

# Gravity Based Power Generation

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**Abstract** - Conserving energy has become the biggest issue in the scenario. Due to the development and modernization, the electricity demand is increasing to a high extent. To fulfil this demand globally which is without any harmful effect on the environment is possible by using gravity-based power generation. There are many energies around us like solar power, wind energy, tidal energy, hydro energy, thermal energy, gravity energy. And during this project, we are employing gravitational energy to get electric energy. With the assistance of this energy, we will generate power for light loads like street lamps in colonies because of an outage of power. This power is reliable compare to solar energy we'd like to store that power and this power can access any time anywhere like lift, on the terrace of the building. The basic concept of using gravity base power generation mechanism is when a body moves from higher altitude to lower one its potential energy is converted into kinetic energy. This motion is converted into circular motion and this motion is converted into electrical energy.

**Key Words:** Power Generation, Gravity base power generation, pulley base power generation

## 1. INTRODUCTION

This document is template. We ask that authors follow some simple guidelines. In essence, we ask you to make your paper look exactly Nowadays due to the effect of pollution and global warming, there is a need for generating power from renewable sources. Due to the availability of gravity all over the earth, abundance, and consistent it is very suitable for generating electric power from gravity. Energy demand is increasing day by day with rapid growth in industrialization as well as modernization. But the energy resources are gradually decreasing day by day. Within a few years, the energy resources will be finished and hence there will be a lack of fuel for power generation. The other renewable source such as solar, wind, biomass, etc is available only for a particular duration of time during the day and night. Therefore, gravity base power generation is one of the methods to generate power which will fulfil the energy demand for the day to day usage

It is possible to deflect gravitational action away from an object so that the object partially deviates. That effect makes it possible to extract energy from the

gravitational field, which makes the generation of gravitational electric power technology feasible.

The gravitational electric power plant has an advantage over the hydro-electric power plant, such as not needing fuel and not polluting the environment. However, the gravity base power plant is much smaller than other plants. The location of the plant is not restricted it can be set at any location because gravity power is everywhere over the earth.

## 2. Literature survey:

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

In the year 1665 which was exceptionally productive year a question raised before Sir Issac Newton what is the force that creates this speeding up? Along this line this constrain pull this object towards focus of the world was discovered and clothed to be, name as, Gravitational drive. Sir Issac Newton had found the marvel of gravity around 350 years back.

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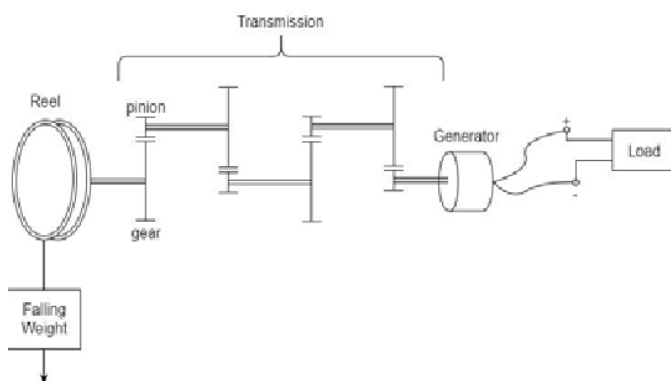
London inquired about Martin Riddiford and Jim Reeves who have put in four years of making gravity light as a disconnected venture they're utilizing attempted and tried fabricated who has the right fabricate who has the correct learning to form gravity light. Gravity light is that the progressive way to deal with putting away viability and making the brightening. It takes just three seconds to lift the load which powers a gravity light, making half-hour light on its drop.

In this idea, more disentangled component is utilizing for the era of the power. The essential target of development is to administer gravity control era system which provides a persistent and stable operation to consistent change over gravity potential vitality into a dynamic vitality and after then to alter over the motor vitality into electrical vitality, Chunchao wang was clearly formulated a component whereby static gravitational attraction will be tackle to form a valuable vitality. He has work for the while creating and testing gravity-controlled gadgets and he has been exceptionally effective in his work. His different plans rely on the rule of thumb of weight to be joined on the haggles for those weight to be balance outward when falling and counter balance inward when rising. because to the distinctive lever arms include, that provides a drive irregularity which cause the wheel to show ceaselessly and if the weights are of an intensive size, then the revolution is intense and can be utilize to product electrical vitality.

### 3. Methodology:

There is different experimental methodology to generate power from gravitational force. In this paper we are basically explain about pin wheel mechanism. The mechanism is use as the gravity engines as extent below the harness electricity. The apparatus consists of the crank and pin arrangement bearing variable load and supporting stand. The arrangement of pulley in such a way that the diameter of upper pull is large as compare to bottom pulley and this pulley are arrange in vertical plane.

Variable loads are mounted on the belt as shown in fig. 1 and this are mounted on the two-variable pulley by using nut and bolts. For the generation of electricity, a mini dc generator is use which is connected to the fly wheel through pinion and this fly wheel are attach to the bottom flywheel.



### 3.1. Pulley:

In reality, a pulley is a “wheel on an axle or shaft that is designed to support movement and change direction of taut cable or belt or transfer of power between the shaft and the cable or belt. so, all pulleys require three things to function as

anything other than a fashionable paperweight. Or transfer of power between the shaft and the cable. In case of pulley supported by a frame or shell that does not transfer power to the shaft but is used to guide the cable and exert a force the supporting shell is called block and the pulley may be called the sheave

### 3.2. Weighted load:

The straightforward gravity pendulum is an admired scientific model of a pendulum. This is a weight on the end of a massless line suspended from a turn, without grating. At the points when given an underlying push it will swing forward and backward at consistent abundance. It associated with the supporting edge and the pendulum weave comprises non-attractive material and has great rigidity to manage the weight constantly the ideal opportunity for one entire cycle is known as the period. The period relies on the length of the pendulum.

### 3.3. Supporting frames:

It is a non-attractive material to bolster the generator and the electric circuit gets together. At the focal point of the supporting edge, the pendulum is connected. Magnet is settled on both sides of the edge. The one side of the supporting frame is resembled the “L” shape where and associating pole is connected.

### 3.4. Wheels:

A bike wheel is a wheel, most normally a wire wheel, intended for a bike. A couple is frequently called a wheelset, particularly with regards to prepared worked “off the rack” execution arranged wheel. Bike wheel is commonly intended to fit into the edge and fork by means of dropouts, and hold bike tries. An ordinary cutting-edge wheel has a metal center point, wire stain spokes, and a metal or carbon fibre edge which holds a pneumatic elastic tire.

### 3.5. Low RPM Generator:

Low rpm generator delivers control at low transmission ever moment. A low rpm generator once utilize gives the year of utilization. These generator gives higher proficiency as well as have ease, low rpm generator is utilized in light of the fact that they give an exceptionally solid power yield as they work at less speed which primps to less wear and tear of the different piece of generators. The rpm of the generator is around 50-100 rpm at a little size, the speed of the generator can increment greater size of uniting but apparatus framework, similar to the wind turbine.

### 3.6. LED:

A light- radiating diode (LED) is a semiconductor light source. LEDs are utilized as marker light as a part of underground gadgets and are progressively utilized for another lighting. Showing up as down to earth electronic segments in 1962, early LEDs radiated low force red light, however current vagrants are accessible over the noticeable, bright, and infrared wavelength, with high splendour.

### 3.7. Future scope:

Whether a developing nation with ambitions of economic growth or an industrialized region moving towards a low carbon economy, the challenges of future electricity production are shared. Therefore, an attempt is made to generate electricity with an eco-friendly concept using gravity. The shown prototype is a simple one that generates little voltage. Researches are being carried out to make improvements to this idea. The major cost involved in this project is with the PMDC generator. It can be made economical by minimizing the generator cost. Large scale production can be achieved using this knowledge.

### 3.8. Conclusion:

Gravitational essentialness is the imperativeness where a question has dropping advancement as an aftereffect of its weight in a gravitational field. The most surely understood use of gravitational potential essentialness is for a dissent near the surface of the earth where the gravitational potential essentialness is for a dissent near the surface of the earth where the gravitational stimulating can be thought to be picked at any point (like the choice of the zero of an encourage structure), the potential essentialness at a height over that demonstrate is proportionate the work which would be required to lift the dissent that stature with no net change in dynamic essentialness. Since the oblige required to lift it is proportionate to its weight, it takes after that the gravitational potential imperativeness is comparable to its weight times the stature to which it is lifted

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