**Section 225.435 Methodology for Calculating Annual Allocations**

The Agency will calculate converted gross electrical (CGO) output, in MWh, for each CAIR NOx unit that has operated during at least one calendar year prior to the calendar year in which the Agency reports the allocations to USEPA as follows:

a) For control periods 2009, 2010, and 2011, the owner or operator of the unit must submit in writing to the Agency, by September 15, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate the unit's converted gross electrical output. The data shall be used to calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:

1) Gross electrical output: If the unit has four or five control periods of data, then the gross electrical output (GO) will be the average of the unit's three highest gross electrical outputs from the 2001, 2002, 2003, 2004, or 2005 control periods. If the unit has three or fewer control periods of gross electrical output data, the gross electrical output will be the average of those control periods for which data is available. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:

CGO (in MWh) = GO (in MWh) × 1.0;

B) If the unit is oil-fired:

CGO (in MWh) = GO (in MWh) × 0.6; or

C) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = GO (in MWh) × 0.4

2) Heat input (HI): If the unit has four or five control periods of data, the average of the unit's three highest heat inputs from the 2001, 2002, 2003, 2004 or 2005 control period will be used. If the unit has three or fewer control periods of heat input data, the heat input will be the average of those control periods for which data is available. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0387.

b) For control periods 2012 and 2013, the owner or operator of the unit must submit in writing to the Agency, by June 1, 2008, a statement that either gross electrical output data or heat input data will be used to calculate the unit's converted gross electrical output. The unit's converted gross electrical output shall be calculated pursuant to either subsection (b)(1) or (b)(2) of this Section:

1) Gross electrical output: The average of the unit's two most recent years of control period gross electrical output, if available. If a unit commences commercial operation in the 2007 control period and does not have gross electrical output for the 2006 control period, then the gross electrical output from 2007 will be used. If a generator is served by two or more units, the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the control period. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:

CGO (in MWh) = GO (in MWh) × 1.0;

B) If the unit is oil-fired:

CGO (in MWh) = GO (in MWh) × 0.6;

C) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = GO (in MWh) × 0.4.

2) Heat input: The average of the unit's two most recent years of control period heat inputs, e.g., for the 2012 control period, the average of the unit's heat input from the 2006 and 2007 control periods. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = HI (in mmBtu) × 0.0387.

c) For control period 2014 and thereafter, the unit's gross electrical output will be the average of the unit's two most recent control period's gross electrical output, if available. If a unit commences commercial operation in the most recent control period and does not have gross electrical output for two control periods, the gross electrical output from the most recent period, e.g., if the unit commences commercial operation in 2009 and does not have gross electrical output from 2008, gross electrical output from 2009 will be used. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

1) If the unit is coal-fired:

CGO (in MWh) = GO (in MWh) × 1.0;

2) If the unit is oil-fired:

CGO (in MWh) = GO (in MWh) × 0.6; or

3) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = GO (in MWh) × 0.4.

d) For a unit that is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (a), (b), or (c) of this Section to the converted useful thermal energy (CUTE) to determine the total converted gross electrical output for the unit (TCGO). The Agency will determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available. In the first year for which a unit is considered to be an existing unit rather than a new unit, the unit's control period useful thermal output for the prior year will be used. The converted useful thermal energy will be determined using the following equations:

1) If the unit is coal-fired:

CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

2) If the unit is oil-fired:

CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or

3) If the unit is neither coal-fired nor oil-fired:

CUTE (in MWh) = UTE (in mmBtu) × 0.1172.

e) The CAIR NOx unit's converted gross electrical output and converted useful thermal energy in subsections (a)(1), (b)(1), (c), and (d) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR NOx unit pursuant to the provisions of Section 225.450.

f) The CAIR NOx unit's heat input in subsections (a)(2) and (b)(2) of this Section for each control period will be determined in accordance with 40 CFR 75, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. 12864, effective August 31, 2007)