

Annotation

The topic of the thesis is “Feasibility Study for the Construction of a 1800-MW Condensation Power Plant with K-300-240LMZ Blocks”. The work includes an introduction, which briefly describes the relevance, purpose and objectives of the project, as well as the state of the energy sector in the country and the main prerequisites for the implementation of this project. The description of the K-300-240LMZ turbine, calculation of the heat circuit, construction of the h-s diagram, determination of the proportion of selections from the equations of thermal balances of regenerative heaters, the choice of the main and auxiliary equipment of the unit are given. A special question is presented, which includes an assessment of the economic effect when installing frequency converters on the main cycle pumps. The issues of Life safety sector cover: analysis of working conditions at the station, noise and lighting calculations. The economic section contains calculations of the feasibility of capital investments in construction, costing and investment indicators of the proposed project.

