MAST30034: Applied Data Science - Project 2 Week 3 Minutes (Group 14)

Date: 11th September 2021 (Saturday) and 12th September 2021 (Sunday)

Time: 11:00PM – 3:00AM

Present: Che Yao Bong, Laura Vander Slott, Megan Soo, Wei Lam Wong

Absent: Seth Jun Jie Ng

Content:

- Discuss and code for checkpoint 3.
- 1st algorithm experimented for checkpoint 3: Set the 5 periods with the lowest spot prices to charge the battery and 4 periods with the highest spot prices that are after the last charging period to discharge.
- The market revenue obtained from the 1st algorithm is $32,000++.

Date: 14th September 2021 (Tuesday)

Time: 2:15PM – 4:15PM

Present: Che Yao Bong, Laura Vander Slott, Megan Soo, Seth Jun Jie Ng, Wei Lam Wong

Content:

- Discuss and code for checkpoint 3.
- 2nd algorithm experimented for checkpoint 3: Set the 4 periods with the highest spot prices to discharge the battery and 5 periods with the lowest spot prices that are before the first discharging period to charge.
- The market revenue obtained from the 2nd algorithm is $35,167.
- 3rd algorithm experimented for checkpoint 3:
    - Allow for alternating charge and discharge periods.
    - Each chosen period charges 135MWh or discharges 150MWh, so there must be at least 2 periods charged (270 MWh) before discharging for one period (150MWh).
    - Set the 4 periods with the highest spot prices to discharge the battery.
    - For each discharging period, set the period that has the lowest spot price out of all periods before the current discharging period while satisfying the condition outlined in the second dot point above as a charging period.
- The market revenue obtained from the 3rd algorithm is $40,469.