We appreciate your feedback

Please click on the icon to take a 5’ online survey and provide your feedback about this document
OPINION OF THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS No 05/2015

of 23 June 2015

ON THE ENTSO-E WINTER OUTLOOK REPORT 2014/15
AND SUMMER REVIEW 2014

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 Regulators\(^1\), 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 1228/2003\(^2\), and, in particular, Article 9(2) thereof,

HAVING REGARD to the favorable opinion of the Board of Regulators of 10 June 2015, 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 for the Cooperation of Energy Regulators ("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"). Furthermore, the

---


summer review of 2014 forms an integral part of the document containing ENTSO-E’s winter outlook for 2014/15 and is strictly linked to it. In light of the above, it is therefore appropriate to consider in this Opinion not only the Winter Outlook Report 2014/15 (the “WOR 2014/15”), but also the Summer Review 2014 (the “SR 2014”).

(3) In its Opinion on the Winter Outlook Report 2013/14 and Summer Review 2013 (the “WOR&SR 2013/14”) the Agency outlined several actions for ENTSO-E to improve the future outlooks and reviews. This Opinion therefore also takes stock of the progress made by ENTSO-E regarding these actions.

HAS ADOPTED THIS OPINION:

1. Winter Outlook Report 2014/15

1.1 Objectives and main results

According to ENTSO-E, the purpose of the WOR 2014/15 is to present the TSOs’ views on any matters concerning security of supply for the forthcoming winter period. In addition, it seeks to identify risks and countermeasures proposed by TSOs in cooperation with their neighbours, and to assess the possibility for neighbouring countries to contribute to the generation/demand balance if required.

The WOR 2014/15 reports the outlook of the national and regional power balances between forecast generation and load on a weekly basis for the upcoming winter period, from 1 December 2014 (week 49) to 19 April 2015 (week 16). The analysis also includes downward adequacy assessment, which covers the cases when an excess of generation can be present in the system, especially when variable renewable generation and inflexible conventional generation are at high output levels.

ENTSO-E indicates that the WOR 2014/15 is based on the information provided by ENTSO-E members during September-October 2014 on a qualitative and quantitative basis in response to a specific questionnaire. The Agency notes that the previous Winter Outlook Reports used to provide the questionnaire as an Annex to the report, which is not the case for the WOR 2014/15. The Agency recommends that ENTSO-E continues to publish the questionnaire, as it provides the basis for the development of the outlook reports.

---


5 WOR&SR 2014/15, p. 3.


7 No reason for this change is provided in the WOR 2014/15.
According to the WOR 2014/15, Europe has sufficient generation for both normal and severe demand conditions. However, under severe weather conditions several countries (Albania, Denmark, Finland, Hungary, Latvia, FYRO Macedonia, Poland, Serbia and Sweden) need imports to fulfil their peak load throughout the winter. Belgium is expected to remain dependent on imports during the whole winter.

The WOR 2014/15 also takes note of the fact that during the past few years renewable generation capacity throughout Europe continued to increase while some conventional generation capacity is being mothballed or decommissioned.

On the other hand, the downward adequacy analysis shows that during certain weeks over the winter, it may be necessary to reduce generation in Ireland, Spain, Portugal, and Germany (resulting from a combination of high renewables in-feed, inflexible generation and insufficient cross border export capacity).

i. **On the evolution of the Winter Outlook Report**

Following a consultation during 2014, ENTSO-E had identified several areas of enhancement of the short term (Summer and Winter) Outlook Reports in its ‘Seasonal Outlook Report Evolution’. The following enhancements were envisaged for the WOR 2014/15:

- Harmonisation of assumptions taken and data used;
- Assessment of the system flexibility (collection of data on the amount of must-run generation at the different time points for the TSOs);
- Enhancement transparency towards stakeholders;
- Improvement of the treatment of cross-border exchange capacities;
- Extension of the outlook reports with a probabilistic assessment of renewable energy sources (“RES”) and temperatures;
- Assessment of the impact of potential gas shortages on generation adequacy;

In view of the above, the Agency positively acknowledges the following enhancements implemented by ENTSO-E in the WOR 2014/15:

i. Concerning the methodology for RES in-feed, the Pan-European Climatic Database contains now 14 years data (load factors for wind and solar photovoltaic and hourly temperatures); records for all 14 years are retained (vs.

---

8 WOR&SR 2014/15, pp. 4-5.
9 [https://www.entsoe.eu/major-projects/adequacy-methodology/Pages/default.aspx](https://www.entsoe.eu/major-projects/adequacy-methodology/Pages/default.aspx)
3 years in WOR&SR 2013/14 and 10 in the ‘Summer Outlook Report 2014 and Winter Review 2013/2014’\(^{11}\) in order to create the RES in-feed for a reference time point\(^{12}\);

ii. Inclusion of a more detailed analysis taking into account the load-temperature relationship\(^{13}\), for regions which are found to experience adequacy risks (the methodology is provided in Appendix 1 of the WOR 2014/15);

iii. Publication of information about expected weekly net load per country for normal and severe conditions (in Appendix 4 of the WOR 2014/15).

Nevertheless, the Agency urges ENTSO-E to implement in the forthcoming outlook reports all the enhancements described in the ENTSO-E document ‘Seasonal Outlook Report Evolution’, and envisaged for the Winter Outlook Report 2014/15, such as publication of information about (a) installed generation capacity, (b) sensitivity of consumption to temperature conditions, (c) load management and (d) Net Transfer Capacity (NTC) values at the time points used for the downward adequacy analysis\(^{14}\).

The Agency notes that no specific information is provided in the WOR 2014/15 concerning the implementation of the enhancements related to (a) data collection about flexibility and (b) improvement of the treatment of cross-border exchange capacities.

1.3 Sensitivity analysis of the regional adequacy assessment

The Agency notes positively that sensitivity analysis of the regional adequacy assessment on the contracted emergency load reduction measures and strategic reserves has been performed for Belgium and France, in order to obtain an indication of the necessity of these measures for the coming winter, as well as the probability of their use\(^{15}\). The sensitivity analysis led to a more detailed examination of the region of Belgium-France in the WOR&SR 2014/15\(^{16}\).

1.4 Analysis of potential threats to generation adequacy stemming from stress on natural gas supply

During the development cycles of the seasonal outlooks, ENTSO-E has consistently been asking TSOs for information about natural gas supply threats. The Agency, in its Opinions on the WOR&SR 2012/13\(^ {17}\) and on the WOR&SR 2013/14 had noted the importance of incorporating in the Winter Outlook Reports an analysis related to gas supply stress.

---

\(^{11}\) [https://www.entsoc.eu/Documents/Publications/StCC/140521_Summer%20Outlook%202014.pdf](https://www.entsoc.eu/Documents/Publications/StCC/140521_Summer%20Outlook%202014.pdf)


\(^{13}\) WOR&SR 2014/15, p. 34.

\(^{14}\) Seasonal Outlook Report Evolution, p. 5.

\(^{15}\) WOR&SR 2014/15, p. 8.

\(^{16}\) WOR&SR 2014/15, p. 35.

The Agency notes positively that, after a request by the European Commission’s DG-ENER, the WOR 2014/15 assesses the two main risks for the electricity sector due to ‘short-term’ disruption of Russia gas\textsuperscript{18}:

1. Reduction in power (electricity and heat) production from gas fired power units;
2. Increase in electricity demand from household, industry and district heating as a consequence of the gas disruption.

A similar exercise was conducted by the European Network of Transmission System Operators for Gas (ENTSOG). One important conclusion is that the regional cooperative assumptions used by ENTSOG in their top-down modelling approach of gas supply\textsuperscript{19} are not necessarily in line with the (‘bottom-up’) positions of each Member State as provided to ENTSO-E.

The responses provided by TSOs show that only in few cases electricity generation is severely affected by disruption in Russian gas supply. However, it should be noted that responses from only 21 countries\textsuperscript{20} are provided in the WOR 2014/15. There are several countries with their own resources or with resources coming from elsewhere than Russia, which would not be affected at all by the assumed disruption.

2. Summer Review 2014

2.1 Objectives and main results

The SR 2014 covers the period from 1 June (week 23) to 20 September 2014 (week 38). It outlines the main events during the previous summer, according to TSOs, with reference to security of electricity supply (i.e. summer conditions, power system conditions, as well as availability of interconnections)\textsuperscript{21}.

ENTSO-E indicates\textsuperscript{22} that the Summer Review report is prepared on the basis of the information given by ENTSO-E members through a questionnaire\textsuperscript{23} in order to present the most important events occurred during the summer period in comparison to the forecasts and risks reported in the last Summer Outlook. The TSOs mainly answered if their respective power system experienced any important or unusual events or conditions during the summer period as well as the identified causes and the remedial actions taken.

\textsuperscript{18} WOR&SR 2014/15, p. 39.
\textsuperscript{19} The ENTSOG analysis follows a top-down approach in which the disrupted gas demand is spread between Member States in order to minimize the relative share of disrupted demand in each country.
\textsuperscript{20} AT, BG, CZ, DK, FI, FR, GB, HU, IE, IT, LV, LT, NL, NO, PL, PT, RO, RS, SI, ES, SE.
\textsuperscript{21} WOR&SR 2014/15, p. 3.
\textsuperscript{22} SR 2014, p. 6.
\textsuperscript{23} As was also the case for the questionnaire for WOR 2014/15, the questionnaire for SR 2014 is not provided in the SR 2014
According to the SR 2014\textsuperscript{24}, peak demand was generally lower than what was predicted in the Summer Outlook Report for 2014 and there were no reports of unusually high demand. Furthermore, the SR 2014 notes the significant amounts of unscheduled flows experienced by the Polish system, in the West to South direction.

2.2 \textit{Availability of retrospect information}

In its Opinions on the WOR&SR 2012/13 and on the WOR&SR 2013/14, the Agency recommended ENTSO-E to collect and publish quantitative information as an element of the review reports. The Agency would like to re-iterate this request noting that priority should be given to the actual weekly peak load levels and to the actual average temperatures and their deviation in relation to the forecasts.

Done at Ljubljana on 23 June 2015.

For the Agency:

\begin{center}
\begin{tabular}{c}
\textbf{Alberto Pototschnig}\\
\textbf{Director}
\end{tabular}
\end{center}

\textsuperscript{24} WOR&SR 2014/15, p. 15.
We appreciate your feedback

Please click on the icon to take a 5’ online survey and provide your feedback about this document