ACER
European Union Agency for the Cooperation of Energy Regulators

PUBLIC

OPINION No 07/2021
OF THE EUROPEAN UNION AGENCY
FOR THE COOPERATION OF ENERGY REGULATORS

of 28 October 2021

ON THE ENTSO-E SUMMER OUTLOOK 2021
AND WINTER REVIEW 2020-2021

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators[1], and, in particular, Article 4(3)(b) thereof,

Having regard to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity[2] and, in particular, Articles 30(1)(m) and 32(2) thereof,

Having regard to Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC[3] and, in particular, Article 9(2) thereof,

Having regard to the favourable opinion of the Board of Regulators of 27 October 2021, delivered pursuant to Article 22(5)(a) of Regulation (EU) 2019/942,

Whereas:

[1] OJ L 158, 14.6.2019, p. 22.
[2] OJ L 158, 14.6.2019, p. 54.
[3] OJ L 158, 14.6.2019, p. 1.

1. INTRODUCTION

(1) This Opinion regards the seasonal adequacy outlook report for summer 2021 (Summer Outlook 2021) and a review of the main events occurred during winter season 2020-2021 (Winter Review 2020-2021), carried out by the European Network for Transmission System Operators for Electricity (ENTSO-E) and published on 31 May 2020 (the Report).

(2) ENTSO-E has also published the relevant data used in the assessment as well as comments of the transmission system operators on the expected security of supply situation in their respective systems during summer 2021 and their assessments of events or operational challenges occurred during winter 2020-2021.[4]

(3) On 7 June 2021, ENTSO-E has submitted the Report to ACER for its opinion. ACER considers it appropriate to issue this Opinion, in particular in order to accelerate the implementation of ACER's approved methodology for short-term and seasonal adequacy assessments (the STSAA methodology).[5]

2. LEGAL FRAMEWORK

(4) Pursuant to Article 30(l)(m) and Article 32(2) of Regulation (EU) 2019/943, ENTSO-E shall carry out and adopt seasonal adequacy assessments, and submit them to ACER for an opinion. These seasonal adequacy assessments shall be carried out in line with the STSAA methodology and include a winter and a summer adequacy assessment, as specified in Article 9(2) of Regulation (EU) 2019/941.

(5) Article 4(3)(b) of Regulation (EU) 2019/943 states that ACER may provide opinions on ENTSO-E's seasonal adequacy assessments, taking into account the objectives of non-discrimination, effective competition and efficient and secure functioning of the internal market for electricity.

(6) While Article 30(1)(m) and Article 32(2) of Regulation (EU) 2019/943 do not require ENTSO-E to carry out summer and winter reviews and submit them to ACER for an opinion, ACER welcomes ENTSO-E's current practice as effective reviews may play an important role in improving future seasonal assessments. ACER therefore considers it appropriate to assess and provide comments on the entire Report, also covering the Winter Review 2020-2021.

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[4] The Report and its accompanying files are available on ENTSO-E's website (https://www.entsoe.eu/outlooks/seasonal/).

[5] See Annex I to ACER Decision No. 08/2020 of 6 March 2020 on the methodology for short-term and seasonal adequacy assessments, available on ACER's website (https://acer.europa.eu/electricity/security-of-supply/risk-preparedness).

3. ASSESSMENT OF THE REPORT

3.1. Assessment of the Summer Outlook 2021

(7) ACER has assessed the Summer Outlook 2021 against the requirements of the STAA methodology. ACER has also checked whether, and to what extent, the Report takes into account the recommendations provided in ACER's previous opinions on ENTSO-E's seasonal assessments.[6] Our key findings are set out below.

General remarks

(8) ENTSO-E progressively refines its seasonal assessments and develops them in line with the STSAA methodology. However, ACER notes that the implementation of the methodology has not been completed within the required timeframe (March 2021). In the context of this delay, it is thus disappointing to note that many recommendations from our previous opinions have not been taken into account by ENTSO-E.[7] We therefore encourage ENTSO-E to duly consider ACER's recommendations specified in this Opinion, in particular the recommendation to provide a detailed update on the implementation status in the forthcoming seasonal assessment (Winter Outlook 2021-2022). Since ENTSO-E might not have sufficient time to fully implement the STSAA methodology already in the Winter Outlook 2021-2022 (since it is currently under preparation), ACER expects that ENTSO-E fully adheres to the STSAA methodology in the Summer Outlook 2022 at the latest.

Implementation of the STSAA methodology

(9) As set out in Article 10(2) of the STSAA methodology, ENTSO-E, Regional Cooperation Centres (RCCs) and transmission system operators (TSOs) shall implement the STSAA methodology by 6 March 2021, i.e. one year after its approval by ACER. In addition, the above Article requires that each short-term and seasonal adequacy assessment shall include a description of the implementation status of the STSAA methodology.

(10) The `Methodological Revolution` section of the Report briefly explains the application of the Monte Carlo probabilistic approach in the recent seasonal assessments. As regards the full implementation of the STSAA methodology, the

[6] In particular, see ACER Opinion No 01/2021 of 9 March 2021 on the ENTSO-E Winter Outlook 2020-2021 and Summer Review 2020 and ACER Opinion No 07/2020 of 10 December 2020 on the ENTSO-E Summer Outlook 2020 and Winter Review 2019-2020. All ACER opinions on ENTSO-E's seasonal assessments are available on ACER's website (https://acer.europa.eu/documents/official-documents/opinions).

[7] The Report takes on board 2 out of 8 recommendations from ACER Opinion 01/2021 (footnote 6). The implemented recommendations refer to the use of the LOLE metric and providing more information on the expected flows with non-explicitly modelled systems.

Report states that it "will still require some extensions in the coming year (for instance to include flow-based modelling)".[8]

(11) ACER notes that the Report does not inform in detail about the current status of the implementation of the STSAA methodology, nor does it explain the delay in finalising the implementation (envisaged for March 2021). ACER therefore expects that the next seasonal outlook will provide a detailed checklist of all requirements listed in the STSAA methodology which are relevant to seasonal assessments, including its Annex I, clearly setting out which of these requirements have already been implemented and which still need to be implemented.

Risk indicators

(12) Article 3(7) of the STSAA methodology lists the relevant metrics for the seasonal adequacy assessments. ACER welcomes the application of the Loss of Load Expectation (LOLE) metric in the Summer Outlook 2021, in addition to the Loss of Load Probability (LOLP) and the Expected Energy Not Served (EENS) used in the previous assessments. As reiterated in our previous opinions[9], calculating LOLE allows to better assess the level of security of supply in the analysed area (by complementing the other metrics used in the assessment).

Sensitivity analysis with non-market-based measures

(13) According to Article 3(8)(e) of the STSAA methodology, seasonal adequacy assessments shall include a sensitivity analysis to assess possible measures to prevent or mitigate adequacy risks, in particular with respect to the use of non-market-based measures to mitigate an electricity crisis. The approach in developing such sensitivities shall take into consideration compliance with market rules, in agreement with the principles set up in Article 16 of Regulation (EU) 2019/941.

(14) ACER welcomes the refined modelling of non-market measures. In particular, ACER welcomes the assessment of the cross-border impact of non-market measures, i.e. ENTSO-E's assumption that non-market measures located in one bidding zone may contribute to adequacy in another bidding zone, provided that cross-zonal capacity is available.

(15) However, as pointed out in our previous opinions,[10] the list of non-market measures considered by ENTSO-E is not exhaustive as it only includes strategic (or similar) reserves. ACER expects that the next seasonal outlook considers all the relevant non-market-based measures, which are identified and described in the published risk-

[8] The Report, p. 5-6.
[9] ACER Opinion No 01/2021 (footnote 6) para. 13, ACER Opinion No 07/2020 (footnote 6) para. 17.
[10] ACER Opinion No 01/2021 (footnote 6) para. 16, ACER Opinion No 07/2020 (footnote 6) para 20.

preparedness plans established by the Member States pursuant to Chapter III of Regulation (EU) 2019/941.[11]

Study zones and cross-zonal capacity

(16) According to paragraph 35 of Annex I of the STSAA methodology, the grid is represented as a set of modelled interconnections between study zones. Modelled interconnections represent net transfer capacity (NTC) zone coupling or flow-based zone coupling. As stated in our previous opinion[12] (and also recognised by ENTSO-E), the seasonal assessment would benefit from flow-based modelling. It would enable a more accurate assessment of the transfer capacities between the relevant modelled zones, and therefore enhance the quality of the results. ACER welcomes ENTSO-E's target to include flow-based modelling in the coming year.[13]

Clarity of the assessment and transparency of data

(17) According to Article 9(1) of the STSAA methodology, the results of the adequacy assessment shall be presented in a report. The report shall transparently list both inputs and outputs, being an exhaustive, informative and reader-friendly document. It shall consist of a high-level summary and dedicated technical appendices.

(18) In line with paragraphs 33 and 34 of Annex I of the STSAA methodology, ENTSO-E considers certain study zones which are smaller than the bidding zones (e.g. for Ireland, Northern Ireland, Luxembourg and Germany). ENTSO-E thus defines exchange limits within bidding zones.[14] As capacity calculation methodologies do not specify how to define exchange limits within bidding zones, to increase the clarity of the assessment, ACER expects that in the next seasonal assessment, ENTSO-E details why and how such exchange restrictions apply within bidding zones.

(19) The Report includes information about the capacity evolution of thermal resources but lacks equivalent information on variable renewable energy sources as well as demand-side response and storage. As already noted in the previous ACER opinion[15], given the increasing significance of these types of resources for security of supply, a more detailed description of their projected development would enhance the informative value of the assessment and give a more exhaustive picture of the capacity evolution in the EU.

(20) ACER notes that the analysis of input variables presented in section 'Overview of the power system in summer 2021' is not referenced (or otherwise reflected) in the

[11] See, in particular, Article 11(g) and Article 12(1)(e) of Regulation (EU) 2019/941.
[12] ACER Opinion No 01/2021 (footnote 6) para 19.
[13] The Report, p. 5.
[14] E.g. a 300MW limit applies between Ireland and Northern Ireland.

identification of adequacy-related risks set out in section 'Adequacy situation'. A closer link between the two sections would make the Report more reader-friendly.

(21) Article 7(1) of the STSAA methodology requires that data collection guidelines are provided to each national TSO to guarantee a coherent data collection process, thereby ensuring that datasets are built on consistent, transparent and common assumptions. As already noted in our previous opinion[16], the next seasonal assessment would greatly benefit from an appendix which transparently lists all the assumptions used. In particular, these assumptions should be consistent with the applicable capacity calculation methodologies where relevant.

Dissemination of results

(22) ENTSO-E published the Report on 31 May 2021 and thereby met the publication deadline of 1 June required by law.[17] ACER notes that an earlier publication of the Report would give stakeholders more time to respond to any expected risks, especially those foreseen to occur at the beginning of the studied period. ACER recognises that the timing of the publication should balance the trade-off between accuracy of the assessment and providing early notice to the stakeholders. As already pointed out in its previous opinion[18], ACER encourages ENTSO-E to strive to publish in advance of the deadline (e.g. few weeks to a month) to enhance the usefulness of the seasonal outlooks for the stakeholders.

3.2. Assessment of the Winter Review 2020-2021

(23) As stated in the Report, the goal of the Winter Review 2020-2021 is to represent the most important events that occurred during winter 2020–2021 and compare them to the study results reported in the previous seasonal outlook.[19] Although ENTSO-E provides a summary of the major events, there is no comparison of these events or the actual measured system data with the inputs and/or the results of the Winter Outlook 2020-2021. Such an ex-post comparison would give meaningful insights with respect to the completeness and accuracy of the ex-ante assessment. These insights could then inform and improve future seasonal assessments.

4. CONCLUSION

(24) Having assessed the Report against the requirements of the STSAA methodology and the recommendations from our previous opinions, summarised in Section 3, ACER has found that:

[16] ACER Opinion No 01/2021 (footnote 6) para 20.
[17] Article 9(2) of Regulation (EU) 2019/941 and Article 3(9) of the STSAA methodology.
[18] ACER Opinion No 01/2021 (footnote 6) para. 13.
[19] The Report, p. 23.

- The Summer Outlook 2021 represents an incremental improvement compared to the previous seasonal assessment, the Winter Outlook 2020-2021;
- However, ENTSO-E has failed to implement the STSAA methodology within the required timeframe (by 6 March 2021);
- ACER's comments and recommendations expressed in this Opinion aim to help ENTSO-E improve its future seasonal assessments and foster their compliance with the STSAA methodology;
- In that respect, ACER expects ENTSO-E to duly consider our recommendations, in particular the recommendation to provide, in the forthcoming seasonal assessment, a detailed update on the implementation status. ACER expects that ENTSO-E implements the STSAA methodology in its Summer Outlook 2022 at the latest, while not delaying or impacting on the quality of its other deliverables,

HAS ADOPTED THIS OPINION:

1. ACER considers that the Report is broadly consistent with the objectives listed in Article 4(3)(b) of Regulation (EU) 2019/942.
2. Future seasonal assessments should appropriately take into account ACER's comments and recommendations provided in this Opinion.
3. This Opinion is addressed to ENTSO-E.

Done at Ljubljana, on 28 October 2021.

- SIGNED -

For the Agency
The Director

C. ZINGLERSEN