreover, Febeliec very strongly regrets that Elia has put 20/06/2021 forward as a deadline for this consultation, where the outcome of its Adequacy and Flexibility Study 2022-2032, often referred to in the consultation, will only be presented after this date, implying that it is impossible to get a full picture of the implications. Febeliec insists that Elia could have made a better planning, in order to allow for respondents to get a better grasp of the intricate interactions between both studies and their methodologies, in particular because Elia itself links them to each other.

Febeliec has comments both on the excel spreadsheet as well as the explanatory note.

Febeliec comments to the explanatory note from Elia.

Febeliec takes note that Elia states that there is an *“intensive stakeholder involvement process”*, it remains, as previous year, very important to note that none of the topics, scenarios, sensitivities and data have been discussed at all during the aforementioned stakeholder involvement process, nor has any methodology for the determination of the need for a CRM ever been discussed or consulted up until this point in time. Febeliec thus continues to voice its strongest concern but also opposition to the way Elia frames the context of this consultation and reiterates its major concerns on the lack of real stakeholder involvement.

On the general scope of this input for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2025-2026, Febeliec strongly wonders how such an analysis can be performed knowing that the calculations leading to the according to some presumed need for a CRM nor the CRM design and corresponding functioning rules of the proposed CRM have still not been approved by the European Commission based on compatibility and compliance with European legislation and validated by the relevant authorities in their respective decision domains.

On the scenario and sensitivities, Febeliec is already surprised to see that Elia states that the methodology related to the model and simulation will be in line with the latest Mid-Term Adequacy Forecast (MAF 20202) and Elia's own Adequacy and Flexibility Study 2022-2032 (as mentioned above not yet presented), but still not entirely with the methodology for the European Resource Adequacy Assessment (ERAA), the latter already being approved for some time now. For Febeliec this is clearly not in line with the requirements written down in the Clean Energy Package (CEP).

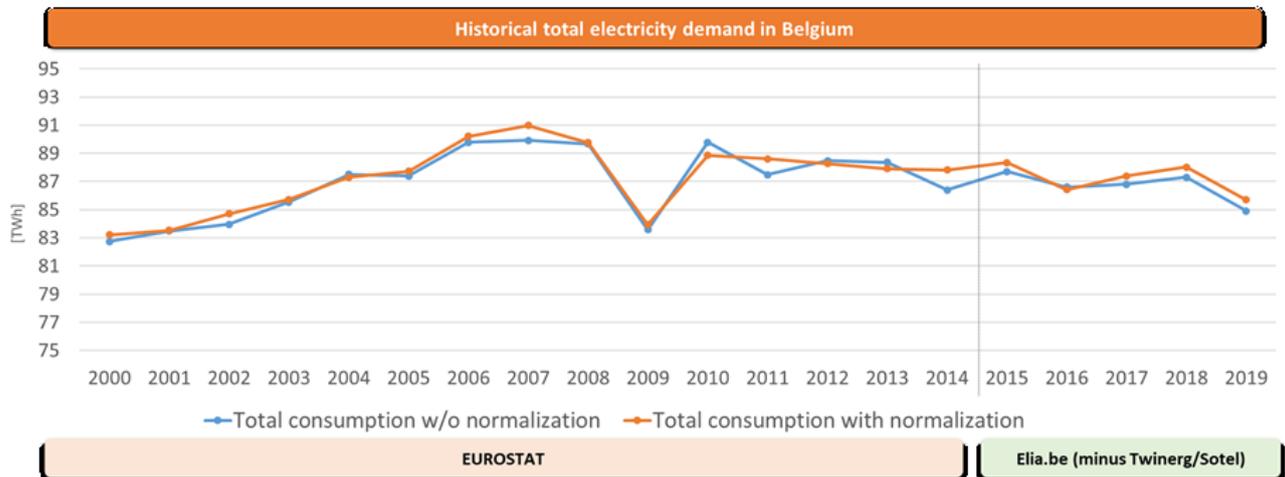
Febeliec comments to the spreadsheet provided by Elia.

Febeliec vertegenwoordigt de industriële energieverbruikers in België. Zij ijvert voor competitieve prijzen voor elektriciteit en aardgas voor industriële activiteiten in België, en voor een verbeterde bevoorradingszekerheid in energie. Febeliec telt als leden 5 sectorfederaties (Chemie en life sciences, Glas, papierdeeg & papier en karton, Ontginningsbedrijven, Textiel en houtverwerking, Baksteen) en 36 bedrijven (Air Liquide, Air Products, Aperam, ArcelorMittal, Arlanxeo Belgium, Aurubis Belgium, BASF Antwerpen, Bayer Agriculture, Bekaert, Borealis, Brussels Airport Company, Covestro, Dow Belgium, Evonik Antwerpen, Glaxosmithkline Biologicals, Google, Ineos, Infrabel, Inovyn Belgium, Kaneka Belgium, Kronos, Lanxess, Nippon Gases Belgium, Nippon Shokubai Europe, NLMK Belgium, Nyrstar Belgium, Oleon, Proximus, Sol, Tessenderlo Group, Thy-Marcinelle, Total Petrochemicals & Refining, Umicore, Unilin, Vynova en Yara). Samen vertegenwoordigen zij ruim 80% van het industriële verbruik van elektriciteit en aardgas in België en zo'n 230.000 industriële jobs.

Febeliec has following remarks and comments to the spreadsheet. In general, Febeliec already wants to indicate the lack of much actual data provided by Elia. Most spreadsheets provide hardly any data, almost no sources and in fact provide hardly any basis to provide input on. It is impossible to discern whether the values are based on external sources, internal estimates, or a mix of both, making it also nearly impossible to validate or falsify the data. On the different tab sheets, Febeliec has following comments:

- 1.2 Individually modelled thermal generation
 - Febeliec has no comments on the specific units presented, but reiterates a longstanding comment on the lack of transparency on the announced(temporary) closure of power plants in Belgium. Moreover, Febeliec also notices that Elia does not consider any additional units in Belgium in the period till 2026 and wonders whether this is realistic.
 - Febeliec wonders which assumptions Elia will apply for its sensitivities including a nuclear extension. Moreover, Febeliec also wonders which data Elia will use to model nuclear availability in other countries, knowing that Elia refers several times to such scenarios as having a major impact, yet does not provide any quantitative insight on its methodology.
- 1.3 Storage
 - For storage no source is available (e.g. for the storage capacity estimates) nor a full methodology describing volumes for small scale storage (e.g. number of installations) or V2G (e.g. number of vehicles in each year) the increase of storage, making it impossible to provide any meaningful comments to the proposed data. This comment has been voiced before and still has not been addressed by Elia in a complete way.
- 1.4 Renewable and on-CIPU
 - Febeliec regrets that it is not completely clear which power plants are included here, in particular diesel generators¹, emergency generators (all considered market response?) and process generators. Because of a lack of breakdown (only aggregated data is shown), it is even more impossible than last year (as profile information was removed) to identify which periods these categories are available/producing and to have a view on their contribution to system adequacy.
 - For renewables, as only aggregated numbers are given without any explanation, it is impossible to provide any meaningful information (e.g. applied annual growth rates by Elia are missing as well as the starting points on which to apply such growth rates)
- 1.5 Forced outage rates
 - Febeliec regrets that no methodology for the calculation has been provided, making it difficult to assess the information (e.g. are forced outages uniformly spread over the year or are there periods with higher/lower forced outage rates, e.g. due to preventive maintenance before winter period with on average higher prices).
- 2.1 Demand
 - Febeliec is surprised to see that only one absolute value is provided, without any curve before and after 2026, making it impossible to provide any meaningful comments by lack of data.
 - On demand, it remains unclear on which basis the values are determined. Elia is referring to the latest forecast from the final (yet not approved by the European Commission) National Energy and Climate Plan (NECP), which was published end of 2019, based on additional measures, as well as economic projections from the Federal Planning Bureau dating back to June 2020 (so over one year outdated, while since 2020 the world has entered in presumably the worst global economic crisis in over a century (Covid-19 crisis), without any of the latest information since June 2020 being taken into account at all.
 - Febeliec in this context wants to refer again to data that was provided by Elia on Belgian overall electricity demand in the period 2000-2019 (both non-normalised and normalised data).

¹ Diesel generators (and similar technologies) seem despite previous comment on this topic by Febeliec still completely missing in the file from Elia. CREG studies have shown that for example only the (aggregated) Belgian hospitals already have up to 200MW of diesel generators and this is not taking into account all the other emergency generators (accounting for several hundreds of MWs of installed capacity, from industrial sites over public services, office buildings to even residential consumers) that are operational in Belgium. Moreover, winter 2018-2019 shows that even large BRPs install more than substantial volumes of diesel generators to cover their positions (diesel generators which cannot be formally accounted for as “emergency” generators as they are not connected to specific consumption processes). Febeliec reiterates its request to Elia to introduce this category of diesel generators (and similar technologies) to the analysis.



The historical data sources are indicated on the chart.
 For the normalization, Elia applies a simple linear method based on the equivalent HDD, 'jours ouvrés' and amount of days in the year (correction for leap years).

The normalization methodology is currently under review at Elia and could lead to slight differences in the historical normalization values. It is also important to note that the data above were never normalized before 2010 and that the same impact is used for the whole horizon.

In past studies other sources have been also used for historical data (ENTSOE.net for instance) where the same definition of consumption was used across all countries. Since the introduction of a common tool at ENTSO-E (since MAF2019), the consumption source for future studies will be the one published on the Elia.be website which represents an estimation of the 'total electricity consumption' of Belgium.

Figure 1: Belgian electricity demand 2000-2019 (source: Elia, received 27/05/2020)

As can be seen from this data, the 2008 financial crisis, which was the major economic crisis in the current millennium with substantial global economic impact, shows a clear drop of more than 6TWh (or around 7% of Belgian consumption) in the wake of this crisis. A decade later, Belgian electricity demand has still not regained pre-2008 levels (with a.o. 2019 showing even a continued decrease in overall demand, reaching a level that was last seen in 2002, despite a substantial increase in Belgian GDP over that period). While the underlying reasons for this observation are beyond the scope of this consultation (e.g. impact of energy-intensity of GDP-growth, impact of energy-efficiency measures, ...), the trend can be clearly observed. Febeliec is surprised to see that Elia nevertheless for 2026 predicts an even higher overall electricity consumption in Belgium than it did last year (and this mostly based on exactly the same data, as the outdated NECP and Federal Planning Bureau projections of June 2020 are still applied).

- 2.2 Demand Side response
 - Febeliec continues as in previous years to voice important questions and comments towards the values used for demand side response, which are based on the Belgian Energy Pact, which first of all pre-dates the current covid-19 crisis, but also does not provide a quantitative background for the provided numbers. Febeliec is thus unsure how for example to evaluate the impact of the on-going roll-out of smart meters for a.o. residential consumers or the introduction of dynamic price contracts (per CEP) or the introduction of new grid tariff structures and incentives (in particular on the distribution grids, as can already be seen in Flanders). Febeliec also wonders how emergency generators (see also above) are treated, as before they were included in the category market response, but that has now been abolished and replaced by demand side response, where it is unsure if and how such generators are taken into account, if at all). Febeliec wants to stress that in Belgium literally 100s of MWs of emergency generators are installed, with its own members already having massive volumes of emergency generators (in at least one case even 100s of MWs for certain grid users), not even taking into account the 100s of MWs installed at a.o. hospitals, where a CREG study indicated an installed capacity of at least 200 MW. Due to the lack of any quantitative (or even qualitative) breakdown or background of the proposed values Febeliec can thus not validate any of them, but can only indicate that it is very concerned that the provided values underestimate reality.

- Febeliec is also surprised to see that Elia applies its own methodology, developed by E-Cube (where Febeliec also refers to the numerous comments it made to this methodology and its reservations it has towards this methodology) only till 2023, after which it states to do an interpolation till 2030 based on the (quantitatively non-substantiated) Energy Pact, which is every year more outdated (and in any case has as stated before no quantitative foundation). Febeliec does not understand why Elia decided to divert from its own methodology, in order to take an outdated value and an interpolation as basis for such an important component. Moreover, as in previous years Febeliec strongly wants to contest the base value that Elia is using for the determination of demand response in the future. It is unclear on which source Elia bases its initial starting point and refers to its previous comments on this, in particular related to winter 2018-2019, with a.o. announcements by two of the largest BRPs in the Belgian system of substantial volumes (+500MW and +200MW) of contracted market response, apart from what all other actors such as aggregators still had contracted in their portfolios. Febeliec reiterates its longstanding request for Elia to finally provide a detailed breakdown of its data in order to be able to analyse this element. Febeliec is convinced that Elia underestimates the market response for the period 2025, as it does in the table not even provide any future data, but only a (non-detailed) overview of the (current?) capacity that it considers.
- In general, it is very difficult to provide any useful input on the data presented by Elia, as any detailed breakdown is missing.
- 3. Balancing capacity
 - Febeliec regrets that Elia takes ever higher volumes of balancing capacity to be reserved, while at the same time watering down certain balancing obligations for BRPs (e.g. Day Ahead balancing obligation). If Elia considers needs for balancing capacity to rise over time (not even yet taking into account the possible impact of the second wave of offshore wind), it should rather strengthen balancing obligations, in order to ensure that not evermore capacity needs to be contracted and paid for by consumers.
 - Febeliec and other stakeholders have already many times voiced concerns about the non-inclusion of balancing capacity in adequacy assessment, most in particular in extreme scenarios (such as Elia's high impact low probability scenarios), which exacerbate the already very conservative approach by Elia for the base scenarios and create extremely high needs for additional capacity (as can be seen in all recent Elia adequacy assessments, where through such extreme scenarios several GWs of required capacity are artificially added). Especially in the latter type of scenarios, which are supposed to have low probability, balancing reserves should be taken into account for adequacy concerns, as would also be the case in real time as a non-adequacy event would become visible through BRP-portfolios simultaneously becoming unbalanced and thus Elia balancing reserves being applied for restoration of the system imbalance. Put in another way, for such extreme and very unlikely scenarios, Febeliec finds it inconceivable that a TSO ponders to have over a GW of capacity available yet not throw this into the balance to avoid curtailment of consumers, capacity that has been paid for by the consumers.
- 4. Flow-based domains
 - Febeliec agrees that for the minimum minRAM 70% is chosen (although Febeliec insists that this value is a legal minimum and TSOs should strive to do better as consumers pay for 100% of the (cross-border) infrastructure). Febeliec wonders why in the table Belgium comes with an asterisk, as no explanation is provided (the same applies to PSTs with double asterisks)
- 5. Other countries data
 - Febeliec wonders to what extent the choice to apply MAF 2020 and whether this approach is compliant with ERAA (see also above).
- 6. Economic parameters
 - Febeliec refers to its previous comments on these and hopes Elia will at least conduct some sensitivity analyses on these parameters, as they will have an enormous impact on the outcome. Febeliec can only observe that covid-19 seems, apart from CO₂, to have had a dampening effect, as oil/gas/coal prices have dropped compared to last year with 10 to 20% (and thus have an important impact)
- 7. Sensitivities menu
 - On the French nuclear availability 1 and 2, as already discussed in the past, Febeliec is surprised that this is even included, as France already has a CRM in place, guaranteeing the adequacy of France (unless Elia would claim that the French existing CRM is performing badly, in which case Febeliec would like to see a full analysis of this) and according to the ERAA methodology, NRAAs can only take into account national impacts and not those happening across the border, such as French nuclear availability (as opposed potentially to a Belgian Royal Decree, in which case European legislation takes

- precedence). Febeliec is also surprised that Elia now again includes a lower availability of 4 nuclear units in France, which was discarded during the previous CRM calibration report.
- On the flow-based CEP rules sensitivity, Febeliec is, just as last year, surprised to see that Elia proposes to diminish the capacity, although the finalisation date for the minimum 70% minRAM has legally been determined as 01/01/2026, meaning that Elia considers that the law will not be respected. Moreover, in the period of the framework of this study the legal deadline will already be almost two years in the past and the minRAM criterion should thus be considered compliant, with all action plans concluded.
 - On the BE units at risk scenario, Febeliec wonders in general whether Elia will take into account every slightest possibility on unavailability of assets based on (non-formal) notifications by asset owners, as this could lead to the perverse effect where they (non-formally) announce closures, which would impact volumes to contract under the CRM, which could benefit those asset owners.
 - On the BE load stable sensitivity, Febeliec welcomes the fact that at least such stable scenario is taken into account, where electricity demand in Belgium is not continuously increase to all-time high new records. However, Febeliec is surprised that no scenario is included with a decrease in demand, taking into account the covid-19 crisis but also many other steps taken, not in the least a.o. with regards to energy efficiency.
 - Febeliec is very surprised to see that no sensitivity is included regarding a possible extension of 2GW nuclear capacity in Belgium, as this option is still on the table. Febeliec believes that such sensitivity would provide extremely valuable additional information for stakeholders and decision makers and would find it irresponsible not to include such information in light of the major change the activation of a CRM would bring to the Belgian market and the potentially very high additional costs for consumers.
- 8. Preselected capacity types
 - On the preselected capacity types, Febeliec takes note of the selection decided by Elia of relevant technologies (yet continues to wonder whether current technological options are relevant for a CRM that could easily cover 15 years in case this duration were to be selected for subsidies to certain capacity provider). Febeliec is however very surprised to see that demand side response is in this update of the analysis completely omitted, as opposed to last year. Febeliec wonders whether this approach is in line with the least cost criterion in the Belgian law.
 - 9. Scenarios post DY
 - Febeliec cannot make any comments on this point, as it refers to a study that Elia has not yet published (see also above).
 - 10.1 Technology list
 - Febeliec refers to its abovementioned comments on this topic
 - 10.2 Activation cost availability test
 - Febeliec, as already mentioned before, wonders whether the referred value, coming from the totally different context of the Strategic Reserve, is the correct reference in this context
 - 10.3 Net revenues from balancing services
 - With respect to the net revenues from the provision of balancing services, Febeliec continues to be surprised that Elia does not yet include these for a.o. CCGTs, as at the very least the reservation cost of balancing reserves, well-known by Elia as it is Elia who is paying this and invoicing it to consumers, is not taken into account. Moreover, in case scarcity situations would occur, it can be expected that these revenues for all asset types would increase. Indeed, in winter 2018-2019 where several nuclear power plants were unexpectedly unavailable, even the potential risk for adequacy (which never materialized, that winter at any point in time always have substantially reserve margin as identified by the CREG) resulted in a substantial increase in the reservation cost of balancing reserves for Elia, clearly implying that when adequacy concerns would start to appear, market parties could expect to see an increase in their revenues from balancing services (and alternatively, if no scarcity situations occur, this revenue stream would not occur, but would also indicate ample capacity in the market and thus no need for a CRM). In any case, based on the information provided in the explanatory note, it is impossible for Febeliec to provide any meaningful input as any quantitative and monetary data is lacking.

General Conclusion

Febeliec as always remains available to discuss its comments to this consultation and the input data, but also still remains available to discuss the methodology. Febeliec is looking forward to the qualitative and especially quantitative results of the adequacy study from Elia and hopes that these will be presented and discussed.

Febeliec also includes in annexe its answer to the consultation on the same topic of last year.