

## عنوان مقاله:

DSTATCOM allocation considering network reconfiguration using combination of BB-BC and GA algorithms (GA-BB-BC)

## محل انتشار:

بیست و هشتمین کنفرانس بین المللی برق (سال: 1392)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

One of the appropriate and low cost ways in order to reduce losses and improve voltage profile is distribution network reconfiguration. In the distribution network reconfiguration we are looking for a structure of network that obtains goals such as lower losses and better voltage profile. Recently Distribution FACTS (DFACTS) devices such as DSTATCOM also have been planned for loss reduction and voltage profile improvement. In this paper distribution network reconfiguration and DSTATCOM placement has been studied to losses reduction, simultaneously and individually. For solution the DSTATCOM placement and reconfiguration problem, BB-BC algorithm and GA have been used, respectively. Also for solving the DSTATCOM placement and reconfiguration simultaneously, combination of BB-BC and GA algorithm (GA-BB-BC) has been used and compared with ordinary GA and Differential Evolutionary (DE) algorithm. Simulations have been applied on 33 and 69 busses distribution test systems. All optimization results show more effectiveness of the simultaneous way than individual way and show better resolves from GA-BB-BC algorithm than GA and DE algorithm

## کلمات کلیدی:

distribution network reconfiguration, DSTATCOM placement, losses reduction, BB-BC algorithm, GA, losses reduction

## لینک ثابت مقاله در پایگاه سیویلیکا:

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