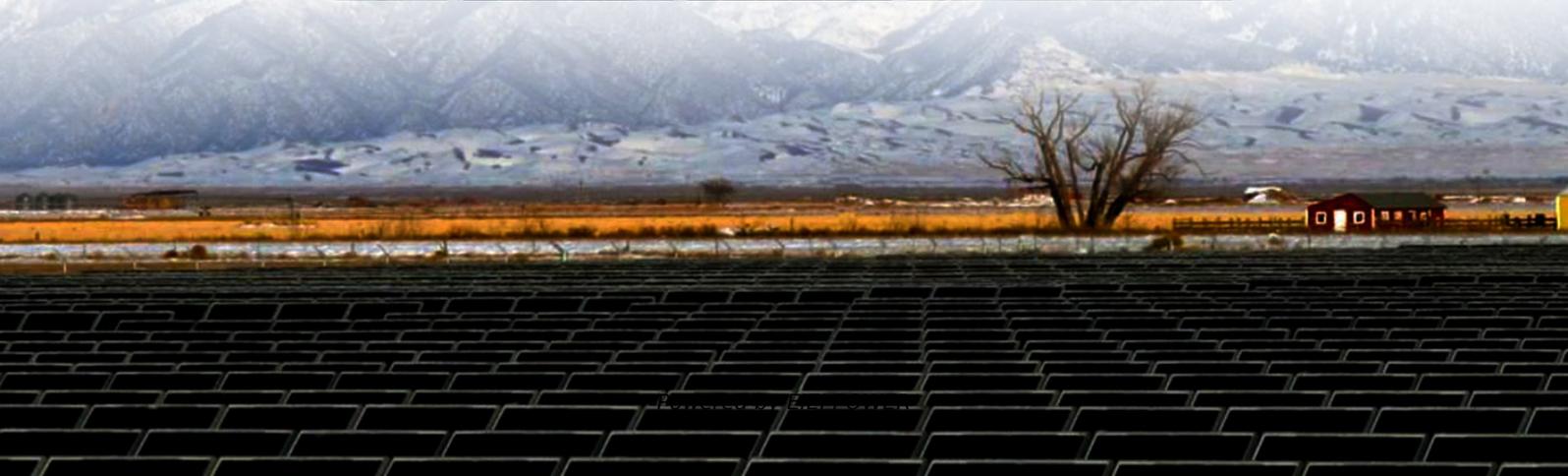


What is the reason for the power outage of 5g base station





Overview

Does 5G increase energy consumption?

5G is the most advanced cellular technology in commercial deployment of our era. While 5G offers much faster speed, massive connections, and much lower latency, and would enable a much bigger variety of new applications for both people's lives and vertical industries, it does increase the energy consumption of cellular networks.

Can network energy saving technologies mitigate 5G energy consumption?

This Technical Report explores how network energy saving technologies, such as carrier shutdown, channel shutdown, symbol shutdown etc., that have emerged since the 4G era, can be leveraged to mitigate 5G energy consumption.

What is 5G NR & how does it work?

The 5G new radio (NR) standard allows more components to switch off or go to sleep when the base station is in idle mode and requires far fewer transmissions of always-on signalling transmissions. Equipment deep sleep, a basic function that is introduced in the initial stage of the 5G deployment, can be applied to maximize energy saving efficiency.

Is 5G enough?

However, it is far away from being enough, as many more new technologies and enhanced technologies need to happen in the 5G era such as equipment deep sleep, L/NR carrier cooperative shutdown, enhanced channel shutdown and symbol aggregation shutdown.



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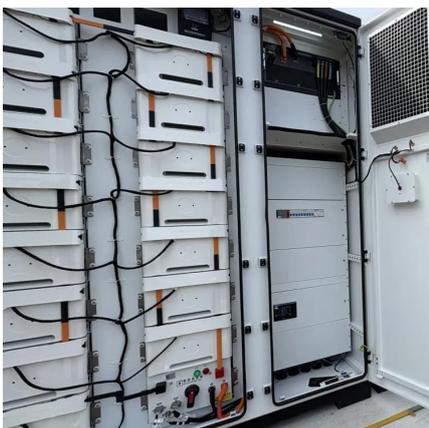


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