

عنوان مقاله:

A Novel Method for Calculating LOLP and Correcting LMP of the Corresponding Bus Using Network Graph

محل انتشار:

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خلاصه مقاله:

Security and reliability are two important challenges in restructured power networks. Because of different loss of load probability in different buses, it is fair to change the prices customers pay, regarding their loss of load probability (LOLP). Various factors are used in Power systems to calculate reliability. In this paper, using network graph and concept of common, first we calculate LOLP factor for each bus and then locational marginal price (LMP) is calculated for each bus using LOLP. This method is applied to a simple 5-bus network to better explain the principles. Also a 24-bus RTS network is investigated and the results for both conditions whether all lines are accessible or there is loss of line probability are presented in this paper.

کلمات کلیدی:

Reliability, Loss of load probability (LOLP), locational marginal price (LMP), Network Graph

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