

“GREEN POWER STORAGE AND GENERATION BY LIQUID NITROGEN”

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A Project Report
submitted in partial fulfilment of the requirements
for the award of the Degree of Bachelor of
Engineering in Electrical & Electronics Engineering
Of the Visveswaraya Technological University, Belgaum

Submitted by

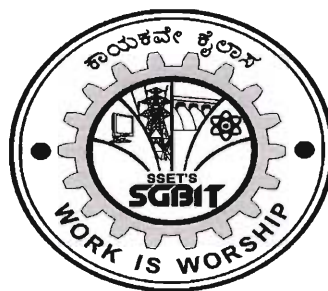
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2012-2013

ABSTRACT

Construction of new large power generating plants is not keeping pace with growing electricity demand in the developing and developed countries. At the same time, customer demand for even more highly reliable power is growing across the nation. Even if a sufficient number of new generating plants were built, the country's aging transmission and distribution systems are unlikely to reliably deliver the increased power supply that is needed. Moreover, the cost of the upgrades required to enable today's power system to deliver the level of reliability being demanded is far in excess of what society has so far been willing to bear. So there is a need to store the electrical power.

When comes to storage, the first area which has to be concerned is wind power. Wind energy is available abundantly in our country but there is no proper storage facility to store wind power and make effective use of wind energy that is available at the wrong time i.e. at the night time. The major challenge to using wind as a source of power is that it is intermittent and does not always blow when electricity is needed. Wind cannot be stored (although wind-generated electricity can be stored, if batteries are used), and not all winds can be harnessed to meet the timing of electricity demands. Further, good wind sites are often located in remote locations far from areas of electric power demand (such as cities). This liquid nitrogen method will be effective method for saving wind energy and storing it.