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(57) Abstract :

The gravity battery is an energy storage system that utilizes gravitational potential energy to store and retrieve electricity. The system includes heavy weights suspended on a lifting mechanism powered by a dynamo motor and gear motor. When surplus electricity is available, the weights are lifted to store potential energy. During periods of high energy demand, the weights are allowed to descend, driving a turbine or generator to produce electricity. Additional components, including PVC pipes, fan blades, LED bulbs, and a 10-core wire, support the structural integrity, cooling, and control of the system. This innovative approach provides a scalable, durable, and sustainable solution for energy storage and grid stability.

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