

Agent's e-mail re noise query from SMDC Environmental Health 21st Sept (relayed to agent 26th Sept)

11th October 2022 - from the agent

Please see below the acoustic specification and the number of transformer units proposed for Totmonslow Solar:

There are 5 transformers in the Totmonslow PV Plant: 3 x 4 MVA; 1 x 3.15MVA; and 1 x 1.6MVA.

We do not have a spec sheet for these transformers, but we have found information of similar transformers. I have attached a data sheet for 1.6MVA and 3.15MVA transformers. I imagine a 4MVA transformer will be a bit noisier than a 3.15 MVA.

We can assume that for Schneider transformer the sound will increase in line with the scale below:

kVA: 3,150-3,300 = 69dBA
 3,301-3,500 = 71dBA
 3,501 - 3,700 = 73dBA
 3,701 -4,000 = 75dBA

Therefore, the sound level for 4.00 MVA transformer, indicated as TR04 on the General Layout, the sound pressure level is 75dBA at 1m. So, if we take the distance from the red line to the TR04 transformer of 190m and not from the houses, if we take the distance away from the receptors (such as houses), the sound pressure level falls to 28dBA and without modelling background noise, which will be high due to A50 nearby. The sound pressure level from the redline will be 29.4dBA.

Another transformer 1.6MVA TR03 is 46dBA at 1m, which is 245m away from the redline, sound pressure level at 245m is 0dBA. 3.15MVA TR05 is 256m away from the redline, sound pressure level is 69dBA at 1m, if we consider the distance of 256m the level drops to 20.4dBA.

Hope this helps. Please do let me know if you require any further information.

Kind Regards,

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