

for submission of objections to the determination. Objections shall be limited to addressing whether the determination is in accordance with paragraph (b) of this section. Based on any such objections, the Administrator will adjust each determination to the extent necessary to ensure that it is in accordance with paragraph (b) of this section.

(b) For each control period for which the NO_x Budget opt-in unit has an approved NO_x Budget opt-in permit, the NO_x Budget opt-in unit will be allocated NO_x allowances in accordance with the following procedures:

(1) The heat input (in mmBtu) used for calculating NO_x allowance allocations will be the lesser of:

(i) The unit's baseline heat input determined pursuant to § 97.84(c); or

(ii) The unit's heat input, as determined in accordance with subpart H of this part, for the control period in the year prior to the year of the control period for which the NO_x allocations are being calculated.

(2) The Administrator will allocate NO_x allowances to the unit in an amount equaling the heat input determined under paragraph (b)(1) of this section multiplied by the lesser of the unit's baseline NO_x emissions rate determined under § 97.84(c) or the most stringent State or federal NO_x emissions limitation applicable to the unit during the control period, divided by 2,000 lb/ton, and rounded to the nearest whole number of NO_x allowances as appropriate.

Subpart J—Appeal Procedures

§ 97.90 Appeal procedures.

The appeal procedures for the NO_x Budget Trading Program are set forth in part 78 of this chapter.

[69 FR 21648, Apr. 21, 2004]

Subpart AA—CAIR NO_x Annual Trading Program General Provisions

§ 97.101 Purpose.

This subpart and subparts BB through II set forth the general provisions and the designated representative, permitting, allowance, moni-

toring, and opt-in provisions for the Federal Clean Air Interstate Rule (CAIR) NO_x Annual Trading Program, under section 110 of the Clean Air Act and § 52.35 of this chapter, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

§ 97.102 Definitions.

The terms used in this subpart and subparts BB through II shall have the meanings set forth in this section as follows:

Account number means the identification number given by the Administrator to each CAIR NO_x Allowance Tracking System account.

Acid Rain emissions limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.

Acid Rain Program means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under title IV of the CAA and parts 72 through 78 of this chapter.

Actual weighted average NO_x emission rate means, for a NO_x averaging plan under § 76.11 of this chapter and for a year:

(1) The sum of the products of the actual annual average NO_x emission rate and actual annual heat input (as determined in accordance with part 75 of this chapter) for all units in the NO_x averaging plan for the year; divided by

(2) The sum of the actual annual heat input (as determined in accordance with part 75 of this chapter) for all units in the NO_x averaging plan for the year.

Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

Allocate or allocation means, with regard to CAIR NO_x allowances, the determination by a permitting authority or the Administrator of the amount of such CAIR NO_x allowances to be initially credited to a CAIR NO_x unit, a new unit set-aside, or other entity.

Allowance transfer deadline means, for a control period, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if

March 1 is not a business day), immediately following the control period and is the deadline by which a CAIR NO_x allowance transfer must be submitted for recordation in a CAIR NO_x source's compliance account in order to be used to meet the source's CAIR NO_x emissions limitation for such control period in accordance with § 97.154.

Alternate CAIR designated representative means, for a CAIR NO_x source and each CAIR NO_x unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with subparts BB and II of this part, to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NO_x Annual Trading Program. If the CAIR NO_x source is also a CAIR SO₂ source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO₂ Trading Program. If the CAIR NO_x source is also a CAIR NO_x Ozone Season source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x source is also subject to the Acid Rain Program, then this natural person shall be the same person as the alternate designated representative under the Acid Rain Program. If the CAIR NO_x source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the alternate Hg designated representative under the Hg Budget Trading Program.

Automated data acquisition and handling system or *DAHS* means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under subpart HH of this part, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by subpart HH of this part.

Biomass means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchandise for other purposes, that is segregated from other nonmerchandise material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

Boiler means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

Bottoming-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

CAIR authorized account representative means, with regard to a general account, a responsible natural person who is authorized, in accordance with subparts BB, FF, and II of this part, to transfer and otherwise dispose of CAIR NO_x allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

CAIR designated representative means, for a CAIR NO_x source and each CAIR NO_x unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with subparts BB and II of this part, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Annual Trading Program. If the CAIR NO_x source is also a CAIR SO₂ source, then this natural person shall be the same person as the CAIR designated representative under

the CAIR SO₂ Trading Program. If the CAIR NO_x source is also a CAIR NO_x Ozone Season source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program. If the CAIR NO_x source is also subject to the Hg Budget Trading Program, then this natural person shall be the same person as the Hg designated representative under the Hg Budget Trading Program.

CAIR NO_x allowance means a limited authorization issued by a permitting authority or the Administrator under subpart EE of this part or § 97.188, or under provisions of a State implementation plan that are approved under § 51.123(o)(1) or (2) or (p) of this chapter, to emit one ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NO_x Program. An authorization to emit nitrogen oxides that is not issued under subpart EE of this part, § 97.188, or provisions of a State implementation plan that are approved under § 51.123(o)(1) or (2) or (p) of this chapter shall not be a CAIR NO_x allowance.

CAIR NO_x allowance deduction or deduct CAIR NO_x allowances means the permanent withdrawal of CAIR NO_x allowances by the Administrator from a compliance account, *e.g.*, in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NO_x units at a CAIR NO_x source for a control period, determined in accordance with subpart HH of this part, or to account for excess emissions.

CAIR NO_x Allowance Tracking System means the system by which the Administrator records allocations, deductions, and transfers of CAIR NO_x allowances under the CAIR NO_x Annual Trading Program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

CAIR NO_x Allowance Tracking System account means an account in the CAIR NO_x Allowance Tracking System estab-

lished by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of CAIR NO_x allowances.

CAIR NO_x allowances held or hold CAIR NO_x allowances means the CAIR NO_x allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with subparts FF, GG, and II of this part, in a CAIR NO_x Allowance Tracking System account.

CAIR NO_x Annual Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program established by the Administrator in accordance with subparts AA through II of this part and §§ 51.123(p) and 52.35 of this chapter or approved and administered by the Administrator in accordance with subparts AA through II of part 96 of this chapter and § 51.123(o)(1) or (2) of this chapter, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

CAIR NO_x emissions limitation means, for a CAIR NO_x source, the tonnage equivalent, in NO_x emissions in a control period, of the CAIR NO_x allowances available for deduction for the source under § 97.154 (a) and (b) for the control period.

CAIR NO_x Ozone Season source means a source that is subject to the CAIR NO_x Ozone Season Trading Program.

CAIR NO_x Ozone Season Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program established by the Administrator in accordance with subparts AAAA through IIII of this part and §§ 51.123(ee) and 52.35 of this chapter or approved and administered by the Administrator in accordance with subparts AAAA through IIII of part 96 and § 51.123(aa)(1) or (2) (and (bb)(1)), (bb)(2), or (dd) of this chapter, as a means of mitigating interstate transport of ozone and nitrogen oxides.

CAIR NO_x source means a source that includes one or more CAIR NO_x units.

CAIR NO_x unit means a unit that is subject to the CAIR NO_x Annual Trading Program under § 97.104 and, except for purposes of § 97.105 and subpart EE of this part, a CAIR NO_x opt-in unit under subpart II of this part.

CAIR permit means the legally binding and federally enforceable written document, or portion of such document, issued by the permitting authority under subpart CC of this part, including any permit revisions, specifying the CAIR NO_x Annual Trading Program requirements applicable to a CAIR NO_x source, to each CAIR NO_x unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

CAIR SO₂ source means a source that is subject to the CAIR SO₂ Trading Program.

CAIR SO₂ Trading Program means a multi-state sulfur dioxide air pollution control and emission reduction program established by the Administrator in accordance with subparts AAA through III of this part and §§ 51.124(r) and 52.36 of this chapter or approved and administered by the Administrator in accordance with subparts AAA through III of part 96 of this chapter and § 51.124(o)(1) or (2) of this chapter, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

Certifying official means:

(1) For a corporation, a president, secretary, treasurer, or vice-president or the corporation in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, Federal, or other public agency, a principal executive officer or ranking elected official.

Clean Air Act or CAA means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

Coal means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

Coal-derived fuel means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

Coal-fired means:

(1) Except for purposes of subpart EE of this part, combusting any amount of coal or coal-derived fuel, alone or in

combination with any amount of any other fuel, during any year; or

(2) For purposes of subpart EE of this part, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

Cogeneration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

(1) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

(2) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity—

(i) For a topping-cycle cogeneration unit, (A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input;

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

Combustion turbine means:

(1) An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the enclosed device under paragraph (1) of this definition is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

Commence commercial operation means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to

generate electricity for sale or use, including test generation, except as provided in § 97.105 and § 97.184(h).

(i) For a unit that is a CAIR NO_x unit under § 97.104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CAIR NO_x unit under § 97.104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.105, for a unit that is not a CAIR NO_x unit under § 97.104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_x unit under § 97.104.

(i) For a unit with a date for commencement of commercial operation as defined in paragraph (2) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in paragraph (2) of this definition and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the re-

placement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

Commence operation means:

(1) To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber, except as provided in § 97.184(h).

(2) For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in paragraph (1) of this definition, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

(3) For a unit that is replaced by a unit at the same source (*e.g.*, repowered) after the date the unit commences operation as defined in paragraph (1) of this definition, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in paragraph (1), (2), or (3) of this definition as appropriate, except as provided in § 97.184(h).

Common stack means a single flue through which emissions from 2 or more units are exhausted.

Compliance account means a CAIR NO_x Allowance Tracking System account, established by the Administrator for a CAIR NO_x source under subpart FF or II of this part, in which any CAIR NO_x allowance allocations for the CAIR NO_x units at the source are initially recorded and in which are held any CAIR NO_x allowances available for use for a control period in order to meet the source's CAIR NO_x emissions limitation in accordance with § 97.154.

Continuous emission monitoring system or *CEMS* means the equipment required under subpart HH of this part to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of nitrogen oxides emissions, stack gas

volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with part 75 of this chapter. The following systems are the principal types of continuous emission monitoring systems required under subpart HH of this part:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A nitrogen oxides concentration monitoring system, consisting of a NO_x pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x emissions, in parts per million (ppm);

(3) A nitrogen oxides emission rate (or NO_x-diluent) monitoring system, consisting of a NO_x pollutant concentration monitor, a diluent gas (CO₂ or O₂) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x concentration, in parts per million (ppm), diluent gas concentration, in percent CO₂ or O₂, and NO_x emission rate, in pounds per million British thermal units (lb/mmBtu);

(4) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H₂O;

(5) A carbon dioxide monitoring system, consisting of a CO₂ pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO₂ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO₂ emissions, in percent CO₂; and

(6) An oxygen monitoring system, consisting of an O₂ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O₂, in percent O₂.

Control period means the period beginning January 1 of a calendar year, except as provided in § 97.106(c)(2), and

ending on December 31 of the same year, inclusive.

Emissions means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the CAIR designated representative and as determined by the Administrator in accordance with subpart HH of this part.

Excess emissions means any ton of nitrogen oxides emitted by the CAIR NO_x units at a CAIR NO_x source during a control period that exceeds the CAIR NO_x emissions limitation for the source.

Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

Fossil-fuel-fired means, with regard to a unit, combusting any amount of fossil fuel in any calendar year.

Fuel oil means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid, or gaseous state.

General account means a CAIR NO_x Allowance Tracking System account, established under subpart FF of this part, that is not a compliance account.

Generator means a device that produces electricity.

Gross electrical output means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

Heat input means, with regard to a specified period of time, the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to the Administrator by the CAIR designated representative and determined by the Administrator in accordance with subpart HH of this part and excluding the heat derived from preheated combustion air,

recirculated flue gases, or exhaust from other sources.

Heat input rate means the amount of heat input (in mmBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

Hg Budget Trading Program means a multi-state Hg air pollution control and emission reduction program approved and administered by the Administrator in accordance subpart HHHH of part 60 of this chapter and § 60.24(h)(6), or established by the Administrator under section 111 of the Clean Air Act, as a means of reducing national Hg emissions.

Life-of-the-unit, firm power contractual arrangement means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

- (1) For the life of the unit;
- (2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
- (3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

Maximum design heat input means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

Monitoring system means any monitoring system that meets the requirements of subpart HH of this part, including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

Most stringent State or Federal NO_x emissions limitation means, with regard to a unit, the lowest NO_x emissions limitation (in terms of lb/mmBtu) that is applicable to the unit under State or Federal law, regardless of the averaging period to which the emissions limitation applies.

Nameplate capacity means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

Oil-fired means, for purposes of subpart EE of this part, combusting fuel oil for more than 15.0 percent of the annual heat input in a specified year and not qualifying as coal-fired.

Operator means any person who operates, controls, or supervises a CAIR NO_x unit or a CAIR NO_x source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

Owner means any of the following persons:

- (1) With regard to a CAIR NO_x source or a CAIR NO_x unit at a source, respectively:
 - (i) Any holder of any portion of the legal or equitable title in a CAIR NO_x unit at the source or the CAIR NO_x unit;
 - (ii) Any holder of a leasehold interest in a CAIR NO_x unit at the source or the CAIR NO_x unit; or
 - (iii) Any purchaser of power from a CAIR NO_x unit at the source or the CAIR NO_x unit under a life-of-the-unit, firm power contractual arrangement;

provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CAIR NO_x unit; or

(2) With regard to any general account, any person who has an ownership interest with respect to the CAIR NO_x allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NO_x allowances.

Permitting authority means the State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to issue or revise permits to meet the requirements of the CAIR NO_x Annual Trading Program or, if no such agency has been so authorized, the Administrator.

Potential electrical output capacity means 33 percent of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

Receive or receipt of means, when referring to the permitting authority or the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the permitting authority or the Administrator in the regular course of business.

Recordation, record, or recorded means, with regard to CAIR NO_x allowances, the movement of CAIR NO_x allowances by the Administrator into or between CAIR NO_x Allowance Tracking System accounts, for purposes of allocation, transfer, or deduction.

Reference method means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

Replacement, replace, or replaced means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the construction of another

unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

Repowered means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

(1) Atmospheric or pressurized fluidized bed combustion;

(2) Integrated gasification combined cycle;

(3) Magnetohydrodynamics;

(4) Direct and indirect coal-fired turbines;

(5) Integrated gasification fuel cells; or

(6) As determined by the Administrator in consultation with the Secretary of Energy, a derivative of one or more of the technologies under paragraphs (1) through (5) of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

Sequential use of energy means:

(1) For a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or

(2) For a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.

Serial number means, for a CAIR NO_x allowance, the unique identification number assigned to each CAIR NO_x allowance by the Administrator.

Solid waste incineration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act.

Source means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. For purposes of section 502(c) of the Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility."

State means one of the States or the District of Columbia that is subject to the CAIR NO_x Annual Trading Program pursuant to § 52.35 of this chapter.

Submit or serve means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

- (1) In person;
- (2) By United States Postal Service; or
- (3) By other means of dispatch or transmission and delivery. Compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

Title V operating permit means a permit issued under title V of the Clean Air Act and part 70 or part 71 of this chapter.

Title V operating permit regulations means the regulations that the Administrator has approved or issued as meeting the requirements of title V of the Clean Air Act and part 70 or 71 of this chapter.

Ton means 2,000 pounds. For the purpose of determining compliance with the CAIR NO_x emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions (or the mass equivalent of the recorded hourly emission rates) in accordance with subpart HH of this part, but with any remaining fraction of a ton equal to or greater than 0.50 tons deemed to equal one ton and any remaining fraction of a ton less than 0.50 tons deemed to equal zero tons.

Topping-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Total energy input means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$\text{LHV} = \text{HHV} - 10.55(\text{W} + 9\text{H})$$

Where:

LHV = lower heating value of fuel in Btu/lb,
HHV = higher heating value of fuel in Btu/lb,
W = Weight % of moisture in fuel, and
H = Weight % of hydrogen in fuel.

Total energy output means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

Unit means a stationary, fossil-fuel-fired boiler or combustion turbine or other stationary, fossil-fuel-fired combustion device.

Unit operating day means a calendar day in which a unit combusts any fuel.

Unit operating hour or *hour of unit operation* means an hour in which a unit combusts any fuel.

Useful power means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

Useful thermal energy means, with regard to a cogeneration unit, thermal energy that is:

- (1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;
- (2) Used in a heating application (*e.g.*, space heating or domestic hot water heating); or
- (3) Used in a space cooling application (*i.e.*, thermal energy used by an absorption chiller).

Utility power distribution system means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

[65 FR 2727, Jan. 18, 2000, as amended at 71 FR 74795, Dec. 13, 2006; 72 FR 59206, Oct. 19, 2007]

§ 97.103 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this subpart and subparts BB through II are defined as follows:

Btu—British thermal unit
CO₂—carbon dioxide
H₂O—water
Hg—mercury