

Annotation

In this thesis, a feasibility study of the construction of a CCGT in the conditions of the city of Kostanay is proposed. In our time, the issue of ecology is acute and due to this, the combined-cycle gas installation is very relevant. The combined-cycle gas plant is much more environmentally friendly than the current solid-fuel CHP plants, since the CCGT uses natural gas as fuel. By itself, the climate of the city of Kostanay is severe and in winter the air temperature can reach up to -40 oC. Therefore, the construction of a new CCGT in this city takes place.

In the thesis, the thermal calculation of the CCGT, economic calculations and the calculation of life safety were carried out.