EPA ozone season emissions of NO_X and summer day emissions of NO_X from all point sources, nonpoint sources, onroad mobile sources, and nonroad mobile sources.

- (3) The data availability requirements in §51.116 must be followed for all data submitted to meet the requirements of paragraphs (c)(1) and (2) of this section
 - (d) [Reserved]
- (e) Each state must submit for EPA approval an example of the calculation procedure used to calculate ozone season emissions along with sufficient information to verify the calculated value of ozone season emissions.
- (f) Data collection is to begin during the ozone season 1 year prior to the state's NO_X SIP Call compliance date.
- (g) The state shall report emissions as point sources according to the point source emissions thresholds of the Air Emissions Reporting Rule (AERR), 40 CFR part 51, subpart A. The detail of the emissions inventory shall be consistent with the data elements required by 40 CFR part 51, subpart A. When submitting a formal NO_X Budget Emissions Report and associated data, states shall notify the appropriate EPA Regional Office.

[73 FR 76558, Dec. 17, 2008, as amended at 80 FR 8796, Feb. 19, 2015; 84 FR 8443, Mar. 8, 2019]

§51.123 Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule.

(a)(1) Under section 110(a)(1) of the CAA, 42 U.S.C. 7410(a)(1), the Administrator determines that each State identified in paragraph (c)(1) and (2) of this section must submit a SIP revision to comply with the requirements of section 110(a)(2)(D)(i)(I) of the CAA, 42 U.S.C. 7410(a)(2)(D)(i)(I), through the adoption of adequate provisions prohibiting sources and other activities from emitting NO_X in amounts that will contribute significantly to nonattainment in, or interfere with maintenance by, one or more other States with respect to the fine particles $(PM_{2.5})$ NAAQS.

(2)(a) Under section 110(a)(1) of the CAA, 42 U.S.C. 7410(a)(1), the Administrator determines that each State identified in paragraph (c)(1) and (3) of this

section must submit a SIP revision to comply with the requirements of section 110(a)(2)(D)(i)(I) of the CAA, 42 U.S.C. 7410(a)(2)(D)(i)(I), through the adoption of adequate provisions prohibiting sources and other activities from emitting NO_X in amounts that will contribute significantly to nonattainment in, or interfere with maintenance by, one or more other States with respect to the 8-hour ozone NAAQS.

- (3) Notwithstanding the other provisions of this section, such provisions are not applicable as they relate to the State of Minnesota as of December 3, 2009.
- (b) For each State identified in paragraph (c) of this section, the SIP revision required under paragraph (a) of this section will contain adequate provisions, for purposes of complying with section 110(a)(2)(D)(i)(I) of the CAA, 42 U.S.C. 7410(a)(2)(D)(i)(I), only if the SIP revision contains control measures that assure compliance with the applicable requirements of this section.
- (c) In addition to being subject to the requirements in paragraphs (b) and (d) of this section:
- (1) Alabama, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, Wisconsin, and the District of Columbia shall be subject to the requirements contained in paragraphs (e) through (cc) of this section:
- (2) Georgia, Minnesota, and Texas shall be subject to the requirements in paragraphs (e) through (o) and (cc) of this section; and
- (3) Arkansas, Connecticut, and Massachusetts shall be subject to the requirements contained in paragraphs (q) through (cc) of this section.
- (d)(1) The State's SIP revision under paragraph (a) of this section must be submitted to EPA by no later than September 11, 2006.
- (2) The requirements of appendix V to this part shall apply to the SIP revision under paragraph (a) of this section.
- (3) The State shall deliver 5 copies of the SIP revision under paragraph (a) of

this section to the appropriate Regional Office, with a letter giving notice of such action.

(e) The State's SIP revision shall contain control measures and demonstrate that they will result in compliance with the State's Annual EGU NO_X Budget, if applicable, and achieve the State's Annual Non-EGU NO_X Reduction Requirement, if applicable, for the appropriate periods. The amounts of the State's Annual EGU NO_X Budget and Annual Non-EGU NO_X Reduction Requirement shall be determined as follows:

(1)(i) The Annual EGU NO_X Budget for the State is defined as the total amount of NO_X emissions from all EGUs in that State for a year, if the State meets the requirements of paragraph (a)(1) of this section by imposing control measures, at least in part, on EGUs. If the State imposes control measures under this section on only EGUs, the Annual EGU NO_X Budget for the State shall not exceed the amount, during the indicated periods, specified in paragraph (e)(2) of this section.

(ii) The Annual Non-EGU NOx Reduction Requirement, if applicable, is defined as the total amount of NO_X emission reductions that the State demonstrates, in accordance with paragraph (g) of this section, it will achieve from non-EGUs during the appropriate period. If the State meets the requirements of paragraph (a)(1) of this section by imposing control measures on only non-EGUs, then the State's Annual Non-EGU NO_X Reduction Requirement shall equal or exceed, during the appropriate periods, the amount determined in accordance with paragraph (e)(3) of this section.

(iii) If a State meets the requirements of paragraph (a)(1) of this section by imposing control measures on both EGUs and non-EGUs, then:

(A) The Annual Non-EGU NO_X Reduction Requirement shall equal or exceed the difference between the amount specified in paragraph (e)(2) of this section for the appropriate period and the amount of the State's Annual EGU NO_X Budget specified in the SIP revision for the appropriate period; and

(B) The Annual EGU NO_X Budget shall not exceed, during the indicated periods, the amount specified in para-

graph (e)(2) of this section plus the amount of the Annual Non-EGU NO_X Reduction Requirement under paragraph (e)(1)(iii)(A) of this section for the appropriate period.

(2) For a State that complies with the requirements of paragraph (a)(1) of this section by imposing control measures on only EGUs, the amount of the Annual EGU NO_X Budget, in tons of NO_X per year, shall be as follows, for the indicated State for the indicated period:

State	Annual EGU NO _x budget for 2009–2014 (tons)	Annual EGU NO _X budget for 2015 and thereafter (tons)
Alabama	69,020	57,517
Delaware	4,166	3,472
District of Columbia	144	120
Florida	99,445	82,871
Georgia	66,321	55,268
Illinois	76,230	63,525
Indiana	108,935	90,779
lowa	32,692	27,243
Kentucky	83,205	69,337
Louisiana	35,512	29,593
Maryland	27,724	23,104
Michigan	65,304	54,420
Minnesota	31,443	26,203
Mississippi	17,807	14,839
Missouri	59,871	49,892
New Jersey	12,670	10,558
New York	45,617	38,014
North Carolina	62,183	51,819
Ohio	108,667	90,556
Pennsylvania	99,049	82,541
South Carolina	32,662	27,219
Tennessee	50,973	42,478
Texas	181,014	150,845
Virginia	36,074	30,062
West Virginia	74,220	61,850
Wisconsin	40,759	33,966

(3) For a State that complies with the requirements of paragraph (a)(1) of this section by imposing control measures on only non-EGUs, the amount of the Annual Non-EGU NO_X Reduction Requirement, in tons of NO_X per year, shall be determined, for the State for 2009 and thereafter, by subtracting the amount of the State's Annual EGU NOX Budget for the appropriate year, specified in paragraph (e)(2) of this section from the amount of the State's NOx baseline EGU emissions inventory projected for the appropriate year, specified in Table 5 of "Regional and State SO₂ and NO_X Budgets", March 2005 http://www.epa.gov/ (available at cleanairinterstaterule).

(4)(i) Notwithstanding the State's obligation to comply with paragraph

(e)(2) or (3) of this section, the State's SIP revision may allow sources required by the revision to implement control measures to demonstrate compliance using credit issued from the State's compliance supplement pool, as set forth in paragraph (e)(4)(ii) of this section.

(ii) The State-by-State amounts of the compliance supplement pool are as follows:

State	Compliance supplement pool
Alabama	10.166
Delaware	843
District of Columbia	0
Florida	8,335
Georgia	12,397
Illinois	11,299
Indiana	20,155
lowa	6,978
Kentucky	14,935
Louisiana	2,251
Maryland	4,670
Michigan	8,347
Minnesota	6,528
Mississippi	3,066
Missouri	9,044
New Jersey	660
New York	0
North Carolina	0
Ohio	25,037
Pennsylvania	16,009
South Carolina	2,600
Tennessee	8,944
Texas	772
Virginia	5,134
West Virginia	16,929
Wisconsin	4,898

- (iii) The SIP revision may provide for the distribution of credits from the compliance supplement pool to sources that are required to implement control measures using one or both of the following two mechanisms:
- (A) The State may issue credit from compliance supplement pool to sources that are required by the SIP revision to implement NO_X emission control measures and that implement NO_X emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable at any time during such years. Such a source may be issued one credit from the compliance supplement pool for each ton of such emission reductions in 2007 and 2008.
- (1) The State shall complete the issuance process by January 1, 2010.
- (2) The emissions reductions for which credits are issued must have been demonstrated by the owners and

- operators of the source to have occurred during 2007 and 2008 and not to be necessary to comply with any applicable State or federal emissions limitation.
- (3) The emissions reductions for which credits are issued must have been quantified by the owners and operators of the source:
- (i) For EGUs and for fossil-fuel-fired non-EGUs that are boilers or combustion turbines with a maximum design heat input greater than 250 mmBut/hr, using emissions data determined in accordance with subpart H of part 75 of this chapter; and
- (ii) For non-EGUs not described in paragraph (e)(4)(iii)(A)(3)(i) of this section, using emissions data determined in accordance with subpart H of part 75 of this chapter or, if the State demonstrates that compliance with subpart H of part 75 of this chapter is not practicable, determined, to the extent practicable, with the same degree of assurance with which emissions data are determined for sources subject to subpart H of part 75.
- (4) If the SIP revision contains approved provisions for an emissions trading program, the owners and operators of sources that receive credit according to the requirements of this paragraph may transfer the credit to other sources or persons according to the provisions in the emissions trading program.
- (B) The State may issue credit from the compliance supplement pool to sources that are required by the SIP revision to implement NO_X emission control measures and whose owners and operators demonstrate a need for an extension, beyond 2009, of the deadline for the source for implementing such emission controls.
- (1) The State shall complete the issuance process by January 1, 2010.
- (2) The State shall issue credit to a source only if the owners and operators of the source demonstrate that:
- (i) For a source used to generate electricity, implementation of the SIP revision's applicable control measures by 2009 would create undue risk for the reliability of the electricity supply. This demonstration must include a showing that it would not be feasible for the owners and operators of the source to

obtain a sufficient amount of electricity, to prevent such undue risk, from other electricity generation facilities during the installation of control technology at the source necessary to comply with the SIP revision.

- (ii) For a source not used to generate electricity, compliance with the SIP revision's applicable control measures by 2009 would create undue risk for the source or its associated industry to a degree that is comparable to the risk described in paragraph (e)(4)(iii)(B)(2)(i) of this section.
- (iii) This demonstration must include a showing that it would not be possible for the source to comply with applicable control measures by obtaining sufficient credits under paragraph (e)(4)(iii)(A) of this section, or by acquiring sufficient credits from other sources or persons, to prevent undue risk.
- (f) Each SIP revision must set forth control measures to meet the amounts specified in paragraph (e) of this section, as applicable, including the following:
- (1) A description of enforcement methods including, but not limited to:
- (i) Procedures for monitoring compliance with each of the selected control measures;
- (ii) Procedures for handling violations; and
- (iii) A designation of agency responsibility for enforcement of implementation
- (2)(i) If a State elects to impose control measures on EGUs, then those measures must impose an annual $N{\rm O}_{\rm X}$ mass emissions cap on all such sources in the State.
- (ii) If a State elects to impose control measures on fossil fuel-fired non-EGUs that are boilers or combustion turbines with a maximum design heat input greater than 250 mmBtu/hr, then those measures must impose an annual $\rm NO_{\rm X}$ mass emissions cap on all such sources in the State.
- (iii) If a State elects to impose control measures on non-EGUs other than those described in paragraph (f)(2)(ii) of this section, then those measures must impose an annual $N{\rm O}_{\rm X}$ mass emissions cap on all such sources in the State or the State must demonstrate why such emissions cap is not practicable and

adopt alternative requirements that ensure that the State will comply with its requirements under paragraph (e) of this section, as applicable, in 2009 and subsequent years.

- (g)(1) Each SIP revision that contains control measures covering non-EGUs as part or all of a State's obligation in meeting its requirement under paragraph (a)(1) of this section must demonstrate that such control measures are adequate to provide for the timely compliance with the State's Annual Non-EGU NO_X Reduction Requirement under paragraph (e) of this section and are not adopted or implemented by the State, as of May 12, 2005, and are not adopted or implemented by the Federal government, as of the date of submission of the SIP revision by the State to EPA.
- (2) The demonstration under paragraph (g)(1) of this section must include the following, with respect to each source category of non-EGUs for which the SIP revision requires control measures:
- (i) A detailed historical baseline inventory of NO_X mass emissions from the source category in a representative year consisting, at the State's election, of 2002, 2003, 2004, or 2005, or an average of 2 or more of those years, absent the control measures specified in the SIP revision.
- (A) This inventory must represent estimates of actual emissions based on monitoring data in accordance with subpart H of part 75 of this chapter, if the source category is subject to monitoring requirements in accordance with subpart H of part 75 of this chapter.
- (B) In the absence of monitoring data in accordance with subpart H of part 75 of this chapter, actual emissions must be quantified, to the maximum extent practicable, with the same degree of assurance with which emissions are quantified for sources subject to subpart H of part 75 of this chapter and using source-specific or source-category-specific assumptions that ensure a source's or source category's actual emissions are not overestimated. If a State uses factors to estimate emissions, production or utilization, or effectiveness of controls or rules for a source category, such factors must be

chosen to ensure that emissions are not overestimated.

- (C) For measures to reduce emissions from motor vehicles, emission estimates must be based on an emissions model that has been approved by EPA for use in SIP development and must be consistent with the planning assumptions regarding vehicle miles traveled and other factors current at the time of the SIP development.
- (D) For measures to reduce emissions from nonroad engines or vehicles, emission estimates methodologies must be approved by EPA.
- (ii) A detailed baseline inventory of NO_X mass emissions from the source category in the years 2009 and 2015, absent the control measures specified in the SIP revision and reflecting changes in these emissions from the historical baseline year to the years 2009 and 2015, based on projected changes in the production input or output, population, vehicle miles traveled, economic activity, or other factors as applicable to this source category.
- (A) These inventories must account for implementation of any control measures that are otherwise required by final rules already promulgated, as of May 12, 2005, or adopted or implemented by any federal agency, as of the date of submission of the SIP revision by the State to EPA, and must exclude any control measures specified in the SIP revision to meet the NO_X emissions reduction requirements of this section.
- (B) Economic and population forecasts must be as specific as possible to the applicable industry, State, and county of the source or source category and must be consistent with both national projections and relevant official planning assumptions, including estimates of population and vehicle miles traveled developed through consultation between State and local transportation and air quality agencies. However, if these official planning assumptions are inconsistent with official U.S. Census projections of population or with energy consumption projections contained in the U.S. Department of Energy's most recent Annual Energy Outlook, then the SIP revision must make adjustments to correct the inconsistency or must demonstrate how

the official planning assumptions are more accurate.

- (C) These inventories must account for any changes in production method, materials, fuels, or efficiency that are expected to occur between the historical baseline year and 2009 or 2015, as appropriate.
- (iii) A projection of NO_X mass emissions in 2009 and 2015 from the source category assuming the same projected changes as under paragraph (g)(2)(ii) of this section and resulting from implementation of each of the control measures specified in the SIP revision.
- (A) These inventories must address the possibility that the State's new control measures may cause production or utilization, and emissions, to shift to unregulated or less stringently regulated sources in the source category in the same or another State, and these inventories must include any such amounts of emissions that may shift to such other sources.
- (B) The State must provide EPA with a summary of the computations, assumptions, and judgments used to determine the degree of reduction in projected 2009 and 2015 $\rm NO_X$ emissions that will be achieved from the implementation of the new control measures compared to the relevant baseline emissions inventory.
- (iv) The result of subtracting the amounts in paragraph (g)(2)(iii) of this section for 2009 and 2015, respectively, from the lower of the amounts in paragraph (g)(2)(i) or (g)(2)(ii) of this section for 2009 and 2015, respectively, may be credited towards the State's Annual Non-EGU $\rm NO_{\rm X}$ Reduction Requirement in paragraph (e)(3) of this section for the appropriate period.
- (v) Each SIP revision must identify the sources of the data used in each estimate and each projection of emissions.
- (h) Each SIP revision must comply with §51.116 (regarding data availability).
- (i) Each SIP revision must provide for monitoring the status of compliance with any control measures adopted to meet the State's requirements under paragraph (e) of this section as follows:

- (1) The SIP revision must provide for legally enforceable procedures for requiring owners or operators of stationary sources to maintain records of, and periodically report to the State:
- (i) Information on the amount of NO_X emissions from the stationary sources; and
- (ii) Other information as may be necessary to enable the State to determine whether the sources are in compliance with applicable portions of the control measures:
- (2) The SIP revision must comply with §51.212 (regarding testing, inspection, enforcement, and complaints);
- (3) If the SIP revision contains any transportation control measures, then the SIP revision must comply with §51.213 (regarding transportation control measures);
- (4)(i) If the SIP revision contains measures to control EGUs, then the SIP revision must require such sources to comply with the monitoring, record-keeping, and reporting provisions of subpart H of part 75 of this chapter.
- (ii) If the SIP revision contains measures to control fossil fuel-fired non-EGUs that are boilers or combustion turbines with a maximum design heat input greater than 250 mmBtu/hr, then the SIP revision must require such sources to comply with the monitoring, recordkeeping, and reporting provisions of subpart H of part 75 of this chapter.
- (iii) If the SIP revision contains measures to control any other non-EGUs that are not described in paragraph (i)(4)(ii) of this section, then the SIP revision must require such sources to comply with the monitoring, recordkeeping, and reporting provisions of subpart H of part 75 of this chapter, or the State must demonstrate why such requirements are not practicable and adopt alternative requirements that ensure that the required emissions reductions will be quantified, to the maximum extent practicable, with the same degree of assurance with which emissions are quantified for sources subject to subpart H of part 75 of this
- (j) Each SIP revision must show that the State has legal authority to carry out the SIP revision, including authority to:

- (1) Adopt emissions standards and limitations and any other measures necessary for attainment and maintenance of the State's relevant Annual EGU $\rm NO_X$ Budget or the Annual Non-EGU $\rm NO_X$ Reduction Requirement, as applicable, under paragraph (e) of this section;
- (2) Enforce applicable laws, regulations, and standards and seek injunctive relief;
- (3) Obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require record-keeping and to make inspections and conduct tests of air pollution sources; and
- (4)(i) Require owners or operators of stationary sources to install, maintain, and use emissions monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such stationary sources; and
- (ii) Make the data described in paragraph (j)(4)(i) of this section available to the public within a reasonable time after being reported and as correlated with any applicable emissions standards or limitations.
- (k)(1) The provisions of law or regulation that the State determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the SIP revision.
- (2) Legal authority adequate to fulfill the requirements of paragraphs (j)(3) and (4) of this section may be delegated to the State under section 114 of the CAA.
- (l)(1) A SIP revision may assign legal authority to local agencies in accordance with §51.232.
- (2) Each SIP revision must comply with §51.240 (regarding general plan requirements).
- (m) Each SIP revision must comply with §51.280 (regarding resources).
- (n) Each SIP revision must provide for State compliance with the reporting requirements in §51.125.
- (o)(1) Notwithstanding any other provision of this section, if a State adopts regulations substantively identical to subparts AA through II of part 96 of

this chapter (CAIR NO_X Annual Trading Program), incorporates such subparts by reference into its regulations, or adopts regulations that differ substantively from such subparts only as set forth in paragraph (o)(2) of this section, then such emissions trading program in the State's SIP revision is automatically approved as meeting the requirements of paragraph (e) of this section, provided that the State has the legal authority to take such action and to implement its responsibilities under such regulations. Before January 1, 2009, a State's regulations shall be considered to be substantively identical to subparts AA through II of part 96 of this chapter, or differing substantively only as set forth in paragraph (o)(2) of this section, regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in §96.102 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State's regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.

- (2) If a State adopts an emissions trading program that differs substantively from subparts AA through II of part 96 of this chapter only as follows, then the emissions trading program is approved as set forth in paragraph (0)(1) of this section.
- (i) The State may decline to adopt the CAIR NO_X opt-in provisions of:
- (A) Subpart II of this part and the provisions applicable only to CAIR NO_X opt-in units in subparts AA through HH of this part;
- (B) Section 96.188(b) of this chapter and the provisions of subpart II of this part applicable only to CAIR NO_X optin units under §96.188(b); or
- (C) Section 96.188(c) of this chapter and the provisions of subpart II of this part applicable only to CAIR NO_X optin units under §96.188(c).
- (ii) The State may decline to adopt the allocation provisions set forth in

subpart EE of part 96 of this chapter and may instead adopt any methodology for allocating CAIR NO_X allowances to individual sources, as follows:

- (A) The State's methodology must not allow the State to allocate CAIR NO_X allowances for a year in excess of the amount in the State's Annual EGU NO_X Budget for such year;
- (B) The State's methodology must require that, for EGUs commencing operation before January 1, 2001, the State will determine, and notify the Administrator of, each unit's allocation of CAIR $NO_{\rm X}$ allowances by October 31, 2006 for 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for 4th the year after the year of the notification deadline:
- (C) The State's methodology must require that, for EGUs commencing operation on or after January 1, 2001, the State will determine, and notify the Administrator of, each unit's allocation of CAIR $\rm NO_X$ allowances by October 31 of the year for which the CAIR $\rm NO_X$ allowances are allocated; and
- (D) The State's methodology for allocating the compliance supplement pool must be substantively identical to §97.143 (except that the permitting authority makes the allocations and the Administrator records the allocations made by the permitting authority) or otherwise in accordance with paragraph (e)(4) of this section.
- (3) A State that adopts an emissions trading program in accordance with paragraph (o)(1) or (2) of this section is not required to adopt an emissions trading program in accordance with paragraph (aa)(1) or (2) of this section or §96.124(o)(1) or (2).
- (4) If a State adopts an emissions trading program that differs substantively from subparts AA through HH of part 96 of this chapter, other than as set forth in paragraph (o)(2) of this section, then such emissions trading program is not automatically approved as set forth in paragraph (o)(1) or (2) of this section and will be reviewed by the Administrator for approvability in accordance with the other provisions of this section, provided that the NO_X allowances issued under such emissions trading program shall not, and the SIP revision shall state that such NO_{X} allowances shall

not, qualify as CAIR NO_X allowances or CAIR NO_X Ozone Season allowances under any emissions trading program approved under paragraphs (0)(1) or (2) or (aa)(1) or (2) of this section.

- (p) Notwithstanding any other provision of this section, a State may adopt, and include in a SIP revision submitted by March 31, 2007, regulations relating to the Federal CAIR NO_X Annual Trading Program under subparts AA through HH of part 97 of this chapter as follows:
- (1) The State may adopt, as CAIR $NO_{\rm X}$ allowance allocation provisions replacing the provisions in subpart EE of part 97 of this chapter:
- (i) Allocation provisions substantively identical to subpart EE of part 96 of this chapter, under which the permitting authority makes the allocations: or
- (ii) Any methodology for allocating CAIR $NO_{\rm X}$ allowances to individual sources under which the permitting authority makes the allocations, provided that:
- (A) The State's methodology must not allow the permitting authority to allocate CAIR NO_X allowances for a year in excess of the amount in the State's Annual EGU NO_X budget for such year.
- (B) The State's methodology must require that, for EGUs commencing operation before January 1, 2001, the permitting authority will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X allowances by April 30, 2007 for 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for the 4th year after the year of the notification deadline.
- (C) The State's methodology must require that, for EGUs commencing operation on or after January 1, 2001, the permitting authority will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X allowances by October 31 of the year for which the CAIR NO_X allowances are allocated.
- (2) The State may adopt, as compliance supplement pool provisions replacing the provisions in §97.143 of this chapter:
- (i) Provisions for allocating the State's compliance supplement pool

that are substantively identical to §97.143 of this chapter, except that the permitting authority makes the allocations and the Administrator records the allocations made by the permitting authority:

- (ii) Provisions for allocating the State's compliance supplement pool that are substantively identical to §96.143 of this chapter; or
- (iii) Other provisions for allocating the State's compliance supplement pool that are in accordance with paragraph (e)(4) of this section.
- (3) The State may adopt CAIR opt-in unit provisions as follows:
- (i) Provisions for CAIR opt-in units, including provisions for applications for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NO_X allowances for CAIR opt-in units, that are substantively identical to subpart II of part 96 of this chapter and the provisions of subparts AA through HH that are applicable to CAIR opt-in units or units for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied;
- (ii) Provisions for CAIR opt-in units, including provisions for applications for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NOx allowances for CAIR opt-in units, that are substantively identical to subpart II of part 96 of this chapter and the provisions of subparts AA through HH that are applicable to CAIR opt-in units or units for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied, except that the provisions exclude §96.188(b) of this chapter and the provisions of subpart II of part 96 of this chapter that apply only to units covered §96.188(b) of this chapter; or
- (iii) Provisions for applications for CAIR opt-in units, including provisions for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NO_X allowances for CAIR opt-in units, that are substantively identical to subpart

II of part 96 of this chapter and the provisions of subparts AA through HH that are applicable to CAIR opt-in units or units for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied, except that the provisions exclude §96.188(c) of this chapter and the provisions of subpart II of part 96 of this chapter that apply only to units covered by §96.188(c) of this chapter.

- (q) The State's SIP revision shall contain control measures and demonstrate that they will result in compliance with the State's Ozone Season EGU NO_X Budget, if applicable, and achieve the State's Ozone Season Non-EGU NO_X Reduction Requirement, if applicable, for the appropriate periods. The amounts of the State's Ozone Season EGU NO_X Budget and Ozone Season Non-EGU NO_X Reduction Requirement shall be determined as follows:
- (1)(i) The Ozone Season EGU NO_X Budget for the State is defined as the total amount of NO_X emissions from all EGUs in that State for an ozone season, if the State meets the requirements of paragraph (a)(2) of this section by imposing control measures, at least in part, on EGUs. If the State imposes control measures under this section on only EGUs, the Ozone Season EGU NO_X Budget for the State shall not exceed the amount, during the indicated periods, specified in paragraph (q)(2) of this section.
- (ii) The Ozone Season Non-EGU NO_X Reduction Requirement, if applicable, is defined as the total amount of NO_x emission reductions that the State demonstrates, in accordance with paragraph (s) of this section, it will achieve from non-EGUs during the appropriate period. If the State meets the requirements of paragraph (a)(2) of this section by imposing control measures on only non-EGUs, then the State's Ozone Season Non-EGU NO_X Reduction Requirement shall equal or exceed, during the appropriate periods, the amount determined in accordance with paragraph (q)(3) of this section.
- (iii) If a State meets the requirements of paragraph (a)(2) of this section by imposing control measures on both EGUs and non-EGUs, then:

- (A) The Ozone Season Non-EGU NO_X Reduction Requirement shall equal or exceed the difference between the amount specified in paragraph (q)(2) of this section for the appropriate period and the amount of the State's Ozone Season EGU NO_X Budget specified in the SIP revision for the appropriate period; and
- (B) The Ozone Season EGU NO_X Budget shall not exceed, during the indicated periods, the amount specified in paragraph (q)(2) of this section plus the amount of the Ozone Season Non-EGU NO_X Reduction Requirement under paragraph (q)(1)(iii)(A) of this section for the appropriate period.
- (2) For a State that complies with the requirements of paragraph (a)(2) of this section by imposing control measures on only EGUs, the amount of the Ozone Season EGU NO_X Budget, in tons of NO_X per ozone season, shall be as follows, for the indicated State for the indicated period:

State	Ozone season EGU NO _X budget for 2009–2014 (tons)	Ozone season EGU NO _X budget for 2015 and thereafter (tons)
Alabama	32,182	26,818
Arkansas	11,515	9,596
Connecticut	2,559	2,559
Delaware	2,226	1,855
District of Columbia	112	94
Florida	47,912	39,926
Illinois	30,701	28,981
Indiana	45,952	39,273
lowa	14,263	11,886
Kentucky	36,045	30,587
Louisiana	17,085	14,238
Maryland	12,834	10,695
Massachusetts	7,551	6,293
Michigan	28,971	24,142
Mississippi	8,714	7,262
Missouri	26,678	22,231
New Jersey	6,654	5,545
New York	20,632	17,193
North Carolina	28,392	23,660
Ohio	45,664	39,945
Pennsylvania	42,171	35,143
South Carolina	15,249	12,707
Tennessee	22,842	19,035
Virginia	15,994	13,328
West Virginia	26,859	26,525
Wisconsin	17,987	14,989

(3) For a State that complies with the requirements of paragraph (a)(2) of this section by imposing control measures on only non-EGUs, the amount of the Ozone Season Non-EGU NO_x Reduction Requirement, in tons of NO_x per ozone season, shall be determined, for the State for 2009 and thereafter, by

subtracting the amount of the State's Ozone Season EGU NO_X Budget for the appropriate year, specified in paragraph (q)(2) of this section, from the amount of the State's NO_X baseline EGU emissions inventory projected for the ozone season in the appropriate year, specified in Table 7 of "Regional and State SO_2 and NO_X Budgets", March 2005 (available at: http://www.epa.gov/cleanairinterstaterule).

- (4) Notwithstanding the State's obligation to comply with paragraph (q)(2) or (3) of this section, the State's SIP revision may allow sources required by the revision to implement NO_X emission control measures to demonstrate compliance using NOx SIP Call allowances allocated under the NO_X Budget Trading Program for any ozone season during 2003 through 2008 that have not been deducted by the Administrator under the NO_X Budget Trading Program, if the SIP revision ensures that such allowances will not be available for such deduction under the NO_X Budget Trading Program.
- (r) Each SIP revision must set forth control measures to meet the amounts specified in paragraph (q) of this section, as applicable, including the following:
- (1) A description of enforcement methods including, but not limited to:
- (i) Procedures for monitoring compliance with each of the selected control measures:
- (ii) Procedures for handling violations: and
- (iii) A designation of agency responsibility for enforcement of implementation.
- (2)(i) If a State elects to impose control measures on EGUs, then those measures must impose an ozone season NO_{X} mass emissions cap on all such sources in the State.
- (ii) If a State elects to impose control measures on fossil fuel-fired non-EGUs that are boilers or combustion turbines with a maximum design heat input greater than 250 mmBtu/hr, then those measures must impose an ozone season NO_X mass emissions cap on all such sources in the State.
- (iii) If a State elects to impose control measures on non-EGUs other than those described in paragraph (r)(2)(ii) of this section, then those measures

must impose an ozone season NO_X mass emissions cap on all such sources in the State or the State must demonstrate why such emissions cap is not practicable and adopt alternative requirements that ensure that the State will comply with its requirements under paragraph (q) of this section, as applicable, in 2009 and subsequent years.

- (s)(1) Each SIP revision that contains control measures covering non-EGUs as part or all of a State's obligation in meeting its requirement under paragraph (a)(2) of this section must demonstrate that such control measures are adequate to provide for the timely compliance with the State's Ozone Season Non-EGU NOx Reduction Requirement under paragraph (q) of this section and are not adopted or implemented by the State, as of May 12, 2005, and are not adopted or implemented by the federal government, as of the date of submission of the SIP revision by the State to EPA.
- (2) The demonstration under paragraph (s)(1) of this section must include the following, with respect to each source category of non-EGUs for which the SIP revision requires control measures:
- (i) A detailed historical baseline inventory of NO_X mass emissions from the source category in a representative ozone season consisting, at the State's election, of the ozone season in 2002, 2003, 2004, or 2005, or an average of 2 or more of those ozone seasons, absent the control measures specified in the SIP revision.
- (A) This inventory must represent estimates of actual emissions based on monitoring data in accordance with subpart H of part 75 of this chapter, if the source category is subject to monitoring requirements in accordance with subpart H of part 75 of this chapter.
- (B) In the absence of monitoring data in accordance with subpart H of part 75 of this chapter, actual emissions must be quantified, to the maximum extent practicable, with the same degree of assurance with which emissions are quantified for sources subject to subpart H of part 75 of this chapter and using source-specific or source-category-specific assumptions that ensure a source's or source category's actual

emissions are not overestimated. If a State uses factors to estimate emissions, production or utilization, or effectiveness of controls or rules for a source category, such factors must be chosen to ensure that emissions are not overestimated.

- (C) For measures to reduce emissions from motor vehicles, emission estimates must be based on an emissions model that has been approved by EPA for use in SIP development and must be consistent with the planning assumptions regarding vehicle miles traveled and other factors current at the time of the SIP development.
- (D) For measures to reduce emissions from nonroad engines or vehicles, emission estimates methodologies must be approved by EPA.
- (ii) A detailed baseline inventory of NO_X mass emissions from the source category in ozone seasons 2009 and 2015, absent the control measures specified in the SIP revision and reflecting changes in these emissions from the historical baseline ozone season to the ozone seasons 2009 and 2015, based on projected changes in the production input or output, population, vehicle miles traveled, economic activity, or other factors as applicable to this source category.
- (A) These inventories must account for implementation of any control measures that are adopted or implemented by the State, as of May 12, 2005, or adopted or implemented by the federal government, as of the date of submission of the SIP revision by the State to EPA, and must exclude any control measures specified in the SIP revision to meet the NO_X emissions reduction requirements of this section.
- (B) Economic and population forecasts must be as specific as possible to the applicable industry, State, and county of the source or source category and must be consistent with both national projections and relevant official planning assumptions including estimates of population and vehicle miles traveled developed through consultation between State and local transportation and air quality agencies. However, if these official planning assumptions are inconsistent with official U.S. Census projections of population or with energy consumption projections

- contained in the U.S. Department of Energy's most recent Annual Energy Outlook, then the SIP revision must make adjustments to correct the inconsistency or must demonstrate how the official planning assumptions are more accurate.
- (C) These inventories must account for any changes in production method, materials, fuels, or efficiency that are expected to occur between the historical baseline ozone season and ozone season 2009 or ozone season 2015, as appropriate.
- (iii) A projection of NO_X mass emissions in ozone season 2009 and ozone season 2015 from the source category assuming the same projected changes as under paragraph (s)(2)(ii) of this section and resulting from implementation of each of the control measures specified in the SIP revision.
- (A) These inventories must address the possibility that the State's new control measures may cause production or utilization, and emissions, to shift to unregulated or less stringently regulated sources in the source category in the same or another State, and these inventories must include any such amounts of emissions that may shift to such other sources.
- (B) The State must provide EPA with a summary of the computations, assumptions, and judgments used to determine the degree of reduction in projected ozone season 2009 and ozone season 2015 $\rm NO_X$ emissions that will be achieved from the implementation of the new control measures compared to the relevant baseline emissions inventory.
- (iv) The result of subtracting the amounts in paragraph (s)(2)(iii) of this section for ozone season 2009 and ozone season 2015, respectively, from the lower of the amounts in paragraph (s)(2)(i) or (s)(2)(ii) of this section for ozone season 2009 and ozone season 2015, respectively, may be credited towards the State's Ozone Season Non-EGU NO $_{\rm X}$ Reduction Requirement in paragraph (q)(3) of this section for the appropriate period.
- (v) Each SIP revision must identify the sources of the data used in each estimate and each projection of emissions.

- (t) Each SIP revision must comply with §51.116 (regarding data availability).
- (u) Each SIP revision must provide for monitoring the status of compliance with any control measures adopted to meet the State's requirements under paragraph (q) of this section as follows:
- (1) The SIP revision must provide for legally enforceable procedures for requiring owners or operators of stationary sources to maintain records of, and periodically report to the State:
- (i) Information on the amount of $NO_{\rm X}$ emissions from the stationary sources; and
- (ii) Other information as may be necessary to enable the State to determine whether the sources are in compliance with applicable portions of the control measures:
- (2) The SIP revision must comply with §51.212 (regarding testing, inspection, enforcement, and complaints);
- (3) If the SIP revision contains any transportation control measures, then the SIP revision must comply with §51.213 (regarding transportation control measures):
- (4)(i) If the SIP revision contains measures to control EGUs, then the SIP revision must require such sources to comply with the monitoring, record-keeping, and reporting provisions of subpart H of part 75 of this chapter.
- (ii) If the SIP revision contains measures to control fossil fuel-fired non-EGUs that are boilers or combustion turbines with a maximum design heat input greater than 250 mmBtu/hr, then the SIP revision must require such sources to comply with the monitoring, recordkeeping, and reporting provisions of subpart H of part 75 of this chapter.
- (iii) If the SIP revision contains measures to control any other non-EGUs that are not described in paragraph (u)(4)(ii) of this section, then the SIP revision must require such sources to comply with the monitoring, record-keeping, and reporting provisions of subpart H of part 75 of this chapter, or the State must demonstrate why such requirements are not practicable and adopt alternative requirements that ensure that the required emissions reductions will be quantified, to the max-

- imum extent practicable, with the same degree of assurance with which emissions are quantified for sources subject to subpart H of part 75 of this chapter.
- (v) Each SIP revision must show that the State has legal authority to carry out the SIP revision, including authority to:
- (1) Adopt emissions standards and limitations and any other measures necessary for attainment and maintenance of the State's relevant Ozone Season EGU NO_X Budget or the Ozone Season Non-EGU NO_X Reduction Requirement, as applicable, under paragraph (q) of this section;
- (2) Enforce applicable laws, regulations, and standards and seek injunctive relief:
- (3) Obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require record-keeping and to make inspections and conduct tests of air pollution sources; and
- (4)(i) Require owners or operators of stationary sources to install, maintain, and use emissions monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such stationary sources; and
- (ii) Make the data described in paragraph (v)(4)(i) of this section available to the public within a reasonable time after being reported and as correlated with any applicable emissions standards or limitations.
- (w)(1) The provisions of law or regulation that the State determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the SIP revision.
- (2) Legal authority adequate to fulfill the requirements of paragraphs (v)(3) and (4) of this section may be delegated to the State under section 114 of the CAA.
- (x)(1) A SIP revision may assign legal authority to local agencies in accordance with §51.232.
- (2) Each SIP revision must comply with §51.240 (regarding general plan requirements).

- (y) Each SIP revision must comply with §51.280 (regarding resources).
- (z) Each SIP revision must provide for State compliance with the reporting requirements in §51.125.
- (aa)(1) Notwithstanding any other provision of this section, if a State adopts regulations substantively identical to subparts AAAA through IIII of part 96 of this chapter (CAIR Ozone Season NO_X Trading Program), incorporates such subparts by reference into its regulations, or adopts regulations that differ substantively from such subparts only as set forth in paragraph (aa)(2) of this section, then such emissions trading program in the State's SIP revision is automatically approved as meeting the requirements of paragraph (q) of this section, provided that the State has the legal authority to take such action and to implement its responsibilities under such regulations. Before January 1, 2009, a State's regulations shall be considered to be substantively identical to subparts AAAA through IIII of part 96 of the chapter, or differing substantively only as set forth in paragraph (o)(2) of this section, regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in §96.302 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State's regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.
- (2) If a State adopts an emissions trading program that differs substantively from subparts AAAA through IIII of part 96 of this chapter only as follows, then the emissions trading program is approved as set forth in paragraph (aa)(1) of this section.
- (i) The State may expand the applicability provisions in §96.304 to include all non-EGUs subject to the State's emissions trading program approved under §51.121(p).

- (ii) The State may decline to adopt the CAIR NO_X Ozone Season opt-in provisions of:
- (A) Subpart IIII of this part and the provisions applicable only to CAIR NO_X Ozone Season opt-in units in subparts AAAA through HHHH of this part;
- (B) Section 96.388(b) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X Ozone Season opt-in units under §96.388(b); or
- (C) Section 96.388(c) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X Ozone Season opt-in units under $\S96.388(c)$.
- (iii) The State may decline to adopt the allocation provisions set forth in subpart EEEE of part 96 of this chapter and may instead adopt any methodology for allocating CAIR NO_X Ozone Season allowances to individual sources, as follows:
- (A) The State may provide for issuance of an amount of CAIR Ozone Season NO_X allowances for an ozone season, in addition to the amount in the State's Ozone Season EGU NO_X Budget for such ozone season, not exceeding the amount of NO_X SIP Call allowances allocated for the ozone season under the NO_X Budget Trading Program to non-EGUs that the applicability provisions in §96.304 are expanded to include under paragraph (aa)(2)(i) of this section;
- (B) The State's methodology must not allow the State to allocate CAIR Ozone Season NO_X allowances for an ozone season in excess of the amount in the State's Ozone Season EGU NO_X Budget for such ozone season plus any additional amount of CAIR Ozone Season NO_X allowances issued under paragraph (aa)(2)(iii)(A) of this section for such ozone season;
- (C) The State's methodology must require that, for EGUs commencing operation before January 1, 2001, the State will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X allowances by October 31, 2006 for the ozone seasons 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for the ozone season in the 4th year after the year of the notification deadline; and

- (D) The State's methodology must require that, for EGUs commencing operation on or after January 1, 2001, the State will determine, and notify the Administrator of, each unit's allocation of CAIR Ozone Season NO_X allowances by July 31 of the calendar year of the ozone season for which the CAIR Ozone Season NO_X allowances are allocated.
- (3) A State that adopts an emissions trading program in accordance with paragraph (aa)(1) or (2) of this section is not required to adopt an emissions trading program in accordance with paragraph (o)(1) or (2) of this section or §51.153(o)(1) or (2).
- (4) If a State adopts an emissions trading program that differs substantively from subparts AAAAthrough IIII of part 96 of this chapter, other than as set forth in paragraph (aa)(2) of this section, then such emissions trading program is not automatically approved as set forth in paragraph (aa)(1) or (2) of this section and will be reviewed by the Administrator for approvability in accordance with the other provisions of this section, provided that the NO_X allowances issued under such emissions trading program shall not, and the SIP revision shall state that such NO_X allowances shall not, qualify as CAIR NOx allowances or CAIR Ozone Season NOx allowances under any emissions trading program approved under paragraphs (o)(1) or (2) or (aa)(1) or (2) of this sec-
- (bb)(1)(i) The State may revise its SIP to provide that, for each ozone season during which a State implements control measures on EGUs or non-EGUs through an emissions trading program approved under paragraph (aa)(1) or (2) of this section, such EGUs and non-EGUs shall not be subject to the requirements of the State's SIP meeting the requirements of §51.121, if the State meets the requirement in paragraph (bb)(1)(ii) of this section.
- (ii) For a State under paragraph (bb)(1)(i) of this section, if the State's amount of tons specified in paragraph (q)(2) of this section exceeds the State's amount of NO_X SIP Call allowances allocated for the ozone season in 2009 or in any year thereafter for the same types and sizes of units as those

- covered by the amount of tons specified in paragraph (q)(2) of this section, then the State must replace the former amount for such ozone season by the latter amount for such ozone season in applying paragraph (q) of this section.
- (2) Rhode Island may revise its SIP to provide that, for each ozone season during which Rhode Island implements control measures on EGUs and non-EGUs through an emissions trading program adopted in regulations that differ substantively from subparts AAAA through IIII of part 96 of this chapter as set forth in this paragraph, such EGUs and non-EGUs shall not be subject to the requirements of the State's SIP meeting the requirements of §51.121.
- (i) Rhode Island must expand the applicability provisions in §96.304 to include all non-EGUs subject to Rhode Island's emissions trading program approved under §51.121(p).
- (ii) Rhode Island may decline to adopt the CAIR NO_X Ozone Season optin provisions of:
- (A) Subpart IIII of this part and the provisions applicable only to CAIR NO_X Ozone Season opt-in units in subparts AAAA through HHHH of this part;
- (B) Section 96.388(b) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X Ozone Season opt-in units under §96.388(b); or
- (C) Section 96.388(c) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X Ozone Season opt-in units under \$96.388(c).
- (iii) Rhode Island may adopt the allocation provisions set forth in subpart EEEE of part 96 of this chapter, provided that Rhode Island must provide for issuance of an amount of CAIR Ozone Season NO_X allowances for an ozone season not exceeding 936 tons for 2009 and thereafter;
- (iv) Rhode Island may adopt any methodology for allocating CAIR NO_X Ozone Season allowances to individual sources, as follows:
- (A) Rhode Island's methodology must not allow Rhode Island to allocate CAIR Ozone Season NO_X allowances for an ozone season in excess of 936 tons for 2009 and thereafter;

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- (B) Rhode Island's methodology must require that, for EGUs commencing operation before January 1, 2001, Rhode Island will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X allowances by October 31, 2006 for the ozone seasons 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for the ozone season in the 4th year after the year of the notification deadline; and
- (C) Rhode Island's methodology must require that, for EGUs commencing operation on or after January 1, 2001, Rhode Island will determine, and notify the Administrator of, each unit's allocation of CAIR Ozone Season NO_X allowances by July 31 of the calendar year of the ozone season for which the CAIR Ozone Season NO_X allowances are allocated.
- (3) Notwithstanding a SIP revision by a State authorized under paragraph (bb)(1) of this section or by Rhode Island under paragraph (bb)(2) of this section, if the State's or Rhode Island's SIP that, without such SIP revision, imposes control measures on EGUs or non-EGUs under §51.121 is determined by the Administrator to meet the requirements of §51.121, such SIP shall be deemed to continue to meet the requirements of §51.121.
- (cc) The terms used in this section shall have the following meanings:

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 allowances, the determination of the amount of allowances to be initially credited to a source or other entity.

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 nonmerchantable for other purposes, that is segregated from other nonmerchantable 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.

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

- 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 then 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 operation means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber.

- Electric generating unit or EGU means: (1)(i) Except as provided in paragraph (2) of this definition, a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for
- (ii) If a stationary boiler or stationary combustion turbine that, under paragraph (1)(i) of this section, is not an electric generating unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become an electric generating unit as provided in paragraph (1)(i) of this section on the first date on which it both combusts fossil fuel and serves such generator.
- (2) A unit that meets the requirements set forth in paragraphs (2)(i)(A), (2)(ii)(A), or (2)(ii)(B) of this definition paragraph shall not be an electric generating unit:
- (i)(A) Any unit that is an electric generating unit under paragraph (1)(i) or (ii) of this definition:
- (1) Qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and
- (2) Not serving at any time, since the later of November 15, 1990 or the startup of the unit's combustion chamber, a

generator with nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

- (B) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of paragraphs (2)(i)(A) of this section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become an electric generating unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of paragraph (2)(i)(A)(2) of this section.
- (ii)(A) Any unit that is an electric generating unit under paragraph (1)(i) or (ii) of this definition commencing operation before January 1, 1985:
- (1) Qualifying as a solid waste incineration unit; and
- (2) With an average annual fuel consumption of non-fossil fuel for 1985–1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- (B) Any unit that is an electric generating unit under paragraph (1)(i) or (ii) of this definition commencing operation on or after January 1, 1985:
- (1) Qualifying as a solid waste incineration unit; and
- (2) With an average annual fuel consumption of non-fossil fuel for the first 3 calendar years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of nonfossil fuel for any 3 consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- (C) If a unit qualifies as a solid waste incineration unit and meets the requirements of paragraph (2)(ii)(A) or (B) of this section for at least 3 consecutive calendar years, but subsequently no longer meets all such requirements, the unit shall become an electric generating unit starting on the

earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more.

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.

Generator means a device that produces electricity.

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.

NAAQS means National Ambient Air Quality Standard.

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 reby seasonal other stricted or deratings), such increased maximum amount as of such completion as specified by the person conducting the physical change.

 ${\it Non-EGU}$ means a source of ${\it NO}_X$ emissions that is not an EGU.

 $NO_{\rm X}$ Budget Trading Program means a multi-state nitrogen oxides air pollution control and emission reduction program approved and administered by the Administrator in accordance with subparts A through I of this part and $\S51.121$, as a means of mitigating interstate transport of ozone and nitrogen oxides.

 $NO_{\rm X}$ SIP Call allowance means a limited authorization issued by the Administrator under the $NO_{\rm X}$ Budget Trading Program to emit up to one ton of nitrogen oxides during the ozone season of the specified year or any year thereafter, provided that the provision in §51.121(b)(2)(ii)(E) shall not be used in applying this definition.

Ozone season means the period, which begins May 1 and ends September 30 of any year.

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.

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.

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.

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:

LHV = HHV - 10.55(W + 9H)

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 a stationary, fossil-fuel-fired combustion turbine.

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, 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.

- (dd) New Hampshire may revise its SIP to implements control measures on EGUs and non-EGUs through an emissions trading program adopted in regulations that differ substantively from subparts AAAA through IIII of part 96 of this chapter as set forth in this paragraph.
- (1) New Hampshire must expand the applicability provisions in §96.304 of this chapter to include all non-EGUs subject to New Hampshire's emissions trading program at New Hampshire Code of Administrative Rules, chapter Env-A 3200 (2004).
- (2) New Hampshire may decline to adopt the CAIR NO_X Ozone Season optin provisions of:
- (i) Subpart IIII of this part and the provisions applicable only to CAIR NO_X Ozone Season opt-in units in subparts AAAA through HHHH of this part;
- (ii) Section 96.388(b) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X Ozone Season opt-in units under $\S 96.388(b)$; or
- (iii) Section 96.388(c) of this chapter and the provisions of subpart IIII of this part applicable only to CAIR NO_X

Ozone Season opt-in units under $\S 96.388(c)$.

- (3) New Hampshire may adopt the allocation provisions set forth in subpart EEEE of part 96 of this chapter, provided that New Hampshire must provide for issuance of an amount of CAIR Ozone Season NO_X allowances for an ozone season not exceeding 3,000 tons for 2009 and thereafter;
- (4) New Hampshire may adopt any methodology for allocating CAIR NO_X Ozone Season allowances to individual sources, as follows:
- (i) New Hampshire's methodology must not allow New Hampshire to allocate CAIR Ozone Season NO_X allowances for an ozone season in excess of 3,000 tons for 2009 and thereafter;
- (ii) New Hampshire's methodology must require that, for EGUs commencing operation before January 1, 2001, New Hampshire will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X allowances by October 31, 2006 for the ozone seasons 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for the ozone season in the 4th year after the year of the notification deadline; and
- (iii) New Hampshire's methodology must require that, for EGUs commencing operation on or after January 1, 2001, New Hampshire will determine, and notify the Administrator of, each unit's allocation of CAIR Ozone Season NO_X allowances by July 31 of the calendar year of the ozone season for which the CAIR Ozone Season NO_X allowances are allocated.
- (ee) Notwithstanding any other provision of this section, a State may adopt, and include in a SIP revision submitted by March 31, 2007, regulations relating to the Federal CAIR NO_X Ozone Season Trading Program under subparts AAAA through HHHH of part 97 of this chapter as follows:
- (1) The State may adopt, as applicability provisions replacing the provisions in §97.304 of this chapter, provisions for applicability that are substantively identical to the provisions in §96.304 of this chapter expanded to include all non-EGUs subject to the State's emissions trading program approved under §51.121(p). Before January

- 1, 2009, a State's applicability provisions shall be considered to be substantively identical to §96.304 of this chapter (with the expansion allowed under this paragraph) regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in §97.102 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State's regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1. 2009
- (2) The State may adopt, as CAIR ${\rm NO_X}$ Ozone Season allowance allocation provisions replacing the provisions in subpart EEEE of part 97 of this chapter:
- (i) Allocation provisions substantively identical to subpart EEEE of part 96 of this chapter, under which the permitting authority makes the allocations: or
- (ii) Any methodology for allocating CAIR NO_X Ozone Season allowances to individual sources under which the permitting authority makes the allocations, provided that:
- (A) The State may provide for issuance of an amount of CAIR Ozone Season NO_X allowances for an ozone season, in addition to the amount in the State's Ozone Season EGU NO_X Budget for such ozone season, not exceeding the portion of the State's trading program budget, under the State's emissions trading program approved under §51.121(p), attributed to the non-EGUs that the applicability provisions in §96.304 of this chapter are expanded to include under paragraph (ee)(1) of this section.
- (B) The State's methodology must not allow the State to allocate CAIR Ozone Season NO_X allowances for an ozone season in excess of the amount in the State's Ozone Season EGU NO_X Budget for such ozone season plus any additional amount of CAIR Ozone Season NO_X allowances issued under para-

- graph (ee)(2)(ii)(A) of this section for such ozone season.
- (C) The State's methodology must require that, for EGUs commencing operation before January 1, 2001, the permitting authority will determine, and notify the Administrator of, each unit's allocation of CAIR NO_X Ozone Season allowances by April 30, 2007 for 2009, 2010, and 2011 and by October 31, 2008 and October 31 of each year thereafter for the 4th year after the year of the notification deadline.
- (D) The State's methodology must require that, for EGUs commencing operation on or after January 1, 2001, the permitting authority will determine, and notify the Administrator of, each unit's allocation of CAIR NO $_{\rm X}$ Ozone Season allowances by July 31 of the year for which the CAIR NO $_{\rm X}$ Ozone Season allowances are allocated.
- (3) The State may adopt CAIR opt-in unit provisions as follows:
- (i) Provisions for CAIR opt-in units, including provisions for applications for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NO_X Ozone Season allowances for CAIR opt-in units, that are substantively identical to subpart IIII of part 96 of this chapter and the provisions of subparts AAAA through HHHH that are applicable to CAIR opt-in units or units for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied:
- (ii) Provisions for CAIR opt-in units, including provisions for applications for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NOx Ozone Season allowances for CAIR optin units, that are substantively identical to subpart IIII of part 96 of this chapter and the provisions of subparts AAAA through HHHH that are applicable to CAIR opt-in units or units for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied, except that the provisions exclude §96.388(b) of this chapter and the provisions of subpart IIII of part 96 of

this chapter that apply only to units covered by §96.388(b) of this chapter; or

(iii) Provisions for applications for CAIR opt-in units, including provisions for CAIR opt-in permits, approval of CAIR opt-in permits, treatment of units as CAIR opt-in units, and allocation and recordation of CAIR NOx allowances for CAIR opt-in units, that are substantively identical to subpart IIII of part 96 of this chapter and the provisions of subparts AAAA through HHHH that are applicable to CAIR optin units or units for which a CAIR optin permit application is submitted and not withdrawn and a CAIR opt-in permit is not vet issued or denied, except that the provisions exclude §96.388(c) of this chapter and the provisions of subpart IIII of part 96 of this chapter that apply only to units covered by §96.388(c) of this chapter.

- (ff) Notwithstanding any provisions of paragraphs (a) through (ee) of this section, subparts AA through II and AAAA through IIII of part 96 of this chapter, subparts AA through II and AAAA through IIII of part 97 of this chapter, and any State's SIP to the contrary:
- (1) With regard to any control period that begins after December 31, 2014, the Administrator:
- (i) Rescinds the determination in paragraph (a) of this section that the States identified in paragraph (c) of this section must submit a SIP revision with respect to the fine particles $(PM_{2.5})$ NAAQS and the 8-hour ozone NAAQS meeting the requirements of paragraphs (b) through (ee) of this section; and
- (ii) Will not carry out any of the functions set forth for the Administrator in subparts AA through II and AAAA through IIII of part 96 of this chapter, subparts AA through II and AAAA through III of part 97 of this chapter, or in any emissions trading program provisions in a State's SIP approved under this section:
- (2) The Administrator will not deduct for excess emissions any CAIR NO_X allowances or CAIR NO_X Ozone Season allowances allocated for 2015 or any year thereafter;
- (3) By March 3, 2015, the Administrator will remove from the CAIR ${\rm NO_X}$ Allowance Tracking System accounts

all CAIR NO_x allowances allocated for a control period in 2015 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO_x allowances will be required with regard to emissions or excess emissions for such control periods; and

(4) By March 3, 2015, the Administrator will remove from the CAIR NO_X Ozone Season Allowance Tracking System accounts all CAIR NO_X Ozone Season allowances allocated for a control period in 2015 and any subsequent year, and, thereafter, no holding or surrender of CAIR NO_X Ozone Season allowances will be required with regard to emissions or excess emissions for such control periods.

[70 FR 25319, May 12, 2005, as amended at 71 FR 25301, 25370, Apr. 28, 2006; 71 FR 74793, Dec. 13, 2006; 72 FR 59203, Oct. 19, 2007; 74 FR 56726, Nov. 3, 2009; 76 FR 48353, Aug. 8, 2011; 79 FR 71671, Dec. 3, 2014]

§51.124 Findings and requirements for submission of State implementation plan revisions relating to emissions of sulfur dioxide pursuant to the Clean Air Interstate Rule.

- (a)(1) Under section 110(a)(1) of the CAA, 42 U.S.C. 7410(a)(1), the Administrator determines that each State identified in paragraph (c) of this section must submit a SIP revision to comply with the requirements of section 110(a)(2)(D)(i)(I) of the CAA, 42 U.S.C. 7410(a)(2)(D)(i)(I), through the adoption of adequate provisions prohibiting sources and other activities from emitting SO_2 in amounts that will contribute significantly to nonattainment in, or interfere with maintenance by, one or more other States with respect to the fine particles $(PM_{2.5})$ NAAQS.
- (2) Notwithstanding the other provisions of this section, such provisions are not applicable as they relate to the State of Minnesota as of December 3, 2009
- (b) For each State identified in paragraph (c) of this section, the SIP revision required under paragraph (a) of this section will contain adequate provisions, for purposes of complying with section 110(a)(2)(D)(i)(I) of the CAA, 42 U.S.C. 7410(a)(2)(D)(i)(I), only if the SIP revision contains control measures that assure compliance with the applicable requirements of this section.