A logistics company needs to schedule three trucks daily to transport goods and meet customer demand across different time periods. Each truck has startup and transportation costs. The customer demand for the four time periods is [1,500 kg, 2,000 kg, 1,800 kg, 1,000 kg]. The company must follow these operating rules:

First, trucks have minimum runtime and cooldown requirements. Once a truck is started, it must run continuously for at least 2 hours before being shut down. If turned off, it must remain idle for 1 hour before restarting. Second, there are limits on load fluctuations between consecutive time periods. The change in transported weight between two adjacent periods cannot exceed 200 kg. Additionally, the company must always maintain a 20% spare capacity buffer for emergency orders. This means the total transported weight across all trucks must not exceed 80% of their combined maximum capacity.

The goal is to find the lowest-cost scheduling solution that meets all the above constraints while fulfilling customer demand. Costs include truck startup and transportation expenses.

Specifically, in each time period, the total transported weight from all active trucks must exactly match customer demand, while the unused capacity (the difference between maximum possible load and actual transported weight) must remain at least 20% of total capacity. If a truck is running in a given period, its load must be between zero and its maximum capacity; if inactive, its load must be zero.