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**Innovations in Power Electronics & Renewable Energy**

**Usage of SMA Large Scale with Grid Forming, Technical Discussion**

**שימושים בגריד פורמינג עם ממירי ,SMAדיון טכני**

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Operators of battery plants are looking for possibilities to use new feature and functionalities to cover multiple use cases with storage inverters. Grid Forming Converters (GFMs) have attract-ed significant interests for supporting future system operability due to their enhanced proper-ties compared with Grid Following convertors (GFLs). This paper will present the capability of GFMs method solution with SCS (Sunny Central Storage of company SMA) for multiple use cases in utility scale application.

Traditional use cases like arbitrage, energy shifting, peak shaving, will be accompanied by grid supporting functionalities like inertia, system strength increase and fault current level increase.



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