

# The importance of monitoring long-term background noise when considering the expansion of power station sites



Where an existing power station is being expanded, or a new power unit constructed alongside an existing unit, it is important to consider the value of long-term unmanned noise and wind monitoring survey.

- Noise limits for new power generation units will be set at housing in relation to background noise from the existing power station.
- Accurate measurement of background noise levels is essential. If they are underestimated then unnecessary expensive noise control treatments, typically 2-3% of capital value, will be installed. If they are overestimated, the station could receive complaints once operations start.
- A short 2-3 day/night background survey may not be adequate to establish the long-term background noise profile, as this ideally has to be established under a wide range of wind directions. Wind direction is a critical factor affecting background levels by up to 15 dB(A).
- Environmental Statements sometimes use the minimum value recorded in a background survey for assessment purposes rather than the long term value, leading to unnecessarily stringent noise limit being imposed on the new power units.
- Spectrum can undertake a continuous long-term monitoring exercise around existing power stations, where there are plans for expansion, at up to 4 positions for noise and one for wind. The long-term monitoring results would then be made available to the Consultants preparing the Environmental Statement for use as a baseline against which the new plant noise levels should then be assessed.
- All noise and wind monitoring stations are remotely downloadable, allowing instantaneous access to data without visiting site. Samples of sound can also be recorded to establish sources of noise contributing to the background levels.

For more information or to receive a quote, email us at [enquiries@spectrumacoustic.com](mailto:enquiries@spectrumacoustic.com)

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