

Febeliec answer to the Elia CRM Design Note on Intermediate Price Caps

Febeliec wants to strongly indicate that the answer on this consultation is at best partial as it has currently **no** view on **all** the different pieces of the puzzle concerning the introduction of a Capacity Remuneration Mechanism in Belgium based on reliability options as described in the Electricity Law. Febeliec reserves the right to come back on any of the comments made in this answer, as it has at this point no complete overview and as such can under no circumstance be asked to provide a thorough and complete position.

Febeliec urges Elia but also CREG and the Federal Public Service Economy as well as the Cabinet of the Minister of Energy to provide as soon as possible and in any case before the introduction of the final design for a CRM in Belgium a complete overview of all the intertwined components of the CRM design, including the legal texts such as Royal Decrees and modifications of the Electricity Law to bring it in line with amongst others European legislation, in order to be able to get an overall view on the implications and modalities of the introduction of the CRM to Belgian consumers and the overall energy markets.

With respect to the current proposed design note on only the topic of intermediary price caps, Febeliec wants to provide these first preliminary remarks, within the scope described above:

- Febeliec takes note of the illustration provided by Elia (figure 1), clearly indicating the superiority of a pay-as-bid approach as compared to a pay-as-cleared approach in the framework of intermediate price caps, where the application of a pay-as-bid approach leads, ceteris paribus, to a lower overall cost. Under pay-as-cleared, an accepted high price bid not subject to the bid cap will set a price for all volumes, including those with a bid cap, thus leading to a higher total costs, which is of course not in line with the conditions in the Electricity Law concerning the CRM. Febeliec understands that this element is not directly relevant in the discussion on intermediate price caps as these are not bid caps but price caps, but Febeliec nevertheless wants to draw the attention to this conclusion, as it sheds light on a discussion that will be covered in another design note. Febeliec considers this one of the examples where it is regrettable that Elia has decided to break-up the CRM design in different design notes. Febeliec will come back on this topic in the design note that Elia should provide on this topic, as it is a major element of the auction design.
- On the rationale for intermediate price caps, Febeliec agrees that it is an approach which can limit the windfall profits. Nevertheless, the proposed approach (with one intermediate price cap) will at best only partially alleviate this concern and will almost certainly lead to a certain level of windfall profits, thus violating the criterion of least possible cost of the CRM as prescribed by the Electricity Law as it is at least only contributing to this objective, while in no way guaranteeing it. Moreover, Elia also mentions that the intermediate price cap should also be *“at the same ensuring a proportionate and appropriate remuneration for capacity providers”*, while not justifying this statement nor providing any indication of what would be an appropriate and/or proportionate remuneration nor how this would be attained. Febeliec is strongly in favour of an approach with multiple price caps (e.g. per technology), in order to avoid the abovementioned risk for (substantial) windfall profits.

- Febeliec can support the fact that Elia, as also prescribed in the Electricity Law, tries to limit the CRM costs by avoiding inframarginal CRM rents. Elia correctly states that *“as the CRM is complementary to the energy market and residual as revenue stream, there is no economic rationale behind an inframarginal rent resulting from the CRM auctioning mechanism”*; for Febeliec, this means that any inframarginal rent from the CRM auctioning mechanism should be avoided, as these would otherwise entail a windfall profit for the capacity owner, to the detriment of the Belgian consumers who will have to bear the cost of the financing of the CRM. A CRM should, as Elia states *“the bid price of the capacity provider should be driven by its level of missing money”*, only cover the so-called missing money, and nothing else. Febeliec also wants to comment on the *“fair and sufficient return on investment”* that is mentioned by Elia, as such return should be taking into consideration also the fact that the risk profile of capacity providers under a CRM is very much different than from those that are operating under EOM market conditions, and this risk impact should be reflected in a fair rate of return. Febeliec strongly reiterates its comments on the purpose of the CRM, in concreto the safeguarding of the adequacy of the electricity supply in Belgium, as per the Clean Energy Package, and not the de-risking of assets of capacity providers as such. Where Febeliec has no problem with inframarginal rents in the energy only market, which allow investors to recuperate their costs and earn a return on their assets, inframarginal rents in a capacity market only lead to windfall profits and any design of intermediate price caps should remove any such windfall profits from the equation. Elia states that the intermediate price *“may manage to avoid a significant part of the otherwise disproportionately allocated inframarginal rents”* yet this is not sufficient for Febeliec as this does not guarantee that the intermediate price cap proposed by Elia will be able to manage this issue nor that it would be able to avoid large windfall profits. Febeliec also regrets that Elia proposes to introduce such intermediate price cap only for one year contracts and not for multiyear contracts, thus inherently allowing for windfall profits in those segments. Febeliec is strongly in favour of an approach with multiple price caps (e.g. per technology), in order to avoid the abovementioned risk for (substantial) windfall profits, both for one year as well as multi-year contracts.
- On market power mitigation as described by Elia, Febeliec applauds the fact that Elia is looking into this topic and in its design is trying to cope with both economic and physical withholding of capacity. Nevertheless, Febeliec is not convinced that the intermediate price cap is as robust in the avoidance of strategic mothballing of closing of existing capacity as Elia describes. Febeliec strongly urges Elia but also CREG as well as FPS Economy and the Cabinet of the Minister of Energy to look into the maintaining of a mechanism of Strategic Reserve, already known and implemented in Belgium, as a safety net to avoid any capacity leaving the Belgian system and thus artificially increasing the need for additional volumes under the CRM based on reliability options. The maintaining of the existing Strategic Reserve could, according to Febeliec, create a backstop towards a slippery slope of capacity being taken out of the market and thus limit the costs of the CRM for Belgian consumers, as non-frequently used but also non-frequently needed capacity would still be available for the system.
- On the scope of the intermediate price cap as described by Elia, Febeliec wants to voice a wide range of concerns. Febeliec takes note of the proposal of Elia to introduce only one single intermediate price cap that shall be applicable to all participants for a one year capacity contract, thus not making any distinction between different technologies and by consequence creating windfall profits for a wide range of technologies, while not even introducing any price cap for multi-year capacity contracts. Both choices from Elia go directly against the criterion in the law that requires the CRM to be at the lowest possible cost, while not providing any clear justification for diverging from this criterion other than providing some almost

anecdotal examples and stating that it is *“not considered appropriate to differentiate further intermediate price caps to CMUs applying for multi-year contracts, let alone apply a different intermediate price cap to each multi-year capacity category”*. By doing so, Elia leaves ample room for windfall profits while also undermining the potential for limiting the total cost of the CRM with the intermediate price cap as well as largely nullifying the dampening effect that intermediate price caps could have to counter the large potential for windfall profits that Elia will create with its proposal for a single strike price. Moreover, Febeliec can only observe that there seems to be no issue to apply different price caps in the Y-4 auction on the one hand and the Y-1 auction on the other hand, and this for every auction that will take place, but several intermediate price caps within an auction or for multi-year contracts are then again deemed not useful. Last but certainly not least and cumulative with the above, Febeliec takes note of Elia’s statement that *“assuming a pay-as-cleared pricing rule, the selection of even a limited investment capacity project with high missing-money, would result in disproportionate inframarginal rent allocation to all existing capacity in case no intermediate price cap would apply”*, clearly making a case against a pay-as-cleared mechanism, which Elia will however still propose (after the first two auction rounds according to the last information received from Elia) and thus going against the least cost criterion.

- On the calibration methodology of the intermediate price cap, Febeliec takes note that Elia proposes to *“align the intermediate price cap applicable to all CMUs applying for a one-year capacity contract with the missing-money level of the worst performing technology class currently in the market, i.e. the technology class with the highest missing-money”*. While Febeliec already voiced above its concerns with the introduction of only one single intermediate price cap and only for one-year contracts (and not for multi-year contracts, which goes against the least cost criterion for the development of a CRM), Febeliec is even more concerned about the calibration of this very limitedly applied single intermediate price cap on the worst-performing technology, thus creating ample room for windfall profits for all other technologies and thus, again, clearly going against the least cost criterion. Elia states that *“by looking at both costs and revenues, the proposed calibration methodology results in a decreasing intermediate price cap when market conditions improve and level of anticipated missing money drop”*, on which for most elements Febeliec has voiced a wide range of concerns, Febeliec can not at all agree with Elia’s statement that this should be *“ensuring that the intermediate price cap remains proportionate”* as it is unclear to what it would be proportionate nor is there any guarantee that the proposal by Elia would even be proportionate to start with.
- On the proposed calibration methodology and its different steps, Febeliec regrets that Elia has omitted to be clear about who will decide on the methodology and has not foreseen any consultation of stakeholders throughout the process. When taking into account the first step, the governance and especially the decision-making with respect to the composition of the short-list of technologies which will be analysed as well as the methodology to translate each cost component to a delivery period is rather vague other than that this *“shall be determined via an independent expert study on behalf of and in collaboration with the TSO and the regulator”*. Involvement of stakeholders seems to be discarded, while it is this study that will lead to the selection of merely one intermediate price cap (only for single-year contracts) based on the single worst performing technology for the calibration (and as discussed above will create ample opportunity for windfall profits). On the following steps, Febeliec strongly opposes the fact that these *“shall be performed by the TSO”* without any involvement of stakeholders but not even the regulator. Febeliec strongly questions the proposed governance as all these elements will greatly influence the (very limitedly used) intermediate price cap

and could thus even exacerbate the potential for windfall profits, to the detriment of consumers in Belgium and against the least cost criterion in the Electricity Law. Moreover, Febeliec very strongly opposes the proposal by Elia in the second step to only considering P50 revenues, as the use of median revenues could entail a gross underestimate of average revenues, which would yet again exacerbate the potential for undue windfall profits. Moreover, it is not specified at all by Elia how it will be *“taking into account the applicable strike price level”*, as stated in this design note yet not at all elaborated upon. Last but not least, Febeliec reiterates its concerns about the lack of visibility on the total design of the CRM, as Elia states *“taking into account a reference scenario that reflects expected circumstances”*, referring to the scenario used to calibrate the volume to be procured through the CRM, while this scenario as well as the underlying methodology are completely lacking in the discussion on the design of the CRM; Elia has even more strongly stated multiple times that these are deemed by Elia to be completely out of scope of the discussion, while they surface here and presumably also in other instances of the design, thus nullifying the ability of stakeholders to formulate a clear position on the proposed design vis-à-vis the criteria described in the Electricity Law, and in particular the least cost criterion.

On the documents with the **definitions**, even though not formally part of the consultation, Febeliec believes that following modifications are required:

Term	Definition
Aggregation*	<i>According to Directive (EU) 2019/944, article 2, 18°: a function performed by a natural or legal person who combines multiple customer loads or generated electricity for sale, purchase or auction in any electricity market.</i>
AMT Hour	An hour for which the DAM Price equals or exceeds the AMT Price and during which Availability Monitoring can occur.
AMT Moment	A series of consecutive AMT Hours.
AMT Price or p_{AMT}	The ex-ante defined price level of the DAM Price for a Delivery Period equal to or above which the AMT Hours are determined.
Auction*	<i>According to the Electricity Law, article 2, 73°, the competitive process in which Capacity Holders are offering a price for making capacity available.</i>
Available Capacity	The CMU's capacity that is deemed available during an AMT Hour as a result of the Availability Monitoring Process or the Availability Testing. Available Capacity can consist of both Proven Availability and Unproven Availability.
Availability Monitoring Mechanism	The mechanism that monitors whether the CMU's Available Capacity equals at least its Obligated Capacity during AMT Hours as referred to in article 7undecies § 7 of the Electricity Law.
Availability Monitoring Trigger (AMT)	A pre-defined trigger price, expressed in €/MWh, in a predefined market segment, equal or above which it is monitored whether the Available Capacity of a CMU at least equals the Obligated Capacity of that CMU.
Availability Obligations	The obligation of a CMU to have an Available Capacity that equals at least its Obligated Capacity during AMT Hours.
Availability Testing	The mechanism based on which CMUs have to demonstrate their availability by actually delivering energy upon request of the Transmission System Operator. During Availability Testing it is monitored whether the CMU's delivered energy equals at least its Obligated Capacity.
Bid	Offer made by a CRM Candidate (in EUR/kW/year) in an Auction, relating to a single CMU.
Bid Cap	A maximum Bid Price (in EUR/kW/year) that can be made for a Bid in an Auction.

Commented [A1]: Availability monitoring will also occur if the DAM price is lower than the AMT Price but equals or exceeds the Declared Market Price

Commented [A2]: See previous comment with respect to the definition of AMT Hours

Commented [A3]: Is there a need to define AMT, besides the definition of AMT Price? The current definition of AMT seems to be rather a definition of the AMT Price?

Commented [A4]: Bid = volume and price, but by adding the reference to EUR/kW/year (like in the Bid Price) the impression is given that a bid only contains a price and not a volume.

Bid Price	The price expressed in EUR /kW/year at which CRM Candidates are offering a Bid in an Auction.
Capacity Category*	<i>According to the Electricity Law, article 2, 84°, the category including capacities that are distinguished by the eligible total Investment Thresholds to which different Capacity Contract Durations are linked, during which the Capacity Provider is entitled to a Capacity Remuneration. The different categories that are foreseen in the CRM design are 1-year, 3-years, 8-years and 15-years as referred to in article 7undecies § 7 of the Electricity Law .</i>
Capacity Contract	A contract signed between a Capacity Provider and the contracting counterparty that determines the rights and obligations for both parties as referred to in article 7undecies § 7 of the Electricity Law.
Capacity Contract Duration	The number of Delivery Periods during which the Capacity Provider can receive a Capacity Remuneration. The Capacity Contract Duration cannot exceed the maximum duration assigned to their Capacity Category as determined during the Prequalification Process and is approved by the regulator for each CMU requesting a multi-year contract.
Capacity Holder*	<i>According to the Electricity Law, article 2, 74°, every natural person or legal entity that can offer a certain level of capacity, either on an individual or aggregated basis.</i>
Capacity Market Unit (CMU)	One Delivery Point or a combination of Delivery Points, built in order to participate in the CRM. It is the outcome of a positive Prequalification Process and corresponds to the level where the Service is effectively delivered and monitored.
Capacity Provider*	<i>According to the Electricity Law, article 2, 75°, every Capacity Holder selected after closing of the Auction and that will keep available a capacity during the Delivery Period in return for a Capacity Remuneration.</i>
Capacity Remuneration*	<i>According to the Electricity Law, article 2, 76°, the periodically assigned payment to the Capacity Provider in return for keeping available their capacity.</i>
Capacity Remuneration Mechanism* (CRM)	<i>According to the Electricity Law, article 2, 71°, the market mechanism based on a system of Reliability Options to ensure the achievement of the country's required level of security of supply to guarantee that the evolution of the different forms of capacities meets the development of the electricity demand, taking into account the import possibilities.</i>
CRM Candidate	Capacity Holder willing to participate to an Auction and submit per successfully prequalified CMU a Bid for the Service delivery with such CMU(s).

Commented [A5]: Correct definition of Delivery Point is crucial (also in a CDS context). What is meant with "built" in relation to a (existing) Delivery Point?

CRM Law	The law of 04/04/2019 modifying the Electricity Act: « <i>Wet tot wijziging van de wet van 29 april 1999 betreffende de organisatie van de elektriciteitsmarkt, teneinde een capaciteitsvergoedingsmechanisme in de stellen</i> », published in the Belgian National Gazette on 22 April 2019.
Day-Ahead Market Price (DAM Price)	Day-Ahead Market refers to the single day-ahead coupling, being the auctioning process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the Day-Ahead Market.
<i>Delivery Period*</i>	<i>According to the Electricity Law, article 2, 77°, the period starting from the 1st of November and ending on (but including) the 31st of October of the next year, during which the Capacity Providers are remunerated for making available their capacity.</i>
Delivery Point	A point on the electrical grid or within electrical installations of a grid user where the Service is delivered. This point is associated to one or several metering device(s) conform to the technical requirements set by the Transmission System Operator;
Declared Market Price (DMP)	The Day-Ahead Market price equal to or above which a CMU has declared it would deliver energy in the energy market.
<i>Demand Curve*</i>	<i>According to the Electricity Law, article 2, 78°, a curve that reflects the variation of the procured capacity volume, in function of the price of the capacity.</i>
<i>Demand Side Response* (DSR)</i>	<i>According to the Electricity Law, article 2, 66°, the capacity of end users to change their electricity demand upwards or downwards on a voluntary basis, reacting upon an external signal.</i>
Demand Side Unit (DSU)	An end user asset that can deliver DSR.
<i>Derating Factor*</i>	<i>According to the Electricity Law, article 2, 83°, a factor that is applied to a certain capacity, determining its contribution to the security of supply and used to calculate the total Eligible Volume that is qualified to participate in the Auction.</i>
Electricity Law	Federal Electricity Law of 29 April 1999 on the organization of the Belgian electricity market, as amended from time to time.
Eligibility Criteria	The criteria to determine which investment costs are eligible to calculate the Investment Threshold as referred to in article 7undecies § 5 of the Electricity Law and to be further specified in a royal decree.

Commented [A6]: DAM is being defined by using "DAM" in the definition... Rather than DAM, one should define DAM Price.

Commented [A7]: Not only physical point, should be made clear that this can also be a virtual point.

Commented [A8]: Elia grid?

Commented [A9]: Grid User in the context of a CDS?

Commented [A10]: Definition (also in the context of a CDS)?

Commented [A11]: Not defined

Commented [A12]: Definition is confusing, since the scope of the term "Eligibility criteria" as used within the CRM Taskforce is far more wide and certainly not limited to investment costs / Investment Threshold. Even in the context of eligibility of costs to take into account for the investment file to request a multiyear contract, this definition doesn't hold. Costs are not used to calculate Investment Thresholds, but are used to check whether an investment file gets to a certain threshold. The thresholds themselves are calculated in a different way defined by the CREG.

Eligible Volume	The Reference Power of each CMU multiplied by the Derating Factor as determined during the Prequalification Process.
Energy Constrained Assets	An asset or a portfolio of assets that have limited availability because they can only provide capacity availability for a limited number of consecutive hours.
Energy Not Served* (ENS)	Amount of energy that cannot be supplied, expressed in GWh per year.
Expected Energy Not Served* (EENS)	Expected amount of energy that cannot be supplied, expressed in GWh per year.
Direct Cross-Border Participation*	<i>According to the Electricity Law, article 2, 86°, capacity outside the Belgian territory, but connected through a specific cable to only the Belgian control zone, after entry into force of the CRM Law, subject to the same rights and obligations as similar capacity inside the Belgian territory.</i>
Existing Capacity	Capacity already connected to the electricity grid, equipped with metering device enabling the determination of the Reference Power at the moment of the prequalification.
Indirect Cross-Border Participation*	<i>According to the Electricity Law, article 2, 85°, capacity outside the Belgian control zone that is contributing to the security of supply of Belgium via interconnectors.</i>
Investment Threshold	The level of capex investments that meet the Eligibility Criteria, required for a CMU to be entitled to a Capacity Contract with a multi- year duration as referred to in article 7undecies § 5 of the Electricity Law.
Loss of Load Expectation* (LOLE)	<i>According to the Electricity Law, article 2, 52°, the statistical calculation based on which the anticipated number of hours during which it will not be possible for all the Generation resources available to the Belgian electricity grid to cover the load, taking into account also Market Response and the capacity from interconnectors, for a statistically normal year.</i>
Market Response	A reduction of electricity consumption behind the meter, independent from the technology, including both Demand Side Response as well as decentralized production and storage facilities.
Market Rules	The set of rules that provide for the functioning of the CRM, including a.o. the prequalification requirements, the auction's clearing algorithm, opt-out treatment, the Availability Monitoring Mechanism and Penalties as referred to in article 7undecies § 8 of the Electricity Law.

Commented [A13]: Why an asterisk, since not in red and no reference to any existing definition in other regulation?

Commented [A14]: Why an asterisk, since not in red and no reference to any existing definition in other regulation?

Commented [A15]: Not correct in alphabetical order of definitions

Commented [A16]: Can we conclude that if the only investment needed to participate to an Auction is a metering device, the capacity is looked at as 'new'? For ex. demand response.

Commented [A17]: Unclear

Commented [A18]: Not defined

Missing Capacity	The positive difference during the Delivery Period between the Obligated Capacity and the Available Capacity.
New Capacity	Capacity that is not yet connected to the electricity grid at moment of prequalification and for which at that time no Reference Power can be calculated based on 15 minutes measurements.
Non-Eligible Capacity	Capacity that is not allowed to take part in the CRM including at least capacities not meeting the emission standards as defined in RIME.
Non-Energy Constrained Assets	An asset or a portfolio of assets for which their availability is not limited in terms of the number of consecutive hours during which energy could be provided by the assets.
Obligated Capacity	The capacity for a CMU that is required to be available during an AMT Hour.
Opt-Out Volume	(Part of) the Eligible Volume of the CMU for which the CRM Candidate formally indicates it is not willing to offer it in an Auction, by the end of the Prequalification Process at the latest as referred to in article 7undecies § 6 of the Electricity Law.
Penalty	The amount to which the Capacity Provider is exposed in case of Missing Capacity not covered on the Secondary Market.
Prequalification Process*	<i>According to the Electricity Law, article 2, 82°, the procedure that enable the Capacity Holders to determine to participate in the Auction.</i>
Price Cap	The maximum Capacity Remuneration that can be received for a Bid.
Price Limit*	<i>The maximum price of bids permitted in the Auctions and/or the maximum Capacity Remuneration received by Capacity Providers after auction closure.</i>
Proven Availability	Proven Availability is exhibited when (i) a CMU without full scheduling obligation has Available Capacity during AMT Hours where the Day-Ahead Market price exceeds the Declared Market Price, that is consistent with the Obligated Capacity or (ii) a CMU with scheduling obligation is available in the energy market or (iii) a CMU reserving its Obligated Capacity in ancillary services made up only of Delivery Points associated to the CMU or (iv) a CMU physically delivering its Obligated Capacity output as a result of Ancillary Services activations.

Commented [A19]: After reading the design note on availability obligations and penalties, it seems to make more sense to define Missing Capacity without referring to the Secondary Market. Missing Capacity which is not covered on the Secondary Market could lead to the payment of penalties. The language used in the design note should take this into account.

Commented [A20]: Art. 7, undecies §4, 1° does not by definition exclude capacities which have or still receive support from other support mechanisms from participating in the CRM. This is still to be decided.

Commented [A21]: Aligned with the definition of Energy Constrained Assets

Commented [A22]: Is this sufficiently precise? Alternative: "that at least equals the Obligated Capacity"?

Reference Power	Maximal capacity (expressed in kW) that could deliver the Service and resulting from the Prequalification Process before application of relevant Derating Factors. This value is associated to a Capacity Market Unit (CMU).
Reference Price*	<i>According to the Electricity Law, article 2, 81°, the price that is presumed to be received by the Capacity Providers in the energy market.</i>
Reliability Options*	<i>According to the Electricity Law, article 2, 72°, the CRM based on which Capacity Providers will repay the positive difference between the Reference Price and the Strike Price.</i>
Reliability Standard	The Reliability Standard, as described in Article 25 of RIME, is used to define the level of security of supply of a country. In the absence of a European Reliability Standard, the national Reliability Standard for Belgium is determined in function of a two-fold LOLE criterion: The LOLE for a statistically normal year is not to exceed 3 hours. The LOLE for a statistical abnormal year (LOLE95) is not to exceed 20 hours as referred to in article 7undecies §3 3° of the Electricity Law.
RIME (Regulation EU n° 2019/943)	Regulation (EU) n° 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity.
Secondary Market	The market where Capacity Providers can procure spare capacity from other Capacity Holders to cover their obligations under the Capacity Contract.
Service	Compliance by a CMU with the Availability Obligations under its Capacity Contract AMT Hours.
Service Level Agreement (SLA)	The level of service which the CRM Candidate selects for its Energy-Constrained Assets during the Prequalification Process in function of their duration constraints per calendar day.
Storage*	<i>According to the Electricity Law, article 2, 63°, every process whereby the same installation takes electricity off the grid, to inject the electricity in the grid at a later stage, except for the electrical losses.</i>
Strike Price*	<i>According to the Electricity Law, article 2, 80°, a pre-defined price that determines the threshold above which the Capacity Provider has to pay-back difference with the Reference Price.</i>
Unproven Availability	Unproven Availability arises when a CMU without scheduling obligation is assumed to be available during AMT Hours where the Day-Ahead Market price is below the Declared Market Price, without actual proof of delivery of energy.

Commented [A23]: Or is there a real difference between “Service” and “Availability Obligations”?

Unsheddable Margin

Minimal amount of net active power offtake (in kW/MW) that cannot be curtailed (inflexible or unsheddable power) at the Delivery Point(s) concerned

