

## عنوان مقاله:

Optimal allocation of distributed generation using an analytical method with consideration of technical and economic parameters

## محل انتشار:

فصلنامه پژوهش در علوم، مهندسی و تکنولوژی، دوره 3، شماره 1 (سال: 1394)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

In order to benefit maximally from positive features of Distributed Generation (DG) supplies, the finding of location (siting), and determination of optimal capacity of these supplies are inevitable in power distribution networks so that the researches indicate that if this important process is not considered in installation of DG supplies, not only the given positive goals and features are not fulfilled in installation of DG supplies, but also it is probably led to the worse status in installation of power supplies than the past as well. As a result, determination of optimal size and position of power distributed generation supplies is assumed as an important point. An analytical technique has been proposed in this essay for siting and sizing of DG supplies. Technical and economic aspects have been simultaneously considered in the aforesaid method and it is aimed at maximization of profit due to installation of these supplies. Initially, all parameters have been expressed as a function of DG power and then the optimal siting and sizing of DG is determined by employing the suggested method. The studied supplies are of wind and solar types. Simulations are implemented in MATLAB software and the studied systems include IEEE standard 33 and 69- bus networks

## کلمات کلیدی:

Distributed Generation Supply, Losses, Economic Parameters, Technical Parameters, Voltage Profile, Siting

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/406315>

