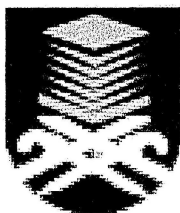


LOAD FLOW STUDY BETWEEN COMPARISON NEWTON RAPHSON LOAD FLOW METHOD AND FAST DECOUPLED LOAD FLOW METHOD

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ABSTRACT

This paper presents the load flow study between comparison Newton Raphson Method and Fast Decoupled Method in order to find a power flow solution at its bifurcation point. The Newton Raphson and Fast Decoupled power flow method are presented for the solution of nonlinear algebraic equation. These techniques are employed in the solution of load flow problem. The conventional Newton's Method was found to be inadequate to obtain the maximum loading point (MLP) or critical point of the power system due to the Jacobian matrix singularity. This problem can be compare by using both method of power flow, which remains well condition at the saddle node bifurcation point due to the convergence of load flow. The method of power flow program is developed using MATLAB programming language base on algorithm of continuation power flow (CPF) technique, which can compute efficiently the parameter at saddle node bifurcation point. A small test system is used for the implementation of this technique and another medium test system is also used for verification of the program used.

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