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THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators¹, and, in particular, Articles 6(3)(b) and 17(3) thereof,

HAVING REGARD to Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003², and, in particular, Article 9(2) thereof,

HAVING REGARD to the favourable opinion of the Board of Regulators of 14 September 2016, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:


(2) Pursuant to Article 6(3)(b) of Regulation (EC) No 713/2009, the Agency shall provide an opinion to ENTSO-E in accordance with the first subparagraph of Article 9(2) of Regulation (EC) No 714/2009 on relevant documents referred to in Article 8(3) of Regulation (EC) No 714/2009. Point (f) of Article 8(3) of Regulation (EC) No 714/2009 refers to annual summer and winter generation adequacy outlooks to be adopted by ENTSO-E. It does not explicitly refer to the summer and winter reviews. However, such reviews are of utmost relevance for the preparation of future outlooks and, equally, constitute a long-standing practice of the associations of transmission system operators (“TSOs”). In light

of the above, it is appropriate to consider in this Opinion not only the Summer Outlook Report 2016 (the “SOR 2016”), but also the Winter Review 2015/2016 (the “WR 2015/16”).

HAS ADOPTED THIS OPINION:


1.1 Objectives and main results

The SOR 2016 reports on the outlook of the national and regional power balances of forecast generation and load on a weekly basis for the 2016 summer period, from 1 June 2016 to 2 October 2016. Its main objective is to address power balances and to present TSOs’ views on any matters concerning security of supply for the forthcoming summer period. Such a report provides a good platform to raise awareness regarding system adequacy issues and, if needed, warns TSOs and other parties involved in time to implement the potentially required coordinated measures to keep the system secure and demand uninterrupted.

Seasonal adequacy forecasts, such as the SOR 2016, are based on data provided by the TSOs through a questionnaire and historical weather data from the Pan-European Climate Database (PECD). The Agency welcomes the inclusion of the questionnaire in the SOR 2016 & WR 2015/16, further contributing to the transparency of the report. The Agency notes that Cyprus seems missing in some of the maps included in the SOR 2016 & WR 2015/16.

The SOR 2016 concludes that there are no adequacy-related issues expected under normal weather conditions. Various countries may depend on imports to meet their demand, but the cross-border capacities should be sufficient to accommodate this need. However, under severe weather conditions, Great Britain and Poland have identified the possibility of adequacy crisis. Great Britain could need to rely on its strategic reserves and on demand-side management to cope with the worst-case scenarios. As already observed in the Summer Outlook Report 2015 (“SOR 2015”) and in the Winter Outlook Report 2015/2016, Poland could be at risk under severe weather conditions, if the amount of unscheduled flows on the DE+SK+CZ profile continues to cause the need for redispatching and limit its possibility to import. As a sustainable solution of controlling these unscheduled flows will not be implemented before 2018, real-time countermeasures are being developed within TSO Security Cooperation to cope with the situation. The Agency welcomes such regional cooperation and would like to highlight the need for a permanent solution to the problem of unscheduled flows, which is affecting all aspects of system operation.

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4 SOR 2016 & WR 2015/16, Fig.7, Fig. 8, Fig.10, Fig.11
5 Regional Service Coordinator (RSC)
The Agency notes the continuing decreasing trend of conventional generation capacity: 19 GW of “conventional” generation (mostly thermal and nuclear, large hydro) in the ENTSO-E perimeter are to be decommissioned compared to capacity reported in the SOR 2015. The Agency reiterates its recommendation to monitor the behaviour of the system and calls on ENTSO-E to provide impact assessments also through seasonal and long-term adequacy reports and reviews. Since the lack of dispatchable generation can lead to problems related to voltage regulation, ENTSO-E should ask for feedback from its TSO members on constraints of voltage regulation in their reviews of the past season. The Agency thus recommends that ENTSO-E’s questionnaire\textsuperscript{6} be complemented with questions dedicated to the quantification of voltage issues.

The assessment of “downward” adequacy foresees that, during some weeks of the summer period, it may be necessary to export excess generation from some countries\textsuperscript{7}, while insufficient cross-border capacity could lead to curtailment of Renewable Energy Sources (RES) generation in Germany and Belgium.

The Agency also reiterates its recommendation to perform a market simulation to understand how periods of both upward and downward adequacy problems affect electricity prices and market behaviour.

1.2 On the methodology for the Summer Outlook Report

The Agency welcomes ENTSO-E’s consistent evolution of adequacy reports and recognises the effort to improve them.

Although a probabilistic approach is to some extent considered when utilising PECD data, the Agency believes the probabilistic assessment should further evolve, namely through the identification of probabilities of individual events leading to inadequacy situations (i.e. severe atmospheric conditions, minimum Net Transfer Capacity, outage of the largest generating unit, etc.). Through taking into account the probabilities of individual events when assessing adequacy, ENTSO-E could better estimate the risk of an individual country facing adequacy problems. Utilising this calculated risk and the results of market simulations, the effects of adequacy crises could be monetised, providing further insight into the topic.


The WR 2015/16 covers the period from 1 December 2015 to 3 April 2016. It outlines the main events impacting security of electricity supply, according to TSOs. Resulting from favourable weather conditions, demand was around or lower than the seasonal average in most European countries, except in Finland and Norway.

\textsuperscript{6} Appendix 4 of the SOR 2016 and WR 2015/2016

\textsuperscript{7} Belgium, Bulgaria, Czech Republic, Switzerland, Germany, Denmark, Spain, France, Ireland, Italy, Macedonia, Romania, Sweden and Slovenia reported the possible need for export during the day-time and/or night-time minimum demand
No adequacy related risks have occurred during the past winter, although, as stated in the report, Switzerland faced a “tense” situation following the outage of 720 MW of nuclear power and simultaneous low hydrology. However, the situation remained under control due to low demand and actions taken by the Swiss authorities. Although the term “tense situation” is not clearly defined in the WR 2015/16, it might be understood as an adequacy crisis. It has to be noted that such a situation was not foreseen in the WOR 2015/16, which did not show the necessity of Swiss import even during severe weather conditions (i.e. in the worst case scenario).

The Agency thus recommends ENTSO-E to include a comparison of the Outlook forecasts to the Reviews of the same season, focusing on potential forecast errors and analysing the reasons for them. This exercise could help improve the forecasts and the overall quality of the seasonal adequacy outlooks.

Done at Ljubljana on 4 October 2016.

For the Agency:

Alberto Pototschaig
Director

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