Semenova, O. V.

An optimal threshold control for a $BMAP/SM/1$ system with map disaster flow. (English. Russian original) Zbl 1081.90021

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Summary: A $BMAP/SM/1$ queueing system with two operation modes, a Markov disaster flow, and a modified threshold control strategy is studied. The stationary state probability distribution of the imbedded Markov chain is determined. An algorithm for finding the optimal modified threshold control strategy for the system is designed.

MSC:

90B22 Queues and service in operations research
60K25 Queueing theory (aspects of probability theory)

Keywords:

continuous-time Markov chain; customer service times; semi-Markov process; Neuts condition; Lucantoni-Neuts condition

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