MODELING AND APPROXIMATION OF PERFORMANCE CHARACTERISTICS OF PUMPING AND POWER UNITS OF A PUMPING STATION OF A MAIN PIPELINE IN A CITY WATER SUPPLY NETWORK

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Annotation. In the presented article, the problem of qualitative modeling and polynomial approximation of the operating characteristics of pumps of a pumping station (PS) of extended pipelines of a city water supply network is solved. The solution of this problem is a necessary and important element of the urgent problem of the optimal choice of the type and number of pumping and power units, which ensures a decrease in the cost of the pumping unit and energy consumption when the amount of water is supplied to the pipeline in a set range.

Keywords: pumping station, city water supply network, main pipeline, minimization of energy consumption and overconsumption of water, main operating characteristics of pumping and power units, mathematical modeling, approximation

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