

# Switching on and off the full capacity of an $M/M/\infty$ queue

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This paper studies optimal switching on and off the  $M/M/\infty$  queue with holding, running and switching costs. The main result is that an optimal policy either always runs the system or is defined by two thresholds  $M$  and  $N$ , such that the system is switched on upon an arrival epoch when the system size accumulates to  $N$  and it is switched off upon a departure epoch when the system size decreases to  $M$ .

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