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By email

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Subject: Letter to CRE and RTE on the reform of the imbalance price – recommendations for the removal of the k factor

Dear Domitille, dear Yannick,

In the context of the implementation of the EU Electricity Balancing guideline, we are following with interest the reform of the imbalance price in France. We have noted with interest the series of improvements introduced by CRE and RTE in recent years in that regard. With this letter, we would like to share our thoughts and recommendations on the matter, with a focus on the k and k' factors in the imbalance price.

Back in June 2017, CRE tasked RTE to study the opportunity of removing the k factor from the imbalance price as part of their decision on the 2016 green book of RTE on a road map for balancing reform. A number of positive amendments have been introduced in the calculation of the k factor, which we have welcomed. However, we consider that further reflection and action is still needed to do away with the k factor as a whole. You will find below our contribution to this important and complex task.

1. Why the k factor should be removed

As a starter, we trust it is important to remember that the primary objective of the imbalance price is to correctly reflect the value of energy in real time. Ensuring the purity of the imbalance price is vital, as it serves as the price signal for all market timeframes before that – intraday, day-ahead and forward.

In our view, this translates into two main objectives that should be sought by the design of the imbalance price:
- **Clarity**: the imbalance settlement price should be as "clean" as possible, without added component that blurs the true value of energy in real time;
- **Visibility**: the imbalance settlement price should be known by BRPs as rapidly as possible after real time.

The k factor, as a component added to the imbalance price (ex-ante) without connection to the value of energy in real time, is an impediment to the objective of *clarity*. Further, as the k factor is readjusted with the publication of the k' factor in Y+2, the mechanism exposes BRPs to long-lasting financial risk, hence the objective of *visibility* is not attained either.

In line with the objective of harmonisation of European balancing frameworks, we insist that the imbalance price formula should refrain as much as possible from taking into consideration (ex-ante or ex-post) corrective factors. The imbalance price should be left to reflect the value of energy in real time. A removal of the k factor, combined with immediate publication of the imbalance price after real time (thanks to the elimination of the k' factor correction), would ensure the clarity and visibility needed for the imbalance price to be a strong and reliable price signal.

2. The financial neutrality of the TSO

The imbalance price is also supposed to reflect the cost of balancing the system for the TSO, in order to incentivise BRPs to be balanced or help the system restore its balance. In line with this, RTE like many of its counterparts applies the principle of financial neutrality for its balancing activities.

In order to ensure the equilibrium of its balancing account for the whole system (Compte Ajustement-Ecart or CAE) and especially the "energy" part of it, RTE makes use of the two above-mentioned corrective factors in the calculation of the imbalance price: the k factor, determined ex-ante (per default value - 0,05 for the two last periods), and the k' factor, calculated ex-post (up to two years after the considered ISP). The k and k' factors are applied to all imbalance volumes incurred during the period under consideration to purge the CAE of RTE and ensure the financial neutrality of the TSO in this process.

While we understand the practicality of using the k and k' factors to adjust the CAE in a flexible manner, we have also indicated above how their use is detrimental to the clarity and visibility of the imbalance price. The suppression of the k factor and its ex-post adjustment (k' factor) is currently not foreseen by RTE, chiefly because they are

key elements in the current design of the imbalance price to achieve RTE's financial neutrality. However, we believe that further efforts can be made to see how the objective of financial neutrality could be attained by other means.

In particular, we recommend reviewing all the financial flows related to the components of the "energy" part of the CAE, in order to **see how imbalances of the CAE could be reduced or removed**:
- Imbalance settlement itself
- Adjustments and counter-adjustments after deduction of costs (or inclusion of revenues) related to the activation for congestion management, ancillary services or margin recovery
- Penalties for non-compliance and compensation for not respecting the use conditions linked to offers made on the MA
- Remuneration of balancing energy (primary and secondary reserves)
- Imbalance netting process between TSOs
- Physical imbalances at the borders and rebalancing in the synchronous zone.

3. Interim remedies towards a total removal of the k factor

We acknowledge – and have witnessed since the 2017 CRE decision of 2017 – that the removal of the k factor we call for will not come in one day. With this in mind, we see three steps that could be taken rather rapidly to improve the situation for market participants, while keeping the TSO's balancing process financially neutral.

First, the k factor should be more effectively estimated rather than being set as a default value. This will allow a better understanding by BRPs of the imbalance price. The value of the k factor should also be disclosed sufficiently in advance of the period in question to give BRPs the needed visibility and transparency – ideally a few months to a year.

Second, the k' factor should be removed altogether, so that BRPs can be settled as soon as possible after the ISP. This will drastically reduce the financial risk borne by BRPs between the end of each ISP and the final settlement of imbalances, currently in Y+2.

On these two first points: the setting of the k factor ex-ante will always rely on an estimation. However, a more precise estimation of the k factor will mean that the corrections to make to it would be of lesser importance. Combined also with foreseen evolutions in standard balancing products at EU level, this would warrant a suppression of the k' factor.

Note that if these two first interim steps will improve *visibility* on the imbalance price, only a full suppression of the k factor would bring full *clarity*. Implementing these two first steps would also require finding a way to adjust the CAE of RTE in order to ensure the desired financial neutrality of the TSO.

As a third step, we see different options to clear the CAE delta at the end of a period without a readjustment of the k factor, including the following:
- removing the CAE delta from the imbalance price by adding the CAE delta into the TURPE of the next period, or
- carrying over the CAE delta to the next period by taking it into account for the calculation of the next k factor (Y for Y+1 or Y for Y+2)

We would welcome the opportunity to further discuss these options with CRE and RTE. Both options have the benefit of allowing the imbalance price to be fixed right after the concerned ISP. The first option – removing the CAE delta from the imbalance price and adding it to the TURPE of the next period – would have our preference, as it would completely remove ex-post adjustments from the imbalance price. It is also a solution that has been adopted in a number of European markets to avoid distorting balancing activities and signals. Provided that the CAE delta is minimised as a consequence of the use of marginal imbalance pricing with standard products and better estimations of the k factor, we expect the impact on the TURPE to be reasonable. We are of course also open to discussing the second options – carrying over the CAE delta into the k factor of the next period – should CRE and RTE consider the first option as putting too heavy a burden on network users.

4. Conclusions

We encourage CRE and RTE to continue their efforts to improve both the clarity and visibility of the imbalance price signal.

In order to do so, we recommend the following:
- Set a clear aim for the removal of the k factor to allow the imbalance price to fully reflect the value of energy in real time.
- Further research how the financial neutrality of the TSO in the balancing process can be achieved without resorting to additional components in the imbalance price like the k factor.
- In the meantime:
  - Improve the estimation of the k factor;
  - Remove the k' factor as an ex-post adjustment measure;
  - Identify a proper and acceptable way to clear the CAE delta at the end of each period.

We look forward to contributing to the improvement of the electricity balancing framework in France, and remain at the disposal of CRE and RTE for further discussions on this topic.

With best regards,

Jérôme Le Page
Director for European Electricity Markets