

Hello, My name is Simon Durrant, my home is in Hullavington. I walk and or cycle daily and enjoy the bucolic beauty and profound silence of the area.

Noise pollution from Lime Down is only measured to a distance of 500m from the sites. There is no good reason for this limit but, it does mean that Lime Down LTD do not have to report noise pollution in Allington, Luckington, Sherston, Corston, Rodbourne, Stanton ST Quinton, Hullavington and Grittleton. All of these villages being just outside the 500m line. Each of the 159 inverter units spread across the sites is shown by Lime Down to generate ">50dBA" – about the same noise as a domestic fridge. In fact, these units make 90dBA – about the same noise as a 90mph train. We can hear trains as they pass from over a kilometre away. We can hear the M4 up to 3 kilometres away, depending on wind and how much moisture there is in the air. How is the 500m limit on noise measurement justified?

There **will** be noise pollution from Lime Down and the biggest source is the BESS. The Lime Down documents show the BESS having a noise output of ">50dBA" – that's the maximum they show anywhere. Yet, there are about two hundred equipment units, every one producing at least 4 times the noise output indicated for the site total. Equipment noise figures are stated to be from manufacturers data, but there is no statement that these are the full load figures. They could be even louder.

Even worse, the BESS will be louder at night than it is during the day. It is during the night that the batteries are charged with low price electricity generated using gas turbines; fossil fuel. That electricity is then sold to consumers the next day at a high price. Along the way, due to transmission losses, rectification losses, battery insertion losses, inversion losses and more transmission losses, about 13% of that power is lost. That's right, the BESS actually makes environmental pollution worse than it would be, if the demand was met directly, at time of that demand.

The advert for BESS is that they take surplus electricity generated by renewable sources, and use it to cover demand peaks. This is nonsense because there is never a surplus of electricity from renewable sources. Just look at gridwatch.co.uk for the proof. They are subsidised by the taxpayer as a green initiative, but the promise is not the reality. If you actually care about the environment, the Lime Down BESS should be rejected, and, every existing BESS should be shut down until such time as a renewables generated surplus is available to charge them.

Lime Down BESS will do four things. It will plunge the surrounding area in never ending noise. It will increase environmental damage of every Watt Hour that passes through it by 13%. It will contribute to the high cost of electricity to consumers. But ignore all that because the real reason for building it is that it will make Lime Down LTD and its owners huge profits from the tariff differential it exploits.

For a written response later in the year, I intend to further develop the issues pointed out above. This will include the analysis of the environmental damage done by BESS, including quantified levels of pollution caused by Lime Down BESS. Further, I will develop quantified environmental damage from the 12.6GWh of BESS already installed in the UK.

Also, how battery insertion losses increase with time and charge cycles, exploring how the environmental damage done by BESS used in a tariff arbitrage fashion increases over time.