

## Assumptions

### Energy Profile

- Office buildings are unlikely to have highly peaky demand profiles as there is no large devices that could cause spikes
- Normal distribution of energy demand between each half hour period
- Sigma of normal distribution = average between mean and max of data
- Daily variation negligible, assume profile is unlikely to change over battery lifetime

### Unit Charges

- Red rate times remain the same for the entirety of the batteries lifetime

### TRIAD Charges

- TRIAD dates kept as close as possible to the original (no weekends)

### Battery Health

- Daily variation negligible, assume profile is unlikely to change over battery lifetime
- Battery parameters restrict battery to perform under normal use case, making cycle life figure valid
- Battery does not overheat

### Battery Usage

- Battery efficiency losses occur only when charging
- Trickle charging and minimum charge rate employed