

Dynamic Economic Load Dispatch Using Quadratic Programming: Application to Algerian Electrical Network

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Abstract : This paper presents a comparative analysis study of an efficient and reliable quadratic programming (QP) to solve economic load dispatch (ELD) problem with considering transmission losses in a power system. The proposed QP method takes care of different unit and system constraints to find optimal solution. To validate the effectiveness of the proposed QP solution, simulations have been performed using Algerian test system. Results obtained with the QP method have been compared with other existing relevant approaches available in literatures. Experimental results show a proficiency of the QP method over other existing techniques in terms of robustness and its optimal search.

Keywords : economic dispatch, quadratic programming, Algerian network, dynamic load

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