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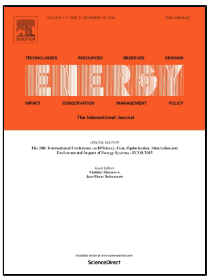

A Novel Fuzzy Control Algorithm for Reducing the Peak Demands using Energy Storage System

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Highlight

1. The maximum demand charges can be as high as 30 % of the total electricity bill.
2. The uncertainty of the load demand creates the difficulties for BESS to reduce the peaks.
3. The fuzzy-controlled BESS constantly adjusts its power output based on latest load demand.
4. The fuzzy-controlled BESS improves the success rate of the peak reductions.
5. The fuzzy-controlled BESS can reduce peaks even under the limited capacity of BESS.