**IFIEC Europe’s answer to the ENTSO-e consultation on the Mid-term Adequacy Forecast 2019**

With respect to the ENTSO-e consultation on the Mid-term Adequacy Forecast (MAF) 2019, IFIEC Europe wants to provide its comments on the methodology (appendix 2).

IFIEC Europe regrets that an (IT) error[[1]](#footnote-2) at the ENTSO-e side resulted in exactly this methodology document not being publicly available until 13/01/2020, which was the date of the deadline for this consultation, and has as a result requested an extension of the deadline for this consultation. ENTSO-e approved the requested deadline extension for this consultation in written form on 13/01/2020, in order to allow for sufficient time to analyse the methodology document.

IFIEC Europe wants to raise some **fundamental** **concerns** with the MAF methodology of ENTSO-e; IFIEC Europe considers the MAF methodology not to be balanced, most notably with respect to all available sources of flexibility in the system, in particular with respect to the methodological treatment of (implicit and explicit) demand side response. Moreover, IFIEC Europe can only observe and deplore that for ENTSO-e “*adequacy studies aim to evaluate a power system’s* ***available[[2]](#footnote-3)*** *resources and* ***projected[[3]](#footnote-4)*** *electric demands in order to identify potential risk of supply and demand mismatches in developed scenarios*”, as for IFIEC Europe also **projected** resources as well as implicit and explicit **demand side response** reduction potential (as opposed to mere demand patterns) should be taken into account in any forward looking system adequacy study. IFIEC Europe also regrets that with respect to “*techno-economic trends as well as policy decisions”*, ENTSO-e only refers to “a *massive phase-out of certain generating technologies*”, but does not take into account other policy decisions that also have a major impact on the adequacy of the system, such as strategic reserves or even capacity remuneration mechanisms (more below). IFIEC Europe is also not satisfied with the way ENTSO-e is treating random events and the use of balancing reserves; balancing reserves exist to cope with unexpected and random events and only if such events have a duration beyond balancing time horizons such events should be taken into account for an adequacy assessment ( e.g. a power plant tripping and returning back to the market within a short timeframe does not create an adequacy issue, only a balancing issue). For IFIEC Europe, these issues are not sufficiently taken into account (or at the least not described in the methodology) and thus leads to an overestimate of potential adequacy concerns as also events covered by (existing) balancing means will be added to the needs with respect to adequacy. As a general remark on the MAF, IFIEC Europe regrets that the actual implications of the (summarily described) methodological elements towards a quantitative output are unclear; the MAF thus remains a blackbox approach for all parties except ENTSO-e…

With respect to the modelling of demand, and even more so demand side response, IFIEC Europe does not consider the methodology of ENTSO-e as satisfactory. With respect to demand and demand elasticity, the ENTSO-e methodology remains very vague, only referring, without any methodological insight, to explicit demand side response, but completely omitting any impact of implicit demand side response, as if consumers were completely indifferent to prices (thus presuming low elasticity). This is in any case not valid for industrial consumers, as can already be observed historically, and will also become less correct for other consumers as smart meters are being rolled out. In several Member States supply of implicit and explicit demand side response reaches considerable levels (thus indicating at least minimal levels of potential for demand side response in other Member States, insofar no undue barriers exist for consumer participation).

With respect to the notion of “Missing Capacity”, IFIEC Europe is of the opinion that this should be analysed in a multi-area setting, as a perimeter merely focusing on a single-area setting will lead to sub-optimal results, as no synergies between areas with different supply and demand patterns can be taken into account. This would lead to unwarranted determination of adequacy concerns and potentially even the building of unnecessary capacity, to the detriment of the consumers through an increase in their overall energy costs (in particular in the case of subsidised capacity remuneration mechanisms). IFIEC Europe regrets that the focus of ENTSO-e seems to be exclusively (or at least primarily) on generation assets[[4]](#footnote-5), with less attention to the flexibility that for example (explicit and implicit) demand side response or storage can bring to the adequacy discussion, alleviating the potential need for generation capacity that would only be used during very few hours and thus unduly increase the overall system cost. The whole section of the demand time series does not even mention demand side response at all! Demand side response is only very briefly mentioned (132 words!) in section 3.6 of the methodology, not distinguishing whatsoever between implicit and explicit demand response. The section at first glance only refers to explicit demand response and does not provide any clarity on how demand side response is treated in the model, which data is provided by the TSOs and whether there is any alignment in the input data as regarding for example the potential for demand side response in the different Member States and the different assumptions that are probably used by TSOs. Section 4.2 on specific data collection and model assumptions also remains very vague on how data is collected and which assumptions are used, while completely omitting demand side response.

IFIEC Europe is categorically opposed to the methodological choice by ENTSO-e to explicitly exclude from the MAF the capacity markets and the out-of-market measures such as strategic reserves. IFIEC absolutely cannot accept that “*out-of-market capacities, such as strategic or grid reserves, are not considered in the optimisation problem*”, as this approach by ENTSO-e leads to a voluntary underestimation of the means available to counter adequacy concerns (in the case of strategic reserves, means explicitly constituted to avoid such concerns!). This underestimation leads to an unwarranted indication of adequacy concerns, resulting in potentially unnecessary and very costly additional measures (on top of the measures not considered by ENTSO-e which were put in place to alleviate adequacy concerns!), unduly negatively impacting consumer energy costs. IFIEC Europe also regrets to observe that “*the MAF model considers neither capacity nor the balancing market explicitly*”, which goes even further in creating an illegitimate and undue sense of urgency by even further omitting measures taken by Member States to avoid adequacy concerns. As such, IFIEC Europe can under no circumstance accept that the “*contribution of approved, existing and planned, CMs* ***[[5]](#footnote-6)might*** *be currently considered in the installed capacity for MAF on the part of* ***some*** *TSOs*” [bold by IFIEC Europe], as these **must** be included by **all** TSOs in order to have a relevant assessment. IFIEC Europe adamantly opposes this approach, as this implies that consumers are paying for adequacy related (strategic) reserves in several Member States, often sold as insurance against adequacy concerns, while these (costly) measures are not even considered by ENTSO-e. IFIEC Europe considers this a fundamental and inexcusable flaw in the ENTSO-e methodology which renders all the results and policy recommendations of the MAF analysis void and without value. For IFIEC Europe, the methodology choices of ENTSO-e fundamentally diverge from the market liberalisation that was started in 1996, with Balancing Responsible Parties that have to guarantee that their portfolios are in balance at all moments and only residual imbalances being covered by the TSOs. The ENTSO-e methodology choices shift the responsibility for system adequacy away from the market.

With respect to the future evolution of the pan-European adequacy assessment, IFIFEC Europe is looking forward to the European Resource Adequacy Assessment (ERAA) and hopes that this methodology improves on the MAF methodology, not in the least on the aforementioned elements. IFIEC Europe hopes to be actively involved in the development of the five new methodologies that need to be developed within six to twelve months after the Clean Energy Package’s entry into force. IFIEC Europe is also interested in seeing how certain elements of the Clean Energy Package, such as the 70% cross-border capacity, will be integrated in both the ERAA and the MAF adequacy methodologies.

1. First notified to ENTSO-e by e-mail on 23/12/2019, but only rectified on 13/01/2020 by ENTSO-e [↑](#footnote-ref-2)
2. *bold added by IFIEC Europe* [↑](#footnote-ref-3)
3. *bold added by IFIEC Europe* [↑](#footnote-ref-4)
4. E.g. at the bottom of page 17 of Appendix 2, where ENTSO-e states “*A single-area approach with local generation*” or “*Multi-area approach with generation expansion*”, without mentioning any other sources of flexibility. The same applies for the comprehensive datasets for the MAF (the PEMMDB), where the focus lies on generation, with some attention for “*electric vehicle penetration, heat pump penetration, new technologies, battery storage*”, but where demand side response (explicit or implicit) is not mentioned (except presumably for the few cases enumerated) despite the active contribution already today of demand side response to the adequacy discussions in Europe. [↑](#footnote-ref-5)
5. Capacity Mechanisms [↑](#footnote-ref-6)