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What are redox flow batteries?
Redox flow batteries (RFB) are considered one of the most promising electrochemical energy storage technologies for stationary storage applications,especially for long duration energy storage services. RFBs are electrochemical energy converters that use flowing media as or with active materials,where the electrochemical reactions can be reversed.

Are iron-based aqueous redox flow batteries the future of energy storage?
The rapid advancement of flow batteries offers a promising pathway to addressing global energy and environmental challenges. Among them,iron-based aqueous redox flow batteries (ARFBs) are a compelling choice for future energy storage systemsdue to their excellent safety,cost-effectiveness and scalability.

Are aqueous iron-based flow batteries suitable for large-scale energy storage applications?
Thus,the cost-effective aqueous iron-based flow batteries hold the greatest potentialfor large-scale energy storage application.

Are zinc-bromine flow batteries suitable for industrial applications?
Their relatively long cycle life,scalability,and stable performance make them suitable for applications requiring large-scale and long-duration energy storage (255). The zinc-bromine flow batteries have been studied and considered for their potential use in industrial applications.

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