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Czech Republic without power: lessons from the blackout

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Following a power system failure around midday on 4 July, the electricity supply was temporarily cut off to approximately one million consumption points in the Czech Republic – roughly one sixth of the total. The blackout affected six of the country's 14 regions, including Prague and three regions bordering Poland: Liberec, Hradec Králové and Olomouc. Production was halted at several major sites, including Škoda Auto in Central Bohemia and the Orlen Group's refinery in Litvínov, Ústí nad Labem Region. Power was restored to most affected areas within six hours, with the remaining faults resolved after ten hours. The national power grid operator, ČEPS, declared a state of emergency, which remained in effect from 12:00 until midnight that day.

The investigation to determine the precise cause of the failure is expected to take several more weeks. However, Prime Minister Petr Fiala has already confirmed that the intelligence services have ruled out a cyberattack. ČEPS management has clarified that the immediate technical cause was the severing of a crucial phase conductor in the Ústí nad Labem Region. This triggered a chain reaction, forcing the ČEZ Ledvice coal-fired power plant, located in the same region, to shut down. Additionally, the transmission network in Central Bohemia became overloaded. Some of the surplus electricity was successfully redirected to Germany, preventing even more serious damage.

Commentary

- **So far, there is no indication that the incident was anything other than a purely technical failure.** However, it has exposed the poor condition of the country's power infrastructure and the inefficiency of its modernisation efforts. The section of the grid where the failure occurred has been overloaded for years. Plans to double its transmission capacity have been in place since 2016, yet, according to the latest schedule, the upgrade was not to be implemented until 2026–28. ČEPS management has attributed the prolonged implementation to lengthy permitting procedures for various stages of investment. As a result, the design phase alone takes an average of 10–12 years in the Czech Republic. Last year, the economist David Marek, a former adviser to President Petr Pavel, estimated that investments required in the energy sector would amount to 50% of Czech GDP; up to one-sixth of these funds should be allocated to modernising and expanding the energy transmission and distribution system. In fact, the urgent need for such investments reflects a Europe-wide challenge associated with ongoing electrification. Finding ways to accelerate and finance these projects is one of the key objectives of the EU's energy policy.

- **Initially, other potential causes of the failure were also considered, including network overload due to excessive energy production from photovoltaic panels, or sabotage.** The first theory, which was already dismissed during the blackout by the Minister of Industry and Trade, was promoted by some right-wing politicians, who drew a comparison with the recent power disruption in Spain. In the run-up to the October elections to the Chamber of Deputies, this line of argument has been used to express opposition to the Green Deal, which remains unpopular in the country (see '*Energy policy in times of war and transition*'). At the same time, however, the problematic section of the grid is indeed burdened by so-called loop flows of surplus renewable energy from northern Germany. Speculation about Russian sabotage, though currently unsupported by any evidence, has emerged in light of previous experiences in both the Czech Republic and other countries in the region. In 2021, the Czech intelligence services concluded that Russian military intelligence was behind an explosion at an ammunition depot in Vrbětice (see '*Russian attacks in the Czech Republic: domestic context, implications, perspectives*'). More recently, Russian links emerged during a Czech police investigation into an arson attack at a bus depot in Prague in June 2024. It is worth noting that the Czech Republic has played a prominent role in providing military and humanitarian assistance to Ukraine, which may make it a natural target for the Kremlin's hybrid warfare operations.
- **The blackout has prompted national media to reflect on various instances of infrastructure neglect.** Such themes are likely to resonate throughout the election campaign. Leading figures in ANO, the party of former Prime Minister Andrej Babiš, which is currently topping the polls, have accused the current government of plunging the country into an 'economic, political, and moral blackout', and have called for a stronger role of 'experts' in governing the country. The Czech Republic has long struggled to deliver large-scale investment projects, such as the expansion of nuclear power plants. It has also faced criticism (for example, from the OECD) for its protracted construction permitting procedures. In this regard, a breakthrough of sorts occurred in 2024, when the country completed 111 kilometres of new motorways – more than in the previous four years combined, and the highest annual total since the breakup of Czechoslovakia. However, the needs remain substantial, spanning transport infrastructure, housing development, and the aforementioned investments in the energy sector.