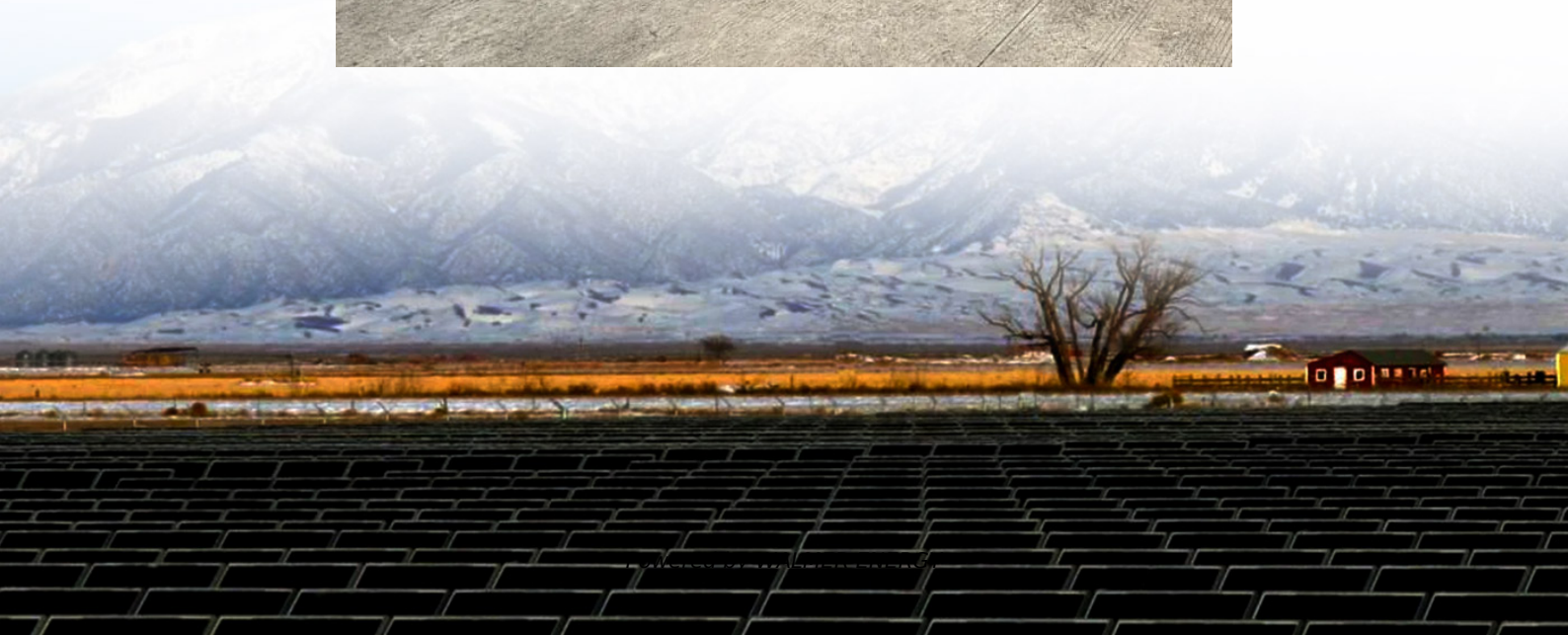


The principles of base station site selection do not include





Overview

Why do we need additional base stations?

Hence, additional base stations (BSs) may be needed to satisfy the new demand. This case addresses the application of dynamic permanent demand for service such as establishing a new residential area over several time periods where new demand clusters are created in each time period as the residential area expands.

How to optimize the location of BSS in wireless communication networks?

Some studies optimize the location of BSs in wireless communication networks through exact solution approaches such as mixed integer linear programs (MILP) and algorithmic approaches , , .

How can a BS be used at a candidate site?

A BS at a candidate site j , $j \in S$, can be used at time period t , $t \in T$, only if candidate site j , $j \in S$, is selected to have a BS constructed at it. Such set of constraints can be expressed by (4): $(4) \sum_{l=1}^L z_{jl} \geq y_{jt}, \forall j \in S, t \in T$.

Can BSS serve mobile users in a given geographical area?

The proposed optimization model for locating BSs to serve mobile users in a given geographical area is presented in Section 3. In Section 4, experimental results are provided for two scenarios that cover Cases A and B. Finally, concluding remarks with possible future extensions are provided in Section 5.



The principles of base station site selection do not include

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base station

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Part 1: site selection Planning

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