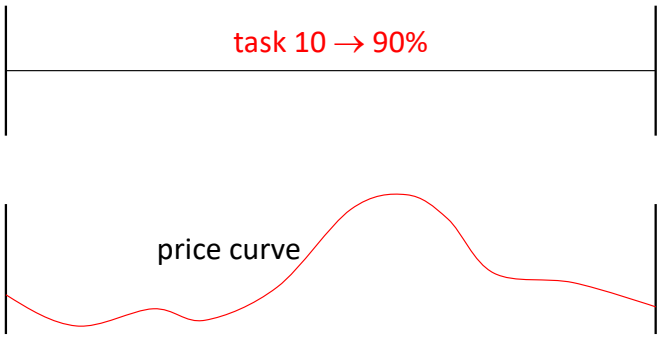
Price optimization

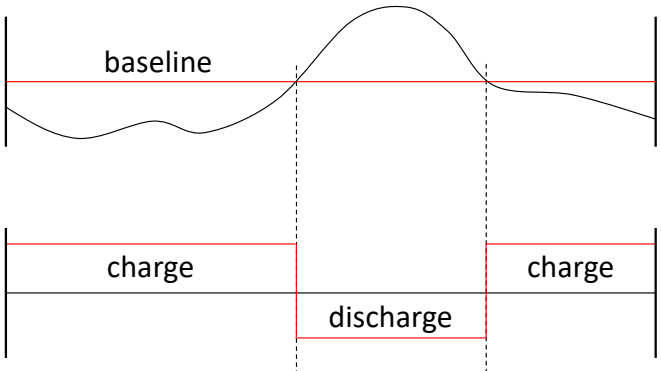
1



Given is the task to (dis)charge, e.g. from 10 to 90%, over a certain time period.

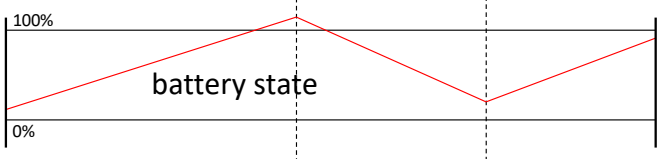
Given is also a price curve. The absolute level is irrelevant.

2



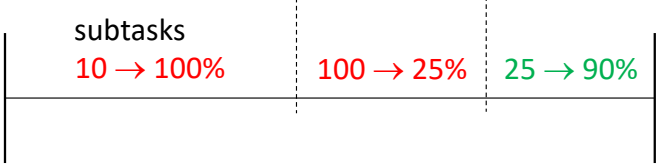
Now we determine a baseline, such that when the price curve is below the baseline, the battery is assumed to charge at full power. Above, it is assumed to discharge. The level of the baseline can be computed straightforwardly, apart from fringe cases.

3



However, battery capacity might get under 0% or, as is the case here, above 100%.

4



Still, it yields information about how to slice the task into subtasks. These can be fed into the algorithm again, until all conditions are met. Here, the third one is done.