

Transitional National Plan and Annex V 1,500 hour and 500 hour derogations

General Principles

EDF Energy considers that there should be the maximum flexibility in the UK implementation of the Industrial Emissions Directive (IED) and that all compliance options should be made available in the UK.

There should not be any additional UK restrictions on the compliance options as set out in the text of the IED, taking account of relevant Commission guidance. Additional UK conditions would be gold plating of regulation.

Transitional National Plan

The Transitional National Plan (TNP) in the IED enables a plant to operate subject to an annual emissions limit as an alternative to the IED Annex V emission limits, up to 30 June 2020. Once the TNP is over, the plant must comply with Annex V or close.

The IED text does not introduce any additional qualification or condition on subsequent compliance for a plant that has been in the TNP. In other words, after 30 June 2020, under the IED a plant that has been in the TNP is to be subject to the identical requirements as a plant that has been subject to Annex V prior to 30 June 2020. There is no residual distinction between these categories.

Annex V compliance options

Annex V sets out the emission limit values that plant must comply with unless they are covered by the TNP or Article 33 limited life derogation.

Annex V includes 1,500 annual operating hours derogations from the emission limit values for solid, liquid and gas fired plants. The derogations specify alternative ELVs.

Annex V also includes a 500 hours operating hours derogations for gas fired plants. Under this derogation, no IED ELV applies.

Other than meeting the condition on annual operating hours, there is no further restriction on accessing these derogations specified in the IED.

Article 30(4) allows the limited operating hours derogations to be applied to a part of a plant (e.g. to one or more individual boiler units in a coal station). Consequently, it is possible for a part of a plant to be subject to the main Annex V ELVs and a part to be subject to the 1,500 hour IED derogation ELVs.

IED recitals

There is no recital that specifically references the TNP.

Recital 43 states:-

In order to provide existing installations with sufficient time to adapt technically to the new requirements of this Directive, some of the new requirements should apply to those installations after a fixed period from the date of application of this Directive.

Combustion plants need sufficient time to install the necessary abatement measures to meet the emission limit values set out in Annex V.

This recital is implemented by the general deferral of the application of Annex V limits to existing plants to 1st January 2016 under Article 82(3), rather than the date of the Directive coming into force.

Previous UK precedent in applying the LCPD 2,000 hours ELV derogation

The IED 1,500 hours derogation is effectively a carry-through of the LCPD 2,000 hours derogations from the LCPD SO₂ and NO_x ELVs. The LCPD SO₂ derogation was used by several coal plants in 2008 and 2009 to deal with late completion of FGD abatement. The approach adopted by the Environment Agency was that a plant normally subject to LCPD ELVs could enter and then exit this derogation as necessary, to deal with periods when the plant was unable to comply with the LCPD SO₂ ELV, without other restriction.

This was an effective arrangement, maintaining a tight control on total emissions while allowing an operator some flexibility to deal with challenges in the installation and operation of new abatement. It is recommended that this flexible approach to entry and exit is also applied to the IED 1,500 hours derogation.

Potential Use of the 1,500 hours derogation

There are at least three potential categories of coal plant exiting the TNP for which the 1,500 hours derogation could enable useful flexibility:-

- Plants that have installed additional NO_x abatement and intend to operate under the main Annex V ELVs normally, but which are temporarily unabated in whole or part (for example, due to late completion of abatement, or due to abatement breakdown, subject to other IED conditions).
- Plants that have installed additional NO_x abatement on only some units and wish to operate other units at a lower load without abatement.
- Plants that have not installed any additional NO_x abatement and wish to operate units at a lower load.

There are several reasons why lower load plants could be increasingly required after 2020, including an increasing proportion of intermittent renewable generation in the overall mix. An increasing amount of lower output back-up generation will be needed to ensure security of supply for the periods when the renewable capacity is at low output. Existing plants could play a key role in providing that backup whilst newer plants are constructed.

The 1,500 hours derogation could also be used by older gas plants that cannot meet the main IED ELVs but which can be operated effectively in a low output, peak support mode. In addition, the 500 hours derogation could be a viable option for gas plants and, in principle at least, for coal plants.

Recommendation

In line with the general principle set out above, there should be no distinction in applying Annex V between plants that have been in the TNP and plants that have been subject to Annex V from 1st January 2016. Accordingly, the 1,500 hour and 500 hour derogations should be fully available to plants that have exited the TNP.

Annex A – Relevant IED articles

Article 32(2) states:-

Combustion plants covered by the plan may be exempted from compliance with the emission limit values referred to in Article 30(2) for the pollutants which are subject to the plan or, where applicable, with the rates of desulphurisation referred to in Article 31.

Article 30(2) states:-

All permits for installations containing combustion plants which have been granted a permit before 7 January 2013, or the operators of which have submitted a complete application for a permit before that date, provided that such plants are put into operation no later than 7 January 2014, shall include conditions ensuring that emissions into air from these plants do not exceed the emission limit values set out in Part 1 of Annex V.

Article 30(4) states:-

Where Annex V provides that emission limit values may be applied for a part of a combustion plant with a limited number of operating hours, those limit values shall apply to the emissions of that part of the plant, but shall be set in relation to the total rated thermal input of the entire combustion plant.

Annex V Part 1 Clause 2 states:-

Combustion plants, using solid fuels which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO₂ of 800 mg/Nm³.

Annex V Part 1 Clause 4 states:-

Combustion plants using solid fuels with a total rated thermal input greater than 500 MW, which were granted a permit before 1 July 1987 and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 450 mg/Nm³.

Annex V Part 1 Clause 4 states:-

For gas turbines (including CCGT) which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the emission limit value for NO_x is 150 mg/Nm³ when firing natural gas and 200 mg/Nm³ when firing other gases or liquid fuels.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.