SEQUENTIAL STAFFING IN CALL CENTERS WITH PARAMETER UNCERTAINTY

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We consider staffing agents in which an initial forecast of the call volume is given at the beginning of the day. After an observation period, the manager has the ability to update the staffing level based on a revised forecast. The manager operates under QoS constraints which can be very general. The resulting problem is formulated as a two-stage stochastic program. When utilization is the metric, the resulting solution can be written in a closed form analogous to a newsvendor solution.