

Aging aware operation of lithium-ion battery energy storage systems: A review

In this review, we provide an overview of relevant aging mechanisms as well as degradation modeling approaches and deduce the key aspects from the state of the art in those topics for BESS operation. Following that, we review and categorize methods that aim to increase BESS lifetime by accounting for battery degradation effects in the operation strategy. Highlights:

- Overview of relevant aging mechanisms, aging stress factors, and degradation models.
- Review of methods for accounting for degradation in the operation strategy.
- Tabular overview of publications in the field of aging aware BESS operation.
- A case study reveals the most relevant aging stress factors for key applications.

