



European coordination

Electricity systems were successfully managed by European TSOs during the solar eclipse

- The solar eclipse caused a maximum decrease of 4.9 GW in the overall solar photovoltaic (PV) production of the most affected countries in Continental Europe.
- In Spain, the partial eclipse has had little impact from the point of view of solar photovoltaic generation.

Madrid, 10 June 2021

Today, the path of the solar eclipse that crossed northern Canada, Greenland and Russia obscured most of the countries of Europe between 10:10 a.m. and 1:45 p.m. CEST and, therefore, European transmission and electricity system operators (TSOs) had previously been working together to prepare for this event with the creation of working groups to coordinate and forecast its possible impacts.

Due to its geographical location, Spain has hardly experienced any variations with respect to solar photovoltaic production during the morning, although the PV infeed in the most affected countries in Continental Europe reached a maximum of 56 GW with the solar eclipse causing a maximum decrease of 4.9 GW in solar photovoltaic generation, in line with the prognosis made by TSOs. On the other hand, the frequency did not show significant deviations from the usual 50 Hertz values. Solar photovoltaic generation was back to normal at 1:45 p.m., after the solar eclipse was over.

Thus, the solar eclipse of 10 June was successfully managed by the TSOs through adequate preparation and coordination in advance. This joint work has served as experience to be better prepared to face new challenges of this nature.

The installed solar photovoltaic power capacity in Continental Europe is currently around 138 GW, which is a substantial increase compared to the 87 GW of installed PV power capacity that existed in 2015, the year of the last solar eclipse in the region.

It is expected that the next solar eclipse, scheduled to occur on 25 October 2022, will have a greater impact on solar photovoltaic generation as it is foreseen that by then there will be a significant increase in new solar PV generation plants in Continental Europe. Thus, TSOs will be able to draw on the lessons learned during the past eclipses, 2015 and that of today, to carefully prepare for the 2022 eclipse.