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The penetration of renewable sources (particularly wind power) into the power system network has been increasing in recent years. As a result of this, there have been serious concerns over reliable and satisfactory operation of the power systems. One of the solutions being proposed to improve the reliability and performance of these systems is to integrate energy storage devices into the power system network. Further, in the present deregulated markets, these storage devices could also be used to increase the profit margins of wind farm owners and even provide arbitrage. This paper discusses the present status of battery energy storage technology and methods of assessing their economic viability and impact on power system operation. Further, a discussion on the role of battery storage systems of electric hybrid vehicles in power system storage technologies has been made. Finally, the paper suggests a likely future outlook for the battery technologies and the electric hybrid vehicles in the context of power system applications.

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