

## **Annotation**

The diploma project addresses the issues of modernization of CHP-3 of JSC "AIES". In the theoretical part of the work, an assessment of the existing state of CHP-3 was carried out, and the main problems of the station were identified. Possible directions of modernization and new construction are considered. Technical solutions for the modernization of CHP-3 according to the scheme of CCGT CHP are proposed. Much attention was paid to the problem of emissions of harmful substances into the atmosphere and the problem of storing ash and slag waste. In the computational part, the calculations of the thermal scheme of the CCGT CHP and the assessment of the technical and economic indicators after the modernization were performed. The issues of modernization economics are considered