

Subject: FEBEG's position regarding the public consultation on the scenarios, sensitivities and data for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2026-2027

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Overall remarks

FEBEG welcomes this consultation and would like to thank Elia for creating this opportunity for all stakeholders to express their comments and suggestions.

Please find hereafter the comments of FEBEG on Elia's Public consultation on the scenarios, sensitivities and data for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2026-2027¹. The comments and suggestions of FEBEG are not confidential.

Executive Summary

Regarding the proposed input data, FEBEG considers that these are much too ambitious and in particular that:

- **The figures regarding renewables** are overly optimistic and not in line with the actual evolution of these capacities. In addition the societal acceptance is not considered at all and the impacts of the various and long appeal procedures against these kind of projects are simply ignored
- **The hypotheses regarding batteries**, in particular home batteries and V2G, are not based on any factual market evolution but are derived from arbitral assumptions.
- **The market response capacity** are very high and overly optimistic when comparing with the potential of DSR in other countries.

FEBEG considers that these figures should be reviewed downwards.

Regarding the scenario, FEBEG considers that the additional sensitivities should be considered, in particular to accommodate with the risk associated with the unavailability of capacities located in neighboring countries, and in particular the unavailability of some French nuclear units.

Using overly optimistic hypothesis will put the Security of Supply at risk and should therefore be absolutely avoided.

¹ <https://www.elia.be/en/public-consultation/20210520-public-consultation-on-the-scenarios-sensitivities-and-data-for-the-crm-parameter>

Comments on the input data

Regarding renewables

The objectives for the coming years are very ambitious, especially for offshore, photovoltaics and biomass where the distrust created by the changing regulatory environment for the photovoltaics and the NIMBY-effect with the delaying effects of the appeal procedures – should unfortunately not be underestimated.

In this respect, EDORA², concerned by the lower PV development in 2020, recently made a call to improve the regulatory framework in order to be able to meet the objectives³. It is therefore surprising that ELIA in its assumption is using the figure derived from the PNEC with additional measures.

This is also confirmed by several press articles or Belga News:

- Fort de 450 mâts, le parc éolien wallon devrait doubler en dix ans. **Beaucoup de communes sont proches de l'asphyxie et entrent en résistance.** [...] Plus de 450 éoliennes sont actuellement déployées sur le sol wallon, même si aucune cartographie précise n'est disponible. **Un nombre qui devrait doubler d'ici à 2030.** [...] **La fédération du secteur des énergies renouvelables (Edora) considère néanmoins que les choses ne vont pas assez vite : en 2020, seuls 24 nouveaux mâts sont sortis de terre pour une puissance totale de 70 MW, largement sous la barre des 100 MW qu'il faudrait atteindre chaque année pour rencontrer les objectifs fixés à la Région. L'opposition gagne du terrain, l'insécurité juridique aussi.** [...] **Sans compter, les dossiers en rade au Conseil d'Etat: « La Wallonie souhaite évidemment rencontrer ses objectifs de production d'énergie renouvelable. Mais les projets qui vont dans ce sens font l'objet de plus en plus de litiges. Un dossier se retrouve devant le Conseil d'Etat pour la septième fois », explique le ministre Borsus.** [...] le ministre qui assure «vouloir rencontrer très prochainement les bourgmestres **tant l'exaspération est croissante par rapport à des dépôts nombreux, en cascade et à répétition.**» (Le Soir 16/06/21 éd. Wallonie p. 6 – we underline)*
- Dit najaar komt er in Vlaanderen een grote informatiecampagne over de energietransitie. **Die campagne moet de burger er onder meer van overtuigen dat het plaatsen van zonnepanelen een aantrekkelijke investering blijft.** [...] De cijfers van enkele weken geleden lieten weinig aan de verbeelding over. **Het aantal nieuwe installaties van zonnepanelen is in de eerste maanden van dit jaar met 60 procent gedaald tegenover 2019. Het ging weliswaar om voorlopige cijfers, maar de commotie over de terugdraaiende teller heeft nu eenmaal voor een deuk in het consumentenvertrouwen gezorgd, zo zei minister Demir eerder al.** (BRUSSEL 16/06 15:39 – BELGA – we underline)*

² EDORA is the federation of companies developing products and services geared towards the energy transition

It furthermore should be noted that for the offshore wind growth ambitions – i.e. the second offshore zone –, the execution of the project will also depend on the timely execution of infrastructure projects. Experience has demonstrated that such large-scale projects will face challenges before they can be realized as perfectly illustrated by the Boucle du Hainaut project. For this reason, **FEBEG strongly recommends to not integrate, in the reference scenario for the next T-4 auction, the additional 700 MW wind offshore parcs at the 2026 horizon** as the most probable scenario is a commissioning of these parcs at the 2027–2028 horizon.

Regarding batteries

FEBEG notes that the figures in this consultation are significantly lower than those used for the delivery year 2025. While we welcome the downward adaptation as we considered the previous figures much too optimistic, **we still believe that the assumptions⁴ used by ELIA are overestimated both in terms of small and large-scale storage and V2G.**

Regarding the potential of small & large-scale storage: it is unlikely that this capacity would enter the market with the current market conditions and regulatory framework (cf. levels of derating factors in the CRM), without additional visibility on their business cases in the coming years. Furthermore, we assume that the market depth (estimated around 2–300 MW) does not permit for the figure proposed in the study.

Regarding the potential of V2G: the volume not only highly depends on the number of electric vehicles in Belgium but also on the roll-out of the available technology to make them active market participants in the electricity market (smart meters roll-out but also compatibility of cars to being smartly charged). FEBEG has strong doubts that this latter will be generally available by 2026. Currently very few models are ‘V2G ready’ and we expect a very slow uptake of this technology (currently less than 1 MW) only from 2022/2023 onwards, when Volkswagen will start to work with this type of technology (note that V2G charging infrastructure is also more expensive than normal “smart” charging infrastructure). Next to the availability/compatibility issue, it should be noted that the (financial) added value for the consumer remains very marginal and will probably not be impacting enough to drive a behavioral change.

Next to the currently non-availability of the technology in the market, we would like to underline the need for a clear and stable regulatory framework and a positive business case, which are both completely absent at the moment. Considering all the above uncertainties and hurdles, we think the figure of 129 MW of V2G by 2026 is overly optimistic.

⁴Assumptions used by ELIA:

- each year 0.5% of the PV installations add a battery capacity of the size of the PV installation (with 3 hours of storage)
- 1% of new EV registrations in 2021 to 10% in 2030 are capable of bi-directional (dis)charge and are connected permanently to a bi-directional charger

Regarding market response capacity

Shedding capacity: FEBEG considers that applying a yearly increase of 7% for the coming years is too ambitious for the reference scenario. While FEBEG is convinced about the role that Demand Side Response will play in the market in the coming years, we estimate that the strong increase observed in the last few years (cf. E-cube study) may not necessarily continue to materialize in the following decade – pending the full roll-out of the smart meters – as the additional DSM potential for certain types of grid users will be limited. In addition, FEBEG would like to remind that the methodology applied by E-Cube cannot ensure that the identified potential corresponds to market response only (e.g. at 150 €/MWh or more blocks could also be linked to super-peakers under some circumstances). In addition, the volume expected in terms of market response are highly different from ENTSO-E assumptions in their Mid-Term Adequacy Forecasts.

FEBEG doubts that the DSM potential expected by Elia would become effective without additional support at the 2026 horizon: very high ambitions regarding DSM are expressed in the framework of the CRM given the significant volume that is left open for the T-1 auction but energy-limited capacities have low derating factors in the CRM. In comparison, in France where a capacity market is in place, FEBEG observes that “only” 3⁵ GW of DSR⁶ have been certified, in a market where the load is much more thermo-sensitive. Furthermore, the potential for DSR is function of the peak load; the UK Association of Decentralized Energy (ADE) assumes that about 16% of the peak could be covered by DSR⁷. In comparison, about 2 GW of DSR in Belgium would amount to about 15% of the 13.8 GW Belgian peak load, almost reaching its maximum potential.

Shifting capacity: FEBEG considers that the figures presented are also very ambitious.

Regarding peak demand and total electricity consumption:

Elia does not provide any information regarding the peak assumptions for Belgium or for the surrounding countries in the explanatory note to the public consultation. Particular caution should be considered for the forecasts of peak demand (MW).

While on one hand some might put forward that the electricity consumption could be reduced post-COVID due to reduced economic activities, 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

⁵ <https://www.services-rte.com/fr/visualisez-les-donnees-publiees-par-rte/registre-des-capacites-certifiees.html>

⁶ Given a consumption of about six times the Belgian consumption, a DSR volume of 1521 MW compared to about 3 GW in France would imply that Belgium amounts proportionally twice as much DSR as in France, which seems utterly optimistic.

⁷ “The ADE calculates that 16% of the UK’s peak electricity requirement – or 9.8 gigawatts (GW) – could be provided by businesses being flexible in their energy demand, which could save UK energy consumers £600 million by 2020 and £2.3bn by 2035.” <https://www.theade.co.uk/resources/what-is-demand-side-response>

consumption more than expected. Also, the short-term negative effects on power consumption (annual TWh) of the COVID19 crisis did not necessarily translate in the same proportional decrease of peak demand, which is the relevant dimension to consider for assessing adequacy.

FEBEG would like to highlight some evolutions that Elia also needs to consider when determining the peak demand:

- **E-mobility** (cf. comment above). This is also demonstrated in the study⁸ performed by E-Cube and EWI.
- **Increase of heat pumps heating** (air-to-air): as explained in the study⁹ performed by E-Cube and EWI, “Heat pumps are critical since their performance (COP) and power output significantly decrease with low temperatures, which results in higher electricity demand”. As demonstrated in this study, the impact on security of supply of more heat pumps is a lot more significant than the e-mobility phenomenon. Those arguments should be enough to plead for a **Higher Thermo-sensitivity** in the proposed Sensitivities.
- Development of **Electrolysers**

Regarding the flow-based domains

FEBEG considers that there remain uncertainties on whether the ambition of minRAM 70%¹⁰ will really be achieved by 2026. For instance, we observe that derogations are still claimed by some countries, while for others action plans are put in place to reach the minRAM (e.g.: Germany). Without doubting on the goodwill of the concerned countries, we consider that a minRAM set at 70% would represent the absolute best-case scenario¹¹. Given that the goal of the reference scenario and its sensitivities is the SoS of Belgian zone, it is of the utmost importance to avoid overly optimistic hypotheses. Currently, prior to SDAC, FB domains are extended to reach 70% minRAM criteria. After SDAC, FB domains are reduced to meet the real physical limitations of the interconnections, leading to redispatching actions (at the cost of the TSO not reaching minRAM criteria) and therefore limiting the real cross-border capacity available during times of scarcity.

For this reason, FEBEG considers that it is not relevant to consider in the reference scenario that the 70% min RAM will be reached in 2026. A possibility to account for this would be the **Preventive Dispatch Sensitivity**, i.e. mitigating the impact of inefficiencies linked to

⁸ <https://www.ewi.uni-koeln.de/cms/wp-content/uploads/2020/09/E-CUBE-EWI-2030-Peak-Power-Demand-in-North-West-Europe-vf3.pdf>

⁹ <https://www.ewi.uni-koeln.de/cms/wp-content/uploads/2020/09/E-CUBE-EWI-2030-Peak-Power-Demand-in-North-West-Europe-vf3.pdf>

¹⁰ Even though this minRAM set at 70% is a purely political setpoint that does not imply that foreign capacity will be available for import when needed.

¹¹ “Nevertheless, the 70% margin was only respected during 1,5% of the observed period albeit on 91,7 % of the observed network elements”, see CREG’s study presented during “WG Fonctionnement marché électricité” on 07/06/2021

redispatching by anticipating and incorporating redispatching as soon as possible in the capacity calculation process (as suggested by CREG)¹².

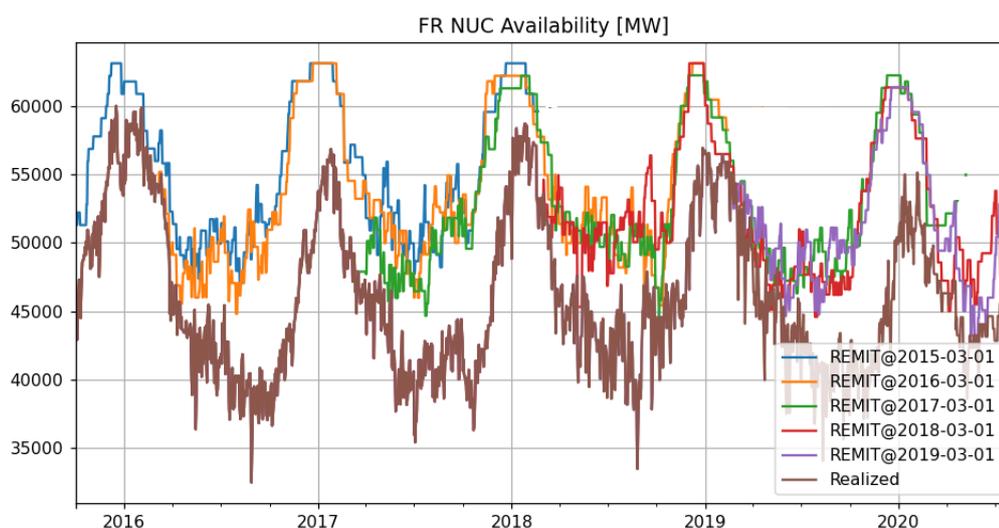
Regarding Network Elements

FEPEG considers that Force Outage Rate of the Network Elements of the grid (besides HVDC cables) should also be applied as those elements are equally subjects to failure (even with the N-1 dimensioning rule). We see no reason why such FOR is not considered in Elia’s adequacy simulation as those elements have a major impact on the SoS of the zone.

Regarding the sensitivities

FEPEG considers that a particular attention should be paid to the likely unavailability of capacities in foreign countries in the coming years. In particular, FEPEG refers to:

- **The availability of French Nuclear assets:** Historical data show that variations over the winter months between announced availability and actual availability go up to more than –15 GW. The variations are on average at least –6 GW between the planned and actual figures over the last 4 years. Data on the French CRM, in particular, reveals that the view on the reliably nuclear capacity has consistently been overestimated over the past years. At the end of a delivery year, at least 5 to 6 GW were missing compared to initial certification. Next to this, one must be very cautious about the commissioning of Flamanville EPR, which keeps being delayed from year to year (delayed till 2022 in 2019 and till 2024 in March 2020). **FEPEG strongly recommends authorities to consider 4 nuclear units unavailable in the reference scenario.**



Source: Data compiled from the RTE website

¹² <https://www.creg.be/sites/default/files/assets/Publications/Studies/F1987EN.pdf>

- **Coal phase out across Europe** (in particular in Germany and in the Netherlands): given the expected reinforcement of the GHG emission reduction targets by 2030 (EC proposal of minimum -55% compared to 1990 levels) the additional decommissioning of coal/lignite capacities to meet these targets should be embarked as a clear additional risk factor.
- In the U.K. a recent announcement also highlights the important risk of over-estimating the contribution from foreign capacity to Belgium. According to Bloomberg news: *Electricité de France SA is shutting its Dungeness nuclear power station with immediate effect, seven years sooner than planned. The shutdown of Dungeness means that **by 2024 five of the U.K.'s eight nuclear plants will be halted permanently**, adding to a list that includes Hunterston B, Hinkley Point B, Heysham-1 and Hartlepool-1 .*

FEBEG therefore recommends to Elia to integrate in the reference scenario the risk associated with the unavailability of capacities located in neighboring countries, and in particular the unavailability of some French nuclear units.

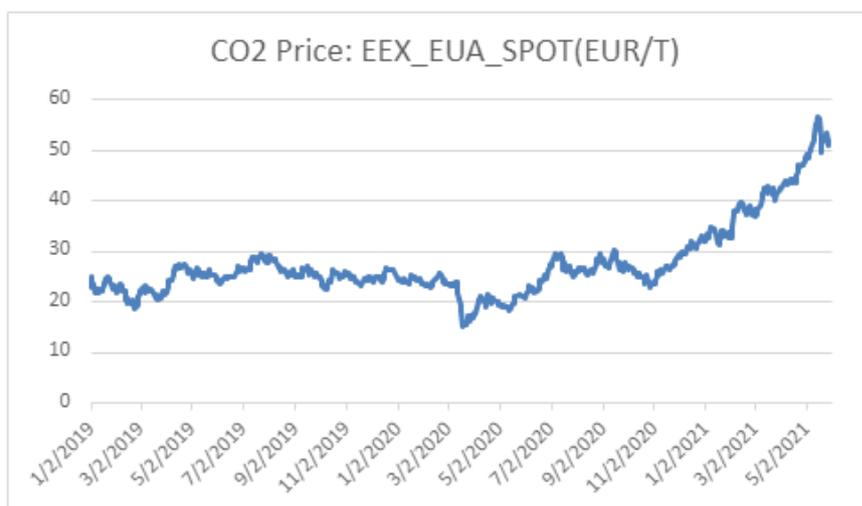
As further explained in the document, the following evolutions will have an important impact when combined with other uncertainties and need be integrated in the reference scenario:

- Lower battery and DSM development (see comments above)
- Additional 700 MW offshore capacity not present in 2026-27 (see comments above)
- MinRAM 70% not reached (-> minRAM 50% to be considered)
- a Higher Thermo-sensitivity due to electrification of the heating systems

FEBEG does not support the proposal to introduce a slower growth on the demand in the reference scenario.

Regarding the Economic parameters

Elia proposes to use a CO₂ price of 31 €/tCO₂, based on W.E.O. 2020¹³, which is very low compared to the levels that have been observed since early 2021. This needs to be adapted.



Comments on the other parameters

Regarding the preselected capacity types:

As mentioned last year, it is questionable whether IC engines are relevant technologies to ensure the long-term adequacy in Belgium in (i) a European green deal context and (ii) a context where the additional capacity to ensure the security of supply is expected to replace baseload capacity.

¹³ <https://www.iea.org/reports/world-energy-outlook-2020>