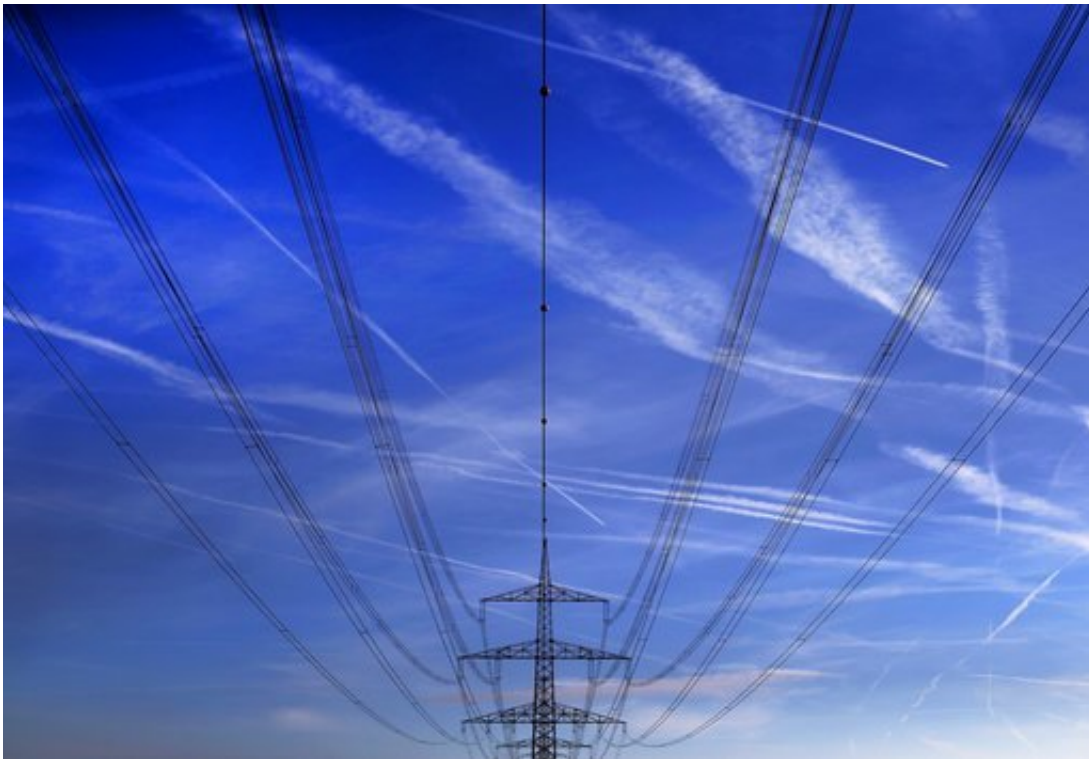


European clocks slowed by lag in continent's power grid

March 7 2018, by Frank Jordans



In this Nov. 1, 2017 file photo high power cables hang from a pole on a field in Hattersheim, Germany. Millions of Europeans who arrived late to work or school Wednesday March 7, 2018 have a good excuse: an unprecedented slowing of the frequency of the continent's electricity grid. The Brussels-based European Network of Transmission System Operators for Electricity, or ENTSO-E, says the problem began mid-January and affects 25 countries, from Portugal to Poland and Greece and Germany. (AP Photo/Michael Probst,file)

Millions of Europeans who arrived late to work or school Wednesday had a good excuse—an unprecedented lag in the continent's electricity grid that's slowing down some clocks.

The problem is caused by a political dispute between Serbia and Kosovo that's sapping a small amount of energy from the local grid, causing a domino effect across the 25-nation network spanning the continent from Portugal to Poland and Greece to Germany.

"Since the European system is interconnected ... when there is an imbalance somewhere the frequency slightly drops," said Claire Camus, a spokeswoman for the European Network of Transmission System Operators for Electricity.

The Brussels-based organization, known as ENTSO-E, said in a separate statement that "this average frequency deviation, that has never happened in any similar way in the Continental European power system, must cease."

The deviation from Europe's standard 50 Hz frequency has been enough to cause electric clocks that keep time by the power system's frequency, rather than built-in quartz crystals, to fall behind by about six minutes since mid-January. The problem mostly affects radio alarms, oven clocks or clocks used to program heating systems.

ENTSO-E said it's working on a technical solution that could bring the system back to normal within "a few weeks," but urged European authorities and national governments to address the political problem at the heart of the issue.

"This is beyond the technical world. Now there needs to be an agreement between Serbia and Kosovo about this lack of energy in the Kosovo system. You need to solve it politically and then technically," Camus told

The Associated Press.

The friction between Serbia and Kosovo is part of a broader dispute that goes back almost 20 years. Since the war in Kosovo ended in 1999, the Serb-dominated north of Kosovo that remains loyal to Belgrade, haven't paid the Kosovo government for the energy they consume.

A 2015 agreement was meant to resolve the dispute, but Serbia has blocked its implementation.

Serbia's power grid company EMS blamed the problem on Kosovo, claiming that in January and February the country "was uninterruptedly withdrawing, in an unauthorized manner, uncontracted electric energy from the Continental Europe synchronous area."

Kadri Kadriu, deputy manager of Kosovo's grid operator KOSTT, acknowledged that electricity from elsewhere was diverted to the Serb minority in the north, but said consumers there hadn't paid for their electricity, causing considerable financial burden to the company.

ENTSO-E warned that "if no solution can be found at political level, a deviation risk could remain."

So far the only consequence seems to be the effect on clocks.

"The system is built in such a way that all your basic needs are really secured by the distribution and the transmission system operators," Camus said. "Frankly, there is no risk other than those clocks running behind."

© 2018 The Associated Press. All rights reserved.

Citation: European clocks slowed by lag in continent's power grid (2018, March 7) retrieved 24

April 2024 from <https://phys.org/news/2018-03-european-clocks-lag-continent-power.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.