

## **EFFECTIVENESS OF OPERATION OF ORC INSTALLATION APPLIED IN THE LNG RE-GASIFICATION PLANT**

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### **Abstract**

In the paper presented is the analysis of operation of ORC installation heated by means of the low-temperature heat source, in which condenser of the working fluid is cooled by the liquid having ultra-low temperature. For that purpose the process of re-gasification of liquid natural gas (LNG) has been considered. In the process the heat of condensation of the working fluid in ORC is taken up by the natural gas which subsequently evaporates (undergoes re-gasification). In the paper presented and discussed is the schematic of such installation, its application as well as presented are the results of calculations which formed the basis for the subsequent effectiveness analysis in terms of power and efficiency. In the analysis considered have been selected organic fluids used in the ORC as working fluids.