

Final TWG

ETN Key Notes - Revised BAT Conclusions

Submitted by the European Turbine Network (ETN)

Following the release of the revised BAT Conclusions ETN has the following comments and concerns in relation to their content and implications for Gas Turbine based plant in both generation and mechanical drive application. Overall, given the low level of environmental impact of this technology relative to other generation types, the current difficulties in operation of this plant type in the market, and the role of the plant in managing networks stressed by intermittent renewable supplies, we feel that the revisions to the Conclusions - whilst going some way to allay our concerns - still pose a significant threat to the technology, and may penalise it compared to other prime mover types.

Recognising that there is limited time for a large change to the document, we have restricted ourselves to setting out our main concerns below:

- Operators should not be forced to buy plant at own risk when they cannot be in receipt of a warranty. Hence AELs of 50 mg/Nm³ NO_x and 40-100 mg/Nm³ CO should be retained only for baseload natural gas fire plant. H Class and higher technology may struggle to achieve 50mg/Nm³ so this should be considered separately, with 75mg/Nm³ for NO_x being an appropriate basis for permit setting, offering a high level of environmental protection whilst supporting deployment of the technology.
- SCR is not BAT for natural gas or liquid fuel fired GTs unless local air quality requires it. We believe that for new plant either Dry Low Emissions or Water/Steam Injection represent BAT. This is also true for existing plant – noting that for emergency plant there may be no cost benefit case for upgrades to firing systems. We also note that for balancing intermittent renewables, the “power boost” offered by the use of Water Injection / Wet Compression into gas turbines can be an especially useful feature – and the application of this should not be restricted.
- CO be required to be monitored for combustion QA purposes (unless local air quality requires otherwise), but overall net emission be managed via the Emissions Trading Scheme compliance process. For Emergency plant, we consider that there is no need to monitor as there will be an increase in overall plant emissions due to running required for the sole purpose of demonstrating compliance.
- In-service Emergency Units, and those under IED derogations, should be excluded from the newly introduced Emergency plant AELs. We feel there has been a lack on consultation over the introduction of this category.
- BAT AELs should apply above 70% load, in common with IED ELVs, this recognises the restriction to performance arising from low load operation. Without this we are extremely concerned that GTs in compressor station and those despatched for demand response by TSOs will be unable to operate – ultimately leading to either more polluting, smaller units being operated, or further investment being required, increasing the costs to consumers.

- Whilst we welcome the treatment of efficiency, as being assessed from nameplate values or commissioning tests rather than continuous operation, we are concerned that this is not always clear in the BAT Conclusions. ETN wish for this to be more clearly stated.
- Given the special and challenging nature of off-shore installations we believe that the BAT Conclusions drawn here should be advisory in nature for that sector and that this should be clearly stated.