

A materials-based assessment of distribution-level grid energy storage

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Technology of interest:



- 25 kW power capability
- 25 – 75 kWh energy capacity
- Li-ion chemistry

Research objectives:

- Model the performance and degradation of various Li-ion battery chemistries
- Analyze the value of community energy storage operating as a “virtual power plant”
- Employ a bottom-up cost model for lithium-ion battery systems
- Assess the cost-benefit tradeoffs of distributed, Li-ion grid energy storage.



Fundamental material properties determine cost-benefit tradeoffs

