

## **Optimization of hydrocarbon fuels combustion variable composition in thermal power plants**

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### **Abstract**

It is known that associated petroleum gas and refinery waste can be used as fuel in thermal power plants. However, random changes in the composition of such fuels cause instability of the combustion process. This article explores the burning of hydrocarbon fuel in the case of long continuous change of its specific heat of combustion. The results of analysis were used to develop a technique of optimizing the combustion process, ensuring complete combustion of the fuel and its minimum flow.

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