

Reaction to the RTE proposals on the RINGO project



EFET memo – 16 October 2017

On 25 September, RTE presented a high-level view of its RINGO project to market participants and the regulator. The project intends to study the creation of so-called “virtual lines” thanks to the establishment of batteries on the HTB1 network. The batteries would be used for local congestion management with simultaneous charging/discharging in two areas of the network. Local congestions on the network are expected to increase with the growing penetration of renewable energy generation. The objective of the whole project is to analyse how batteries could contribute to an improved use of the network without resorting to investment in new transportation lines.

I. Considerations on the RINGO project

First and foremost, we would like to underline that **we very much appreciate that RTE is looking into improving the use of the current infrastructure**. Whether within or across bidding zones, EFET has long advocated the need for TSOs to improve the use of existing infrastructure before looking into new investment. Investment in new lines is a long and cumbersome process, and comes at a cost – borne by consumers – that cannot be justified if the existing infrastructure is not used at its optimum. In that sense, any additional investment to an already sub-optimally used network worsens the burden on consumers. The intention of RTE to study how new technologies can improve the use of the network is to be welcomed.

Notwithstanding the above, the RINGO project, as presented to market participants on 25 September, raises a number of questions and concerns. **EFET is especially concerned about Phase 1 of the project**: it foresees that for a period of time (not clearly defined, but estimated two to three years), RTE will own and operate three battery installations in its own name following tenders for turnkey projects. RTE

argues they need to own and operate batteries directly at the beginning to understand their properties, and be able to see how batteries could be useful to remedy local congestions. Experience will be drawn from this initial phase to detail the needs of RTE and issue call for tenders for the second phase.

This link between Phase 1 and Phase 2 also makes us worried about Phase 2 of the project. In particular:

- First, we believe that **Phase 1 of the project is violating the key principle of unbundling**, as stated in the Third Energy Package. Internal Energy Market legislation is clear on the separation of roles between regulated entities and non-regulated market participants. It is up to non-regulated market participants to take part in the market and react to price signals.

Phase 1 of the project precludes the possibility for market participants to respond to the TSO needs, on the premise that RTE needs to own and operate batteries to understand the battery technology. This is unheard of for any other technology of the contestable domain of the market that can be put at the disposal of the TSO via procurement for congestion management purposes (generation and demand response used in re-dispatch). It is for market participants to know if they can provide the services requested by the TSO, not for the TSO to establish the technical requirements of a service on a specific technology – as RTE indicated at the 25 September workshop.

Some questions also remain around the possibility for RTE to take time-spread positions on the market: as we understand, RTE's intention is that the charging and discharging of batteries for congestion management should happen simultaneously. Should that not be the case in the so-called "reactive mode", or should this approach be amended as time passes (i.e. because of the emergence of new congestions), then RTE would be effectively acting as a market participant and not a neutral market facilitator anymore. The same applies but with RTE taking pure market spread positions in case of a reconfiguration of bidding zones in France if two batteries would be located in different zones. This being said, even if the TSO would not take a position on the market, the use of the battery by the TSO raises efficiency questions that we detail in the next paragraphs.

The fundamental rule is and should remain: when a TSO wishes or needs to use energy or reactive power to manage its network, it is supposed to procure it from market participants. This is already current practice for ancillary services and congestion management. Therefore, we believe that **even for the initial test phase of the RINGO project (Phase 1), RTE should buy the necessary services from non-regulated market participants.**

- Second, we believe that **the whole project introduces discrimination between different categories of market participants**. While we acknowledge that batteries will surely be part of the technologies that will help respond to the flexibility needs of the electric system in the coming years, the role of a TSO as neutral market facilitator is to ensure that all technologies compete on a level-playing field in the energy market on the one hand, and for services to the TSO on the other hand. Establishing the technical requirements of a service on a specific technology would have the perverse effect of excluding ex-ante from certain congestion management actions not only generation and demand response, but also alternative storage solutions to batteries.

When a TSO expresses a need, it is for market participants to decide with which technology they wish to respond to this need. Therefore, **we call on RTE to clearly define its needs before embarking on a costly project – estimated EUR 80 million by RTE – solely focused on the use of batteries**.

- Third, we fear that **the project would lead to an economically inefficient solution in the long term**. Assuming that storage via the use of batteries would be the right tool to respond to the need identified by RTE, there is a double risk in terms of economic efficiency: in Phase 1, letting the TSO own and operate these batteries would result in inefficiencies; in Phase 2, letting RTE define its needs based on the experience of Phase 1 would reproduce these economic inefficiencies of Phase 1 and likely lead to an inability of market participants to respond to the TSO procurement for related services. More specifically:
 - **Economically inefficient use of the TSO-owned assets (in Phase 1)**: as we highlight in our paper on the roles and responsibilities of system operators regarding access to electricity storage¹, should TSOs be allowed to own and operate storage assets directly, then it should be expected that these assets would be under-used as the TSOs could not use them for any competitive activity. According to the assessment of RTE, assets of the RINGO projects would therefore be idle 60 to 80% of the time. This would diminish the value of the TSO-owned assets. On the contrary, if owned by market participants, the capacity and output of different storage assets could be sold both on the market and to the TSO, even pooled, thereby decreasing the price of storage capacity use for all users, including for the contracting TSO.
 - **Economically inefficient congestion management practices (in Phase 1)**: when a TSO owns and operates assets, including storage, there is an inherent risk of unfair competition to respond to the TSO needs. Indeed, it would pose questions regarding the choice by the TSO between the use of its own energy storage assets versus other

¹ EFET position paper on the roles and responsibilities of DSOs, particularly regarding access to electricity storage, dated October 2016 (all remarks of this paper on DSOs also apply for TSOs), available at: http://www.efet.org/Files/Documents/Electricity%20Market/DSM%20storage%20and%20retail%20market/EFET-paper_DSOs-and-storage_21102016.pdf.

assets (batteries or other) owned and operated by market participants to remedy congestions in the grid. First, there is no guarantee that using batteries is the most efficient action to undertake to solve a specific congestion. Second, should the congestion be best resolved with the use of batteries, RTE could exercise a preference to use its own energy storage assets in order to ensure their return on investment. The principle of unbundling was enacted to avoid precisely this sort of situation. In the case of the RINGO project, detailed rules would therefore need to be developed to ensure proper monitoring of the use of RTE's storage assets: not only should the regulator be able to make sure that RTE uses these assets for system balancing and congestion management only and not for market activities, it should also ensure that the full cost of using the batteries owned and operated by RTE each time they are activated compares favourably to other flexibility sources – in the case of congestion management: activation of storage but also re-dispatch – proposed by the market to respond to the TSO needs at that moment.

- **Economically inefficient investment signals to the market (in Phase 1 and 2):** as indicated above, storage assets owned by a TSO will inevitably be under-used compared to the use that market participants could make of them. In addition, keeping these assets under such economically inefficient ownership and management structure, whose risk-free investment costs are borne by the consumer, would weaken the business case for further private investments in storage assets, as it would suppress signals of the value of storage capacity on the market. This is exactly the case that private investors are experiencing in Italy with the ownership and operation of storage assets by the local TSO Terna.

II. EFET recommendations on the RINGO project

For the reasons mentioned above, EFET has serious doubts concerning what was presented to us of the current design of the RINGO project. In order to hopefully dissipate our concerns, we advise the following:

- **RTE should conduct proper and thorough involvement of market participants.** The workshop organised by the RTE team on 25 September, though welcome as a general information step, was announced with only two business days' notice. Feedback was requested within a week. The basis for stakeholder's assessment of the RTE proposal was a PowerPoint presentation. Should RTE wish to pay more than mere lip service to stakeholder involvement, appropriate scheduling of workshops, and sufficient time for market participants to form an informed view on a fully detailed proposal is necessary.
- **RTE should very clearly define its needs for congestion management.** EFET cannot imagine that RTE could use EUR 80 million financed by end-

consumers to gain experience on a commercial technology that it is formally not supposed to operate in order to be able to define its needs.

- **RTE should stay away from owning and operating storage assets.** A TSO owning and operating generation or demand-response capacity would seem out of the question for all parties involved. The same applies for storage. Procurement of services for congestion management is the way to proceed to uphold the fundamental principle of unbundling, and it will be up to the market to respond to the TSO needs with batteries or any other technology.
- **CRE should carefully consider the full RTE proposal, bearing in mind its immediate and long-term consequences on the operation of storage in France.** Phase 1 of the project with its plan for three RTE-owned and operated installations may appear as only a small dent in the principle of unbundling, but 1. it excludes ex-ante market participants for no valid reason, 2. it opens the door to a definition by RTE of its needs that would be based on an economically inefficient assessment in the short and long term, and 3. this wrongly built experience could deter the provision of congestion management services by private storage operators in France in the future, thereby practically creating the conditions for a much more serious and lasting breach of the unbundling principle for storage operation.

III. EFET recommendations to improve the development of flexible assets and solutions beyond the RINGO project

Beside the RINGO project itself, **EFET welcomes the intention of RTE to propose a reform of the rules governing the *Mécanisme d'Ajustement*, various ancillary services and the capacity mechanism** to ensure the unequivocal and practical possibility for storage assets to bid participate in these mechanisms.

We also suggest and strongly insist on the need for a more in-depth reflection of the congestion management practices of RTE: at the moment, RTE performs a co-optimisation of balancing and congestion management through the *Mécanisme d'Ajustement*. While we don't oppose the principle of such co-optimisation, we observe that the conditions under which it is established puts limits on the assets that can participate to congestion management and undervalues the redispatching services that market parties provide. Also, the conditions of remuneration of bids used or skipped for congestion management purposes combined with a lack of transparency on the practices of RTE on the matter blur the price signals for market participants, and likely undervalues assets participating in it. In the spirit of improving the use of existing assets and sending appropriate signals to the market, **we recommend a revision of the congestion management practices of RTE to ensure transparency, provide clarity of the price signal, and widen the range of market participants that can and are willing to provide redispatching services.**

More generally, RTE and CRE should focus on establishing the conditions for the true value of all capacities to emerge, including storage. This can be ensured through improvements to the current design and operation of wholesale power markets²:

- **Energy products**, which signal certain flexible characteristics of generation, demand-response of storage capacity, are **already traded on the wholesale market** (base vs. peak forwards and futures, options, profiles...). Excessive interventions may reduce the ability of existing standard base and peak load profiles to adequately attribute value to flexibility.
- **New products with smaller granularity** are being continuously developed by OTC and exchange-based markets to help value flexible capacities. This contributes to providing price signals for more flexible capacity **when the market signals this need** (e.g. shorter-term products, but also shorter-delivery forwards/futures).
- Policy makers should continue to focus on **improving the efficiency of the markets** (incl. allowing all participants including storage operators to participate in the energy market, ancillary services auctions and the capacity market; flexible, close to real time intraday markets including across borders; open balancing markets that truly reflect the cost of energy in real time), so that market participants are exposed to the correct price signals and can make correct decisions.
- A **level-playing field** is of utmost importance (i.e. phase out subsidies and avoid creating new financial or network privileges so that all providers of flexible capacity can participate in the market on the same basis).
- Ensuring **efficient pricing of operating reserve and efficient imbalance settlement** is key: real-time prices are the basis of all the actions taken in intraday, day-ahead and forward markets. In France, the use of weighted average pricing for imbalance prices, combined with the lack of scarcity signal when there is no margin left, prevent the existence of a clear scarcity signal, which is key to triggering investments in flexible capacities such as storages.

² For more details on the subject, we refer to our paper on the Free formation of prices in the wholesale electricity market, dated June 2016, available at:
http://www.efet.org/Files/Documents/Electricity%20Market/General%20market%20design%20and%20governance/EFET_Free-formation-of-prices-power-market.pdf.