

EUROPEAN UNION – REGULATIONS FOR NOX AND CO				
Title	Year Finalized	Authorizing Statute	Major Provisions	Impact on Gas Turbine Emissions
Large Combustion Plant Directive	2001; updated in 2017 with more stringent limits and requiring SCR for NOx and Oxidation catalysts for CO for oil-, liquids- and gas-fuelled turbines.	Large Combustion Plants Directive 2001/80/EC; Industrial Emissions Directive 2010/75/EU	Regulation in effect in all EU countries unless more stringent NOx and CO criteria enacted. - Plants larger than 50 MW must achieve a yearly average NOx of 15 - 35 Mg/Nm3 (7.5 - 17 ppm) for new or existing oil-fired units and even lower limits for gas-fired of 10 - 30 Mg/Nm3 (5 - 15 ppm). - CO limits also must drop. As of July, 2017, the best available technology of selective catalytic reduction (SCR) must be used to prevent or reduce NOx emission from gas, liquids and oil in turbines.	Aeroderivatives for power generation are out of compliance. SCR technology must be used.
Medium Combustion Plant Directive	2015	Directive 2015/2193	Covers new and existing plants between 1 MW - 50 MW. NOx limits of 50 Mg/Nm3 (24 ppm) for new gas-fired turbines and 75 Mg/Nm3 (37 ppm) for new oil-fired. Most new power	Gas turbines running on partial load along pipelines won't comply.

			plants will comply. Gas turbines at existing plants must reduce emissions to 150 Mg/Nm ³ (73 ppm).	
NEC Directive	2012	Gothenburg Protocol	Gothenburg Protocol gives ceilings for 5 air pollutants: Sulphur dioxide (-79%), Ammonia (-19%), VOCs (-40%), Nitrogen Oxides (-63%), and fine particulates (PM 2.5). The NEC Directive set limits identical to the Gothenburg limits and must be implemented into national legislation by 30 June 2018, with each member country producing a National Air Pollution Control Programme by 31 March 2019.	NEC requires all states to make even deeper reductions in these 5 air pollutants by 2030.