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Gravity Based Energy Storage System

Abhishek Bombatkar¹, Sahil Gawande², Shivam Mapari³

B.E. Students, Department of Mechanical Engineering^{1,2,3} Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India

Abstract: We are directly reliant on electrical energy as humans. The consumption of electrical energy is increasing every day. We have been generating electrical energy from fossil fuels, but the resources are depleting due to the increasing demand of the industrial revolution and commercial needs, and will be gone one day. As a result, we must transition to more feasible and sustainable energy sources. This problem cannot be completely solved with present battery technology. Our research is based on the concept of storing electrical energy as potential energy by harnessing gravitational energy. The research will focus on a newly created alternative power source that uses gravitational force. A natural force that is reasonably steady and abundant across the planet's surface. The project will demonstrate the potential of gravity as a renewable energy source, as well as its limitations in terms of quantity and quality of power. The goal of this project is to design and build a small gravity-powered generator that can supply power for a set period of time. A suspended mass will be used in the design, which will descend at a slow steady pace while generating electricity.

Keywords: Electrical Energy

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