Abstract

In this paper we explore the competing issues of coverage effectiveness and power accessible in wireless sensor networks. Nonstop capacity increase of distributed grid-connected system produces more obvious disturbance on the grid. The Monitoring network technology can run protection for the safety and stability of power grid operation, but sensor nodes of the monitoring network will fall to failure due to conservation interference. According to the performance degradation problem produced by nodes failure monitoring network, of natural selection based on random weight is proposed in this paper to optimize monitoring performance can restore the monitoring network by moving redundant nodes. Simulation results show the effectiveness of the proposed algorithm. Our lower energy shifting propagation-loss model comprises with path loss function with random distributed shadowing, independent across with base stations. Our results are valid in the whole estate of ECOSR (Energy coverage overlap sensing ratio), in particular for ECOSR.

References

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**Index Terms**

Computer Science  
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**Keywords**

Wireless sensor network; Coverage; Heterogeneous nodes; Stable election protocol.