How to solve the power problem when the base station is too far away

How to reduce power-intensive base stations?
To address the issue of power-intensive base stations,proposed a combined approach involving base station sleep and spectrum allocation. This approach aims to discover the most efficient operating state and spectrum allocation for SBS to minimize power consumption and network disturbance.

How to reduce the energy consumption of a base station?
So when the inter-cell distance is too large,it is necessary to increase the distance between cells,thus reducing the power consumption of the base station. In the actual network,in order to reduce the energy loss caused by frequent switching,the following two methods can usually be used: increase the distance between cells.

Why does a base station lose a lot of power?
Because switching is a continuous process and the base station is a device that works periodically, the switching loss accounts for a large proportion of the total power consumption of the base station.

How to receive the same power level at a base station?
To receive the same power level at the base station, the mobiles those are closer to the base station should transmit less power than the mobiles which are far away from the mobile base station. In the figure given below, there are two mobile cells A and B. A is closer to the base station and B is far from the base station.

Discover the key factors influencing power consumption in telecom base stations. Optimize energy efficiency and reduce operational costs with our expert insights.

In the wireless communication system of large venues, the signal conflict of multiple base stations will seriously affect the communication quality, and the problem of signal ...

The ONF beam reduces community power fluctuations and increases power by 20 dBm in surrounding areas of the base station (BS).

Forward Link Power Control Similar, to reverse link power control, forward link power control is also necessary to maintain the forward link quality to a specified level. This time, the mobile ...

Abstract. In order to solve high energy consumption caused by massive micro base stations deployed in multi-cells, a joint beamforming and power allocation optimization ...

Power control is essentially needed to solve the near-far problem. The main idea to reduce the near-far problem, is to achieve the same power level received by all mobiles to the ...

The authors in the paper [23] investigated that under the constraints of mobile network

operators" user QoS demands and base station power budgets, an energy-efficient ...

Web: https://stanfashion.pl