عنوان مقاله:

GENERALIZED FIRST AND SECOND ORDER TECHNIQUES IN OPTIMALI PO WER FL 0 W SOL UTION

محل انتشار:

یازدهمین کنفرانس بین المللی برق (سال: 1375)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

In the early 1960's the only optimal power flow (OPF) solution algorithm available was of Gauss-Seidel type. As the demand for security, reliability and efficiency of the power system increased, more researches were done on the development of various algorithms and solution methods for optimal power flow. Some of them developed with the adjustment of all the state and control variables in the system and others only the control variables and some of the techniques used first order form of the Tailor's series and others the second order or the modifications of them in their analytical formulations. This paper describes solution procedures of OPF solution by the first order Gradient Projection Method (GPM) and the second order Newton approach (NA) with the adjustment of all the state and control variables of the system. The analytical formulations used for minimizing the transmission and distribution system losses applied to a large number of systems satisfying the physical and operational limits of the system and its variables and the comparative results presented.

کلمات کلیدی: