CHAPTER 145. INTERSTATE POLLUTION TRANSPORT REDUCTION

Subchapter D. CAIR NOx AND SO_2 TRADING PROGRAMS

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GENERAL PROVISIONS

§ 145.201. Purpose.

This subchapter incorporates by reference the CAIR NOx Annual Trading Program and CAIR NOx Ozone Season Trading Program as a means of mitigating the interstate transport of fine particulates and NOx, and the CAIR SO_2 Trading Program as a means of mitigating the interstate transport of fine particulates and SO_2. This subchapter also

establishes general provisions and the applicability, allowance and supplemental monitoring, recordkeeping and reporting provisions.

§ 145.202. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

Demand side management—The management of customer consumption of electricity or the demand for electricity through the implementation of any of the following:

(i) Energy efficiency technologies, management practices or other strategies in residential, commercial, institutional or government customers that reduce electricity consumption by those customers.

(ii) Load management or demand response technologies, management practices or other strategies in residential, commercial, industrial, institutional and government customers that shift electric load from periods of higher demand to periods of lower demand.

(iii) Industrial by-product technologies consisting of the use of a by-product from an industrial process, including the reuse of energy from exhaust gases or other manufacturing by-products that are used in the direct production of electricity at the facility of a customer.

Demand side management energy efficiency qualifying resource—A demand side management energy efficiency measure that has no associated NOx emissions and that generates certified alternative energy credit.

EIA—The Energy Information Administration of the United States Department of Energy or its successor.

MWh-Megawatt-hour—One million watt-hours.

Pennsylvania Alternative Energy Portfolio Standard—An applicable standard promulgated under the Alternative Energy Portfolio Standards Act (73 P. S. § § 1648.1—1648.8).

Renewable energy—

(i) Renewable energy generated by one or more of the following fuels, energy resources or technologies, and that does not emit NOx or SO_2:

(A) Solar photovoltaic or solar thermal energy.

(B) Wind energy.

(C) Fuel cells that do not employ a fuel processor that emits NOx.

(D) Ocean thermal, wave or tidal energy.

(E) Low-impact hydro energy.

(F) Geothermal energy.

(ii) The term does not include energy generated from nuclear fuel, biomass, landfill gas, fuel cells that employ a fuel processor that emits NOx, or hydro using pumped storage.

Renewable energy certificate—The tradable alternative energy credit instrument generated under, and used to establish, verify and monitor compliance with, the Pennsylvania Alternative Energy Portfolio Standard. A unit of credit shall equal 1 megawatt-hour of electricity from an alternative energy source.

Renewable energy qualifying resource—A renewable energy measure that generates renewable energy certificates.

§ 145.203. Applicability.

This subchapter applies to CAIR NOx units, CAIR NOx Ozone Season units and CAIR SO_2 units.

§ 145.204. Incorporation of Federal regulations by reference.

(a) Except as otherwise specified in this subchapter, the provisions of the CAIR NOx Annual Trading Program, found in 40 CFR Part 96 (relating to NOx budget trading program and CAIR NOx and SO_2 trading programs for State implementation plans), including all appendices, future amendments and supplements thereto, are incorporated by reference.

(b) Except as otherwise specified in this subchapter, the provisions of the CAIR SO_2 Trading Program, found in 40 CFR Part 96, including all appendices, future amendments and supplements thereto, are incorporated by reference.

(c) Except as otherwise specified in this subchapter, the provisions of the CAIR NOx Ozone Season Trading Program, found in 40 CFR Part 96, including all appendices, future amendments and supplements thereto, are incorporated by reference.

(d) In the event of a conflict between Federal regulatory provisions incorporated by reference in this subchapter and Pennsylvania regulatory provisions, the provision expressly set out in this subchapter shall be followed unless the Federal provision is more stringent. Federal regulations that are cited in this subchapter or that are cross-referenced

in the Federal regulations incorporated by reference include any Pennsylvania modifications made to those Federal regulations.

ADDITIONAL REQUIREMENTS FOR CHAPTER 127 EMISSION REDUCTION CREDIT PROVISIONS

§ 145.205. Emission reduction credit provisions.

The following conditions shall be satisfied in order for the Department to issue a permit or plan approval to the owner or operator of a unit not subject to this subchapter that is relying on emission reduction credits (ERCs) or creditable emission reductions in an applicability determination under Chapter 127, Subchapter E (relating to new source review), or is seeking to enter into an emissions trade authorized under Chapter 127 (relating to construction, modification, reactivation and operation of sources), if the ERCs or creditable emission reductions were, or will be, generated by a unit subject to this subchapter.

(1) Prior to issuing the permit or plan approval, the Department will permanently reduce the Commonwealth's CAIR NOx trading budget or CAIR NOx Ozone Season trading budget, or both, as applicable, beginning with the sixth control period following the date the plan approval or permit to commence operations or increase emissions is issued. The Department will permanently reduce the applicable CAIR NOx budgets by an amount of allowances equal to the ERCs or creditable emission reductions relied upon in the applicability determination for the non-CAIR unit subject to Chapter 127, Subchapter E or in the amount equal to the emissions trade authorized under Chapter 127, as if these emissions had already been emitted.

(2) The permit or plan approval must prohibit the owner or operator from commencing operation or increasing emissions until the owner or operator of the CAIR unit generating the ERC or creditable emission reduction surrenders to the Department an amount of allowances equal to the ERCs or emission reduction credits relied upon in the applicability determination for the non-CAIR unit under Chapter 127, Subchapter E or the amount equal to the ERC trade authorized under Chapter 127, for each of the five consecutive control periods following the date the non-CAIR unit commences operation or increases emissions. The allowances surrendered must be of present or past vintage years.

ADDITIONAL REQUIREMENTS FOR CAIR NOx ANNUAL TRADING PROGRAM

§ 145.211. Timing requirements for CAIR NOx allowance allocations.

(a) *Provisions not incorporated by reference*. The requirements of 40 CFR 96.141 (relating to timing requirements for CAIR NOx allowance allocations) are not

incorporated by reference. Instead of 40 CFR 96.141, the requirements set forth in this section apply.

(b) *Regular allocations*. The Department will make regular allocations of CAIR NOx allowances as follows:

(1) Except for allocations made under subsection (c), by April 30, 2008, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212 (relating to CAIR NOx allowance allocations) for the control periods in 2010-2012 in a format prescribed by the Administrator.

(2) Except for allocations made under subsection (c), by April 30, 2009, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212 for the control period in 2013 in a format prescribed by the Administrator. By April 30 every year after 2009, the Department will submit the allocations for the next consecutive control period.

(3) The Department will reserve 1.3% of the CAIR NOx Trading Budget for each annual control period for allocation to units as provided under § 145.212(f)(2).

(c) *New CAIR NOx unit allowance allocations*. By April 30, 2011, and by April 30 every year thereafter, the Department will submit to the Administrator the CAIR NOx allowance allocations made in accordance with § 145.212(e). The Department will base the allocations on actual emissions in the calendar year preceding the year of the submission.

(d) *Publication*. The Department will publish notice of the proposed CAIR NOx allowance allocations in the *Pennsylvania Bulletin* and will publish the final allocations after a 15-day public comment period. The Department will include in the notice the name and telephone number of a person to contact for access to additional information. The Department will publish notice according to the following schedule:

(1) For allocations made under subsection (b)(1), by April 1, 2008.

(2) For allocations made under subsection (b)(2), by April 1, 2009, and by April 1 every year thereafter.

(3) For allocations made under subsection (c), by March 1 each year, beginning in 2011.

(e) *Order of budget allowance withdrawal*. The Department will issue CAIR NOx allowances from the CAIR NOx Trading Budget established in 40 CFR 96.140 (relating to State trading budgets) in the following order:

(1) To new units under § 145.212(e).

(2) To units under § 145.212(f)(2).

(3) To units under § 145.212(c).

§ 145.212. CAIR NOx allowance allocations.

(a) *Provisions not incorporated by reference*. The requirements of 40 CFR 96.142 (relating to CAIR NOx allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.142, the requirements set forth in this section apply.

(b) *Baseline heat input*. Baseline heat input for each CAIR NOx unit will be converted as follows:

(1) A unit's control period heat input and a unit's status as coal-fired or oil-fired for a calendar year under this paragraph will be determined in one of the following two ways:

(i) In accordance with 40 CFR Part 75 (relating to continuous emission monitoring), to the extent that the unit was otherwise subject to 40 CFR Part 75 for the year.

(ii) Based on the best available data reported to the Department for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

(2) Except as provided in subparagraphs (iv) and (v), a unit's converted control period heat input for a calendar year shall be determined as follows:

(i) The control period gross electrical output of the generators served by the unit multiplied by 7,900 Btu/kWh if the unit is coal-fired for the year, and divided by 1,000,000 Btu/mmBtu.

(ii) The control period gross electrical output of the generators served by the unit multiplied by 6,675 Btu/kWh if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/mmBtu.

(iii) 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 share of the total control period heat input from each of the units for the year.

(iv) For a unit that is a 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 total heat energy (in Btus) of the steam produced by the boiler during the annual control period, divided by 0.8 and by 1,000,000 Btu/mmBtu.

(v) For a unit that is a combustion turbine 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 annual control period gross electrical

output of the enclosed device comprising the compressor, combustor and turbine multiplied by 3,413 Btu/kWh, plus the total heat energy (in Btu) of the steam produced by any associated heat recovery steam generator during the annual control period divided by 0.8, and with the sum divided by 1,000,000 Btu/mmBtu.

(vi) Calculations will be based on the best output data available on or before January 31 of the year the allocations are published. If unit level electrical or steam output data are not available from EIA, or submitted by this date by the owner or operator of the CAIR NOx unit, then heat input data for the period multiplied by 0.25 and converted to MWh will be used to determine total output.

(c) *Existing unit, new unit and subsection (f)(1) qualifying resource allocation baseline.* For each control period beginning with January 1, 2010, and each year thereafter, the Department will allocate to qualifying resources and CAIR NOx units, including CAIR NOx units issued allowances under subsection (e), a total amount of CAIR NOx allowances equal to the number of CAIR NOx allowances remaining in the Commonwealth's CAIR NOx trading budget under 40 CFR 96.140 (relating to State trading budgets) for those control periods using summed baseline heat input data as determined under subsections (b) and (f)(1) from a baseline year that is 6 calendar years before the control period.

(d) *Proration of allowance allocations.* The Department will allocate CAIR NOx allowances to each existing CAIR NOx unit and qualifying resource in an amount determined by multiplying the amount of CAIR NOx allowances in the Commonwealth's CAIR NOx trading budget available for allocation under subsection (c) by the ratio of the baseline heat input of the existing CAIR NOx unit or qualifying resource to the sum of the baseline heat input of existing CAIR NOx units and of the qualifying resources, rounding to the nearest whole allowance as appropriate.

(e) *Allocations to new CAIR NOx units.* By March 31, 2011, and March 31 each year thereafter, the Department will allocate CAIR NOx allowances under § 145.211(c) (relating to timing requirements for CAIR NOx allowance allocations) to CAIR NOx units equal to the previous year's emissions at each unit, unless the unit has been issued allowances of the previous year's vintage in a regular allocation under § 145.211(b). The Department will allocate CAIR NOx allowances under this subsection of a vintage year that is 5 years later than the year in which the emissions were generated. The number of CAIR NOx allowances allocated may not exceed the actual emission of the year preceding the year in which the Department makes the allocation. The allocation of these allowances to the new unit will not reduce the number of allowances the unit is entitled to receive under another provision of this subchapter.

(f) *Allocations to qualifying resources and units exempted by section 405(g)(6)(a) of the Clean Air Act.* For each control period beginning with 2010 and thereafter, the Department will allocate CAIR NOx allowances to qualifying resources under paragraph (1) in this Commonwealth that are not also allocated CAIR NOx allowances under another provision of this subchapter and to existing units under paragraph (2) that were

exempted at any time under section 405(g)(6)(a) of the Clean Air Act (42 U.S.C.A. § 7651d(g)(6)(A)), regarding phase II SO_2 requirements, and that commenced operation prior to January 1, 2000, but did not receive an allocation of SO_2 allowances under the EPA's Acid Rain Program, as follows:

(1) The Department will allocate CAIR NOx allowances to a renewable energy qualifying resource or demand side management energy efficiency qualifying resource in accordance with subsections (c) and (d) upon receipt by the Department of an application, in writing, on or before June 30 of the year following the control period, except for vintage year 2011 and 2012 NOx allowance allocations whose application deadline will be prescribed by the Department, meeting the requirements of this paragraph. The number of allowances allocated to the qualifying resource will be determined by converting the certified quantity of electric energy production, useful thermal energy, and energy equivalent value of the measures approved under the Pennsylvania Alternative Energy Portfolio Standard to equivalent thermal energy. Equivalent thermal energy is a unit's baseline heat input for allocation purposes. The conversion rate for converting electrical energy to equivalent thermal energy is 3,413 Btu/kWh. To receive allowances under this subsection, the qualifying resource must have commenced operation after January 1, 2005, must be located in this Commonwealth and may not be a CAIR NOx unit. The following procedures apply:

(i) The owner of a qualifying renewable energy resource shall appoint a CAIR-authorized account representative and file a certificate of representation with the EPA and the Department.

(ii) The Department will transfer the allowances into an account designated by the owner's CAIR-authorized account representative of the qualifying resource, or into an account designated by an aggregator approved by the Pennsylvania Public Utility Commission or its designee.

(iii) The applicant shall provide the Department with the corresponding renewable energy certificate serial numbers.

(iv) At least one whole allowance must be generated per owner, operator or aggregator for an allowance to be issued.

(2) The Department will allocate CAIR NOx allowances to the owner or operator of a CAIR SO_2 unit that commenced operation prior to January 1, 2000, that has not received an SO_2 allocation for that compliance period, as follows:

(i) By January 31, 2011, and each year thereafter, the owner or operator of a unit may apply, in writing, to the Department under this subsection to receive extra CAIR NOx allowances.

(ii) The owner or operator may request under this subparagraph one CAIR NOx allowance for every 8 tons of SO_2 emitted from a qualifying unit during the preceding

control period. An owner or operator of a unit covered under this subparagraph that has opted into the Acid Rain Program may request one CAIR NOx allowance for every 8 tons of SO_2 emissions that have not been covered by the SO_2 allowances received as a result of opting into the Acid Rain Program.

(iii) If the original CAIR NOx allowance allocation for the unit for the control period exceeded the unit's actual emissions of NOx for the control period, the owner or operator shall also deduct the excess CAIR NOx allowances from the unit's request under subparagraph (ii). This amount is the unit's adjusted allocation and will be allocated unless the proration described in subparagraph (iv) applies.

(iv) The Department will make any necessary corrections and then sum the requests. If the total number of NOx allowances requested by all qualified units under this paragraph, as adjusted by subparagraph (iii), is less than 1.3% of the Commonwealth's CAIR NOx Trading Budget, the Department will allocate the corrected amounts. If the total number of NOx allowances requested by all qualified units under this paragraph exceeds 1.3% of the Commonwealth's CAIR NOx Trading Budget, the Department will prorate the allocations based upon the following equation:

$$\mathbf{A_A = [E_A \ X \ (0.013 \ X \ B_{NA} \ )] \ / \ T_{RA}}$$

where,

A_A is the unit's prorated allocation,

E_A is the adjusted allocation the unit may request under subparagraph (iii),

B_{NA} is the total number of CAIR NOx allowances in the Commonwealth's CAIR NOx trading budget,

T_{RA} is the total number of CAIR NOx allowances requested by all units requesting allowances under this paragraph.

(3) The Department will review each CAIR NOx allowance allocation request under this subsection and will allocate CAIR NOx allowances for each control period under a request as follows:

(i) The Department will accept an allowance allocation request only if the request meets, or is adjusted by the Department as necessary to meet, the requirements of this section.

(ii) On or after January 1 of the year of allocation, the Department will determine the sum of the CAIR NOx allowances requested.

(4) Up to 1.3% of the Commonwealth's CAIR NOx trading budget is available for allocation in each allocation cycle from 2011-2016 to allocate 2010-2015 allowances for

the purpose of offsetting SO_2 emissions from units described in paragraph (2). Beginning January 1, 2017, and for each allocation cycle thereafter, the units will no longer be allocated CAIR NOx allowances under paragraph (2). Any allowances remaining after this allocation will be allocated to units under subsection (c) during the next allocation cycle.

(5) Notwithstanding the provisions of paragraphs (2)—(4), the Department may extend, terminate or otherwise modify the allocation of NOx allowances made available under this subsection for units exempted under section 405(g)(6)(a) of the Clean Air Act after providing notice in the *Pennsylvania Bulletin* and at least a 30-day public comment period.

(g) The Department will correct any errors in allocations made by the Department and discovered after final allocations are made but before the next allocation cycle, in the subsequent allocation cycle using future allowances that have not yet been allocated.

§ 145.213. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.170—96.175.

(a) By January 1, 2009, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NOx unit shall install, calibrate, maintain and operate a wattmeter, measure gross electrical output in megawatt-hours on a continuous basis and record the output of the wattmeter. If a generator is served by two or more units, the information to determine the heat input of each unit for that control period shall also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data are used, the owner or operator shall comply with the applicable provisions of 40 CFR Part 75 (relating to continuous emission monitoring).

(b) By September 1, 2008, for a CAIR NOx unit that is a cogeneration unit, and for a CAIR NOx unit with cogeneration capabilities, the owner or operator shall install, calibrate, maintain and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. The owner or operator of a CAIR NOx unit that produces useful thermal energy but uses an energy transfer medium other than steam, such as hot water or glycol, shall install, calibrate, maintain and operate the necessary meters to measure and record the data necessary to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, but operation of the meters shall be resumed if the unit resumes production of useful thermal energy.

(c) Beginning with 2009, the designated representative of the unit shall submit to the Department an annual report showing monthly gross electrical output and monthly useful thermal energy from the unit. The report is due by January 31 for the preceding calendar year.

(d) The owner or operator of a CAIR NOx unit shall maintain onsite the monitoring plan detailing the monitoring system and maintenance of the monitoring system, including quality assurance activities. The owner or operator of a CAIR NOx unit shall retain the monitoring plan for at least 5 years from the date that it is replaced by a new or revised monitoring plan. The owner or operator of a CAIR NOx unit shall provide the Department with a written copy of the monitoring plan by January 1, 2009, and thereafter within 3 calendar months of making updates to the plan.

(e) The owner or operator of a CAIR NOx unit shall retain records for at least 5 years from the date the record is created or the data collected as required by subsections (a) and (b), and the reports submitted to the Department and the EPA in accordance with subsections (c) and (d).

ADDITIONAL REQUIREMENTS FOR CAIR NOx OZONE SEASON TRADING PROGRAM

§ 145.221. Timing requirements for CAIR NOx Ozone Season allowance allocations.

(a) *Provisions not incorporated by reference*. The requirements of 40 CFR 96.341 (relating to timing requirements for CAIR NOx Ozone Season allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.341, the requirements in this section apply.

(b) *Regular allocations*. The Department will make regular allocations of CAIR NOx ozone season allowances as follows:

(1) Except for allocations made under subsection (c), by April 30, 2008, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222 (relating to CAIR NOx Ozone Season allowance allocations) for the control periods in 2010-2012 in a format prescribed by the Administrator.

(2) Except for allocations made under subsection (c), by April 30, 2009, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222 for the control period in 2013 in a format prescribed by the Administrator. By April 30 every year after 2009, the Department will submit the allocations for the next consecutive control period.

(c) *New CAIR NOx unit allowance allocations*. By April 30, 2011, and by April 30 every year thereafter, the Department will submit to the Administrator the CAIR NOx Ozone Season allowance allocations made in accordance with § 145.222(e). The Department will base the allocations on actual emissions in the ozone season in the calendar year preceding the year of the submission.

(d) *Publication*. The Department will publish notice of the proposed CAIR NOx Ozone Season allowance allocations in the *Pennsylvania Bulletin* and will publish the final allocations after a 15-day public comment period. The Department will include in the notice the name and telephone number of a person to contact for access to additional information. The Department will publish notice according to the following schedule:

(1) For allocations made under subsection (b)(1), by April 1, 2008.

(2) For allocations made under subsection (b)(2), by April 1, 2009, and by April 1 every year thereafter.

(3) For allocations made under subsection (c), by March 1 each year, beginning in 2011.

(e) *Order of budget allowance withdrawal*. The Department will issue CAIR NOx Ozone Season allowances from the CAIR NOx Ozone Season trading budget established in 40 CFR 96.240 (relating to State trading budgets) in the following order:

(1) To new units under § 145.222(e).

(2) To units under § 145.222(c).

§ 145.222. CAIR NOx Ozone Season allowance allocations.

(a) *Provisions not incorporated by reference*. The requirements of 40 CFR 96.342 (relating to CAIR NOx Ozone Season allowance allocations) are not incorporated by reference. Instead of 40 CFR 96.342, the requirements in this section apply.

(b) *Baseline heat input*. Baseline heat input for each CAIR NOx Ozone Season unit will be converted as follows:

(1) A unit's control period heat input and a unit's status as coal-fired or oil-fired for the ozone season portion of a calendar year under this paragraph will be determined in one of the following two ways:

(i) In accordance with 40 CFR Part 75 (relating to continuous emission monitoring), to the extent that the unit was otherwise subject to the requirements of 40 CFR Part 75 for the control period.

(ii) Based on the best available data reported to the Department for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

(2) Except as provided in subparagraphs (iv) and (v), a unit's converted control period heat input for the ozone season portion of a calendar year shall be determined as follows:

(i) The control period gross electrical output of the generators served by the unit multiplied by 7,900 Btu/kWh if the unit is coal-fired for the ozone season control period, and divided by 1,000,000 Btu/mmBtu.

(ii) The control period gross electrical output of the generators served by the unit multiplied by 6,675 Btu/kWh if the unit is not coal-fired for the ozone season control period, and divided by 1,000,000 Btu/mmBtu.

(iii) If a generator is served by 2 or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the share of the total control period heat input from each of the units for the ozone season control period.

(iv) For a unit that is a 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 total heat energy (in Btus) of the steam produced by the boiler during the ozone season control period, divided by 0.8 and by 1,000,000 Btu/mmBtu.

(v) For a unit that is a combustion turbine 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 control period gross electrical output of the enclosed device comprising the compressor, combustor and turbine multiplied by 3,413 Btu/kWh, plus the total heat energy (in Btu) of the steam produced by any associated heat recovery steam generator during the ozone season control period divided by 0.8, and with the sum divided by 1,000,000 Btu/mmBtu.

(vi) Calculations will be based on the best output data available on or before January 31 of the year the allocations are published. If unit level electrical or steam output data are not available from EIA, or submitted by this date by the owner or operator of the CAIR NOx Ozone Season unit, then heat input data for the period multiplied by 0.25 and converted to MWh will be used to determine total output.

(c) *Existing unit, new unit and subsection (f)(1) qualifying resource allocation baseline.* For each control period beginning with the 2010 control period and thereafter, the Department will allocate to qualifying resources and CAIR NOx Ozone Season units, including CAIR NOx Ozone Season units issued allowances under subsection (e), a total amount of CAIR NOx Ozone Season allowances equal to the number of CAIR NOx Ozone Season allowances remaining in the Commonwealth's CAIR NOx Ozone Season trading budget under 40 CFR 96.140 (relating to State trading budgets) for those control periods using summed baseline heat input data as determined under subsections (b) and (f)(1) from an ozone season control period in a baseline year that is 6 calendar years before the control period.

(d) *Proration of allowance allocations*. The Department will allocate CAIR NOx Ozone Season allowances to each existing CAIR NOx Ozone Season unit and qualifying resource in an amount determined by multiplying the amount of CAIR NOx Ozone

Season allowances in the Commonwealth's CAIR NOx Ozone Season trading budget available for allocation under subsection (c) by the ratio of the baseline heat input of the existing CAIR NOx Ozone Season unit or qualifying resource to the sums of the baseline heat input of existing CAIR NOx Ozone Season units and of the qualifying resources, rounding to the nearest whole allowance as appropriate.

(e) *Allocations to new CAIR NOx Ozone Season units*. By March 31, 2011, and March 31 each year thereafter, the Department will allocate CAIR NOx Ozone Season allowances under § 145.221(c) (relating to timing requirements for CAIR NOx Ozone Season allowance allocations) to CAIR NOx Ozone Season units equal to the previous year's emissions at each unit, unless the unit has been issued allowances of the previous year's vintage in a regular allocation under § 145.221(b). The Department will allocate CAIR NOx allowances under this subsection of a vintage year that is 5 years later than the year in which the emissions were generated. The number of CAIR NOx Ozone Season allowances allocated shall not exceed the actual emission of the year preceding the year in which the Department makes the allocation. The allocation of these allowances to the new unit will not reduce the number of allowances the unit is entitled to receive under another provision of this subchapter.

(f) *Allocations to qualifying resources*. For each control period beginning with the 2010 control period, and thereafter, the Department will allocate CAIR NOx Ozone Season allowances to qualifying resources in this Commonwealth that are not also allocated CAIR NOx Ozone Season allowances under another provision of this subchapter, as follows:

(1) The Department will allocate CAIR NOx Ozone Season allowances to a renewable energy qualifying resource or demand side management energy efficiency qualifying resource in accordance with subsections (c) and (d) upon receipt by the Department of an application, in writing, on or before June 30 of the year following the control period, except for vintage year 2011 and 2012 NOx Ozone Season allowance allocations whose application deadline will be prescribed by the Department, meeting the requirements of this paragraph. The number of allowances allocated to the qualifying resource will be determined by converting the certified quantity of electric energy production, useful thermal energy, and energy equivalent value of the measures approved under the Pennsylvania Alternative Energy Portfolio Standard to equivalent thermal energy. Equivalent thermal energy is a unit's baseline heat input for allocation purposes. The conversion rate for converting electrical energy to equivalent thermal energy is 3,413 Btu/kWh. To receive allowances under this subsection, the qualifying resource must have commenced operation after January 1, 2005, must be located in this Commonwealth and may not be a CAIR NOx Ozone Season unit. The following procedures apply:

(i) The owner of a qualifying renewable energy resource shall appoint a CAIR-authorized account representative and file a certificate of representation with the EPA and the Department.

(ii) The Department will transfer the allowances into an account designated by the owner's CAIR-authorized account representative of the qualifying resource, or into an account designated by an aggregator approved by the Pennsylvania Public Utility Commission or its designee.

(iii) The applicant shall provide the Department with the corresponding renewable energy certificate serial numbers.

(iv) At least one whole allowance must be generated per owner, operator or aggregator for an allowance to be issued.

(g) The Department will correct any errors in allocations made by the Department and discovered after final allocations are made but before the next allocation cycle, in the subsequent allocation cycle using future allowances that have not yet been allocated.

§ 145.223. Supplemental monitoring, recordkeeping and reporting requirements for gross electrical output and useful thermal energy for units subject to 40 CFR 96.370—96.375.

(a) By January 1, 2009, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NOx Ozone Season unit shall install, calibrate, maintain and operate a wattmeter, measure gross electrical output in megawatt-hours on a continuous basis and record the output of the wattmeter. If a generator is served by two or more units, the information to determine the heat input of each unit for that control period shall also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data are used, the owner or operator shall comply with the applicable provisions of 40 CFR Part 75 (relating to continuous emission monitoring).

(b) By September 1, 2008, for a CAIR NOx Ozone Season unit that is a cogeneration unit, and for a CAIR NOx Ozone Season unit with cogeneration capabilities, the owner or operator shall install, calibrate, maintain and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. The owner or operator of a CAIR NOx Ozone Season unit that produces useful thermal energy but uses an energy transfer medium other than steam, such as hot water or glycol, shall install, calibrate, maintain and operate the necessary meters to measure and record the data necessary to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, but operation of the meters shall be resumed if the unit resumes production of useful thermal energy.

(c) Beginning with 2009, the designated representative of the unit shall submit to the Department an annual report showing monthly gross electrical output and monthly useful thermal energy from the unit. The report is due by January 31 for the preceding calendar year.

(d) The owner or operator of a CAIR NOx Ozone Season unit shall maintain onsite the monitoring plan detailing the monitoring system and maintenance of the monitoring system, including quality assurance activities. The owner or operator of a CAIR NOx Ozone Season unit shall retain the monitoring plan for at least 5 years from the date that it is replaced by a new or revised monitoring plan. The owner or operator of a CAIR NOx Ozone Season unit shall provide the Department with a written copy of the monitoring plan by January 1, 2009, and thereafter within 3 calendar months of making updates to the plan.

(e) The owner or operator of a CAIR NOx Ozone Season unit shall retain records for at least 5 years from the date the record is created or the data collected as required by subsections (a) and (b), and the reports submitted to the Department and the EPA in accordance with subsections (c) and (d).

[Subchapter D is added, with a SIP effective date of 12/10/09.]