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IED/LCPD

The CEA Technical Working Group, the IED and BREF.

Objectives of this presentation

- To outline the activities of the CEA in relation to the IED, LCPD and Technical Working Group for the combustion sector BREF
- To give a history of the CEA contribution to legislation
- To look at the IED and key points for industry
- To consider LCPs transitional arrangements
- To introduce the LCP BREF Technical working Group
- To show the List of submissions being prepared as part of the UK BREF submission
- Glossary

History

There has been a group of companies within the CEA actively lobbying on combustion issues since before the introduction of the Large Combustion Plant Directive .

The group contains representatives from Pulp and Paper, Food and Drink , the Production and Processing of Metals, Chemicals and Energy production.

The lobbying by this group, in conjunction with other groups across energy production, was integral to establishing the current UK National Emissions Reduction Plan (NERP).

The CEA group were represented on both the LCPD stakeholders group and a smaller technical group.

I along with 2 other CEA reps sat on the technical group, together with representatives of the energy generation sector and NGOs that worked in more detail on the actual content of the first NERP.

Additionally during this time we also had a representative on the technical working group which led to the current sector BREF for combustion. One piece of learning from this experience was that within the UK we needed to have better data available for use in any future BREF process.

Following the establishment of the NERP the CEA group have continued to be represented on the LCPD stakeholders group and CEA members have also lobbied on the IED.

History

- A key strength of the CEA LCPD grouping is that it brings together companies from across a wide industrial base who are impacted by changes in combustion legislation. All the plants represented in the group directly supply British industry with integrated plant on industrial sites.
- These sites have widely varying loads from seasonal food producers through energy intensive metals production to our own site that produces chemicals. Due to the SHE requirements the chemical site has to have steam reserves for safety equipment and is required to adapt to rapidly changing site loads .
- Unlike many of the traditional generators these industrial plants can often be combined heat and power units which is a more efficient and environmentally beneficial way of generating power.
- Some of the sites are relatively large, >300 MWth, whilst others represented by the group only fall into the legislation due to the aggregation of smaller units within a windshield.
- All the parties to the CEA group were agreed on two things the need for certainty and sufficient notice of changes to regulation to allow industry to effectively respond . Without these two aspects there was a greater possibility of plant closures and the loss of UK jobs and profits for UK PLC.

Industrial Emissions Directive (IED)

- Flooding has been a known phenomenon on site since at least 1967, as confirmed by 1968 ICI report.

2007 - European Commission reviewed effectiveness of IPPC Directive

Conclusions:

- Several industrial emissions directives should be combined
- Variable implementation across member states
- Directive had not created a level playing field across Europe
- Tougher legislation was needed – greater prescriptive requirements
- BREF documents will have quasi-legal status, no longer only “guidance”
- Revised Directive published Dec 2007

IED Key Points for industry

- Expectation that consents will be set in-line with Emission Limit Values (ELVs) given in BREF
- Regulator may grant derogations, but not beyond limits specified in Annexes to Directive
- When BREFs updated, within 5 years permit, conditions shall be reviewed and updated where BAT has changed
- LCP – significant changes to allowable emission limits
- Potentially the proposals for the IED were in conflict with agreements on LCPD
- The group actively lobbied for a NERP option to be available under the IED and this has now occurred
- Currently there is combustion sector regulatory overload with some plants dealing with IPPC, LCPD, CRC, WID, climate change agreements, ROCs and EU-ETS phase iii.

LCPs – transition arrangements for older plant

Current arrangements

- Comply with current ELVs or
- National Emissions Reduction Plan (NERP) trading scheme

From 2016, replaced with 3 options for transition phase

1. Comply with new ELVs
2. Transitional National Plan
Trading scheme
2016 – 2019 Significant reduction in allowances in line with meeting new ELVs
Detail to be developed
3. Limited life time derogation available
Operate for max 17500 hrs 2016 – 2023, then closure
Notify intention by end 2013



LCPs – transition arrangements for older plant

In recent years the power sector has started to embrace new renewable fuels which are either co incinerated with conventional fuels on existing plant or as in the Sembcorp burn on purpose built plant.

Other sources of Renewables such as wind power cannot guarantee the consistent baseline operation offered by conventional fuels.

Therefore there is a risk that if plants have to be retired for environmental reasons without giving a sufficient time to establish lower carbon options there will be a major security of electricity supply issue for UK. With unwanted consequences for the public and UK industry.

TWG LCP BREF Latest position

In 2011 an author for the combustion sector BREF was appointed

Additionally a call went out for nominations to the TWG in Seville as part of this process, UK reps were drawn from both the electricity generation sector as well as the CEA .

A call went out for the submission of “wish lists” in relation to the LCP BREF with a deadline of May this year.

Based on the previous BREF process UK TWG has worked with DEFRA and the EA to pull together a wider range of UK data that could be used in the BREF process.

This has led to the submission of the UK wish list and the production of supporting documentation that it is intended to use in the process.

UK TWG Documentation

UKTWG 1

Summary of the UK Wish List

UKTWG 2

Best available techniques – “mid-merit plant operation for existing plants”

UKTWG 3

Mixed technique approach

UKTWG 4

Best Available Technique (BAT) for Start up and Shut down (SUSD)– coal-fired units

UKTWG 5

Principles for determining Start up and Shut down Criteria For Gas Turbines

UKTWG 6

Future NOx BAT for existing coal stations with a mid-merit operational category - Summary

UKTWG 7

Future SO2 BAT for existing coal stations with a mid-merit operational category - Summary

UK TWG Documentation

UKTWG 9

Description of co-firing of petroleum coke in UK coal plant

UKTWG 10

BAT for NO_x and CO for combined cycle gas turbine (ccgt) units existing baseload >300MWth

UKTWG 11

BAT for NO_x and CO for combined cycle gas turbine (ccgt) units existing mid merit >300MWth units

UKTWG 12

BAT for SO₂ for coal units existing baseload >300MWth

UKTWG 13

BAT for NO_x for coal units existing baseload >300MWth

UKTWG 14

BAT for particulate for coal units existing baseload >300MWth

UKTWG 15

BAT for SO₂, NO_x and particulate for biomass units new >300MWth



UK TWG Documentation

UKTWG 16
Sector Economics

UKTWG 17
CHP and CHP Ready

UKTWG 18
Carbon Capture

UKTWG 19
Downshot boiler study

UKTWG 20
Future Dust BAT for existing coal stations with a mid-merit operational category - Summary



TWG process

The first meeting of the TWG is anticipated to be this autumn.

It is believed that this session will outline the process and any additional data collection that may be required.

In the mean time any data or issues relating to the issues out lines on the UK wish list would be appreciated.

In addition to considering existing emissions the BREF process seeks to consider what might be suitable limits for emerging techniques.

Glossary

IED

BREF
Documents

IPPC

LCP D

WID

ELV

NERP

MS

EQS

TWG

Industrial Emissions Directive

Best Available Techniques Reference

Integrated Pollution Prevention & Control

Large Combustion Plant directive

Waste Incineration Directive

Emission Limit Value

National Emissions Reduction Plan

Member States

Environmental Quality Standard

Technical Working Group

Contact details for TWG issues

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