

**DECISION No 07/2020
OF THE EUROPEAN UNION AGENCY
FOR THE COOPERATION OF ENERGY REGULATORS**

of 6 March 2020

on the methodology for identifying regional electricity crisis scenarios

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to the Treaty on the Functioning of the European Union,

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 Regulators¹, and, in particular, Article 9(3)(a) 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 sector², and, in particular, Article 5(6) thereof,

Having regard to the outcome of the consultation with the European Network of Transmission System Operators for Electricity ('ENTSO-E') and the Electricity Coordination Group ('ECG'), in its formation composed only of representatives of the Member States,

Having regard to the outcome of the consultation with the Agency's Electricity Working Group ('AEWG'),

Having regard to the favourable opinion of the Board of Regulators of 26 February 2020, delivered pursuant to Article 22(5)(a) of Regulation (EU) 2019/942,

Whereas:

1. INTRODUCTION

- (1) Regulation (EU) 2019/941 of 5 June 2019 on risk-preparedness in the electricity sector (the 'Risk-Preparedness Regulation') laid down a range of requirements for

¹ OJ L158, 14.6.2019, p. 22.

² OJ L158, 14.6.2019, p. 1.

preventing, preparing and managing electricity crisis. These requirements include the development of a methodology for identifying regional electricity crisis scenarios ('crisis scenarios methodology') in accordance with Article 5 of the Risk-Preparedness Regulation.

- (2) Pursuant to Article 5(1) of the Risk-Preparedness Regulation, the European Network of Transmission System Operators for Electricity ('ENTSO-E') has to develop a proposal for a crisis scenarios methodology and submit it to the Agency for approval. The Agency shall amend or approve the proposal within two months of receipt in accordance with Article 9(3)(a) of Regulation (EU) 2019/942 and Article 5(6) of the Risk-Preparedness Regulation.
- (3) The present Decision follows from ENTSO-E's submission of a proposal for the crisis scenarios methodology submitted by ENTSO-E, seeking approval by the Agency; Annex I to this Decision sets out the crisis scenarios methodology as decided by the Agency.

2. PROCEDURE

- (4) On 8 July 2019, ENTSO-E published for public consultation the draft 'Methodology to identify regional electricity crisis scenarios in accordance with Article 5 of the Regulation of the European Parliament and Council on risk-preparedness in the electricity sector'. The consultation lasted from 8 July 2019 until 8 October 2019. The justifications regarding the consideration given to the views expressed by stakeholders during the public consultation in the drafting of the Proposal were provided in a separate document and published on ENTSO-E's website.
- (5) The Agency informed the Electricity Coordination Group (ECG) about the ACER consultation timeline and about the opportunity to submit any comments on its meeting of 22 November 2019 due to the short deadlines for the decision-making process.
- (6) On 6 January 2020, ENTSO-E submitted to the Agency a proposal for a methodology to identify regional electricity crisis scenarios in accordance with Article 5 of the Risk-Preparedness Regulation (the 'Proposal').
- (7) On 6 January 2020, the Agency launched a public consultation on the Proposal, inviting all stakeholders including Member States of the Electricity Coordination Group to submit their comments by 12 January 2020. The consultation document asked stakeholders to provide views on the text of the Proposal. The summary and evaluation of the responses received are presented in Annex II to this Decision.
- (8) The Agency cooperated with Member States, national regulatory authorities and ENTSO-E and further consulted on the possible amendments to the Proposal through telephone conference calls and electronic exchanges of documents. In particular, the following steps were taken:

- (a) 13 January 2020: telephone conference call with ENTSO-E, regulatory authorities and the European Commission;
- (b) 16 January 2020: telephone conference calls with ENTSO-E, regulatory authorities and the European Commission;
- (c) 17 January 2020: electronic exchange of documents for consideration with ENTSO-E, regulatory authorities and the European Commission;
- (d) 28 January 2020: electronic exchange of documents, for consideration, with the ECG;
- (e) 3 February 2020: the Agency submitted a proposal for the draft Decision to the AEWG for consultation;
- (f) 5 February 2020: telephone conference call with ENTSO-E and the European Commission;
- (g) 12 February 2020: discussion with all national regulatory authorities in the framework of the AEWG.

3. THE AGENCY'S COMPETENCE TO DECIDE ON THE PROPOSAL

- (9) Pursuant to Article 9(3)(a) of Regulation (EU) 2019/942 and Article 5(6) of the Risk-Preparedness Regulation, the Agency shall amend, where necessary, and approve the proposal for a methodology for identifying electricity crisis scenarios at a regional level within two months after receiving this proposal from ENTSO-E.
- (10) Since ENTSO-E submitted the Proposal in accordance with Article 5(1) of the Risk-Preparedness Regulation, the Agency is competent to decide on this Proposal according to Article 9(3)(a) of Regulation (EU) 2019/942 and Article 5(6) of the Risk-Preparedness Regulation.

4. SUMMARY OF THE PROPOSAL

- (11) The Proposal consists of the following elements:
 - (a) The 'Whereas' section and Articles 1 and 2, which include general provisions on the subject matter and scope and definitions and interpretation;
 - (b) Articles 3 to 6, which contain general provisions for cross-border dependencies, initiating events, requirements for electricity crisis scenarios and TSOs' obligations to provide information to ENTSO-E to support scenario identification and evaluation;
 - (c) Articles 7 to 9, which contain the electricity crisis scenario evaluation methods, including evaluation of electricity crisis scenarios, methods for the evaluation of likelihood and impact and evaluation of cross-border dependencies;

- (d) Articles 10 to 13, which include the requirements for identification of electricity crisis scenario candidates, steps for establishing the relevance of regional electricity crisis scenarios, the identification of regional electricity crisis scenarios and the evaluation of regional electricity crisis scenarios at national level;
- (e) Articles 14 to 16, which describe the requirements for the ranking of electricity crisis scenarios, the reporting of the most relevant regional electricity crisis scenarios and the review process;
- (f) Articles 17 to 19, which address the handling of sensitive information, the publication of the methodology and language;
- (g) Appendix I, which includes the scenario rating scales for likelihood of crisis, the impact of crisis as well as crisis scenario rating at Member State level, cross-border dependency rating and an example of regional scenario rating;
- (h) Appendix II, which contains the hazards that could initiate an electricity crisis scenario (initiating events); and
- (i) Appendix III, which contains electricity crisis scenario description templates for electricity crisis scenario candidates and regional electricity crisis scenarios, as well as the checklist to use for a comprehensive description of the electricity crisis scenario candidate and the checklist to consider for a comprehensive impact evaluation of regional electricity crisis scenarios.

5. SUMMARY OF THE OBSERVATIONS RECEIVED BY THE AGENCY

5.1. Interaction with ENTSO-E, national regulatory authorities and the European Commission

- (12) During the cooperation between the Agency, Member States, ENTSO-E, national regulatory authorities and the European Commission as detailed in paragraph (8) above the Agency:
 - (a) Discussed the comments received during the public consultation (see section 5.2) and received following the consultation with Member States in the ECG (see section 5.3);
 - (b) Discussed changes to the methodology (see section 5.3 and section 5.5), which ENTSO-E agreed to be necessary for clarity and consistency;
 - (c) Discussed and agreed necessary editorial changes to the methodology.

5.2. Public consultation

- (13) Responses to the public consultation (see paragraph (7) above) are compiled and evaluated in Annex II. Among the issues raised by stakeholders the following ones were particularly relevant as they finally led to changes to the proposed crisis scenario methodology:

- (a) One stakeholder raised the point that, according to Article 5(3) of the Risk-Preparedness Regulation, the proposed methodology should include a consideration of all relevant national and regional circumstances, including those of any subgroups;
- (b) One stakeholder raised a point about the participation of the EU DSO Entity in crisis scenarios identification; and
- (c) One stakeholder commented on the specification of the geographical perimeter of the Expected Energy Not Supplied (EENS) and the Loss of Load Expectation (LoLE).

5.3. Consultation of Member States in the ECG

- (14) Following the consultation of the proposal with the ECG, we have received comments from one stakeholder (Member State); this stakeholder raised the point that the definition of statistical indicators such as EENS, LoLE, Loss of Load Probability (LoLP) and Adequacy Probability Metric (APM) should be enhanced by defining the statistical time period and by specifying in each case the nature of the resource devoted to meet the demand needs.

5.4. Consultation of the AEWG

- (15) No comments from national regulatory authorities have been received during the consultation with the AEWG.

5.5. Comments from other stakeholders

- (16) The Agency also received comments from another stakeholder, (intergovernmental organisation), who raised the point that the crisis scenarios methodology should include a clear link with the reliability standard as referred in Article 25 of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity³. The stakeholder argued that, given the fact that the electricity crisis scenarios methodology could serve as a basis for the justification of interventions to ensure secure supplies, the same reliability standard should be consistently applied among the crisis scenarios methodology, the methodology short-term and seasonal adequacy assessments as referred in Article 8(1) of the Risk-Preparedness Regulation and the methodology for European resource adequacy assessments ('ERAA methodology') as referred in Article 23(3) of Regulation (EU) 2019/943.

³ OJ L158, 14.6.2019, p. 54.

6. ASSESSMENT OF THE PROPOSAL

6.1. Legal framework

(17) Article 5 of the Risk-Preparedness Regulation sets out the requirements of the proposal for a methodology for identifying regional electricity crisis scenarios. In terms of process, it requires ENTSO-E to consult on the proposed methodology (Article 5(5)) and to submit the proposal to the Agency by 5 January 2020 (Article 5(1)). Content-wise, it defines the risk scenarios that the proposed methodology needs to consider (Article 5(2), (4)) and the minimum elements that the proposed methodology has to include (Article 5(3)).

6.2. Consultation and submission of the Proposal

(18) Art. 5(5) of the Risk-Preparedness Regulation requires ENTSO-E to consult at least the regional coordination centres, industry and consumer organisations, producers or their trade bodies, transmission system operators and relevant distribution system operators, competent authorities, regulatory authorities and other relevant national authorities, and to duly take into account the results of the consultation and present them, together with the proposed methodology, at a meeting of the ECG.

(19) As indicated in paragraph (4) above, ENTSO-E conducted a public consultation from 8 July 2019 until 8 October 2019. The results of the consultation were presented during the ECG meeting on 22 November 2019. In addition, ENTSO-E regularly informed and consulted the Agency and regulatory authorities. The justifications regarding the consideration given to the views expressed by stakeholders during the public consultation in the drafting of the Proposal were provided in a separate document submitted to the Agency and published on ENTSO-E's website.

(20) Therefore, ENTSO-E fulfilled the requirements of Article 5(5) of the Risk-Preparedness Regulation regarding the involvement of stakeholders.

(21) Article 5(1) of the Risk-Preparedness Regulation requires ENTSO-E to submit the Proposal to the Agency by 5 January 2020.

(22) ENTSO-E submitted the Proposal on 6 January 2020. Indeed, 5 January 2020 was a Sunday so the Proposal was actually submitted on the next working day. In addition, Article 5(1) of the Risk-Preparedness Regulation does not declare a submission after 5 January 2020 as invalid. In the Agency's view, it is not the purpose of the deadline of 5 January 2020 to exclude any later submission.

(23) Therefore, the Agency considers the submission of the Proposal as valid.

6.3. Required content of the Proposal

(24) Article 5(2) of the Risk-Preparedness Regulation requires that the proposed methodology identifies electricity crisis scenarios in relation to system adequacy, system security and fuel security on the basis of at least the following risks: (a) rare

and extreme natural hazards; (b) accidental hazards going beyond the N-1 security criterion and exceptional contingencies; and (c) consequential hazards including the consequences of malicious attacks and of fuel shortages. The Proposal meets the requirements of Article 5(2) of the Risk-Preparedness Regulation because it identifies electricity crisis scenarios in relation to system adequacy, system security and fuel security on the basis of at least the risks referred to in Article 5 (2)(a), (b) and (c) in Article 4 of the Proposal ('Initiating events') and in Appendix II ('Hazards that could initiate an electricity crisis scenario (initiating events)').

- (25) In this regard, the Proposal also meets the requirements of Article 5(4) of the Risk-Preparedness Regulation, which requires that, when considering the risks of disruption of gas supply in the context of identifying the risks pursuant to point (c), ENTSO-E shall use the natural gas supply and infrastructure disruption scenarios developed by ENTSO-G. Article 12 of the Proposal ('Identification of regional electricity crisis scenarios') accounts for the requirements from the gas supply and infrastructure disruption scenarios in accordance with Article 7 of Regulation (EU) 2017/1938. The Agency made a change to Article 12(6) to clarify that additional scenarios related to interconnected infrastructure and, for example, distribution grids, may also be considered and included where appropriate. ENTSO-E agreed with this change.
- (26) Article 5(3) of the Risk-Preparedness Regulation defines the minimum content for the methodology: (a) a consideration of all relevant national and regional circumstances, including any subgroups; (b) interaction and correlation of risks across borders; (c) simulations of simultaneous electricity crisis scenarios; (d) ranking of risks according to their impact and probability; and (e) principles on how to handle sensitive information in a manner that ensures transparency towards the public. The Agency considers that all of these elements have been covered by the methodology as explained below.
- (27) The Proposal meets the requirements of Article 5(3)(a) of the Risk-Preparedness Regulation by taking into account relevant national and regional circumstances including subgroups in Article 2 ('Definitions and interpretation') on its paragraph (2), point (h) and in Article 10 ('Identification of electricity crisis scenario candidates') paragraph (4). Following the comment from one stakeholder listed above in (12)(a), and in order to clarify that TSOs have the possibility of considering electricity crisis scenarios identified by Member States forming a regional subgroup, the Agency added in Article 10 of the Proposal, under paragraph 4(c), the role of regional subgroups defined by Member States in delivering electricity crisis scenario candidates, if relevant. ENTSO-E agreed with this change clarifying a possibility which was already implicit in the Proposal.
- (28) The Proposal addresses the interaction and correlation of risks across borders in its Article 3 ('Cross-border dependencies'), Article 9 ('Evaluation of cross-border dependencies') and Appendix I ('Scenario rating scales'), thereby meeting the requirements of Article 5(3)(b) of the Risk-Preparedness Regulation.
- (29) The Proposal addresses simultaneous electricity crisis simulations in its Article 12 ('Identification of regional electricity crisis scenarios') and Appendix III ('Electricity

crisis scenario description templates’), as per the requirement of Article 5(3)(c) of the Risk-Preparedness Regulation.

- (30) Ranking of risks according to their impact and probability, as required by Article 5(3)(d) of the Risk-Preparedness Regulation, is covered by the Proposal in its Article 8 (‘Methods for the evaluation of the likelihood and impact of a crisis’), which describes the methods for the evaluation of likelihood and impact of a crisis and in its Appendix I (‘Scenario rating scales’), which contains the scenario rating scales to assess likelihood, impact, scenario and cross-border dependency, as well as provides an example of regional scenario rating.
- (31) The requirements of Article 5(3)(e) of the Risk-Preparedness Regulation are also met by the Proposal, as its Article 6 (‘TSOs’ obligation to provide information to ENTSO-E to support scenario identification and evaluation’) and Article 17 (‘Handling of sensitive information’) as well as Appendix III (‘Electricity crisis scenario description templates’) describe how to handle sensitive information in a manner that ensures transparency towards the public.

6.4. Assessment of the replies received in the public consultation

- (32) With respect to the stakeholders’ responses received during the public consultation period that did not give rise to changes to the crisis scenario methodology, the Agency considers that these did not identify currently concerns requiring an amendment of the Proposal. The Agency’s reasoning is presented in Annex II to this Decision.

6.5. Assessment of the comments received from Member States in the ECG

- (33) With respect to the stakeholder’s concern described in paragraph (14), the Agency observes that the statistical indicators (EENS and LoLE) are defined per crisis scenario and they do not represent the per annual impact of lack of resource adequacy in different timeframes. The Agency thus sees no need to amend the crisis scenarios methodology in this respect.

6.6. Assessment of other comments received

- (34) With respect to the stakeholder’s concern described paragraph (15), the Agency provides its views on the basis of the following reasoning:
- (a) According to Article 25(1) of Regulation (EU) 2019/943, Member States shall have a reliability standard in place when apply capacity mechanisms.
- (b) According to Article 21(4) of Regulation (EU) 2019/943, Member States shall not introduce capacity mechanisms where both the European resource adequacy assessment as referred in Article 23 of Regulation (EU) 2019/943 and the national resource adequacy assessment (as referred in Article 24 of Regulation (EU) 2019/943), or in the absence of a national resource adequacy assessment, the European resource adequacy assessment have not identified a resource adequacy concern.

- (c) The Agency believes that there is a fundamental difference in the intent and the issues that the ERAA methodology and the methodologies as referred in Articles 5(1) and 8(1) of the Risk-Preparedness Regulation are required to address: the ERAA methodology shall mainly be used to identify adequacy concerns and to assess the need for capacity mechanisms. On the other hand, the methodology for identifying regional electricity crisis scenarios focuses on electricity crises that have a large scale impact in a given shorter timeframe and that are likely to result in a deterioration of the electricity supply situation in a region.
- (d) The Agency thus sees no need to amend the crisis scenarios methodology in this respect.

6.7. Other changes to the Proposal

- (35) Further to assessing the required content of the Proposal, as detailed above and making the necessary changes, the Agency assessed the Proposal's contents for consistency and completeness, taking into consideration stakeholders' views. As a result, the following changes, welcomed by ENTSO-E as well, have been introduced:
 - (a) The Agency added a clarification to Recital (5) to specify the legal basis for the scope of risk preparedness plans. The sentence inserted clarifies that risk preparedness plans are to be established by competent authorities in accordance with Article 10 of the Risk-Preparedness Regulation.
 - (b) The Agency found it necessary to amend paragraph (2)(e) of Article 5 of the Proposal ('Requirements for an electricity crisis scenario') to clarify that the scenario description could also, if applicable, refer to past reference crises.
 - (c) The Agency made a change to paragraph (6) of Article 12 of the Proposal ('Identification of regional electricity crisis scenarios') to include the participation of the EU DSO Entity for ENTSO-E to cooperate with in relation to the consideration of additional scenarios related to interdependent infrastructure.
 - (d) The Agency made changes to Appendix III.1 ('Description of electricity crisis scenario candidate') for consistency with the checklist presented regarding the item 'Season(s) of the year and day when the scenario is relevant and type of load' to cover 'week, weekend, holiday, day before holidays'.
 - (e) Furthermore, the Agency added two rows to Appendix III.1 ('Description of electricity crisis scenario candidate') for consistency with the checklist to include the geographical scope under 'Broad geographical area' (likely geographical location or part of the system affected by the event), and 'If applicable, reference crisis in the past' (for consistency with the change to Article 5(2)(e)) in the description of electricity crisis scenario candidate.
 - (f) The Agency added the words 'and cross-regional' to the template of III.2 ('Description of regional electricity crisis scenarios by ENTSO-E') of Appendix

III regarding the potential for cross-border dependencies, for clarity and consistency with Article 10 of the Proposal.

(g) Finally, the Agency made minor editorial changes to recitals (2), (9) and (10) of the “Whereas” section, Article 2 (2)(e), (g) and (h), Article 3(3)(b)(ii), Article (5)(1)(b), Article 6(4), Article 7(1), (1)(b) and (c), (2)(c) and (4), Article 8 (title) (1) and (5), Article 9(1)(a) and (b), Article 10(2), (5), (7) and (8), Article 11(1) and (1) (vii), Article 12(4) and (9), Article 13(4), Article 14(4)(ii), Article 15 (title), Appendix I.1, I.2, I.3, I.5, Appendix II (3)(e) and “Note”, Appendix III.1, III.2 and III.3, to fix legal references and cross-references, typos and punctuation, as well as added omitted words in order to improve readability.

7. CONCLUSION

(36) For all the above reasons, the Agency considers the Proposal in line with the requirements of the Risk-Preparedness Regulation, provided that the amendments described in this Decision are integrated in the Proposal, as presented in Annex I.

(37) Therefore the Agency approves the Proposal subject to the necessary amendments and to the necessary editorial amendments. To provide clarity, Annex I to this Decision sets out the Proposal as amended and approved by the Agency,

HAS ADOPTED THIS DECISION:

Article 1

The methodology for identifying regional electricity crisis scenarios in accordance with Article 5 of Regulation (EU) 2019/941 is adopted as set out in Annex I to this Decision.

Article 2

This Decision is addressed to ENTSO-E.

Done at Ljubljana, on 6 March 2020.

- SIGNED -

*For the Agency
The Director*

C. ZINGLERSEN

Annexes:

Annex I – Methodology for identifying regional electricity crisis scenarios in accordance with Article 5 of Regulation (EU) 2019/941

Annex II (for information only) – Evaluation of responses to the public consultation on the amendments of the proposal for a methodology for identifying regional electricity crisis scenarios

In accordance with Article 28 of Regulation (EU) 2019/942, the addressee may appeal against this Decision by filing an appeal, together with the statement of grounds, in writing at the Board of Appeal of the Agency within two months of the day of notification of this Decision.

In accordance with Article 29 of Regulation (EU) 2019/942, the addressee may bring an action for the annulment before the Court of Justice only after the exhaustion of the appeal procedure referred to in Article 28 of that Regulation.