Operation of emergency generation plant by large energy users

Information note from the Environmental Protection Agency
December 2021

Introduction

This note sets out the implications for relevant EPA authorisations from the large-scale operation of emergency generation plant by large energy users which do not currently hold an Industrial Emissions licence for the combustion of fuels as per class 2.1 of the First Schedule of the Environmental Protection Agency Act 1992 as amended.

Requirements for an IE licence/MCP Registration:

Installations where the total rated thermal input capacity of all combustion plant on site is 50 MW or more are required to hold an Industrial Emissions (IE) licence under Class 2.1 of the First Schedule of the Environmental Protection Agency Act 1992 as amended. However, the EPA has exempted installations with large scale emergency generation (EG) capacity if they limit operations at 50 MWth input load or more to no more than 18 hours per annum. This restriction places no limit on the number of hours that the plant is operated below 50 MWth.

This exemption aims to avoid disproportionate regulation of plant that very rarely operate at or above the 50 MWth load level. Where sites have large numbers of relatively small generators, the operators can avail of the exemption through staggered testing of individual generators, so that operation at 50 MW or more is only likely to be required in the event of an emergency due to grid supply failure or a mandatory demand under Reg 28 of S.I. 60/2005 to respond to a security of energy supply issue.

To avail of this exemption, where the individual generators on site are within scope, operators are advised to register under the Medium Combustion Plant (MCP) Regulations S.I. No. 595 of 2017 and meet the relevant requirements of the Regulations.

EGs are not required to meet the Emission Limit Values (ELVs) set in the MCP Regulations provided operational hours for each EG are restricted to a maximum of 500 hours per annum, as a rolling average over 5 years (existing plant), or over 3 years (new plant). Note that each individual EG will be required to be registered under the MCP Regulations.

- **Where an operator expects to operate emergency generators so as to exceed the 50 MWth for 18 hours restriction,** it should lodge an application for an IE licence to allow for such operation. Pre-application contact (at licensing@epa.ie) with the Agency is strongly advised to ensure the Agency's requirements are met regarding the content of the application and to help avoid delays in determining the application.

- **Where an operator does not expect to exceed the 50 MWth for 18 hours,** but expects to operate emergency generators for purposes other than originally intended, such as to reduce demand on the grid or to provide supply to the grid, registration of **existing** MCP (first put into in operation before 20/12/18) is advised. Note that **new** MCP (first put into in operation on or after 20/12/18) must be registered prior to operation. MCP registration can be completed relatively quickly, allowing operation under the 500-hour restriction as described above. MCP can also be quickly deregistered if subsequently the installation becomes subject to an IE licence. Again, prior contact with the Agency is advised, as the Agency may require information such as air dispersion modelling as part of the registration process, to assess potential impacts on air quality.

EU Emissions Trading Scheme (ETS) – Greenhouse Gas (GHG) permits:

GHG permit requirements for emergency generators:

The GHG permit does not place any restriction on hours of operation of emergency generators. Emissions must be monitored and reported for the calendar year in accordance with the permit/monitoring plan, and sufficient allowances surrendered by 30 April in the following calendar year. Where the emissions of the plant exceed 25,000 tonnes CO_2 equivalent in the year as a result of increased operation this may require a revision to the monitoring plan as the installation will no longer be considered a small emitter under the EU ETS Monitoring and Reporting Regulation. There is no free allocation of allowances for electricity generation under the EU ETS.

The scope of a GHG permit where the activity is "Combustion of fuels in installations with a total rated thermal input exceeding 20 MW[1]" covers all combustion activity on site from a stationary technical unit. Every technical unit that is connected to the installation and serves a purpose, which usually requires the unit to be stationary

[1] When calculating the aggregated total rated thermal input, units with a rated thermal input under 3 MW and units which use exclusively biomass shall not be taken into account. Once it is determined that the installation comes above the threshold all units are included in the monitoring and reporting requirements.

during operation, is considered part of an installation. Gas or oil-fired boilers for space heating even if of a domestic size should be included. Excluded from the EU ETS is "true" mobile machinery (e.g. trucks, forklifts, bulldozers), i.e. machinery which has the purpose of being mobile at the moment of performing its tasks.

Useful definitions:

What is an installation?

The Environmental Protection Agency Act 1992 as amended defines an installation as follows:

'A stationary technical unit or plant where the activity concerned referred to in the First Schedule is or will be carried on, and shall be deemed to include any directly associated activity, whether licensable or not, which has a technical connection with the activity and is carried out on the site of the activity.'

The EPA will adopt this approach in general, while considering any relevant site specific circumstances. The power plant including flue gas emission points and technically associated infrastructure such as fuel supplies and connecting lines, will therefore fall within the installation boundary.

Any areas of the site that share stormwater infrastructure with the power plant and fuel storage areas will also form part of the installation. This may include data halls, and stormwater treatment/balancing or monitoring infrastructure.

Who is the operator?

Under the IED, an operator is defined as: '*any natural or legal person who operates or controls in whole or in part the installation or combustion plant, ... or, where this is provided for in national law, to whom decisive economic power over the technical functioning of the installation or plant has been delegated;'*

The European Union (Large Combustion Plants) Regulations 2012 define an "operator" as "*any natural or legal person who operates or controls in whole or in part the combustion plant or to whom decisive economic power over the technical functioning of the installation or plant has been delegated*.

Defining the EU ETS installation:

Irish legislation[2] transposed the definition of installation for ETS as follows:

"installation" means, from 1 January 2013, a stationary technical unit where one or more activities listed in Schedule 1 may be carried out and any other directly associated activities which have a technical connection with the said activities on that site and which could have an effect on emissions and pollution, and references to an installation include references to part of an installation;

The EU Commission Guidance on interpretation of Annex I of the EU ETS Directive states: '*Where several installations are operated by the same operator at the same site these installations may be covered by one common GHG emissions permit (Article 6(1)). ...*'.[3]

The EPA will adopt this approach in general, while considering any relevant site specific circumstances

Definition of an operator for EU ETS:

The **ETS Directive** defines an operator as: '*any person who operates or controls an installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated'*.

If you have queries on this document please contact licensing@epa.ie

[2] SI 490 of 2012 as amended.
[3] Guidance on Interpretation of Annex I of the EU ETS Directive (excl. aviation activities) - European Commission March 2010.