



Recipient: **ELIA, CRM team**
Mail : taskforce.CRM@elia.be

Brussels, June 5th 2020

Subject : Public consultation on the scenarios, sensitivities and data for the CRM parameter calculation for the Y-4 Auction for Delivery Period 2025-2026 related to the Capacity Remuneration Mechanism (CRM) – contribution of the Belgian Renewable Energy federations EDORA, ODE and BOP

Contact person EDORA : Jehan DECROP (jdecrop@edora.be)

Contact person ODE: Bram Claeys (bram.claeys@ode.be)

Contact person BOP: Annemie Vermeylen (annemie.vermeylen@belgianoffshoreplatform.be)

Preliminary remarks

EDORA is the federation of renewable energy companies and actors in Southern Belgium (Brussels and Wallonia). EDORA is active in promoting a sustainable energy transition in the different energy sectors (electricity, heating and cooling and transport). EDORA promotes a.o. the accelerated development of renewable energy sources, sustainable energy management and smart grids.¹

ODE (Organisatie Duurzame Energie Vlaanderen) is the federation of renewable energy companies, research institutions and actors in Flanders, Belgium. ODE is dedicated to achieving a fully renewable energy system by 2050.²

BOP (Belgian Offshore Platform) is a non-profit association of investors and owners of wind farms in the Belgian part of the North Sea. BOP advocates for the development of wind energy in the Belgian part of the North Sea.³

The present paper constitutes the contribution of EDORA, ODE and BOP (hereafter BREF for Belgian Renewable Energy Federations) to the consultation organised by Elia in the framework of the preliminary draft of Royal Decree (published by FPS Economy) laying down the method for calculating the required capacity volume and the parameters necessary for the organisation of the auctions. It is based on the explanatory note for the public consultation of Elia, and on the Excel file published by Elia. The contribution of BREF refers to the scenarios and data for determining the volume parameters, but it does not go into the Fichtner study about the cost of (mainly fossil fuel) technologies.

¹ www.edora.org

² www.ode.be

³ <http://www.belgianoffshoreplatform.be/nl/>

Main parameters for determining the capacity volume

Elia withdraws **2.5 GW of new CCGT capacity** compared to the reference publication made by ENTSO-E in its last mid-term adequacy forecast (MAF 2019 scenario). The explanation given by Elia for this withdrawal is not clear, a clarification is needed on the reasons for this major withdrawal : is the EOM market functioning less well than foreseen by ENTSO-E? Are the EOM revenue forecasts lower than foreseen for new CCGT's, in spite of the major withdrawals foreseen in Belgium (nuclear phase-out) and abroad (coal phase-out)? In general the link between the shutdown of existing capacities until 2026 and the room made therefore for new (CCGT) capacities in existing EOM markets is not being investigated by Elia in its assumptions and scenarios. BREF asks that this link be duly investigated by Elia in its reference scenario. Besides, at least in one sensitivity scenario, the expected volume of gas power plants that could potentially be incentivized to remain in the market or be induced by the scarcity pricing mechanism that the regulator ask to put in place until 2024 has to be calculated.

Elia adds **985 MW of balancing reserves** to the required CRM volume (500 MW generation & storage, 485 MW demand response). Although this is in line with the draft Royal Decree and the proposed ENTSO-E methodology for adequacy assessments, this assumption is contrary to the proposal made by the regulator. BREF recalls that in scarcity moments the use of balancing reserves is prior to load-shedding plans. Besides, no economic evidence is given that justifies the choice of the volume of demand response taken into account in the balancing reserves assumptions.

The baseline scenario in terms of **electricity consumption** in 2025-2026 is high (89.6 TWh), compared to 83 TWh in 2019 even before the COVID-19 crisis but takes into account the ambitions of the NECP in terms of electrification and additional industrial use in Flanders. It seems that this assumption could potentially overestimate the electricity consumption, in a post COVID-19 world.⁴ This seems to be also the case for the sensitivity scenario "low demand" which corresponds to 86.9 TWh. BREF proposes that Elia takes updated economic parameters assumptions of leading institutions NBB and FPB about their reference economic scenario post-COVID, and, if relevant for adequacy studies, adapts the electricity consumption accordingly. This new reference scenario should also take new electric uses (electric vehicles, heat pumps) planned in the NECP into account, in order to be both realistic and in line with NECP.

BREF also asks to clarify the **link between electricity consumption scenario's and electricity load**, especially during (near-) scarcity periods of time. The increase of power generated by (offshore and onshore) wind turbines also need a special focus, since the effect of these on peak load cannot be underestimated, as pointed out by the regulator in a recent study.

Elia foresees an **additional offshore connection capacity of 700MW** when commissioning the new Ventilus overhead line in 2026⁵ (cf. Ventilus website). Since the grid infrastructure is the bottleneck in the further development of this offshore wind capacity, since the Flemish government in its government declaration committed itself to supporting the roll-out of the project and Elia is 'ready to accelerate the energy transition' (cf. annual report 2019) this grid connection capacity should be made available by December 2025 and could be included in the reference scenario for the winter 2025-2026, i.e. 3,000MW offshore wind.

⁴ The Elia assumption is equivalent to a CAGR of 0,8%, which seems high. Electricity demand increase is a blend of economic growth and electrification (upward) and energy savings (downward).

⁵ <https://www.ventilus.be/p/hoel>

Sensitivities that could be integrated in the reference scenario

The 8 proposed sensitivity analyses almost all have an upward impact on the required CRM volume, which seems not to be balanced for 'sensitivity analyses' (normally both upward and downward impacts).

BREF proposes that Elia **regroup some sensitivity scenarios** that are very similar in one or two upward sensitivity scenarios (for example scenarios 1, 3, 4 and 6 have similar or redundant assumptions on availability of thermal units abroad).

BREF also asks **new sustainable sensitivity scenario's** to be added (a combination of these is also possible):

1. Acceleration of renewable energy installations in all sectors, in line with the EU Green Deal and -50 to -55% GHG 2030 target. Belgian targets are still missing for this, but as a proxy the "high RES" scenario of the Elia adequacy and flexibility study could be used. This could be reinforced with higher assumed fuel and/or CO2 costs.
2. A specific scenario of an acceleration track for wind offshore energy (4.4 GW in winter 2025-2026⁶), considering the substantial impact of this assumption on frequency of scarcity moments during peak in winter.
3. A "flexible low voltage" scenario, where up to 3,000 MW of flexible capacity could be made available on low voltage consumers and prosumers. Note that the Flemish government decided to accelerate the roll-out of digital meters ahead of 2025 and the Flemish energy regulator VREG is preparing a capacity tariff for DSO charges to enter into force in 2022.

Missing elements for determining capacity volume

The explanatory note of Elia, nor the Excel file, mention the **climatic and meteorological assumptions** made for the simulations. Still these parameters are paramount for determining the capacity volume needed to cover the future (near) scarcity moments, especially with regard to cold waves (length, strength and probability) and wind regimes. BREF asks these assumptions to be clarified and evidence based. The regulator has commissioned a study which is now available⁷ and could serve as a basis for these assumptions pending a peer review of the study.

Another missing element of Elia's file for public consultation is the **reserved capacity volume in Y-1 for units functioning less than 200h per year**, as foreseen in CRM law and further detailed in the draft Royal Decree⁸. Since this volume has to be withdrawn from the Y-4 auction volume, and as the potential for these units seems very high (see analyses of the CREG), BREF asks that this assumption be specified and detailed in the volume parameters.

⁶ Id est 2.3GW already installed + 2.1GW additional capacity in the new zones of the MRP. Note that by 2030, a 6 GW offshore scenario for Belgium is feasible, as explained in the wind offshore scenario of WindEurope.

⁷ VUB (2020), Winter is leaving, see https://cris.vub.be/files/51473222/CREG_Report_FINAL.pdf

⁸ 'Draft Royal Decree establishing the methodology to calculate the required volume and the parameters required for the organization of the auction of the capacity remuneration mechanism', Federal Public Service, 17 April 2020.

Concluding remarks

BREF thanks Elia for organising this consultation.

Our organisations have already drawn up a series of positions about CRM. BREF takes note that Elia has made efforts to align to the latest European methodology requirements, while respecting the legal requirements in terms of security of supply in the actual Electricity Law. However, BREF finds it very uncomfortable that organisations that are kept in high regard with respect to the topic discussed, mainly Elia, the CREG, the Federal Planning Bureau have diverging opinions⁹ about (i) the parameters determining the volume of new capacity, (ii) the structural character of this need, and (iii) the type of solution to answer this need (CRM vs strategic reserve).

The 3 organisations of BREF are available for any further explanation of the requests made in this paper or its previous positions, in order to improve the calibration of CRM capacity volume for the winter 2025-2026.

⁹ Hereafter references to their most recent studies and analysis:

- Elia adequacy report: See <https://www.elia.be/fr/publications/etudes-et-rapports>
- CREG: “Analysis by the CREG of the Elia study ‘Adequacy and flexibility study for Belgium 2020 -2030’” <https://www.creg.be/sites/default/files/assets/Publications/Studies/F1957EN.pdf> and “Avis relatif au projet de proposition d’arrêté royal fixant la méthodologie de calcul de capacité et des paramètres pour les enchères dans le cadre du mécanisme de rémunération de capacité, transmis par Elia le 22 novembre 2019” <https://www.creg.be/fr/publications/avis-a2030>
- Federal Planning Bureau: See “Analysis of the CREG comments on the Elia A&F study” in Annex FPB from p.17 of <https://economie.fgov.be/sites/default/files/Files/Energy/Mecanisme-remuneration-capacite-Note-E2-02-10-2019.pdf>