

Abstract:

The DC generators find much utilization in the devices that are used in application systems. This article describes the new voltage control of DC generators based on load characteristic. The DC generator load characteristic is important to identify the DC generator ability to provide the suitable load current. This paper proposed the performance of load characteristic of self-excited DC generator with the condition of voltage build up. The proposal allows for improvement of the more important factor in generation process which results in the voltage drop due to the losses and armature reaction. The field resistance, critical speed, and residual flux are very important factors in voltage build up process.