

ENTSO-E consultation on a CBA methodology for FCR duration under SO GL

A eurelectric response paper

eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Assumptions and methodology for a Cost Benefit Analysis for FCR providing groups with limited energy reservoir

eurelectric welcomes this public consultation and appreciates the opportunity to express its views on this proposal for assumptions and methodology for a Cost Benefit Analysis, for FCR providing groups with limited energy reservoir (LER).

- 1) The methodology described in the document does not seem to be in line with the article 156 of the SO GL, regarding the consideration of the pre-alert state period. Indeed, the guideline requires that:

“a FCR providing unit with an energy reservoir that limits its capability to provide FCR shall activate its FCR for as long as the frequency deviation persists, unless its energy reservoir is exhausted in either the positive or negative direction with the following clarifications:

- *during normal state, the FCR from FCR providing units with limited energy reservoirs shall be continuously available.*
- *as of triggering the alert state and during the alert state, the FCR from FCR providing units with limited energy reservoirs shall be fully activated continuously for a time period to be defined according to a CBA. Where no period has been determined, each FCR provider shall ensure that its FCR providing units with limited energy reservoirs are able to fully activate FCR continuously for at least 15 minutes or, in case of frequency deviations that are smaller than a frequency deviation requiring full FCR activation, for an equivalent length of time, or for a period defined by each TSO, which shall not be greater than 30 or smaller than 15 minutes.”*

This definition means that it is the responsibility of FCR providing units with LER to make sure that, at any point during normal state, the LER resources have always an energy content that will allow them to remain available as of triggering the alert state and during alert state for the minimum time which will be defined by the CBA, between 15 and 30 minutes (called T_{min} LER).

The period which is called “pre-alert state” from which (overcome of +- 100 mHz), the energy consumption of LER is taken into account in the CBA, is not what the article 156 of the SO GL strictly requires (the notion of “pre-alert state” does not exist in this article).

In summary, while a common definition of an alert state is given, the interpretation on the consequences for T_{min} LER seems arbitrary, even though SOGL Art. 156(9) is pretty clear about this. For investment decisions, prequalification standards,

operational procedures and subsequent monitoring a common understanding and harmonized application is vital.

- 2) Normal state being out of the scope of this methodology, there is the risk that requirements for this state differ significantly from one area to the other.

We regret that the methodology doesn't look at the requirements needed to ensure full availability in normal state, as this will probably mean that each TSO will then stay free of asking what they consider needed, which still leads to possible market distortions from one country to another.

- 3) eurelectric has some doubts about the need for this methodology

eurelectric considers that a T_{min} LER higher than 15 min represents an over-specification of FCR product. Indeed, "FCR providing units shall be able to fully activate FCR *continuously* until the activation of FRR". Considering full FRR activation within the time to restore Frequency, (15 minutes for CE: SO GL, Article 157), this requirement would result in extra costs for FCR supply.

- 4) LER and non LER services

eurelectric considers that non LER will probably have to play an extra role in case of LER depletion situations. The additional relevance that is placed on non-LER units needs to be properly remunerated to keep participation attractive.

Regarding the share of non-LER, their additional capacity is calculated to determine additional system costs. This additional non-LER capacity is required for secure system operation. Once an acceptable situation has been identified, the targeted LER share has to be restricted during procurement. Otherwise the extra non-LER capacity will be insufficient.

- 5) Hypothesis considered for the calculation are questionable, and need more transparency

For instance, eurelectric considers that more transparency on FRR dimensioning rules, among which the Full Activation Time of aFRR which will be taken for the study is needed.

The approach of adding additional historical scenarios for stressing the simulations with extreme observations may be relevant if used with care. About the frequency historical trends of 15 years, eurelectric thinks that this period which include the incidents occurred in September 2003 and in November 2006, is too large and not representative of the current European Electricity Network. eurelectric asks for

transparency with the assumptions and sources of data needed for the Monte Carlo simulation as the choice of the TYNDP scenario, the relevant real frequency events as frequency profiles.

eurelectric would like to know which assumptions will be taken to consider the evolutions of electricity mix in each country and market design (ISP, Balancing...). eurelectric considers that a duplication of the past into the future is foreseen, whereas many market design parameters have been changing or will change meantime. For example, with a 15 min imbalance settlement, the deterministic frequency deviation phenomena should decrease, as it has been assessed recently by ENTSO-E.

For more clarity and transparency with the sources of the data, it is important that the assumptions and the methodology needed to build FCR market curves would be released.

- a. Which energy market prices will be used for the study?
- b. As the settlement of BSP which participate at the FCR Procurement market, is actually a Pay as Bid settlement (ie the costs per unit are actually not public), which assumptions will be taken to evaluate the costs of LER and non LER FCR providers?
- c. It is also necessary to calculate the FCR market curves with sensibilities.

As written in page 6 but not in pages 23/24, eurelectric considers that run of river units with LER should be considered for the study.

The implication of the stakeholders and the transparency of ENTSO-E are key for the results of CBA, to minimize FCR costs without jeopardizing operational security. The collect of data and the definition of assumptions needed for the study should be done in consultation with stakeholders. Thus, it is also important that the detailed results of the study become public.

Finally, eurelectric considers that the CBA methodology should be discussed during a "Stakeholders Committee" before its submission to regulatory authorities. A clear planning with the next steps should also be released.

eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



Union of the Electricity Industry - eurelectric aisbl
Boulevard de l'Impératrice, 66 – bte 2 - 1000 Brussels, Belgium
Tel: + 32 2 515 10 00 - VAT: BE 0462 679 112 • www.eurelectric.org
EU Transparency Register number: [4271427696-87](https://ec.europa.eu/transparency/regexp1/index.cfm?do=entity.entity_details&entity_id=4271427696-87)