

Subject: **FEBEG's reaction on Elia's public consultation on the CRM design notes (Part I)**
Intermediate price cap

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Please find here below the FEBEG's reaction on Elia's public consultation on the CRM design notes (Part I). For the sake of clarity a separate document has been made for each document under consultation.

This document addresses the **Intermediate price cap**.

Disclaimer

The present position is based solely on the documents submitted to consultation. The comments on specific elements are thus based on available information on this specific topic and might evolve as additional elements are clarified in future documents and/or public consultation. Obviously, the availability of all documents in a pre-final stage is required in order to provide a global overview allowing the stakeholders to take a final position on the matter.

Design Note on the intermediate price cap

The current proposal for a CRM in Belgium based on reliability options foresees an intermediate price cap. Such price cap would apply only to CMUs applying for a 1-year capacity contract.

1. Main comments FEBEG

Before making detailed comments on the elements put forward in the document we have following main comments.

Introducing an intermediate price caps does not seem suitable

From a principle point of view FEBEG considers that price caps do not seem suitable and should not be applied. (see section 3 of this document).

In the event that intermediate price caps are applied, it should only be limited for 1-year contracts and should carefully be determined (we also refer to the detailed comments in section 2 of this document)

The intermediate price cap should be carefully determined and should allow sufficient return to cover historical and new investments on existing units, including (levelized) major overhauls

Elia's assertion that there is no necessary correlation between the level of investment and the level of anticipated missing money neglects the fact that the cost of large overhauls should be taken into account when fixing the intermediate price cap for the one year contracts. The intermediate price cap may not be a barrier for a CMU facing a large overhaul.

Additionally, the intermediate price cap should not be too low as this could not only confront some CMUs with a potentially unnecessary market exit signal, but it could also be an entry barrier for new capacity below the first investment threshold (3 years contract). Furthermore this intermediate price cap should be discussed with a close link to a yet unknown parameter (the 'to be decided' investment thresholds by CREG).

The intermediate price cap should be coherent with the investment threshold defined for a three years CRM contract and should consider as annualized routine investment the investment threshold defined for a three years CRM contract increased by non-eligible (overhauls,...) cost.

The auxiliary services and balancing revenues should not be considered for price cap calibration

Not all units will have an income from the AS and/or balancing – in other words they are not part of the standard revenues of a generic/average asset. Therefore, ancillary services and balancing revenues should not be taken into account when determining the intermediate price cap

With the opening of the balancing and AS markets to new technologies and to the distribution grid level, the market share of historical technologies decreases and so the revenues for these technologies

Furthermore, it should be clear that the procurement cost of Elia is not equivalent to the net revenues for the balancing and AS supplier.

For example for a unit delivering aFRR:

- The cost of derating should not be counted as a revenue, as it has already been taken into account in the inframarginal rent earned on the energy market.
- the “must run” cost is a supplementary cost for the supplier to deliver the AS service, not a net revenue.
- Balancing revenues of the past is not a guarantee for the future. Flexibility of each asset is quite different and will generate strongly different balancing revenues

Furthermore it is not consistent to integrate those revenues within the price cap while the investments costs related to it (ex. investment in SI) are excluded by eligibility criteria.

Finally, Black Start ancillary service should not be considered, as it concerns only a very limited number of installations.

The risk premium should be embedded for the price cap calibration

The missing money of a CMU should also take into account a risk premium which covers the exposure towards the pay back obligation (no exemption) other penalties (unavailability penalties) and operational risks.

Furthermore, future yearly energy market margins are uncertain, one year ahead and even more several years ahead. Uncertainty is not only driven by meteorological conditions, but also by different scenarios with structurally different market conditions (demand levels, policy choices, etc.). 4 years ago, for instance, we did not expect Germany to introduce a coal phase out policy. The price cap should not only adjust the expected margins by the risk aversion of the market participants, but the distribution of future revenues and margins should be based on several scenarios.

The same conditions should apply for all parties/technologies in a transparent and non-discriminatory way

In order to ensure a level-playing field for the different parties and technologies, the intermediate price cap should be defined in a transparent and non-discriminatory way.

2. Methodology for the determination of the price cap

As a general comment FEBEG considers that before the end of the year, the Task force should go beyond only presenting methodology and come with concrete examples/figures which are absolutely necessary for any investment appraisal. Secondly, to the extent possible, methodology should remain simple and comprehensive. We discuss below our main comments on the proposal.

The Elia proposal defines an intermediate price cap as follows:

Intermediate price cap = annualized routine investments
+ annual fixed "O&M costs"
+ short run marginal costs ()*
- yearly energy market revenues
- yearly balancing and annual ancillary service market revenues"

(*) in the formula on p. 16 of the Design Note, the 'short run marginal costs' are missing, while mentioned before

FEBEG questions several aspects of the methodology to define the price cap level:

- It is not clear what Elia means with annualized routine investments: are major overhauls included ? Are the financing costs of existing units (linked to investment decisions preceding the introduction of the capacity market) etc. included? There is no economic rationale to exclude the latter costs in the cap). For FEBEG, the annualized routine investment should be defined as the investment threshold defined for a three years CRM contract increased by non-eligible overhauls cost.
- Elia mentions (p.10, chapter 2.1, §3) capacity with one-year contracts is confronted with no or minimal investments. However, this depends on whether major overhauls are included/excluded from multi-year contracts. From the information received from CREG by FEBEG so far, major overhauls are currently excluded from the multi-annual contracts. Therefore, they should certainly be included in the one-year contracts. Major overhauls represent significant investments for market participants and they are compulsory from an operational viewpoint, especially to be able to meet the availability requirement set in the capacity obligation. The intermediate price cap should actually foresee in the possibility of substantial investments. As a side comment, this is a good example of the importance of getting a view on the whole design framework of the capacity market, see the disclaimer at the beginning of this document.
- Elia mentions the possibility to update the cost estimation for short-list of existing technologies when deemed appropriate with no clear definition of parameters leading to such review. This leads to arbitrary treatment and uncertainty (as of which deviation updates of the parameters will be deemed appropriate?)
- FEBEG considers that the approach seems focused on thermal generation assets; other types of capacity (e.g. DR, storage, RES) should also be included in the assessment of the intermediate price cap.

Overall, the methodology proposed by Elia requires numerous assumptions and approximations, and thus room for modelling and calibration error (eg. what is the generation park assumed in T-4?). It also leads to yearly variations in the intermediate price cap that market parties have to account for.

For these reasons, FEBEG believes that **in practice, it is difficult to define an intermediate price cap that does not distort efficient market behaviour**. Other countries (e.g. Ireland) approach this design question much more pragmatically.

FEBEG therefore proposes not to use a model to determine the intermediate cap but **to define the price cap as 50% of the Cost of New Entry of an OCGT**.

This would simplify the approach and bring more stability.

The rationale for proposing 50% of the Cost of New Entry for an OCGT is the following: an OCGT has no infra-marginal revenues from the energy markets. It is therefore a logic new entrant that a CRM scheme should make possible. In line with other countries, we suggest a 50% of this generic cost as this approach is stable throughout the years and in line with other CRM's. We expect that this will not be substantially different from the outcome of the Elia methodology, but it is more transparent, stable and benchmarkable. Obviously the result must be coherent with the investment threshold.

3. Regarding the rationale for intermediate price caps

Elia justifies the proposed introduction of an intermediate price cap by two reasons:

1. Avoidance of windfall profits for existing CMUs and a reduction of the overall CRM cost;
2. Market power mitigation.

FEBEG considers that the introduction of a price cap is not suitable for the following reasons:

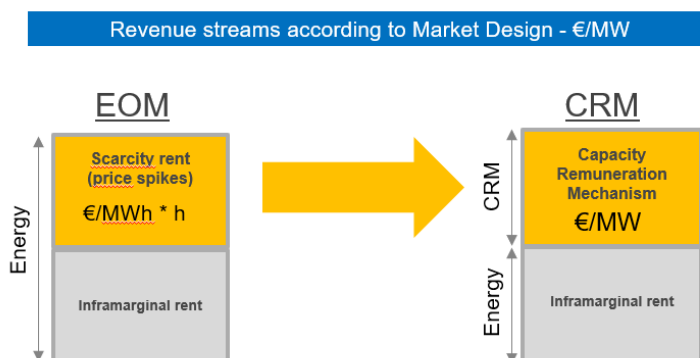
- The price caps is complex and isn't justified in a "pay as bid" auction.
- Inframarginal CRM rents does not create windfall profit. The Elia design notes makes a parallel between both notions, but the two underlying ideas are simply different.
- A CRM does not generate more revenues than needed to attract or keep a given level of generation capacity.
 - The competitive bid of an existing unit in the CRM (with a pay-as-bid clearing mechanism) corresponds to the amount needed on top of the expected (risk adjusted) inframarginal rent in short term energy markets to cover fixed annual O&M costs:
 - Earnings above the Short-Run Marginal Cost are an integral part of the electricity market functioning and under no capacity or energy market model labelled as

windfall profits but as the so called infra-marginal rents, which is necessary to cover costs which are not included in the SRMC.

- The introduction of an intermediate price cap is costly and an inefficient measure to address possible market power abuse. Rendering markets more contestable is a more efficient measure to ensure competitive behaviour.

The introduction of a CRM does not lead to windfall profits

To evaluate a policy measure affecting power market design, Energy-Only Markets (EOM) should be taken as a benchmark. In EOM, short term market prices (day-ahead, intraday, balancing) play a central role: fuel costs, O&M and capital expenditures have to be covered by the short term electricity price only (hence “energy-only”). Fixed and investment costs are covered by inframarginal and scarcity rents. The scarcity rent corresponds to the positive difference between the market price and the variable cost of the most expensive unit in the market. Investment (major overhauls, lifetime extensions, new capacity) in such a framework happens if the sum of the inframarginal and scarcity rent over the lifetime cover at least the fixed and investment costs. Note that the future rents are adjusted for the risk aversion of the investor: a risk averse investor will value less the future scenarios with high margins. The investment decision is thus not based on the expected margins, but on a risk-adjusted margin necessarily lower than the expected one. Scarcity rents in EOM are volatile, driven by meteorological conditions but also by energy policy choices. It is believed therefore that they are too risky to attract a sufficient level of reliable capacity. A CRM basically intends to transform a risky scarcity rent into a more stable and predictable annual revenue. A CRM does not generate more revenues than needed to attract or keep a given level of generation capacity.



In the literature windfall profits refers to unforeseen events which affect very significantly margins. In practice, it is not straightforward to define such situations, since investors may take a series of situations into account when taking a decision, also more extreme ones occurring though with low probability. In any case, based on the reasoning that a CRM just transforms a risky EOM scarcity rent into a more stable and predictable stream of revenues, we question the statement that the introduction of a CRM creates windfall profits. Excluding existing assets from part of the capacity payment would actually represent a windfall loss: when investing in the past, investors counted on scarcity rent (adjusted for risk) captured either via price spikes in EOM, or via explicit capacity

remuneration in case of a market design with CRM. Additionally the pay-back obligation has been introduced as a safety net for windfall profits.

Inframarginal rents in CRM can be justified

The Elia note further argues that there is no economic rationale for inframarginal rent resulting from the CRM, i.e. a capacity payment that is above the bid price (in a pay-as-clear auction).

The competitive bid of an existing unit in the CRM (with a pay-as-bid clearing mechanism) corresponds to the amount needed on top of the expected (risk adjusted) inframarginal rent in short term energy markets to cover fixed annual O&M costs:

$$\text{bid} = \text{fixed annual O\&M cost} - \text{expected inframarginal rent}$$

The investment cost realized in the past is “sunk”, i.e. it does not affect anymore the decision and the bidding of the plant today. Once the investment is realized, the decision of the plant owner is either to stay or to leave the market depending on whether at least fixed annual cost can be covered. On the other hand, any capacity remuneration above the bid price will of course contribute to covering past investment expenditures. Otherwise, knowing that margins would be limited to annual fixed costs, no one would have invested. Hence, the statement that there is no economic rationale for inframarginal rents in CRM is wrong and can thus not be used for justifying intermediate price caps.

From a societal point of view, all capacity provides the same service (reliable capacity) and it is therefore not inherently problematic that they would be remunerated at the same level. Discriminating capacity providers based on their historical cost structure could appear attractive from a customer perspective but can be counterproductive for society as a whole by destroying the investor’s confidence. By analogy with the benchmark EOM design, every capacity available (and not hedged under forward market) during a scarcity event will capture the price spike. Price spikes remunerate capacity for being available in scarcity moments.

Market power mitigation is best achieved by making markets contestable

Elia considers the introduction of intermediate price caps also as a measure to address market power abuse. The objective of market power mitigation is to make economic or physical withholding of existing assets less profitable.

We argue that an intermediary price cap is a suboptimal tool to address market power abuse for several reasons:

- The risk of market power abuse is not justified in the reasoning. Introducing a measure for an issue that is not justified is inefficient, especially if it causes unwanted effects (as described above) and if it requires significant modelling effort and agreement to define reference scenarios;
- Physical withholding is actually not straightforward, since any request to withdraw a plant from the market will be closely monitored;

- Elia already publicly mentioned that many players (generators, storage, DSM, import...) have showed their interest in participating in the CRM representing a total capacity well above the gap identified. Facilitating competition and entry is the best way to ensure that the competitive pressure in the CRM ensures low prices. Complex bidding rules are creating barriers to entry, administrative costs for the market and compliance cost for market participants.
- The best way to address physical or financial withholding is to let the market work, i.e. make sure that the market is contestable in case margins captured (from short term energy and capacity markets) are excessive. This is best achieved by allowing foreign assets, DSM and storage to participate in the CRM.
