NOTE

Reaction to the public consultation organised by ACER on the draft methodologies for the European Resource Adequacy Assessment (ERAA)



INTRODUCTION

- We welcome the opportunity to respond to ACER's consultation on the Proposal for a European Resource Adequacy Assessment Methodology on behalf of the DG Energy of the FPS Economy. The views expressed in this response are not confidential.
- The DG Energy of the FPS Economy is supportive of enhancing adequacy analysis and the
 work undertaken in recent years by ENTSO-E to improve their European resource adequacy
 assessment (ERAA). We believe that the proposed methodology by ENTSO-E fulfils its
 purpose in reflecting the principles set out in Article 23 of Regulation (EU) 2019/943 (referred
 to as the Electricity Regulation).
- 3. In the present note, the Belgian DG Energy of the FPS Economy, which is responsible for the Security of Supply in Belgium, gives its views on the draft methodologies for the European Resource Adequacy Assessment (ERAA) submitted by ENTSO-E to ACER.

1. RESPONSES PER THEMA

1.1. Art. 4 - Description

- 4. The Art. 4.1.e mentioned that: "(...) The PECD comprises a set of hourly time series of climate parameters for multiple years. Frequency and magnitude of future weather and hydrological conditions shall be taken into account, also reflecting any evolution of the climate conditions under climate change. In any case, the data set shall properly consider the inter-zonal and inter-temporal correlation of those climate parameters. The DG Energy of the FPS Economy acknowledge the importance of an evolution of the current ENTSO-E climate data-base in order to properly capture the complex behavior of climate change in MonteCarlo simulations for adequacy. Nevertheless, the DG Energy of the FPS Economy wishes to emphasize that modeling the effects of climate change on the adequacy of the electricity system is a complex exercise. Based on existing literature, the DG Energy of the FPS Economy wishes to recall that there is to date, no definite consensus from a scientific point, on the effect that climate change might have on the drivers affecting adequacy levels (expectations of less cold spells occurring in the future, impact of a weaker Gulfstream leading in colder winters in northern Europe,...) and even less clarity on how to incorporate these aspects in adequacy assessments. According to that, it seems crucial to develop, in close collaboration with climate and adequacy experts, a robust methodology able to capture all the complexity of the phenomenon. In other words, any simplifications (e.g. exclusion of "extreme historical climate years" or restriction in the number of historical climate year of the current dataset used by ENTSO-E) should be avoided. In the meanwhile, the current best-practices should be applied, both at European as on national level, to ensure coherency between adequacy-studies.
- 5. The Art. 4.4.j mentioned that "FCR and FRR shall be deducted from the available resources in the adequacy assessment, either by deducting their respective capacities from the available supply or by adding them to the load profile. Reserves are dimensioned to cover the unexpected imbalances resulting from second-by-second random variations of generation and load and to face in the short term a range of contingencies. Replacement Reserves (RR) shall be considered as available capacity contributing to adequacy in the ERAA adequacy assessment (...)". The DG Energy of the FPS Economy fully supports the view that balancing reserves (FCR and FRR) should not be used for adequacy. Balancing reserves ensure the balance of the grid at all times and are not calibrated in order to ensure the adequacy of the country (balancing problems can occur simultaneously with adequacy purposes). In the past, the DG Energy of the FPS Economy has

already adopt a position on this topic in a public note ($\underline{REF-1}$) relative to the National Adequacy Study (REF-2).

1.2. Art. 5 - Data Collection

- 6. The DG Energy of the FPS Economy recognizes that data access is crucial in Adequacy Assessment. It is in this context that we have for example asked to Elia in our last study on the Belgium Strategic Reserve to improve access to European data by sharing with us not only the aggregated data but also a more detailed database that the TSO uses in its own studies (i.e. distinction between OCGT/CCGT, distribution network capacity,...). By giving access to their database, TSO's/ENTSO-E give to the ministries the opportunity to develop their own tools and to fully support TSO's results in all transparency.
- 7. We support the idea that Member States (i.e. ministries) could/should play a role by taking responsibility on policy-related data as well as guiding the collection of all necessary data to be provided by stakeholders. This position was reconfirmed during the discussions within the Penta Lateral Energy Forum.
- 8. The Art.5.6.c mentioned that: "Data on the potential of explicit and implicit DSR, should such split be available, and the potential of storage, etc., for which the expected realization in the market shall be assessed within the economic viability check. Such estimates should build on input from relevant national market parties and TSO data and result in values that are differentiated for each market zone (...)". Given that DSM/DSR will play an increasing role in resource adequacy and can be seen as one of the contributions to future security of supply, having access to DSM/DSR data appears to be the new challenge. Knowing that the market holds the information, ministries should play a role by supporting the development of methodologies on demand response potential and encouraging the market to share the information with relevant parties in order to increase the knowledge and improve the functioning of the market. Even if a consistent European-wide applicable methodology seems to be quite challenging, it is crucial that each MS can provide a good estimation of their DSR expected technical potential and if possible also of the expected level of DSR that will actually materialize in the market from this potential.

1.3. Art. 6 - Economic viability assessments

- 9. The Belgian ministry wants to remind that the exercise is quite complex and no matter how developed is the model, it will never catch all the specificities of the market or of the investor's behaviors. For this reason, even if economic assessment is crucial, authorities responsible of the SoS have to keep in mind that a model alone can never drive the decisions and that it always have to be complemented by additional studies/qualitative assessment/policy statement/etc. A mathematical model is just one of the decision support tool that authorities have.
- 10. In order to make the model as useful as possible to the relevant authorities and notwithstanding the above mentioned limitations of the economic assessment model as a mathematical tool, the model should still strive to include, as best as possible, risk considerations.
- 11. In order to introduce the principles of risk aversion metrics in the economic viability assessments, it is crucial to include the different market parties in the discussions. Consulting the financial sector on this point might be revealing.
- 12. An important input of the above considerations will be the views of the Member States on the evolution of their power systems, which is a fundamental input for the definition of the different 'Reference Central Scenarios' foreseen in ERAA. The Belgian ministry therefore acknowledges that Member States can provide their opinions during the foreseen ERAA consultations as well as through the process of data collection as mentioned in Art 8.4 (4.2): "The exogenous capacity assumptions estimated by the TSOs shall receive feedback from

stakeholders through the processes of relevant consultations related to [..] relevant national consultations which have occurred prior to the ERAA consultation"

1.4. Art. 10 - Implementation

13. The Art.10.4 mentioned that "Regional and national adequacy assessment studies shall follow the same ERAA stepwise implementation and deployment approach as ENTSO-E, specified in the roadmap mentioned in Article 8(4.6). As long as a given aspect of the methodology is not implemented in the latest published ERAA, the actual methodology implemented in the latest published European adequacy report remains the baseline for regional and national studies". Given the importance of ERAA in relation to National Resource Adequacy Assessments (NRAAs), the Belgian ministry supports this proposal and understands it meaning that NRAAs should follow the MAF/ERAA in force (eg. in 2020, MAF 2020 after it gets approved and is published by ENTSO-E) until the first ERAA is published in 2021 (ERAA 2021). Furthermore, in general and after ERAA2021 is published, the Belgian ministry understands that the ERAA methodology to be considered as point of reference for NRAAs is the one actually implemented by ENTSO-E in its latest ERAA in force (ie. the latest ERAA report approved and published by ENTSO-E).

REFERENCES

REF-1: https://economie.fgov.be/sites/default/files/Files/Energy/Mecanisme-remuneration-capacite-Note-E2-02-10-2019.pdf, p.13

REF-2: https://www.elia.be/fr/actualites/communiques-de-presse/2019/06/20190628_press-release-adequacy-and-flexibility-study-for-belgium-2020-2030