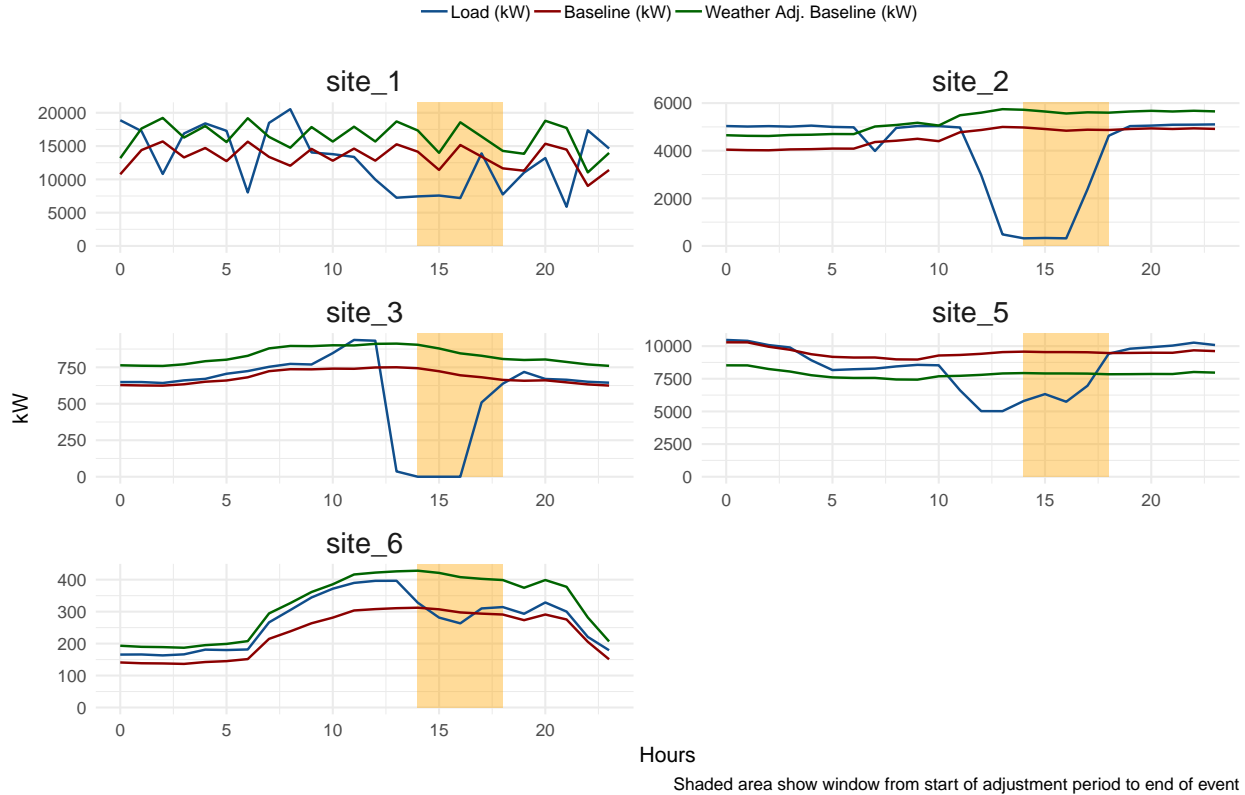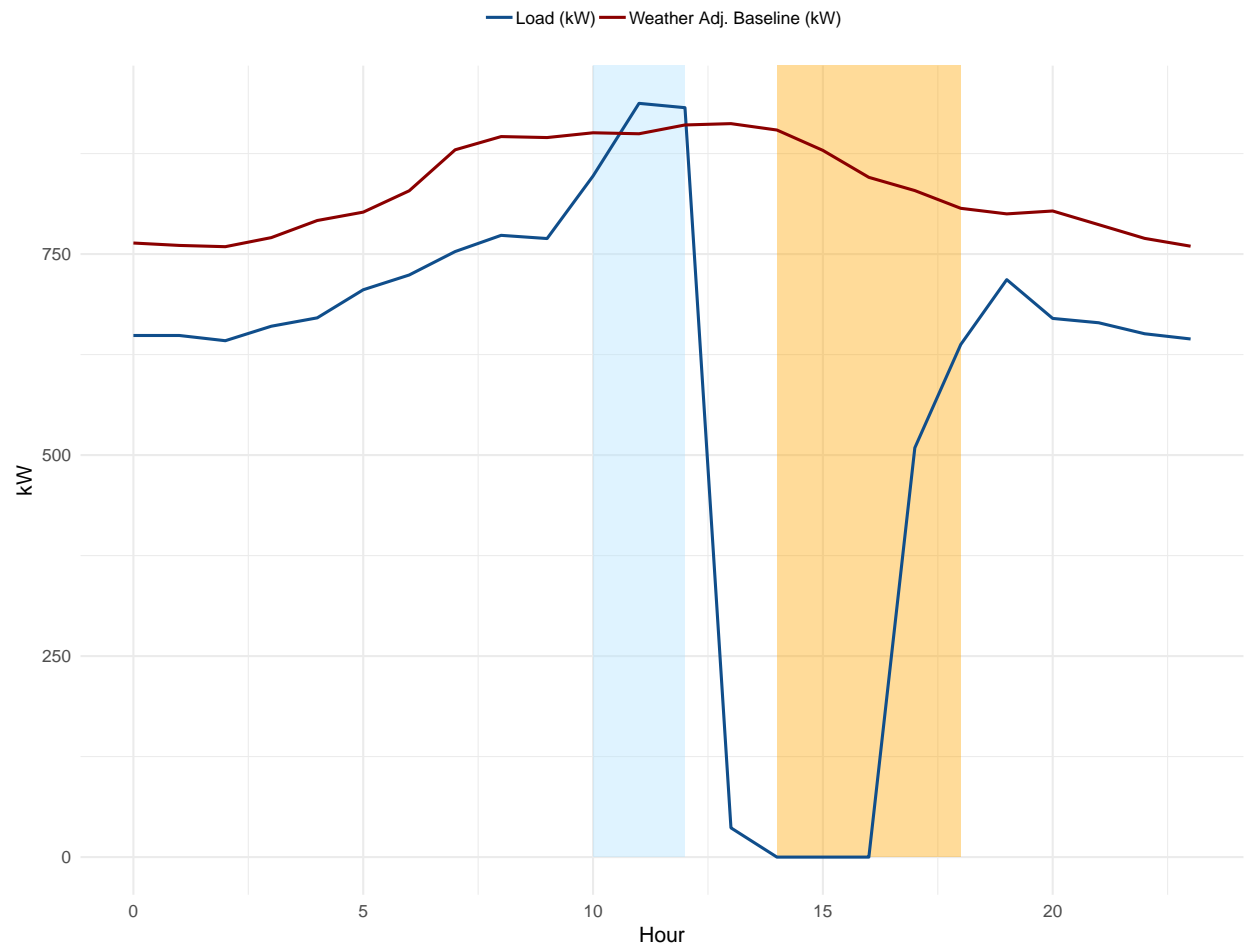# NYISO CBL

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The image on the following page give us a fair idea as to how the customers performed during the event. It is very evident that a few sites curtailed significantly during the required time period and more, infact they started their curtailement measure well in advance of the event beginning. The puprle line signifies the weather adjusted baseline, the orange the baseline without any adjustments an the blue line shows the customers load in kilowatts. The adjustment factor did have a positive impact on certain customers by raising their baselines to a higher value thus giving them some breathing space if under any circustances they could not have curtailed as much. For site 5 though the adjustment factor has had a negative impact lowering its basline. The weather asdjustment factor would be helpful for weather sensitive sites, but loads that are not weather sensitive might not benefit from it.

Table 1: Hourly Performance

Site	HE 14	HE 15	HE 16	HE 17
site_1	9895.0383	6413.5363	11376.2610	2531.86285
site_2	5398.2207	5310.9931	5243.4621	3228.66207
site_3	904.2560	878.9505	845.4142	319.91245
site_5	2135.6255	1580.7671	2166.3651	929.60786
site_6	100.1002	139.8105	144.5832	92.68215

Shaded area show window from start of adjustment period to end of event

Site 3

Load (kW) —— Weather Adj. Baseline (kW)

Shaded regions corresponds to the adjustment and event window respectively

Looking at the Site 1 we can see that, the demand for energy is very high. It resembles the usage of a manufacturing unit which may have large pumps or air compressor's plus the weekly cycle suggests the site operates those big machineries only during the week. For the month of June we can see that the average usage is approximately around 2000 kWh which is considerably lower than the previous month and the months after as well which could be an indication that the machine/s which utilize very high energy are either under maintenance or have broken down.
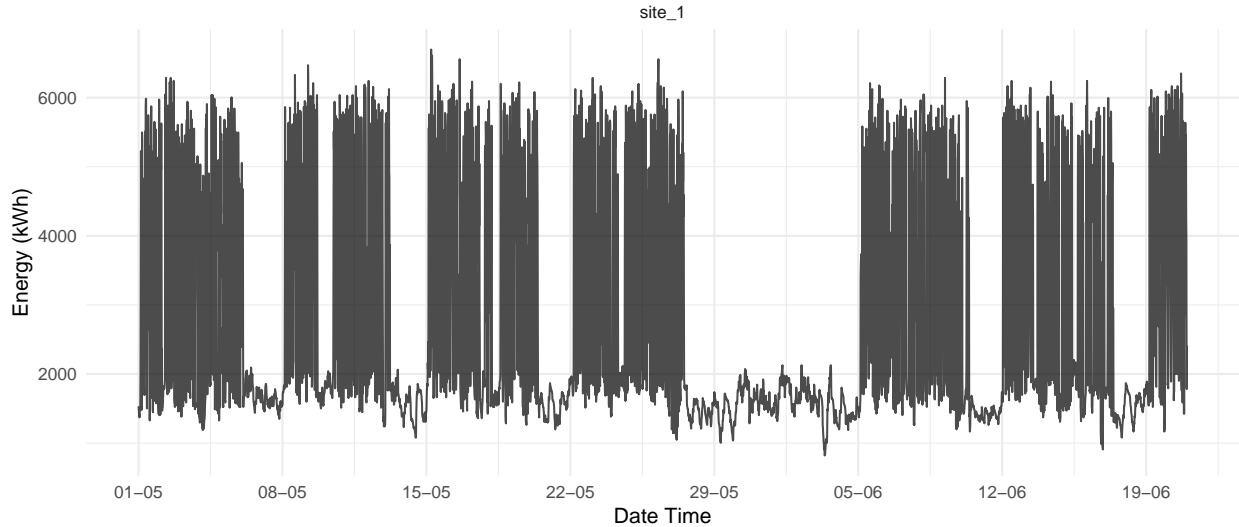

Site 2 is another classic example of cyclic load with the pattern repeating itself throughout the week, looking at the energy usage this site could be small scale manufacturing unit. One thing that is noticeable is that the load continues to stay at ~ 1000 kWh mark even during the night which suggests the site operates on a 24hour schedule with off times only on the weekends
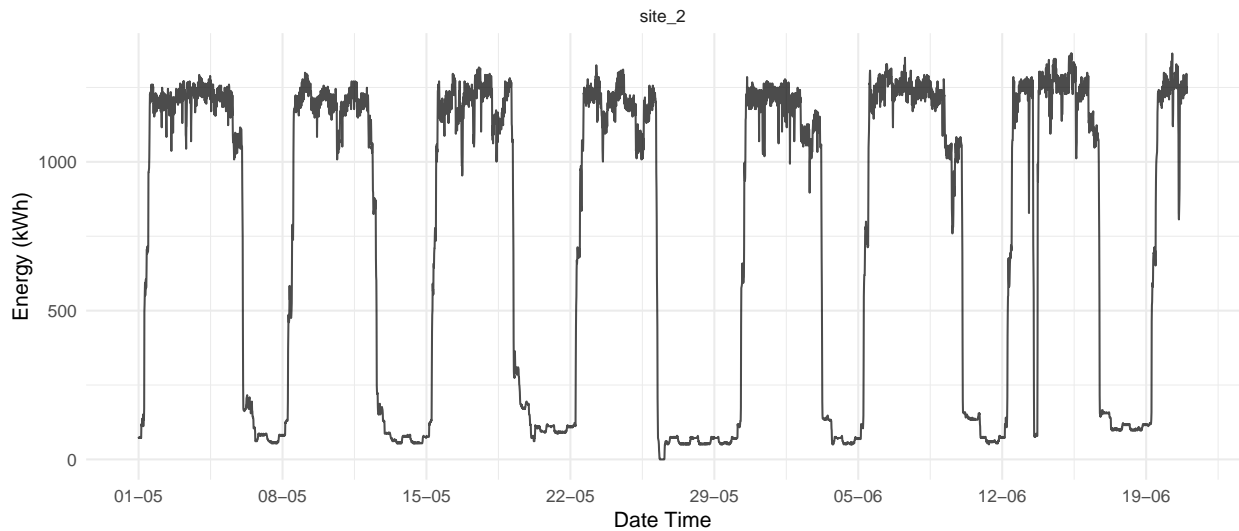
Site 3 has a cyclic load with shorter interval between cycles which gives an impression of this being an HVAC load at a school or office since these units are seldom turned off except during maintenance or breakdowns. The sudden drops to zeros look fishy and can be bad data but more root cause analysis should be carried out for the drops

site_3
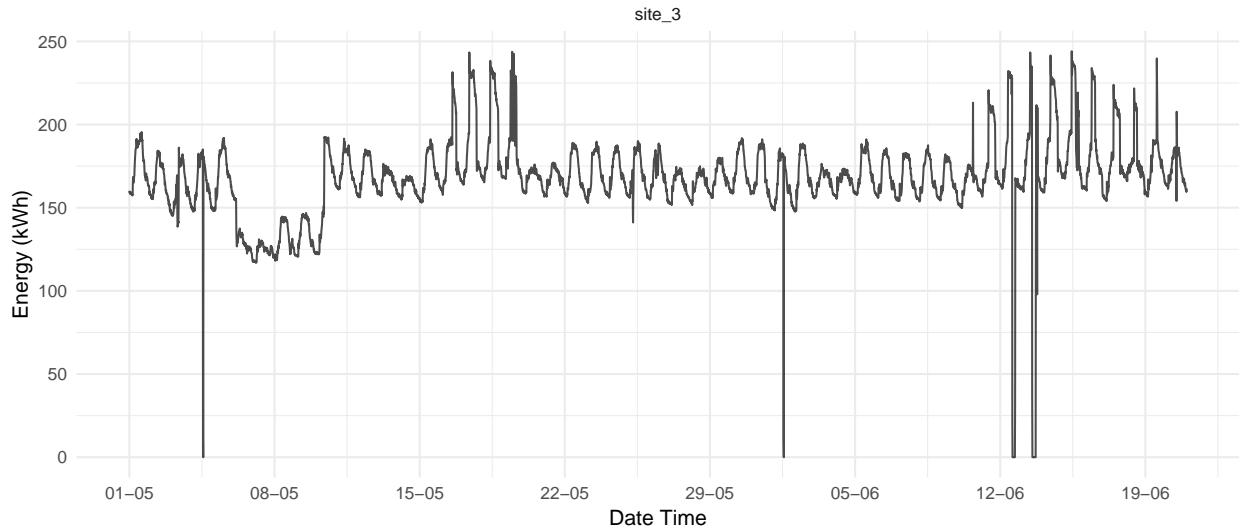
Site 5 again, fairly cyclic although there is no fixed pattern that repeats itselfs over the series, repetition are observed in shorter interval, although somewhat erratic feels like a random walk simulation. This site can correspond to larger storage units which have big HVAC controls or manufacturing units.

site_5
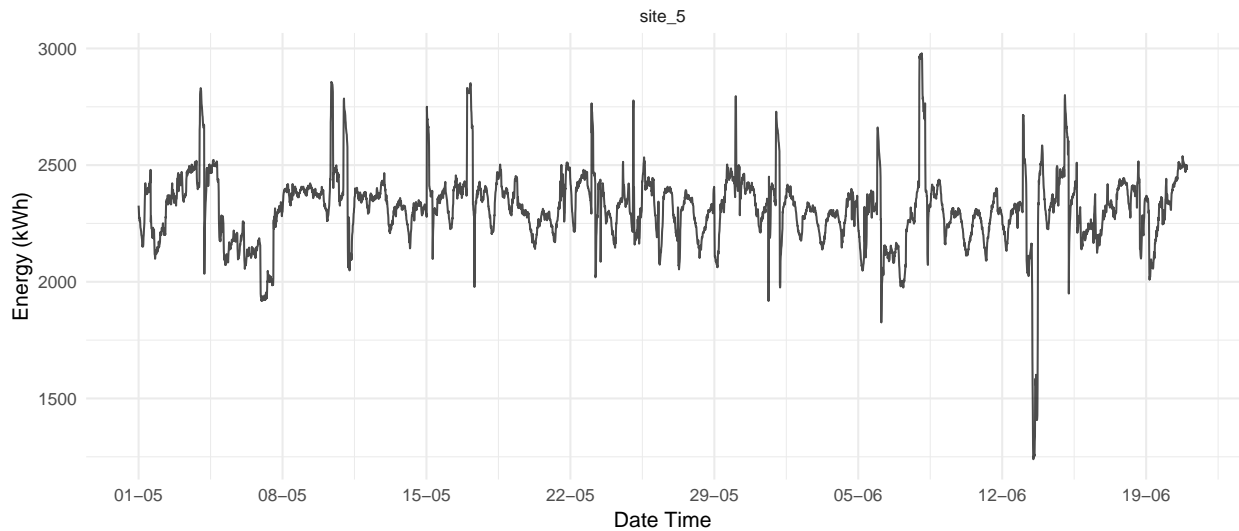
Site 6 is very peculiar, with short cycles of usage but a relatively low demand of energy. This seems like an home air-conditioning unit or possibly a small residential building with HVAC systems that's not turned off, considereing this is summer month's data it is highly probable

site_6