

Why is my BESS underperforming?

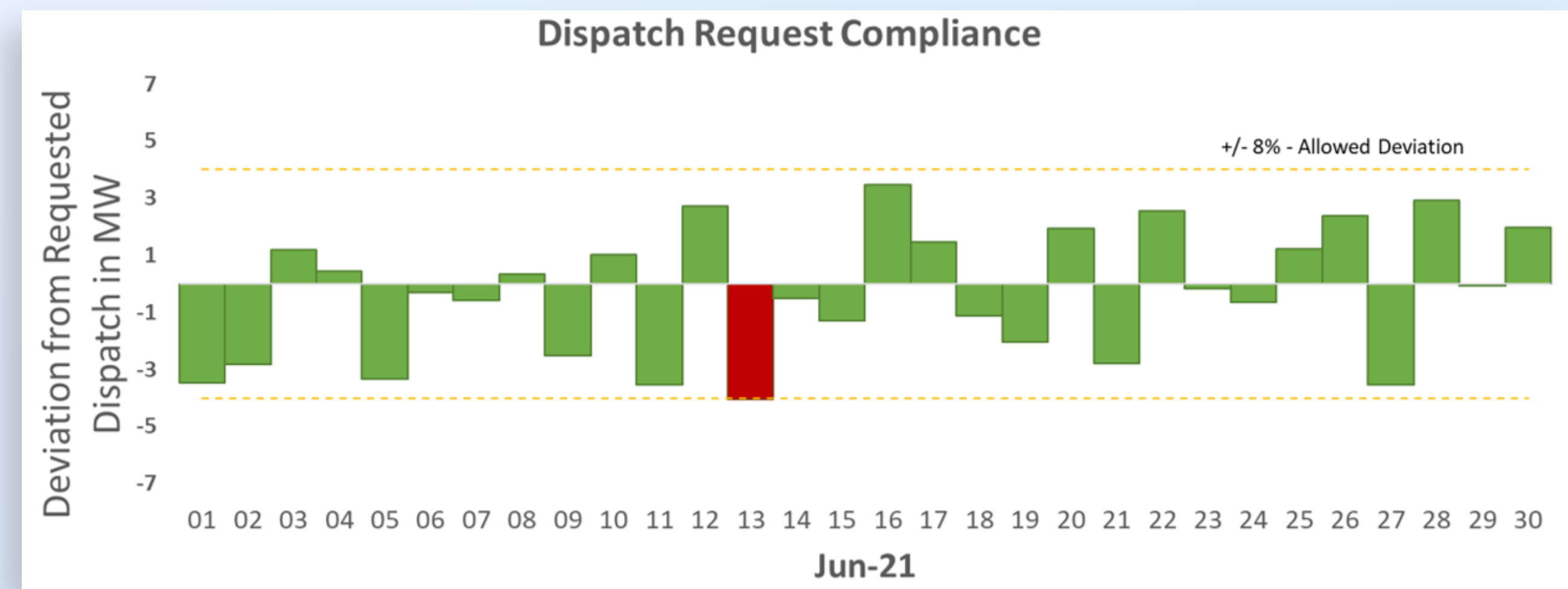
-top 5 issues from the field

“Democratizing data for energy storage”



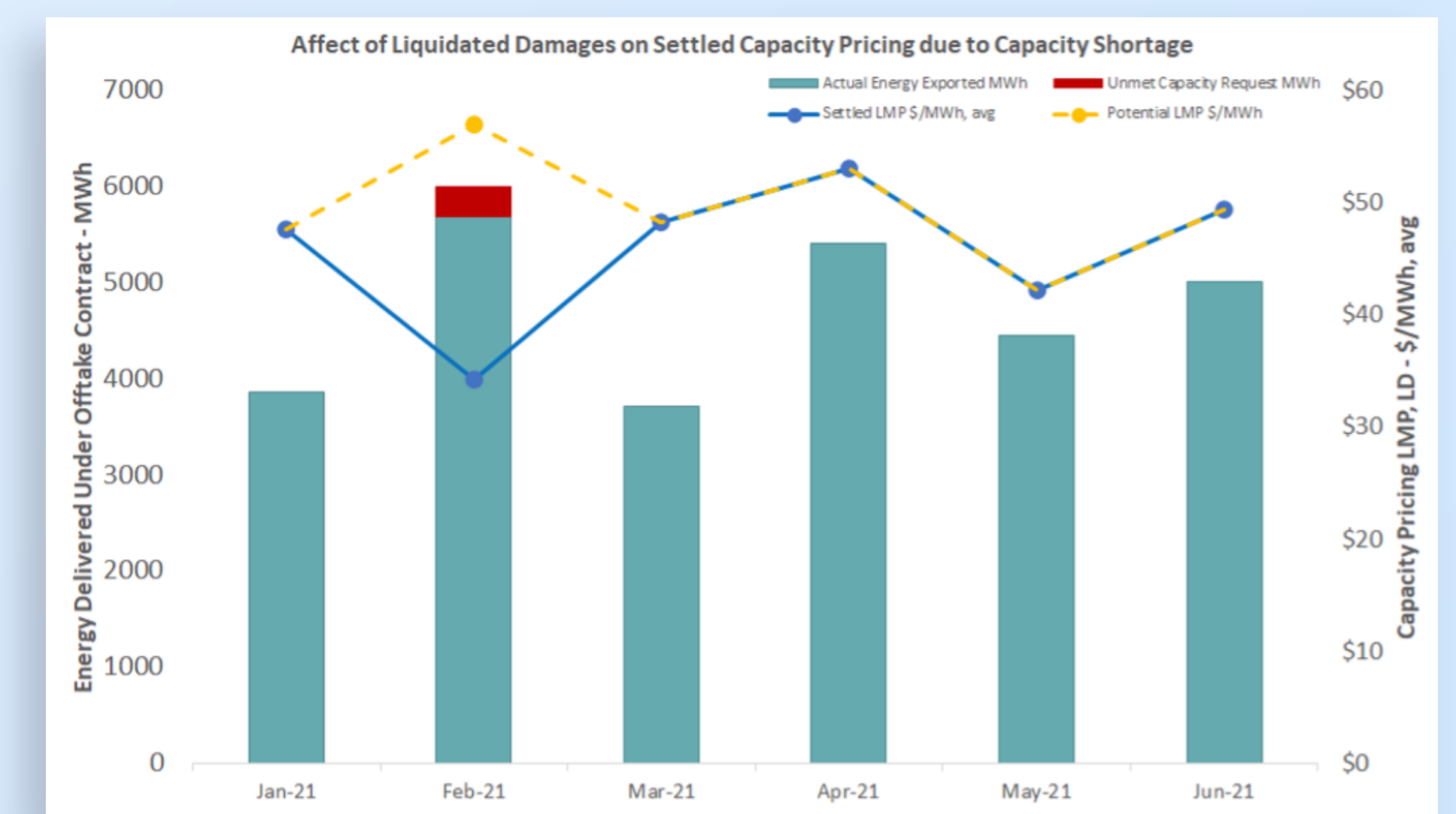
1 Lack of data – don't wait for the 'check engine light' to turn red

Dispatch compliance for this month only shows one day outside the allowed deviation, but there are at least 8 other days where dispatch could do much better



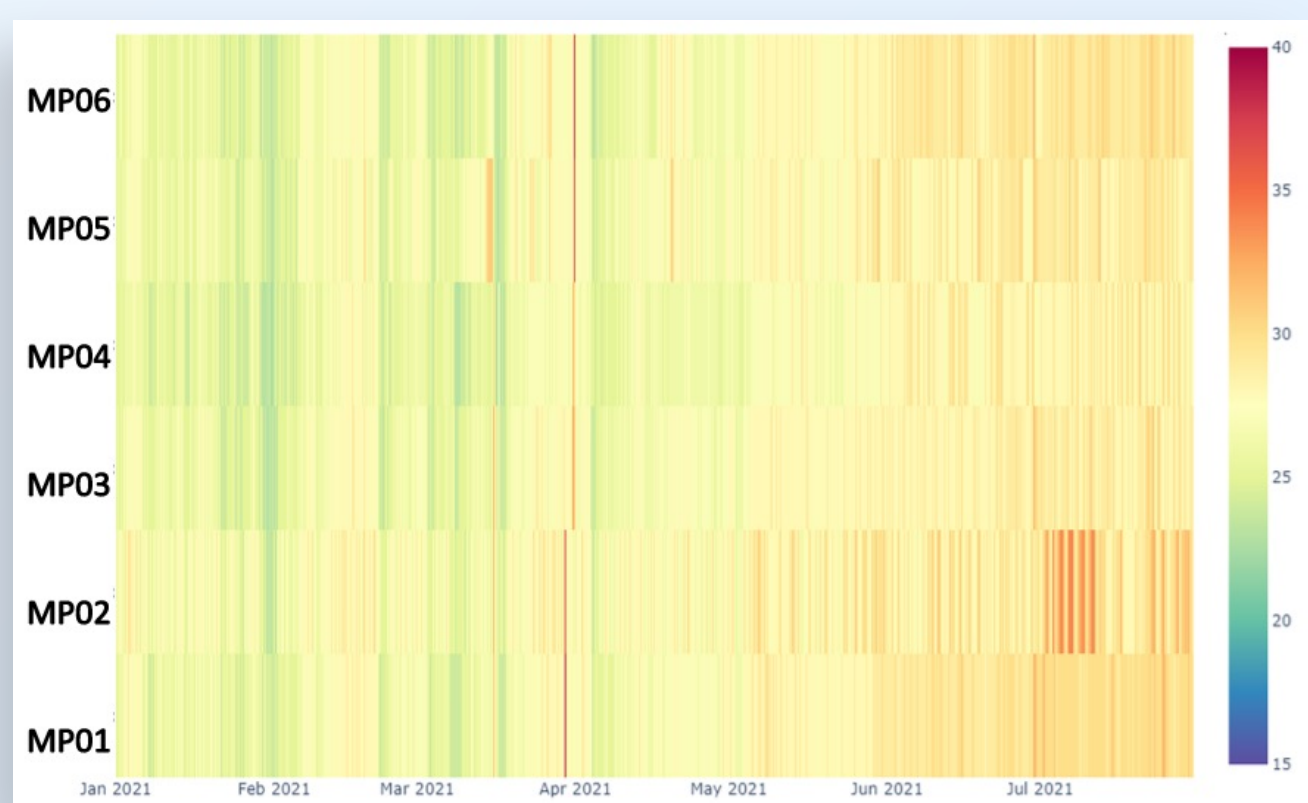
2 Capacity shortages can have an outsized effect on earnings performance

The BESS you built may not be the same BESS you are bidding into the market. Identifying degradation trends early and mitigating them through optimization is key.

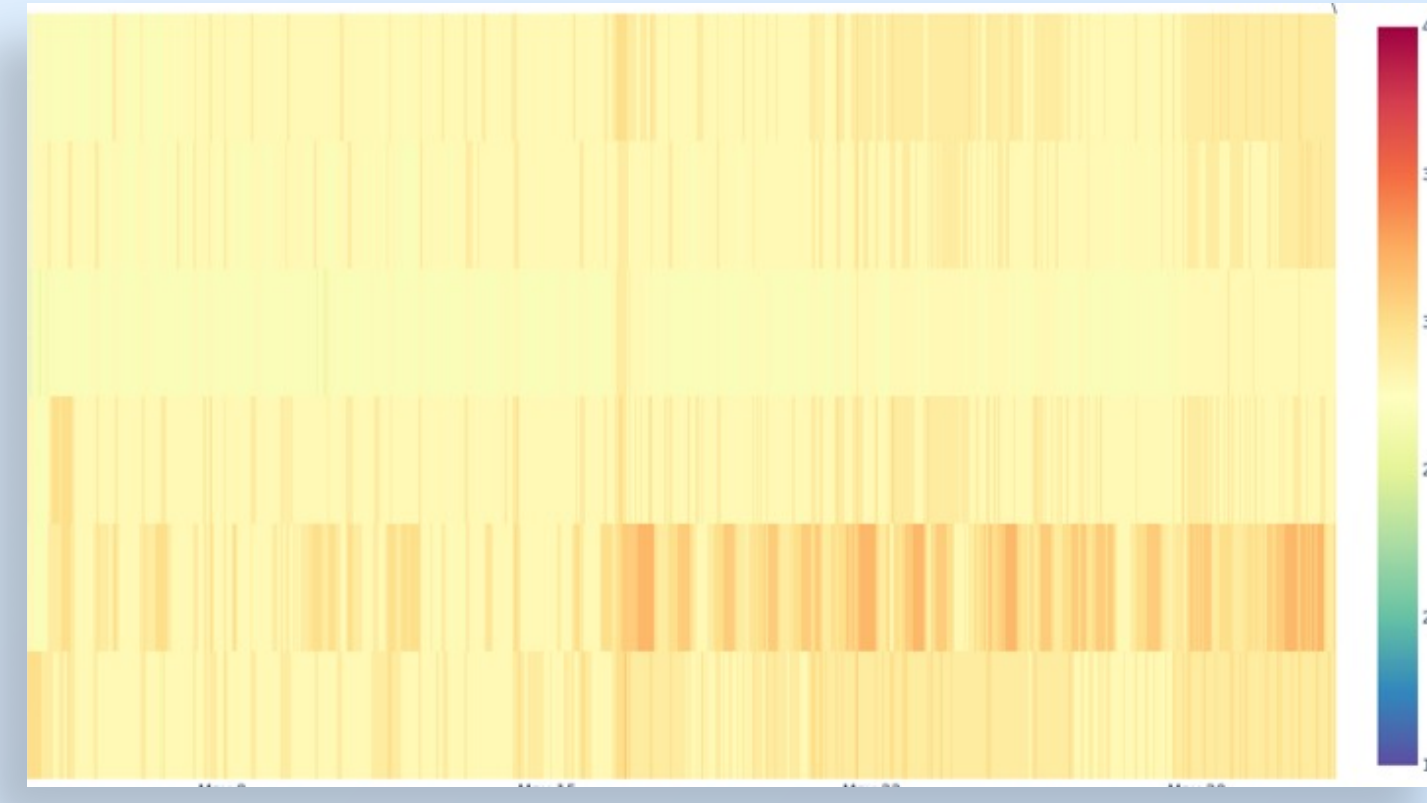


3 Increased operating temperatures will reduce battery lifetime and capacity

Ignoring this can lead to this



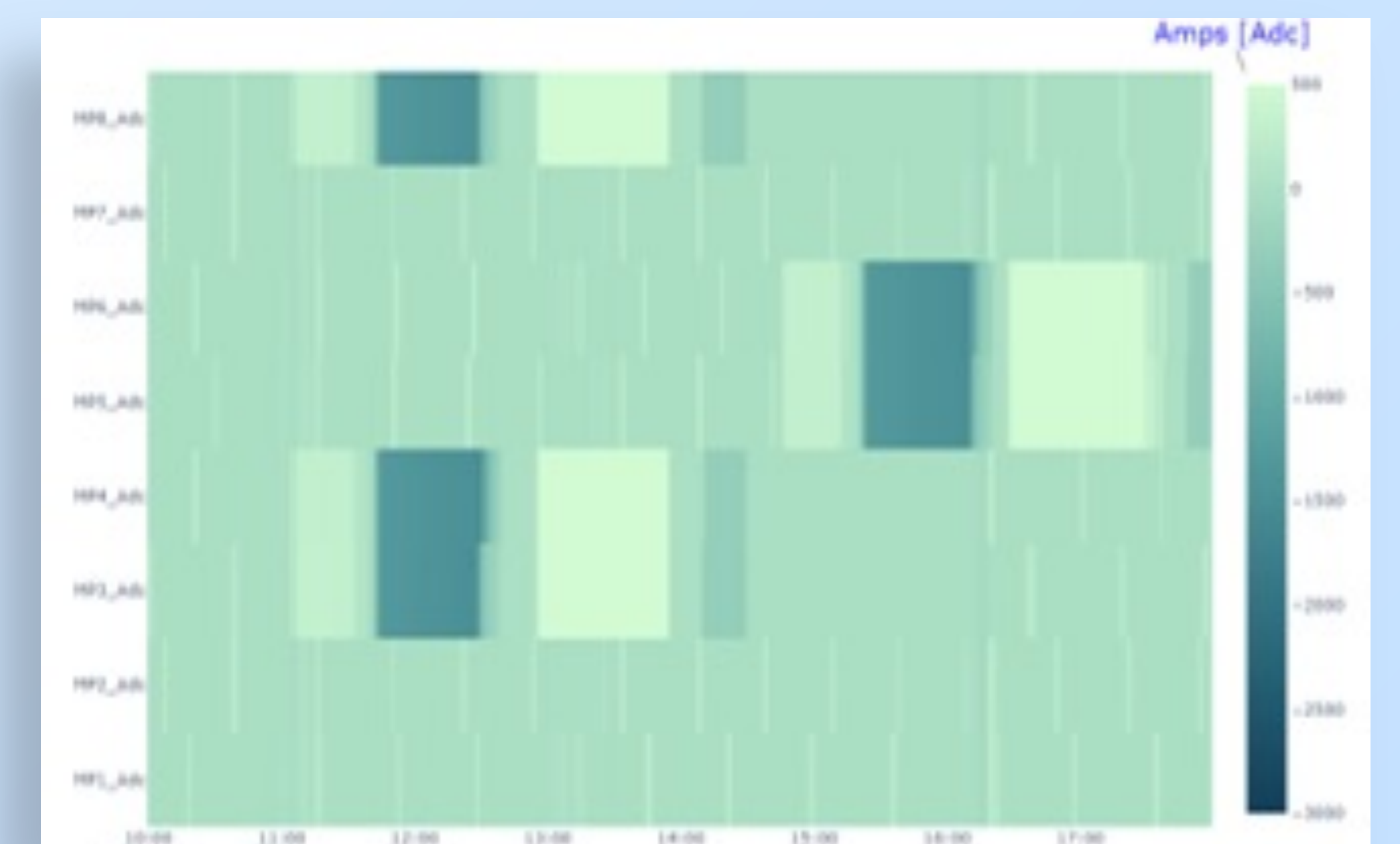
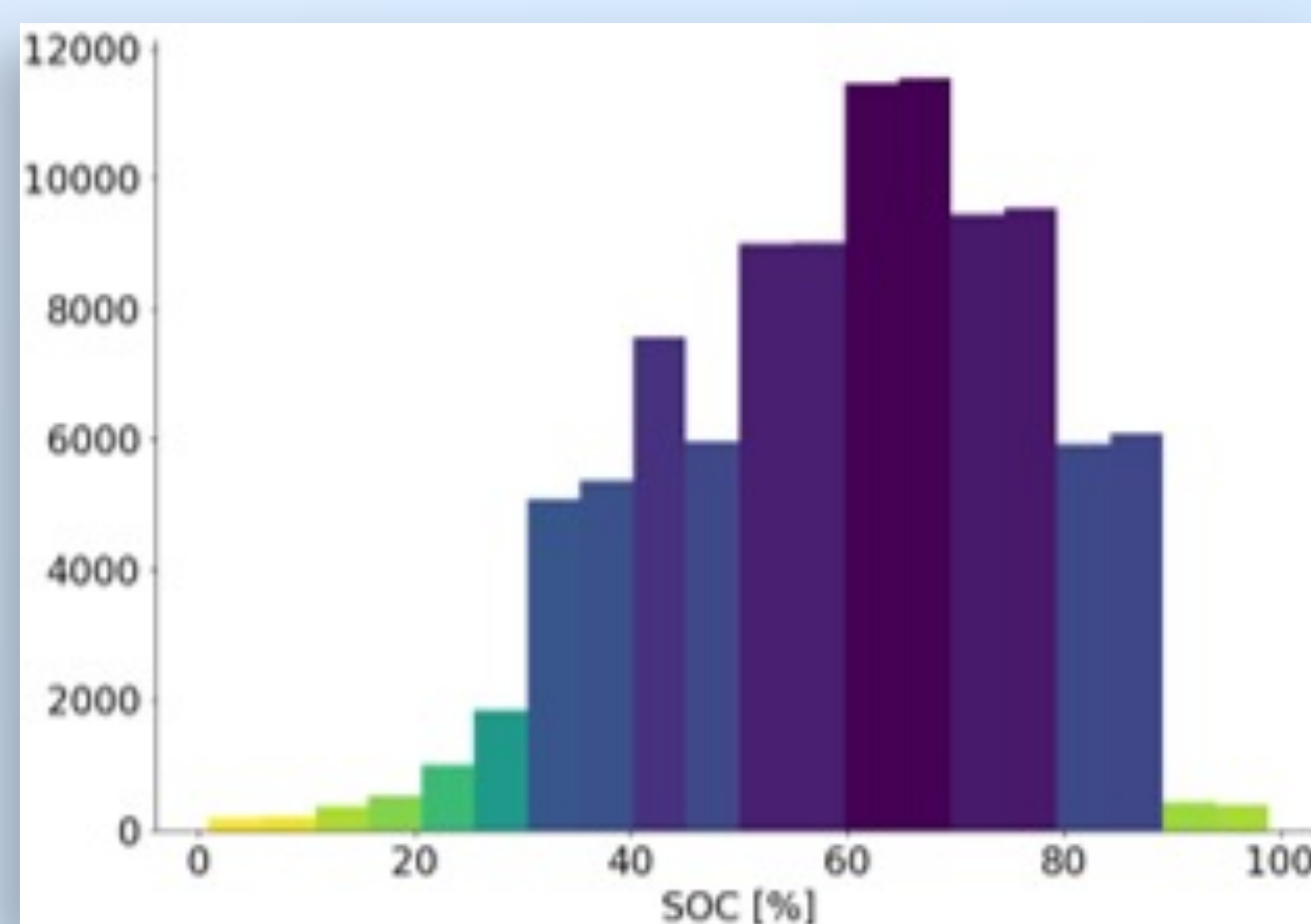
Prolonged time above 30°C can lead to an accelerated degradation rate and reduced capacity.



5 Battery container imbalance can lead to non-uniform degradation

4 Increased time spent above 80% SOC can accelerate calendar aging

We have seen a direct correlation between the amount of time a BESS spends at high SOC percentages and its aging. SOC management that 'tops off' the BESS can further accelerate this trend.



Your BMS should be actively balancing the output from individual strings but when containers are not participating in discharge, cyclic aging is non-uniform

The good news is that you can use your data to improve performance and reliability for the life of the project, its not too late!

