**LCP Data Checks 2018**

**Information on checks 3.3 and 4.2 to 4.4**

Information from the methodology report, updated for the 2018 reporting round.

*LCP3.3 Plausibility of fuel input*

**Rationale:** In principle, the total fuel input reported in a given year must not exceed the rated thermal input. An exceedance may indicate a reporting error.

**Criteria:** The total fuel input (in TJ per year) is added up and compared to the rated thermal input (in MW). Cases where the ratio of the two values is larger than **34** TJ / (MW ∙ yr) are flagged as “among the highest ratios reported”. These cases correspond to the top 1 % of the 2013-2015 datasets. In cases where the ratio is larger than 100 TJ / (MW ∙ yr), the Member State is asked for confirmation.

**Implementation:** The check is carried out by the online tool.

**Quality objectives addressed** (see section 1.3):(1), (2), (3)

*LCP4.2 SO2 Emission outlier test*

**Rationale:** Based on the fuel input and average emission factors, SO2 emissions can be estimated roughly. A strong deviation from the actual reported emissions may indicate a reporting error. It has to be taken into account that differences exist between plants due to different technologies, plant sizes and operating conditions, therefore clarifications will be requested only in case of strong deviations.

**Criteria:** Reported fuel input is multiplied by the following factors. These factors are the average emission factors calculated from the 2013-2015 dataset (for the calculation, the top and bottom 2.5 % of emission factors were not taken into account).

* 0.0085 t/TJ for biomass
* 0.3020 t/TJ for coal, lignite and peat
* 0.1360 t/TJ for liquid fuels
* 0.0003 t/TJ for natural gas
* 0.0083 t/TJ for other gases

Although emission factors for coal, lignite and peat differ widely, currently only one emission factor is available for all types of solid fuels, because up until the 2017 reporting round, all types of solid fuels (except biomass) have been reported together as “solid fuels”.

A justification is requested if reported SO2 emissions are larger by more than a factor of 20 than would be expected from fuel input using average emission factors. Likewise, a justification is requested if reported SO2 emissions are smaller by more than a factor of 500 than would be expected from fuel input using average emission factors, unless the only fuel reported is natural gas.

**Implementation:** This calculation is carried out by the online tool.

**Quality objectives addressed** (see section 1.3):(2), (4)

*LCP4.3 NOx Emission outlier test*

**Rationale:** Based in the fuel input and average emission factors, NOx emissions can be estimated roughly. A strong deviation from the actual reported emissions may indicate a reporting error.

**Criteria:** Reported fuel input is multiplied by the following factors. These factors are the average emission factors calculated from the 2013-2015 dataset (for the calculation, the top and bottom 2.5 % of emission factors were not taken into account).

* 0.0854 t/TJ for biomass
* 0.1271 t/TJ for coal, lignite and peat
* 0.0912 t/TJ for liquid fuels
* 0.0250 t/TJ for natural gas
* 0.0339 t/TJ for other gases

Although emission factors for coal, lignite and peat differ widely, currently only one emission factor is available for all types of solid fuels, because up until the 2017 reporting round, all types of solid fuels (except biomass) have been reported together as “solid fuels”.

A justification is requested if reported NOx emissions are larger by more than a factor of 20 than would be expected from fuel input using average emission factors. Likewise, a justification is requested if reported NOx emissions are smaller by more than a factor of 10 than would be expected from fuel input using average emission factors.

**Implementation:** This calculation is carried out by the online tool.

**Quality objectives addressed** (see section 1.3):(2), (4)

*LCP4.4 Dust Emission outlier test*

**Rationale:** Based in the fuel input and average emission factors, dust emissions can be estimated roughly. A strong deviation from the actual reported emissions may indicate a reporting error.

**Criteria:** Reported fuel input is multiplied by the following factors. These factors are the average emission factors calculated from the 2013-2015 dataset (for the calculation, the top and bottom 2.5 % of emission factors were not taken into account).

* 0.0041 t/TJ for biomass
* 0.0134 t/TJ for coal, lignite and peat
* 0.0048 t/TJ for liquid fuels
* 0.0001 t/TJ for natural gas
* 0.0004 t/TJ for other gases

Although emission factors for coal, lignite and peat differ widely, currently only one emission factor is available for all types of solid fuels, because up until the 2017 reporting round, all types of solid fuels (except biomass) have been reported together as “solid fuels”.

A justification is requested if reported dust emissions are larger by more than a factor of 20 than would be expected from fuel input using average emission factors. Likewise, a justification is requested if reported dust emissions are smaller by more than a factor of 500 than would be expected from fuel input using average emission factors, unless the only fuel reported is natural gas.

**Implementation:** This calculation is carried out by the online tool.

**Quality objectives addressed** (see section 1.3):(2), (4)