

**ANALYTICAL SOLUTION FOR COMBINED ECONOMIC AND
EMISSION DISPATCH**

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ABSTRACT

In power systems, economic dispatch is the most important issue to be considered. In recent years, the economic dispatch problem does not only emphasize on cost reduction but also reducing the emission. This thesis presents an analytical solution to solve the Combination of Economic and Emission Dispatch (CEED) problem. The analytical strategy based on mathematical modelling is developed using MATLAB to solve the CEED problem. This approach is tested on a system which consists of six generating units. The solutions obtained are able to solve the CEED problem with minimum cost and emission.

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