

Energy and potential



Energy and potential Potential energy is energy responsible for configuration. An object is responsible for performing its function which may be as a result of the electric potential field. The creation of magnetic fields occurs when there is a flow in electric currents. The strength of this magnetic field is measured by the greater volume of current. It has been evidently stated that this field is normally present in our own environment but cannot be observed with our naked eyes. This points out that they occur as a result of the electric build up charges available in the atmosphere which may occur as a result of thunderstorms (Shadowitz 49-51). Despite the natural occurrence in the electromagnetic field, there are also human made forces for instance, the use of X-rays in hospitals. When an individual subjects an object to function he employs energy in order for the function to take place. In this connection, we can deduce that the interaction of electric and magnetic field produces a strong magnetic field (Viegas 34).

It has been estimated that the electric fields act in a similar way as gravitation field. In this case, they have to involve action at a force distance. According to Newman (56-59), he noted that gravity force is a conservative force that is capable of moving an object. In a case where gravity is unable to move an object their needs to be application of energy which may impact on potential energy. Object vertical position enables the preservation of potential energy inside the object (Giordano 71-73). The position may be lost when object moves against the rule of gravitation. This calls upon the need for other energy forces to act on an object in order to perform its function. This kind of energy comes in form of work through exerting pressure in an object so as to enhance movement. In regard to this, work is done in a view to gain upon its potential energy. In this case we should note that we cannot

rely on the gravitational force but also rely on external force which works on the object. objects are capable of moving from high level to low level energy but in case of moving an object from low level energy to high level energy there is need to apply the use of force which is done as a form of work (Newman 77).

This case is similar in an electric field, a case which requires a charge to be moved against the natural direction. There will be need to employ energy through work. When work is applied it means that there would be an addition of potential energy upon the acted object. This natural direction takes the place from high to low energy level (Brooks-Cole and Bromly 64). When acting against nature, work would not be essential to move the object from high energy level to low in an electrical field. Moving a positive charge towards a positive charge requires work to achieve this purpose because it will be going against nature. A motion that moves from positive to negative will not require any kind of work for it to move (Shadowitz 112-114). This positive charge would in this case result into potential energy as a result of motion. In this case the principles regarding work of potential energy should be written in relation to the electrical field. In this case, moving a positive charge in the opposite direction of the electric field will automatically require work which will eventually lead to additional gain in potential energy. This relates to other positive charge which will naturally move without need of force.

Works Cited

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