

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

We demonstrate that this model achieves good estimation performance, and it is able to capture the benefits of energy saving when dealing with the complexity of multi-carrier base stations architectures.

To further explore the energy-saving potential of 5 G base stations, this paper proposes an energy-saving operation model for 5 G base stations that incorporates communication caching and ...

In today's 5G era, the energy efficiency (EE) of cellular base stations is crucial for sustainable communication. Recognizing this, Mobile Network Operators are actively prioritizing EE for both ...

To enhance the utilization of base station energy storage (BSES), this paper proposes a co-regulation method for distribution network (DN) voltage control, enabling BSES participation in ...

Artificial intelligence (AI) can be used to increase the impact of improved load dependence and power management technologies. There are two sides to the coin regarding ...

Therefore, an energy consumption optimization strategy of 5G BSs considering variable threshold sleep mechanism (ECOS-BS) is proposed in this paper.

As a result, a variety of state-of-the-art power supplies are required to power 5G base station components. Modern FPGAs and processors are built using advanced nanometer processes ...

Due to infrastructural limitations, non-standalone mode deployment of 5G is preferred as compared to standalone mode. To achieve low latency, higher throughput, larger capacity, higher reliability, and ...

Web: <https://kopbeenskloof.co.za>

