

Energy storage policy on the power generation side and the grid side





Overview

Traditional energy grid designs marginalize the value of information and energy storage, but a truly dynamic power grid requires both. The authors support defining energy storage as a distinct asset class.

Is energy storage a distinct asset class within the electric grid system?

The authors support defining energy storage as a distinct asset class within the electric grid system, supported with effective regulatory and financial policies for development and deployment within a storage-based smart grid system in which storage is placed in a central role.

What role does energy storage play in a smart grid?

Asset class position and role of energy storage within the smart grid As utility networks are transformed into smart grids, interest in energy storage systems is increasing within the context of aging generation assets, heightening renewable energy penetration, and more distributed sources of generation .

How do grid operators use energy storage?

Currently, grid operators would use strategies, such as back-casting (using historical data to predict economically desirable deployment schedules) to apply energy storage. This strategy does not completely capture arbitrage value due to near time weather and usage variations (only 85%) .

Which SOE restructured the electricity grid?

the electricity grid was restructured into two SOEs: The State Grid Corporation and The China Southern Power Grid. State Grid Corporation accounts for 80% of electricity transmission, while China Southern Power Grid accounts for the southern half of China (Sandalow et al,



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Planning of New Energy Storage on the Grid Side ...

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Energy storage on the electric grid , Deloitte Insights

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Energy storage

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Smart grid and energy storage: Policy recommendations

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electric grid system, supported with effective regulatory and financial policies for development ...

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