



**LAGRANGIAN RELAXATION METHOD TO SOLVE ECONOMIC
DISPATCH OF COGENERATION SYSTEM**

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ABSTRACT

This thesis studies an alternative approach to improve the economic power dispatch on operation of the power system. This thesis presents the solution of cogeneration system solved in order to minimize the cost of cogeneration based on Lagrangian Relaxation technique. The proposed method has been applied to a system consisting of thermal unit and one combined cycle cogeneration unit. The results shows that the cost of system can be minimized by reducing the system losses and considered maximum output generated by each cogeneration with certain value of load.

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