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40 CFR Parts 51, 76, and 96

Supplemental Notice for the Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 76, and 96

[FRL–6008–6]

RIN 2060–AH10

Supplemental Notice for the Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone

AGENCY: Environmental Protection Agency (EPA).

ACTION: Supplemental Notice of Proposed Rulemaking (SNPR).

SUMMARY: In accordance with the Clean Air Act (CAA), today's action is a SNPR to EPA's November 7, 1997 notice of proposed rulemaking (NPR). This action augments EPA's proposal to require certain States to submit State implementation plan (SIP) measures to ensure that emissions reductions are achieved as needed to mitigate transport of ozone (smog) pollution and one of its main precursors—emissions of oxides of nitrogen (NO_X)—across State boundaries in the eastern half of the United States.

Ozone has long been recognized, in both clinical and epidemiological research, to affect public health. There is a wide range of ozone-induced health effects, including decreased lung function (primarily in children active outdoors), increased respiratory symptoms (particularly in highly sensitive individuals), increased hospital admissions and emergency room visits for respiratory causes (among children and adults with pre-existing respiratory disease such as asthma), increased inflammation of the lung, and possible long-term damage to the lungs.

Today's action includes proposed rule language for the November 7, 1997 NPR for the 23 jurisdictions, revised statewide emissions budgets and cost analysis, proposed State reporting requirements and SIP approvability criteria, a proposed model cap-and-trade rule, a discussion of the interaction between this proposal and the title IV NO_X rule, and air quality analyses of the proposed statewide emissions budgets.

The EPA intends to finalize today's action and the November 7, 1997 NPR simultaneously in the September 1998 timeframe.

DATES: The EPA is establishing a 45-day comment period, ending on June 25, 1998. Comments must be postmarked by the last day of the comment period and sent directly to the Docket Office listed in **ADDRESSES** (in duplicate form if possible). A public hearing will be held on May 29, 1998, beginning at 9:00 am. Please refer to **SUPPLEMENTARY INFORMATION** for details.

ADDRESSES: Comments may be submitted to the Air and Radiation Docket and Information Center (6101), Attention: Docket No. A–96–56, US Environmental Protection Agency, 401 M Street SW, room M–1500, Washington, DC 20460, telephone (202) 260–7548, between 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding legal holidays. A reasonable fee may be charged for copying. Comments and data may also be submitted electronically by following the instructions under **SUPPLEMENTARY INFORMATION** of this document. No Confidential Business Information (CBI) should be submitted through e-mail. A courtesy copy of comments to David Cole would be appreciated at Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, MD–15, Research Triangle Park, NC 27711, telephone (919) 541–5565, Fax (919) 541–0824. An electronic copy would also be helpful to cole.david@epa.gov. The address for sending overnight packages is US EPA, Air Quality Strategies and Standards Division, 411 W. Chapel Hill St., Durham, NC 27701. The public hearing will be held at the EPA Auditorium at 401 M Street SW, Washington, DC, 20460.

FOR FURTHER INFORMATION CONTACT: General questions concerning today's action should be addressed to Kimber Smith Scavo, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, MD–15, Research Triangle Park, NC 27711, telephone (919) 541–3354. Please refer to **SUPPLEMENTARY INFORMATION** below for a list of contacts for specific subjects described in today's action.

SUPPLEMENTARY INFORMATION:

Reopening of November 7, 1997 NPR Comment Period and Technical Analyses

The Agency will ensure that all comments and technical analyses received on the November 7, 1997 NPR (62 FR 60318) and this SNPR are made publicly available in the docket to this rulemaking. The EPA will accept comments on all issues raised in today's SNPR, as well as comments concerning the implications that any such issues may have for issues raised in the November 7, 1997 NPR. In addition, on April 9, 1998 (63 FR 17349), EPA published a notice in the **Federal Register** that discussed additional items related to the November 7, 1998 NPR for which the Agency is reopening the comment period. Therefore, the comment period for the November 7, 1997 NPR is reopened until June 25, 1998 for the items specified in the April 9, 1998 notice.

Public Hearing

The EPA will conduct a public hearing on today's proposal on May 29, 1998 beginning at 9:00 a.m. The public hearing will be held at the EPA Auditorium at 401 M Street SW., Washington, DC 20460. The metro stop is Waterfront which is on the green line. Persons planning to present oral testimony at the hearing should notify JoAnn Allman, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, MD–15, Research Triangle Park, NC 27711, telephone (919) 541–1815 no later than May 22, 1998. Oral testimony will be limited to 5 minutes each. Any member of the public may file a written statement before, during, or by the close of the comment period after the hearing. For written statements concerning the proposed amended 40 CFR Part 76, the hearing record will be kept open for 30 days after the hearing date, under section 307(d)(5)(iv) of the CAA to provide an opportunity for submission of rebuttal and supplementary information. Written statements (duplicate copies preferred) should be submitted to the docket at the above address. A hearing schedule including a list of speakers will be posted on EPA's SIP call webpage at http://www.epa.gov/ttn/oarpg/otagsip.html prior to the hearing.

Following the hearing, a verbatim transcript of the hearing and written statements will be made available for copying during normal working hours at the Air and Radiation Docket Information Center at the above address. The Agency does not plan to schedule any additional hearings on the proposed rule.

Electronic Availability

The official record for this rulemaking, as well as the public version, has been established under docket number A–96–56 (including comments and data submitted electronically as described below). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as CBI, is available for inspection from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The official rulemaking record is located at the address in **ADDRESSES** at the beginning of this document.

Electronic comments can be sent directly to EPA at: A-and-R-Docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect in 6.1 (or 5.1) file format or ASCII file format. All comments and data in electronic form must be identified by the docket number A–96–56. Electronic comments on this proposed rule may be filed online at many Federal Depository Libraries.

Availability of Related Information

Documents related to the Ozone Transport Assessment Group (OTAG) are available on the Agency's Office of Air Quality Planning and Standards' (OAQPS) Technology Transfer Network (TTN) via the web at http://www.epa.gov/ttn/. If assistance is needed in accessing the system, call the help desk at (919) 541–5384 in Research Triangle Park, NC. Documents related to OTAG can be downloaded directly from OTAG's webpage at http://www.epa.gov/ttn/otag. The OTAG's technical data are located at http://www.iceis.mcnc.org/OTAGDC. The October 10, 1997 signature version of the proposed SIP call, the November 7, 1997 **Federal Register** version, and associated documents are located at http://epa.gov/ttn/oarpg/otagsip.html. Information related to Section VII, Air Quality Assessment of the Statewide Emissions Budgets can be obtained in electronic form from the following EPA website: http://www.epa.gov/scram001/regmodcenter/t28.htm.

For Additional Information

For technical questions related to the air quality analyses, please contact Norm Possiel; Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division; MD–14, Research Triangle Park, NC 27711, telephone (919) 541–5692. For legal questions, please contact Howard Hoffman, Office of General Counsel, 401 M Street SW, MC–2344, Washington, DC, 20460, telephone (202) 260–5892. For questions concerning the statewide emissions budget revisions, please contact Laurel Schultz; Office of Air Quality Planning and Standards; Emissions, Monitoring, and Analysis Division; MD–14, Research Triangle Park, NC 27711, telephone (919) 541–5511. For questions concerning SIP reporting requirements, please contact Bill Johnson, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, MD–15, Research Triangle Park, NC 27711, telephone (919) 541–5245. For questions concerning the model cap-and-trade rule, please contact Rob Lacount, Office of Atmospheric Programs, Acid Rain Division, MC–6204J, 401 M Street SW, Washington, DC 20460, telephone (202) 564–9122. For questions concerning the regulatory cost analysis of electricity generating sources, please contact Ravi Srivastava, Office of Atmospheric Programs, Acid Rain Division, MC–6204J, 401 M Street SW, Washington DC 20460, telephone (202) 564–9093. For questions concerning the regulatory cost analysis of other stationary sources, please contact Scott Mathias, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, MD–15, Research Triangle Park, NC 27711, telephone (919) 541–5310.

Outline

I. Background
A. Summary of November 7, 1997 NPR
B. Updates With 1994–96 Air Quality Data for the Findings of Significant Contribution
II. Proposed Rule for the 23 Jurisdictions
III. Emissions Budgets Analyses
A. Explanation of Revised Budgets
1. Electricity Generating Units
a. Addition of Sources
b. Growth Factors
c. Revised Budget Component
d. Alternative Approach to Calculating the Component of the Budget for Electricity Generation
2. Non-Electricity Generating Point Sources
a. Addition of Sources
b. Application of Controls
c. Revised Budget Component
d. Options for Calculating the Budgets
3. Revised State Budgets
B. Revised Cost Analyses
1. Electricity Generating Sources
2. Non-Electricity Generating Point Sources
3. Cost Analysis Results
IV. SIP Criteria and Emissions Reporting Requirements
A. SIP Criteria
1. Introduction
2. Completeness Determination
3. Approvability Criteria
a. Additional Control Strategy Approvability Criteria
i. Introduction
ii. General Recommendations
iii. New Proposed Approval Criteria
b. Emissions Inventory Preparation Guidance and Control Strategies Guidance
c. Growth Estimates
d. Emissions Growth and Projection Guidance
B. Emissions Reporting Requirements
1. Use of Inventory Data
2. Legal Authority
3. Background for Reporting Requirements
4. Proposal
5. Annual Reporting
a. Point Sources
b. Area Sources
c. Mobile Sources
6. Reporting Every Third Year (3-year cycle reporting)
7. 2007 Report
8. Ozone Season Reporting
9. Data Reporting Procedures
10. Reporting Schedule
11. Confidential Data
12. Data Elements to be Reported
V. NO_X Budget Trading Program
A. Program Summary
1. Purpose of the NO_X Budget Trading Program
2. Emissions Reductions Required by the Proposed Transport Rulemaking
3. Benefits of Participating in the NO_X Budget Trading Program
4. EPA's Proposal
B. Evolution of the NO_X Budget Trading Program
1. OTC's NO_X Budget Program
2. OTAG Process
3. EPA Model Trading Program Workshops
4. RECLAIM Program
C. NO_X Budget Trading Program
1. General Provisions
a. Purpose
b. Definitions, Measurements, Abbreviations and Acronyms
c. Applicability
i. Monitoring
ii. Responsible Party
iii. Inclusion of Additional Source Categories
iv. Individual Opt-Ins
v. Additional Options for Applicability
vi. Area and Mobile Sources
d. Retired Unit Exemption
e. Standard Requirements
f. Computation of Time
2. NO_X Authorized Account Representative (AAR)
3. Permits
a. General Requirements
b. Title V/Non-title V Permits
c. NO_X Budget Permit Application Deadlines
d. NO_X Budget Trading Program Permit Application
e. NO_X Budget Permit Issuance
f. NO_X Budget Permit Revisions
4. Compliance Certification
5. NO_X Allowance Allocations
a. Development of State Trading Program Budget
b. Timing Requirements
c. Options for NO_X Allowance Allocation Recommendation
i. Basis for Developing an Allocation Recommendation
ii. Options for an Allocation Recommendation
iii. Framework for an Allocation Recommendation
6. NO_X Allowance Tracking System
a. Compliance Accounts
b. Overdraft Accounts
c. Compliance
d. General Accounts
7. Banking
a. General Discussion
i. Banking After the Start of the Program
ii. Banking Prior to the Start of the Program
iii. Management of Banking
b. Options
i. Option 1: No Banking
ii. Option 2: Banking After Program Start Only

iii. Option 3: Early-Reduction Credits
iv. Option 4: Phased-In Program
8. Allowance Transfers
9. Emissions Monitoring and Reporting
a. Requirements for Point Sources
b. Output Information
10. Opt-Ins
a. Applicability for Opt-In Units
b. Allowance Allocations for Opt-In Units
c. Units Sharing Stacks or Fuel Pipe Headers with NO_X Budget Units
d. Withdrawal and Termination of Opt-In Units
11. Program Audits
12. Administration of Program
D. SIP Approvability
E. OTC Integration
1. Applicability
a. State Applicability
b. Source Applicability
2. Allocations
3. Emissions Banking
4. Emissions Monitoring and Reporting
5. Permitting
F. New Source Review
G. End Use Energy Efficiency and Renewable Energy
1. Background
2. Energy Efficiency and Renewables Set-Aside Options
VI. Interaction with Title IV NO_X Rule
VII. Air Quality Assessment of the Statewide Emissions Budgets Analyses
A. Background Information
B. Emissions Scenarios
1. Development of Emissions Inputs
a. Electric Generation Sources
b. Non-Electric Generation Point Sources
c. Mobile and Area Sources
2. Emissions Summaries
C. Analysis of Modeling Results
1. Technical Procedures
a. State-Level Analysis
i. Selection of Grid Cells for Analysis
ii. Procedures for Calculating State-Level Metrics
b. OTAG Standard Table of Metrics
D. Analysis Results and Findings
1. Introduction
a. Impacts on 1-Hour Ozone Concentrations
i. State-Level Analyses—1-Hour Concentrations
ii. Ozone Problem Area Analyses—1-Hour Concentrations
b. Impacts on 8-Hour Ozone Concentrations
i. State-Level Analyses—8-Hour Concentrations
ii. Ozone Problem Area Analyses—8-Hour Concentrations
2. Summary and Conclusions
E. Alternative Approaches
VIII. Impact on Small Entities
IX. Unfunded Mandates Reform Act
X. Paperwork Reduction Act
XI. Judicial Review

I. Background

A. Summary of November 7, 1997 NPR

The EPA's November 7, 1997 proposal [1] (hereafter referred to as the ''proposed SIP call'' or ''SIP call'') proposed to find that the transport of ozone and ozone precursors from 22 States and the District of Columbia (23 jurisdictions) significantly contributes to nonattainment of the ozone national ambient air quality standards (NAAQS), or interferes with maintenance of the NAAQS, in downwind States. The proposed SIP call explained the basis for determining significant contribution or interference with maintenance for the 23 jurisdictions. Further, the SIP call proposed the appropriate levels of NO_X emissions that each of the 23 jurisdictions would be required to achieve. The EPA also conducted a regulatory cost analysis which is available in the docket to this rulemaking (docket number II–B–01) as a technical support document (TSD) to the proposed SIP call. A detailed explanation of how EPA established the budgets is also available as a TSD to the proposal (docket number III–B–02). These TSDs have been revised as explained in Section III, Emissions Budgets Analyses.

The SIP call proposed SIP requirements under CAA section 110(a)(1) and section 110(k)(5) in order to meet the requirements of section 110(a)(2)(D), as it pertains to the ozone NAAQS, to prohibit ozone precursor emissions from sources or activities in those States from ''contribut[ing] significantly to nonattainment in, or interfer[ing] with maintenance by,'' a downwind State.

Based on this determination, the EPA proposed to require SIP revisions in order to take steps toward ensuring that the necessary regional reductions are achieved that will enable current ozone nonattainment areas in the eastern half of the United States to prepare attainment demonstrations and that will enable all areas to demonstrate noninterference with maintenance of the ozone standard. This requirement permits each State to choose for itself what measures to adopt to meet the necessary emissions budget. Consistent with OTAG's recommendations to achieve NO_X emissions decreases primarily from large stationary sources in a trading program, EPA encourages States to consider electric utility and large boiler controls under a cap-and-trade program as a cost-effective strategy. The cap-and-trade program is described in more detail in Section V, NO_X Budget Trading Program.

B. Updates With 1994–96 Air Quality Data for the Findings of Significant Contribution

In the proposed SIP call, EPA followed a weight of evidence approach to determine which States cause a significant contribution to nonattainment in downwind States. Part of the information EPA considered in this determination included air quality modeling based on the OTAG 2007 Base Case and OTAG ''zero-out'' subregional UAM–V simulations. The results of the 2007 Base Case modeling were analyzed with 1993–1995 ambient air quality measurements to identify areas which (a) currently violate the NAAQS (based on monitoring) and (b) are expected to continue to violate the NAAQS in the future (based on modeling). The ''zero-out'' subregional modeling data were then used to quantify the ''ppb'' contributions to ozone in these ''nonattainment'' areas. The resulting ''ppb'' contributions were provided in the SIP call Tables II–10 and II–12 for the 1-hour and 8-hour NAAQS, respectively.

The EPA stated in the SIP call that it would review more recent air quality data and, in the event that these data alter the results of the significant contribution assessment in any meaningful way, EPA would make the appropriate adjustments to the findings. Since the SIP call was published, EPA has reviewed 1996 air quality data to determine which counties violate the 1-hour and 8-hour NAAQS based on 1994–1996 measurements. A list of the 1-hour and 8-hour violating counties based on these data is provided in the docket. The EPA recalculated the ''ppb'' contributions to downwind nonattainment using the 1994–1996 1-hour and 8-hour violating counties and the OTAG 2007 Base Case and ''zero-out'' subregional modeling. The resulting updated 1-hour and 8-hour contribution tables are provided in the docket. Based upon a review of the information in these tables, EPA finds no basis for altering its conclusions on significant contribution.

II. Proposed Action for the 23 Jurisdictions

This SNPR includes the proposed rule language for the CFR for the basic elements of the proposed SIP call, including the requirements imposed on the 23 jurisdictions to submit SIP revisions, under both the 1-hour and 8-hour standard, providing for implementation of the applicable statewide NO_X emissions budget, as well as the definition of the NO_X

[1] The EPA signed the November 7, 1997 NPR on October 10, 1997 and made it immediately available to the public on EPA's homepage at http://www.epa.gov/ttn/oarpg/rules.html.

budget. The rule language is located at the end of the preamble.

III. Emissions Budgets Analyses

A. Explanation of Revised Budgets

A number of changes were made to the emissions inventory used to calculate the budget. These changes apply to the electricity generating and non-electricity generating point source sectors only and were made to correct errors found subsequent to publication of the proposed SIP call (NPR). These source sectors are discussed separately below. Detailed information concerning the changes can be found in the revised Budget TSD titled ''Development of Modeling Inventory and Budgets for the Ozone Transport SIP Call'' (revised Budget TSD).

1. Electricity Generating Units

The changes that were made to the electricity generating component of the budgets fall into two general categories: addition of sources and changes in growth factors. Both of these changes increase the budgets.

a. Addition of Sources. The changes that were made in the population of the utility and non-utility owned electricity generating units since the November 7, 1997 notice are summarized in Table III–1. This SNPR includes 1,757 units compared to 1,180 units in the NPR. This reflects an addition of 577 units to the State budget inventories. These units include electricity generating sources 25 megawatts of electrical output (MWe) or smaller and additional units not affected under the Acid Rain Program (40 CFR part 76). Detailed information on the sources of data for these additional units is contained in the revised Budget TSD.

TABLE III–1.—INVENTORY CHANGE FROM NPR

Source	NPR population	SNPR population
Utility	1062	1510
Non-Utility	118	247
Total	1180	1757

b. Growth Factors. The EPA's ''Proposed Ozone Transport Rulemaking Regulatory Analysis'' (September 1997, docket number III–B–01) used a 1995 forecast of future electricity demand prepared by the North American Electric Reliability Council (NERC), with adjustments for EPA's 1996 estimates of the electricity demand reductions that the Climate Change Action Plan (CCAP) was projected to produce from the year 2000 and on. Details on how EPA prepared this electricity demand forecast can be found in EPA's ''Analyzing Electric Power Generation under the Clean Air Act,'' (July 1996, docket number II–A–07). The EPA used this electricity demand forecast in analyses conducted for OTAG and the Clean Air Power Initiative (CAPI). Further, EPA also used this forecast when establishing the State-specific growth factors used in the NPR (referred to as the ''original'' projections).

While EPA is continuing to use the electricity generating industry growth projections described in the NPR when establishing the budget component for that sector, this SNPR is correcting one error in the growth factor calculation of the NPR. The EPA corrected its estimates of State-specific growth rates from 1996 to 2007. The estimates were interpolated from the average annual growth of each State as forecasted by EPA using the Integrated Planning Model (IPM) and EPA's baseline electricity generation forecast. In developing the average annual growth, EPA relied on unit-specific summer energy use from 2000 to 2010 as forecasted by the IPM. The average annual growth was determined using the State-specific growth from 2000 to 2010. However, when calculating the growth for the year 2010, EPA inadvertently omitted information on many of the new combustion turbine and combined-cycle units that IPM forecasts to be built by 2010. Thus new electricity-generating capacity, expected to be built between 2000 and 2010 was not included when estimating the industry growth between 2000 and 2010. This error resulted in an underestimation of the expected average annual growth for each affected State. In the revision of the budget for the electric power industry, this error has been corrected. The change leads to a higher electricity generating component of the NO_X budget for all affected States. The corrected growth factors are shown in Table III–2 (referred to as the ''corrected'' projections).

TABLE III–2.—CORRECTED ELECTRICITY GENERATION GROWTH FACTORS

State	Original 96–07 factor	Corrected 96–07 factor	Percent increase
Alabama	1.03	1.16	12.92
Connecticut	0.92	1.22	32.99
District of Columbia	1.00	1.00	0.00
Delaware	1.68	1.80	6.77
Georgia	1.14	1.21	6.32
Illinois	1.23	1.34	8.63
Indiana	1.27	1.30	2.64
Kentucky	1.20	1.28	6.41
Massachusetts	1.62	1.71	5.62
Maryland	1.14	1.23	7.37
Michigan	1.13	1.18	4.60
Missouri	1.13	1.24	9.28
North Carolina	1.10	1.26	15.04
New Jersey	0.99	1.26	27.37
New York	1.11	1.22	10.16
Ohio	1.10	1.14	3.19
Pennsylvania	1.07	1.15	7.07
Rhode Island	0.43	0.48	11.83
South Carolina	1.32	1.63	23.22
Tennessee	0.92	1.25	35.78
Virginia	1.18	1.43	20.50
Wisconsin	1.07	1.13	6.30
West Virginia	1.02	1.05	3.26

Since the NPR, EPA has also updated its electricity demand forecast to include more up-to-date information. The information was obtained from the same sources used in developing the forecast used in the NPR. The EPA's more recent forecast uses the 1997 forecast of future electricity demand prepared by NERC with adjustments for the Administration's 1997 estimates of electricity demand reductions that the CCAP is projected to produce from 2000 on (referred to as the ''revised'' projections). The EPA found that this revised estimate leads to lower growth rates for the electricity generating industry than the estimate used in the NPR analyses. However, in this SNPR, EPA uses the corrected forecast when calculating State-specific budgets because of the inherent uncertainty in any projection, and EPA's willingness to provide States flexibility in achieving their budgets. Further, when evaluating the cost effectiveness of NO_X controls, EPA considered both the corrected and revised future electricity demand forecasts. However, for all other analyses under this SNPR, EPA is using the corrected future electricity demand forecast. Further, EPA solicits comment on whether to use only the revised future electricity demand forecast for the budget and cost effectiveness calculations.

c. Revised Budget Component. Both the 2007 electricity generating Base Case and the electricity generating Budget component were revised based on the changes described above. These revisions are shown in Tables III–3 and III–4. The difference between the 2007 Base Case and Budget emissions that were proposed and the revised Base Case and Budget emissions is shown in Table III–3. The revised percent reduction from the 2007 Base Case to the Budget is shown in Table III–4.

TABLE III–3.—CHANGES TO PROPOSED BASE CASE AND BUDGET COMPONENTS FOR ELECTRICITY GENERATING UNITS

[tons NO_X/season]

State	Proposed base	Revised base	Percent increase	Proposed budget	Revised budget	Percent increase
Alabama	81,704	85,201	4	26,946	30,644	14
Connecticut	5,715	7,048	23	3,409	5,245	54
Delaware	10,901	10,727	−2	4,390	4,994	14
District of Columbia	385	236	−39	152	152	0
Georgia	92,946	84,890	−9	30,158	32,433	8
Illinois	115,053	119,756	4	31,833	36,570	15
Indiana	177,888	159,917	−10	48,791	51,818	6
Kentucky	128,688	130,919	2	35,820	38,775	8
Maryland	35,332	37,575	6	11,364	12,971	14
Massachusetts	28,284	24,998	−12	12,956	14,651	13
Michigan	82,057	73,585	−10	25,402	29,458	16
Missouri	92,313	81,799	−11	22,932	26,450	15
New Jersey	14,553	17,484	20	5,041	8,191	62
New York	39,639	43,705	10	24,653	31,222	27
North Carolina	83,273	86,872	4	27,543	32,691	19
Ohio	185,757	167,601	−10	46,758	51,493	10
Pennsylvania	125,195	120,979	−3	39,594	45,971	16
Rhode Island	773	1,351	75	905	1,609	78
South Carolina	43,363	57,146	32	15,090	19,842	31
Tennessee	71,994	83,844	16	19,318	26,225	36
Virginia	45,719	51,113	12	16,884	20,990	24
West Virginia	83,719	76,374	−9	23,306	24,045	3
Wisconsin	51,004	45,538	−11	15,755	17,345	10
Total	1,596,255	1,568,655	−2	489,000	563,784	15

TABLE III–4.—REVISED NO_X BUDGET COMPONENTS AND PERCENT REDUCTION FOR ELECTRICITY GENERATING UNITS

[tons/season]

State	Revised base	Revised budget	Percent reduction
Alabama	85,201	30,644	64
Connecticut	7,048	5,245	26
Delaware	10,727	4,994	53
District of Columbia	236	152	36
Georgia	84,890	32,433	62
Illinois	119,756	36,570	69
Indiana	159,917	51,818	68
Kentucky	130,919	38,775	70
Maryland	37,575	12,971	65
Massachusetts	24,998	14,651	41
Michigan	73,585	29,458	60
Missouri	81,799	26,450	68
New Jersey	17,484	8,191	53
New York	43,705	31,222	29
North Carolina	86,872	32,691	62
Ohio	167,601	51,493	69
Pennsylvania	120,979	45,971	62
Rhode Island	1,351	1,609	−19

TABLE III–4.—REVISED NO_X BUDGET COMPONENTS AND PERCENT REDUCTION FOR ELECTRICITY GENERATING UNITS—Continued

[tons/season]

State	Revised base	Revised budget	Percent reduction
South Carolina	57,146	19,842	65
Tennessee	83,844	26,225	69
Virginia	51,113	20,990	59
West Virginia	76,374	24,045	69
Wisconsin	45,538	17,345	62
Total	1,568,655	563,784	64

d. Alternative Approach to Calculating the Component of the Budget for Electricity Generation. In this regulatory action, the component of each State's budget assigned to electricity generation is determined using the State's total heat input, applicable emission rate (0.15 lb/million British thermal units per hour (mmBtu)), and projected growth to 2007. Consequently, for each State this budget component is based on the amount of fossil fuel each State uses to produce electricity.

However, States use other fuel sources to generate electricity, notably nuclear and hydro energy, as well as solar and wind energy. Furthermore, some facilities that rely on fossil fuel sources are more efficient, in terms of lower NO_X emissions, than other facilities. In addition, each State's use of sources to generate electricity may change over time. For example, electricity now produced by the combustion of fossil fuels may, in the future, be produced using alternative sources and vice versa.

Because of the shifts in generation from one fuel source to another, an alternative approach to determining each State's share of the total regionwide budget component based on total heat input may be a consideration of total electricity generation within the State. Under this approach (referred to as ''output-based''), the electricity generation component (i.e., 563,784 tons of NO_X) of the regionwide budget would be apportioned among the States based on total electricity generation, not only fossil-fuel generation. Since the total regionwide budget component would be the same as that proposed in this notice, and assuming a multistate trading program, the environmental effects and cost effectiveness of such an allocation should be similar to the proposed approach.

The data used to apportion the regionwide budget component to each State under the output-based approach would be State-specific generation (in MWh) for the time period May 1 to September 30. One source of such information is the Energy Information Administration's (EIA) Form 759, where electricity generating sources report their monthly generation. To more equitably account for shifts from State-to-State, it may be appropriate to use the higher of summer 1995 or 1996 generation for each State in determining the output-based State budget components, or perhaps the average of the highest two out of three summer periods. The first approach is similar to that used in generating the proposed budget for this sector.

This alternative approach has the effect of rewarding States that have invested in methods of electricity generation that result in no, or fewer, NO_X emissions. At the same time, because most electricity generation relies on fossil-fuel inputs that, in turn, result in NO_X emissions, even under this output-based approach, the State budgets would bear a strong relationship to amount of actual NO_X emissions on a State-by-State basis.

Even so, the resulting budgets for each State would be different, to some degree, from the budgets currently proposed. If a regionwide trading program is ultimately used, it may be assumed that emissions would be reallocated so that each State's budget under the alternative approach would be the same as under the currently proposed approach. Of course, in this case, the cost effectiveness and environmental benefit associated with this alternative approach would be the same as that of the currently proposed approach. It seems plausible to assume that States subject to the NO_X SIP call would opt for regionwide trading due to the cost effectiveness of this approach.

However, in this rulemaking, EPA is not attempting to require regionwide trading, and if the States opt not to employ such a system, the air quality impacts of an output-based approach and its cost effectiveness may be different from the air quality impacts under the proposed budget. If for some States, the budget under the output-based approach is significantly lower than that under the proposed approach, the absence of a regionwide trading system may result in required control levels that are not technically achievable.

Other issues that arise under the output-based approach concern the representativeness and quality of the required data. Specifically, the EIA data used in the output-based approach may not include all electricity generating sources, such as Independent Power Producers (IPPs) and Non-Utility Generators (NUGs). Additionally, some may argue that it is inappropriate to incorporate the non-NO_X-emitting sources in the calculation of each State's electricity generation component of the budget. In addition, the alternative budget fails to consider the fact that nuclear-, hydro-, solar-, or wind-powered facilities generate steam output, as well as electricity. Accordingly, it may be logical to adjust the alternative budgets further to take account of steam output. Further, as discussed in Section V.C.9.b, Output Information, of this preamble, there are a number of issues associated with measuring and using electricity- or steam-related output data. The EPA solicits comments on all issues concerning this alternative approach, including the appropriateness, legality, rationale, and methodology for incorporating the output-based approach when calculating the electricity generation component of each State's budget.

2. Non-Electricity Generating Point Sources

Changes that were made to the non-electricity generating point source component of the budgets fall into two categories: addition of sources and application of controls. Addition of sources increases the budgets, while correction in the application of controls tends to decrease the budgets.

a. Addition of Sources. Based on the matching that was done to identify electricity generating sources, it was determined that a number of sources

that were identified in the OTAG inventory as utilities were, in fact, not utility sources. In the budgets that were proposed on November 7, 1997, these sources were left out of the inventory when the OTAG utility data were replaced by the acid rain data. These sources have since been identified and added back into the budgets. A list of the sources that were moved from the electricity generating to non-electricity generating sector is contained in the revised Budget TSD.

b. Application of Controls. The non-electricity generating point source budget components were calculated based on the OTAG recommendations as follows:

- 70 percent control for large (> 250 mmBtu/hr) sources (measured from uncontrolled 2007 emissions);
- Reasonably Available Control Technology (RACT)-level controls for all other NO_X sources with more than 1.0 tons per day (tpd) of NO_X emissions (medium-sized sources);
- Small source NO_X emissions were estimated using OTAG Base 1c scenario emission values.

For the budgets that were proposed, RACT was erroneously applied only to those sources that were in areas required to adopt RACT. The intent of the proposed approach was to apply RACT to all medium-sized sources, regardless of whether they are located in an area that would otherwise be required to apply RACT. The revised budgets reflect the application of RACT to all medium-sized sources in the affected States. A list of the sources that were treated as large and medium sources is contained in the appendices to the revised Budget TSD.

c. Revised Budget Component. Both the 2007 Base Case and Budget component for non-electricity generating point sources were revised based on the changes described above. These revisions are shown in Tables III–5 and III–6. The difference between the 2007 Base Case and Budget emissions that were proposed and the revised Base Case and Budget emissions for non-electricity generating units is shown in Table III–5. The revised percent reduction from the 2007 Base Case to the Budget is shown in Table III–6.

TABLE III–5.—CHANGES TO PROPOSED BASE CASE AND BUDGET COMPONENTS FOR NON-ELECTRICITY GENERATING UNITS

[tons NO_X/season]

	Proposed base	Revised base	Percent increase	Proposed budget	Revised budget	Percent decrease
Alabama	47,182	48,187	2	25,131	24,416	3
Connecticut	4,732	5,254	11	4,475	3,103	31
Delaware	5,205	5,276	1	3,206	2,271	29
District of Columbia	312	311	0	312	259	17
Georgia	34,012	33,939	0	20,472	14,305	30
Illinois	63,642	65,351	3	39,855	40,719	–2
Indiana	51,432	51,839	1	35,603	29,187	18
Kentucky	18,817	19,019	1	12,258	11,996	2
Maryland	6,729	10,710	59	4,825	5,852	–21
Massachusetts	10,683	9,978	–7	7,590	6,207	18
Michigan	57,190	61,656	8	35,317	35,957	–2
Missouri	12,248	12,320	1	8,174	9,012	–10
New Jersey	32,663	22,228	–32	26,741	12,786	52
New York	19,889	20,853	5	16,930	14,644	14
North Carolina	32,107	34,412	7	21,113	19,267	9
Ohio	50,946	53,329	5	32,799	30,923	6
Pennsylvania	64,224	74,839	17	59,622	41,824	30
Rhode Island	328	327	0	328	327	0
South Carolina	34,791	34,994	1	20,097	18,671	7
Tennessee	65,051	67,774	4	32,138	34,308	–7
Virginia	23,333	25,509	9	15,529	10,919	30
West Virginia	41,510	42,733	3	31,377	21,066	33
Wisconsin	21,209	21,263	0	12,269	11,401	7
Total	698,233	722,101	3	466,158	399,416	14

TABLE III–6.—REVISED NO_X BUDGET COMPONENTS AND PERCENT REDUCTION FOR NON-ELECTRICITY GENERATING UNITS

[tons/season]

	Revised base	Revised budget	Percent reduction
Alabama	48,187	24,416	49
Connecticut	5,254	3,103	41
Delaware	5,276	2,271	57
District of Columbia	311	259	17
Georgia	33,939	14,305	58
Illinois	65,351	40,719	38
Indiana	51,839	29,187	44
Kentucky	19,019	11,996	37
Maryland	10,710	5,852	45
Massachusetts	9,978	6,207	38
Michigan	61,656	35,957	42

TABLE III–6.—REVISED NO_X BUDGET COMPONENTS AND PERCENT REDUCTION FOR NON-ELECTRICITY GENERATING UNITS—Continued

[tons/season]

	Revised base	Revised budget	Percent reduction
Missouri	12,320	9,012	27
New Jersey	22,228	12,786	42
New York	20,853	14,644	30
North Carolina	34,412	19,267	44
Ohio	53,329	30,923	42
Pennsylvania	74,839	41,824	44
Rhode Island	327	327	0
South Carolina	34,994	18,671	47
Tennessee	67,774	34,308	49
Virginia	25,509	10,919	57
West Virginia	42,733	21,066	51
Wisconsin	21,263	11,401	46
Total	722,101	399,416	45

d. Options for Calculating the Budgets. In the November 7, 1997 NPR, EPA proposed budgets and developed cost effectiveness data for non-utility boilers and gas turbines together with other non-utility point sources. The budgets for these sources were based on the applicable OTAG recommendation of 70 percent reduction from uncontrolled levels at large units (greater than 250 mmBtu/hr), RACT at medium units (other sources greater than 1 ton per day) and no controls beyond the baseline for small sources. The revised budgets described in Section III.A.2, Non-Electricity Generating Point Sources, of today's action are based on the same approach. Costs were estimated for these sources using a least cost approach for each State budget which assumed incremental emissions reductions at the most cost-effective sources in each State, including small, medium, and large units. In contrast, electric generation sources were analyzed separately using an emissions rate approach to develop the budgets and the Integrated Planning Model (IPM) was run to estimate costs under an interstate trading program. The November 7, 1997 NPR invited comment on the size cutoffs used in the above analyses and also specifically invited comment on treating large combustion sources, such as industrial boilers greater than 250 mmBtu (this level approximately corresponds to greater than 1 ton per day), at control levels equal to that for large electric generation sources.

In today's action, EPA is proposing to include the non-utility boilers and gas turbines greater than 250 mmBtu/hr together with electric generation sources as the core group of sources in the NO_X Budget Trading Program and analyze both using IPM. As a result, EPA intends to conduct additional analyses as described below.

For the non-utility boilers and gas turbines greater than 250 mmBtu/hr, EPA intends to estimate costs using IPM and assuming a trading program involving these sources and the electric generation sources. The emissions budget would be calculated for these sources the same as it was in the November 7, 1997 NPR. The EPA also solicits comments on whether to calculate budgets for the non-utility boilers and gas turbines through the alternative means of an emission rate basis (e.g., 0.20 lbs/mmBtu), similar to the approach used by EPA for electric generation sources in the November 7, 1997 NPR. The EPA invites comment on these and other approaches for calculating the budget component and costs for the non-utility boilers and gas turbines greater than 250 mmBtu/hr.

Additionally, EPA intends to further analyze the point source categories that are not part of the proposed core group of sources in the NO_X Budget Trading Program (e.g., process heaters, stationary internal combustion engines, and cement manufacturing). These analyses will look at applying (1) various cost-effectiveness ceilings (e.g., maximum of $2000 per ton); (2) percentage reduction floors (e.g., minimum of 50 percent reduction); and (3) combinations (e.g., $2000 per ton maximum and 50 percent reduction minimum). These analyses will cover individual source categories not in the proposed core group of sources of the NO_X Budget Trading Program as well as all such sources in the aggregate. The EPA invites comment on these and other approaches for calculating the budget component and costs for this group of sources.

In the November 7, 1997 NPR, EPA noted that information on emissions and potential control measures was generally lacking for small sources. The EPA believes that there are several medium and large units for which such information is also lacking. In the November 7, 1997 NPR (and in the revised budgets described in Section III.A.2, Non-Electricity Generating Point Sources), these units were assigned a 70 percent reduction target for large and RACT for medium sized units, consistent with the OTAG recommendation. However, since EPA cannot identify specific control measures for these sources due to the lack of available technical information, EPA now proposes to keep them in the statewide budgets at baseline levels, without additional emission reductions.

As the above analyses are completed, EPA intends to place them in the docket.

3. Revised Statewide Budgets

The revised statewide budgets that reflect the changes to the electricity generating and non-electricity generating point source sectors described above are shown in Table III–7.

TABLE III–7.—REVISED STATEWIDE NO_X BUDGETS

[tons/season]

State	Base	Budget	Percent red.
Alabama	241,564	155,617	36
Connecticut	52,014	39,909	23
Delaware	30,568	21,010	31
District of Columbia	7,978	7,000	12
Georgia	246,243	159,013	35
Illinois	350,154	218,679	38
Indiana	340,084	200,345	41
Kentucky	263,855	158,360	40
Maryland	118,065	73,628	38
Massachusetts	103,445	73,575	29
Michigan	283,821	199,238	30
Missouri	185,104	116,246	37
New Jersey	132,032	93,464	29
New York	230,310	185,537	19
North Carolina	234,300	153,106	35
Ohio	391,012	236,443	40
Pennsylvania	328,433	207,250	37
Rhode Island	12,175	10,132	17
South Carolina	169,572	109,267	36
Tennessee	291,225	187,250	36
Virginia	219,835	162,375	26
West Virginia	158,240	81,701	48
Wisconsin	142,759	95,902	33
Total	4,532,790	2,945,046	35

B. Revised Cost Analyses

The EPA has revised the cost estimates presented in the November 7, 1997 notice. As discussed in Section III.A, Explanation of Revised Budgets, additional emissions sources were included in the emissions budgets and several changes to the emissions inventory were made. Also, revised unit control cost estimates for Selective Catalytic Reduction (SCR) and Selective Non Catalytic Reduction (SNCR) were prepared for non-electricity generating point sources. The revised costs are now more consistent with the way estimates were developed for electricity generating sources. Details on the revised cost analysis are presented in ''Supplemental Ozone Transport Rulemaking Regulatory Analysis'' (Supplemental Regulatory Analysis TSD).

1. Electricity Generating Sources

The OTAG recognized the value of market-based approaches to lowering emissions from power plants and large industrial sources. The Agency agrees that a market-based approach with trading is preferable as more cost effective and encourages all States covered by this rulemaking to establish such a program. The Agency's regulatory analysis is based on this view. As in the original proposal analysis, analytical limitations kept EPA from estimating the costs of a single cap-and-trade program for the electric power industry and other large stationary sources. In this SNPR, the analysis of a cap-and-trade program, across all States covered in the rulemaking, is limited to sources in the electric power industry.

The analysis of the electric power industry has been expanded to include additional electricity-generating sources (see Section III.A, Explanation of Revised Budgets). Additionally, EPA also updated many of the assumptions included in the Integrated Planning Model (IPM), including more recent energy demand forecasts and more recent information on future planned new units. These changes are discussed in the Supplemental Regulatory Analysis TSD.

The EPA analyzed the cost of a NO_X cap-and-trade program with a summer NO_X emissions cap of 563,784 tons, assuming reductions are effective by the 2003 ozone season. Annual cost estimates are provided for 2003 and 2007.

2. Non-Electricity Generating Point Sources

The costs for non-electricity generating point sources are estimated using two alternative approaches. The first approach, called the Least Cost Scenario, attempts to identify the mix of sources and control technologies that achieve each State's non-electricity generating budget level for point sources at the lowest possible control cost. The sources controlled under the Least Cost Scenario may not be the same sources that are controlled for the purpose of establishing each State's emissions budget. The results of the Least Cost Scenario are a proxy for State-level emissions trading programs free of transactions costs. If it were possible to consider transactions costs, the Least Cost Scenario would result in higher cost estimates than are presented here. On the other hand, if the Least Cost Scenario had been modeled assuming the States participate collectively in a trading program for non-electricity generating sources (i.e., domain-wide trading as modeled in the electricity generating sector), the resulting cost estimates would likely be lower than presented here.

The second approach, termed the Command-and-Control Scenario, attempts to estimate the cost of controlling just those sources that were used to establish each State's emissions budget. This method does not take into account possible cost savings that can be realized by more efficient regulatory schemes, such as emissions trading, and therefore tends to overstate the cost of meeting the non-electricity generating point source emissions budget.

The EPA has revised the cost of controls associated with non-electricity generating sources based on information previously developed for the revised IPM for electricity generating sources. The new method for estimating SCR and SNCR costs for non-electricity generating sources is now more

consistent with the estimates for electricity generating sources. The annual costs for non-electricity generating sources are estimated based on the 2007 non-electricity generating source emissions projections. Unlike the IPM analysis for electricity generating sources, the cost analysis framework for non-electricity generating sources did not allow distinctions to be made between the estimated annual cost of compliance in 2003 relative to the year 2007. As shown in Section III.B.3, Cost Analysis Results, the electricity generating sector annual cost estimates vary only 5 percent between 2003 and 2007. It is reasonable to believe that non-electricity generating sector annual cost would also not vary significantly between 2003 and 2007.

For NO_X point sources, EPA estimated annual compliance costs for achieving a total summer NO_X emissions budget of 416,619 tons. This budget is slightly higher (4 percent) than the 399,416 ton budget presented in Section III.A.2, Non-Electric Generation Point Sources, because the cost analysis for non-electricity generating point sources was completed before all adjustments to the proposed budgets had been finalized. If the final 399,416 ton budget had been analyzed the cost estimates for non-electricity generating point sources would have been only slightly higher.

3. Cost Analysis Results

Tables III–8 and III–9 show the analysis results based on the changes to the proposed emissions budgets and cost methodology improvements. Table III–8 shows the population of sources covered by each element of the cost analysis and the resulting NO_X emissions levels. Table III–9 shows the estimated annual compliance costs and average cost effectiveness.

TABLE III–8.—POPULATION OF EMISSIONS SOURCES AND NO_X EMISSIONS AFTER COMPLIANCE WITH THE OZONE TRANSPORT RULEMAKING

Budget component	Number of sources*	Ozone season emissions (1,000 NO_X tons)
Electricity generating sources	1,757	564
Non-Electricity generating sources: Least Cost—2007	13,373	409
Non-Electricity generating sources: Command-and-Control-2007	1,774	394

*The number of electricity generating sources reflects the number of sources in 1996 that were used to establish the summer season NO_X budget. The number of non-electricity generating sources reflects sources controlled for the purpose of estimating costs.

TABLE III–9.—INCREMENTAL ANNUAL CONTROL COSTS AND AVERAGE COST EFFECTIVENESS FOR COMPLIANCE WITH THE OZONE TRANSPORT RULEMAKING

Budget component	Annual control cost (million 1990 dollars)	Average ozone season cost effectiveness ($/ton)	Average annual cost effectiveness ($/ton)
Electricity generating sources—2003	1,308	1,455	1,161
Electricity generating sources—2007	1,378	1,469	1,165
Non-Electricity generating sources: Least Cost—2007	456	1,500	640
Non-Electricity generating Sources: Command-and-Control—2007	1,170	3,700	2,600

Based on the Least Cost Scenario for non-electricity generating sources, the incremental annual cost of the proposed SIP call in 2007 for both electricity and non-electricity generating sources is $1.8 billion (1990 dollars).

IV. SIP Criteria and Emissions Inventory Reporting Requirements

A. SIP Criteria

1. Introduction

The November 7, 1997 NPR explained that each State would be required to submit a SIP demonstrating ''that each State will meet the assigned statewide emission budget'' (62 FR 60365). It further explained that each ''SIP revision should include the following general elements related to the regional strategy: (1) Baseline 2007 statewide NO_X emissions inventory (which includes growth and existing control requirements)—this would generally be the emissions inventory that was used to calculate the required statewide budget; (2) a list and description of control measures to meet [the] statewide budget; (3) fully-adopted State rules for the regional transport strategy with compliance dates providing for control between September 2002 and September 2004, depending on the date EPA adopts in its final rulemaking; (4) clearly documented growth factors and control assumptions; and (5) a 2007 projected inventory that demonstrates that the State measures along with national measures will achieve the State budget in 2007.'' Id.

The purpose of this Section is to identify criteria for determining completeness and approvability of a State submittal in response to the final SIP call. The criteria are set forth in proposed regulatory language (40 CFR 51.121). In addition, this section describes the actions the Agency intends to take if a State fails to make a submittal, or the Agency makes a finding of incompleteness or disapproves the SIP.

2. Completeness Determination

Any submittal that is made with respect to the final SIP call first will be determined to be either incomplete or complete. A finding of completeness means that EPA will review the submittal to determine whether it is approvable. It is not a determination that the submittal is approvable; rather, it means the submittal is administratively and technically sufficient for EPA to determine whether it meets the statutory and regulatory requirements for approval. In order for any submittal to be complete, 40 CFR 51.121 provides that the submittal must meet the criteria described in 40 CFR, part 51, Appendix V, ''Criteria for Determining the Completeness of Plan Submissions.'' These criteria apply generally to SIP submissions and so should be familiar to States submitting transport SIPs.

Section 1.2 of Appendix V, in accordance with section 110(k)(1) of the

CAA, requires EPA to notify States within 60 days of EPA's receipt of a submittal, but no later than 6 months after the submittal is due. If a completeness determination is not made within 6 months after submission, the submittal is deemed complete by operation of law. For purposes of rules submitted in response to the SIP call, EPA intends to make completeness determinations expeditiously. In addition, EPA expects to make findings of failure to submit no later than the Agency makes completeness determinations.

A finding of failure to submit or incompleteness triggers an 18-month sanctions clock that can only be stopped by an affirmative EPA finding that the State has made a complete submittal. The findings also trigger the requirement that EPA promulgate a Federal implementation plan (FIP) within 2 years of the date of the finding, if the deficiency has not yet been corrected. The EPA intends to propose FIPs in the fall of 1998 and move quickly to promulgate a FIP where necessary. In addition, sanctions and FIP clocks are triggered if a State submits a complete SIP, but EPA subsequently disapproves it, in whole or in part.[2]

3. Approvability Criteria

In the November 7, 1997 NPR, EPA highlighted several general elements that must be included in ozone transport SIP revisions. Without these general elements, a SIP submission will not be approved. This Section (1) identifies EPA's proposed additional approvability criteria for control strategies that will help States meet their NO_X budgets; and (2) provides guidance to assist States in preparing emissions inventories for purposes of identifying emissions benefits of possible control strategies. The existing guidance documents listed below will help States incorporate existing EPA guidance into their SIPs. Much of the pertinent guidance is available electronically.

Each State must start with a baseline 2007 statewide NO_X emissions inventory, including growth and existing control requirements. The 2007 projected control inventory must demonstrate that the State measures, along with national measures, will achieve the State budget in 2007. The EPA has issued documents to assist States in developing emissions inventories. Specifically, these documents describe how to clearly define the particular control measures and document the methods used to estimate emissions reductions from implementation measures. A State need not define these measures in its SIP to the extent it chooses to achieve the required reductions through the model rule for the NO_X Budget Trading Program, which is being proposed in this notice.

a. Additional Control Strategy Approvability Criteria.

i. Introduction. The approvability criteria for transport SIP submissions appear in proposed 40 CFR 51.121. Most of the criteria are substantially identical to those that already apply to attainment SIPs. For example, each submission must describe the control measures that the State intends to employ, identify the enforcement methods for monitoring compliance and handling violations, and demonstrate that the State has legal authority to carry out its plan. This part of the preamble focuses on approvability criteria that are being proposed for the first time to ensure States meet their NO_X budgets.

ii. General Recommendations. As discussed in the NPR (62 FR 60365–66), regulatory requirements that employ a maximum mass emissions limitation for a source or group of sources provide the greatest certainty that a specific level of emissions will be attained and maintained. With respect to transport of pollution, a mass emissions limitation also provides the greatest assurance to downwind States that air emissions from upwind States will be effectively managed over time. Regulatory requirements designed and enforced as an emissions rate limitation can achieve a measurable emissions reduction, but the targeted level of emissions may or may not be reached depending on the actual activity level of the affected source(s). Finally, regulatory requirements designed as a specific technology or measure have the greatest uncertainty for achieving a targeted emissions level due to uncertainty in both the activity level of the affected source(s) and uncertainty in the effectiveness of the technology or measure.

Based on the desire to establish regulatory requirements with the greatest likelihood of achieving and maintaining the statewide NO_X emissions budget, EPA recommends that, to the maximum extent practicable, all regulatory requirements be in the form of a maximum level of emissions for a source or group of sources. The EPA recognizes that this option may be difficult for some sources because the available emissions control options may be limited, and the techniques for quantifying mass emissions to ensure compliance with a tonnage budget may not be adequate.

iii. New Proposed Approval Criteria. While mass emissions limitations may be difficult for some sources, EPA believes that, if the State chooses to meet the budget through control requirements for electric generators and large industrial boilers, the State can feasibly require these sources to quantify mass emissions through reasonably available measurement technology. For this reason, as well as others discussed below, EPA proposes the following additional SIP approvability criteria which would apply if the State selected regulatory requirements covering NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe and boilers with a maximum design heat input greater than 250 mmBtu/hr:

- Regulatory requirements to meet the 2007 budget for these sources would need to be expressed in one of three ways: (1) In terms of mass emissions, which would limit total emissions from a source or group of sources; (2) in terms of emissions rates that when multiplied by the affected sources' maximum operating capacity would meet the tonnage component of the emissions budget for this source or for these sources; or (3) an alternative approach for expressing regulatory requirements, provided the State demonstrates to EPA that its alternative provides equivalent or greater assurance than options (1) or (2) that seasonal emissions budgets will be attained and maintained.
- Sources would be required to demonstrate that they have met these applicable emissions control provisions using continuous emissions monitors. Further, EPA is taking comment on whether sources should be required to demonstrate that they met these requirements using the monitoring provisions of the Acid Rain Program for monitoring NO_X mass emissions in 40 CFR part 75.

The EPA believes control approaches and monitoring for this group[3] of sources have advanced to the point that complying with, tracking, and enforcing a maximum mass emissions limitation or tonnage budget is reasonable. A variety of regulatory programs are currently in use or under development that utilize a mass emissions limitation for large combustion devices. These

[2] A more detailed discussion of sanctions and FIPs appeared in the November 7, 1997 NPR at page 60368–69.

[3] NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe and boilers with a maximum design heat input greater than 250 mmBtu/hr.

regulatory systems include the EPA's Acid Rain Program for sulfur dioxide (SO_2) emissions, the South Coast Air Quality Management District's Regional Clean Air Incentives Market for SO_2 and NO_X, and the Ozone Transport Commission's NO_X Budget Program. Experience with these regulatory programs indicates that establishing a tonnage budget for large combustion sources is currently feasible and cost effective. These approaches exist because there is a range of reasonable options available for controlling emissions from these sources. In general, large combustion sources have several effective control options for reducing NO_X emissions, including combustion modifications, post-combustion technologies, and fuel switching. This range of options provides flexibility for these sources or groups of sources to maintain a tonnage budget for emissions.

For measuring emissions, continuous emissions monitors, currently installed at most sources participating in these programs, provide accurate, complete and timely accounting of emissions which enable the administrators of these programs to easily track and enforce emissions on a mass emissions basis. Therefore, EPA proposes that all of the sources in this group must employ continuous emissions monitoring. Further, EPA seeks comment on what specifications, if any, to require for such continuous emissions monitoring systems (CEMS). More specifically, EPA is taking comment on requiring these sources to meet the NO_X mass emissions monitoring and reporting provisions that are contained in a proposed new subpart to the monitoring and reporting provisions of the acid rain regulations in 40 CFR part 75. These revisions are being proposed in a separate notice entitled ''Acid Rain Program; Continuous Emission Monitoring Revisions'' that will be published in the **Federal Register** in the near future. Electric utility units have been meeting the current 40 CFR part 75 requirements since at least 1995. The EPA believes that the proposed 40 CFR part 75 provisions will provide accurate monitoring of NO_X mass emissions and also provide flexibility, particularly for smaller and infrequently operated sources. Additional information on the proposed 40 CFR part 75 requirements can be found in Section V.C.9.a, Requirements for Point Sources. Also, EPA has prepared a memorandum for the docket that compares the proposed provisions of 40 CFR part 75 to other available CEMS requirements.[4]

Another reason that States choosing to control electricity generating sources should use available means to assure that the source's mass emissions stay within the State's projected levels is that recent changes in the utility industry may foster substantial shifts in electricity production from State to State for market reasons. Given the changing market forces in the electricity generating industry today, State measures to limit electricity generating unit emission rates without accounting for potential utilization increases would provide little assurance that mass emissions from these sources would be reduced to the levels necessary to meet the proposed budgets. For this reason, too, EPA believes that regulatory requirements for large combustion sources to meet a State's NO_X budget can and should be expressed and enforced as mass emissions limitations or an alternative providing equivalent assurance that the mass reductions will occur.

Finally, while EPA has not heretofore imposed the proposed approvability criteria on State ozone control measures, EPA believes they are reasonable (as described above) and appropriate in the context of this transport rulemaking. This SIP call addresses the regional problem of emissions transport—i.e., the problem of one State's effect on one or more other States. The EPA believes it is appropriate to take reasonable and feasible steps to minimize the potential ''commons'' phenomenon inherent in this problem. Under the theory of the commons, a State has less interest in controlling pollution that is produced within its borders but primarily affects the health of non-residents, compared to its interest in controlling pollution that has intrastate effects. The additional approvability criteria proposed today offer downwind States the assurance that upwind States, to the extent they elect to control the applicable group of sources, will implement measures that offer transparent certainty of success. Given the availability of reasonable measures to control the applicable group of sources in this way, and the potential for substantial shifts in utilization in the utility sector in coming years, EPA believes it is appropriate for this transport SIP call to propose additional SIP approvability criteria to address the potential commons phenomenon.[5]

To assist States with the development and implementation of an emissions budget for large combustion sources, EPA is proposing the NO_X Budget Trading Program in section V of today's notice. States may voluntarily choose to participate in the NO_X Budget Trading Program by adopting the model rule. This multistate trading program would provide sources the flexibility and cost effectiveness of a market based system, while meeting the additional SIP approvability criteria for States that are proposed in this section.

The EPA intends to approve the portion of any State's SIP submission that adopts the model rule, provided: (1) The State has the legal authority to adopt the model rule and implement its responsibilities under the model rule, and (2) the SIP submission accurately reflects the NO_X reductions to be expected from the State's adoption of the model rule. As noted above, today's action proposes that transport SIP submissions comply with various approval criteria that are substantially identical to existing approval criteria for attainment SIPs. Those criteria include: (1) A demonstration by the State that it has the legal authority to adopt and implement each of the control measures contained in the SIP submission, and (2) a demonstration of the expected emissions reductions to be achieved from each new control measure. Provided a State meets these two criteria with respect to its adoption of the model rule, then EPA intends to approve the model rule portion of the State's SIP submission.

A State or group of States may also choose to develop, adopt, and implement their own cap-and-trade program separate from today's proposed NO_X Budget Trading Program. In developing these alternative programs,

[4] See Memorandum from Kevin Culligan, EPA, Acid Rain Division, to Docket regarding ''Transport SIP Call: Potential Continuous Emissions Monitoring Systems Requirements'' April 8, 1998, Docket Number A–96–56, IV–B–01.

[5] Authority for the proposed additional SIP approval criteria described above resides in sections 110(a) and 301(a) of the Clean Air Act. Specifically, the requirement in section 110(a)(2)(A) that SIPs include enforceable emissions limitations and other control measures ''as may be necessary or appropriate'' to meet the Clean Air Act, together with the requirement in section 110(a)(2)(D) that SIPs include ''adequate provisions'' to mitigate certain transport effects on other States, implicitly authorize EPA to impose the additional SIP approval criteria described above to ensure that affected States adequately mitigate their contribution to ozone transport, given the reasons and circumstances described above. Additionally, section 301(a) grants EPA broad authority to prescribe such regulations as are necessary to carry out its functions under the Clean Air Act. The proposed additional SIP approval criteria are necessary for EPA to meet its obligation to approve only SIPs that contain ''necessary or appropriate'' and ''adequate'' provisions for the applicable State to mitigate its contribution to ozone transport.

States should follow the available guidance in the Economic Incentive Program requirements (see 40 CFR part 51, subpart U) and EPA's Emissions Trading Policy Statement (see 51 FR 43814, December 4, 1986) in addition to the transport SIP approval criteria in proposed 40 CFR 51.121.

Regulatory requirements used to meet the 2007 budget for other sources not identified in the above description may be expressed as (1) a mass emissions limit, (2) an emissions rate, or (3) specific technology or measure. As discussed above, EPA recognizes that it may not be reasonable to require regulatory requirements to be expressed as mass emissions limitations for all of these sources because of limitations with control options and the ability to measure mass emissions. Moreover, EPA believes that the likelihood of substantial shifts in demand (and corresponding changes in emissions compared to historical actuals) is lower for these other sources. Therefore, EPA believes there is substantially less risk with respect to these sources that past representative production rates will prove unreliable predictors of future activity. However, EPA recommends that mass emissions budgets also be used for these sources to the maximum extent practicable.

The EPA solicits comments on the proposed SIP approvability criteria for regulatory requirements that govern emissions from large combustion sources. In addition, EPA solicits comments as to the reasonableness of expressing regulatory requirements as mass emissions limitations for other sources.

b. Emissions Inventory Preparation Guidance and Control Strategies Guidance. This Section presents guidance that States should follow when initiating the planning and development of an emissions inventory. The documents referenced below describe control measures a State may wish to consider for purposes of meeting a statewide NO_X budget. Most of these documents can be obtained directly by computer download from the EPA's Clearinghouse for Inventories and Emission Factors (CHIEF) Web Site (http://www.epa.gov/ttn/chief) or by contacting the InfoCHIEF helpline at (919) 541–5285.

Descriptions of a number of potential data sources that can be consulted for emission estimation methods are provided below. Site-specific source tests are generally expected to provide a better estimate for the tested site than average emission factors (including factors cited in ''Compilation of Air Pollutant Emission Factors (AP–42)'') derived from testing at similar sources. Site-specific tests should be based on a reliable test procedure and should represent typical operating conditions at the site before being assumed to be superior to an average emission factor. The CEMS data for a given site can be considered a superior form of site-specific source test data. Material balances for NO_X sources, and particularly combustion NO_X sources, are not appropriate and should not be used.

If reliable site-specific tests or calculation methods are not available or are not feasible to use for all sources, an emission factor or emission model approach can be used. The EPA's Factor Information Retrieval (FIRE) Data System provides a searchable electronic listing of all criteria, toxic, and greenhouse gas emission factors appearing through the latest printed AP–42 supplement for stationary sources. The FIRE database also contains a number of non-AP–42 factors, but only for sources where no AP–42 factor exists. In addition, FIRE contains a reference indicating if the factor is from AP–42 or another source, and it contains the factor quality rating if one exists. Note that mobile source emission factors do not appear in FIRE. The most recently finished AP–42 stationary source revisions can only be found on the CHIEF web site (http://www.epa.gov/ttn/chief/ap42etc.html).

If an emission factor is not available from one of the above sources, or if the inventory preparer wants to improve the emissions estimates for sources deemed significant, the following data sources may be of use.

- ''Volume I, Introduction to the Emission Inventory Improvement Program (EIIP)'' (EPA–454/R–97–004a)—

http://www.epa.gov/ttn/chief/eiip/techrep.htm#intro

- ''Volume II, Preferred and Alternative Methods for Estimating Air Emissions from Point Sources'' (EPA–454/R–97–004b)—

http://www.epa.gov/ttn/chief/eiip/techrep.htm#pointsrc

- ''Volume III, Preferred and Alternative Methods for Estimating Air Emissions from Area Sources'' (EPA–454/R–97–004c)—

http://www.epa.gov/ttn/chief/eiip/techrep.htm#areasrc

- ''Volume IV, Preferred and Alternative Methods for Estimating Air Emissions from Mobile Sources'' (EPA–454/R–97–004d)—

http://www.epa.gov/ttn/chief/eiip/techrep.htm#mobsrc

- ''Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I: General Guidance for Stationary Sources'' (EPA–450/4–91–016)—

This document provides general procedures for estimating emissions from point and area stationary sources; it may still be useful for estimating emissions from area sources that are not yet covered in the EIIP area source guidance document (e.g., small publicly owned treatment works, aircraft refueling, on-site incineration, residential heating (excluding wood fuel), barge and tank drum cleaning). It is not available in electronic form. Paper copies are available from the InfoCHIEF help desk (919) 541–5285.

- ''Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume II: Emission Inventory Requirements for Photochemical Air Quality Simulation Models'' (Revised) (EPA–450/R–92–026)—

This document offers technical assistance to those engaged in the planning and development of detailed emissions inventories for use in photochemical air quality simulation models. It includes guidance for identifying and incorporating the additional detail required by photochemical air quality simulation models into an existing base year inventory. It is not available in electronic form. Paper copies are available from the InfoCHIEF help desk (919) 541–5285.

- ''Procedures for Emission Inventory Preparation, Vol. IV: Mobile Sources'' (EPA–450/4–81–026d [Revised]) (You can download a zipped WordPerfect file of this document from the ''Emission Inventory Guidance'' Section of the CHIEF Web Site.)

http://www.epa.gov/ttn/chief/ei__guide.html

c. Growth estimates. In order for EPA to approve a SIP for the proposed Ozone Transport Rule, the State must clearly document growth factors and control assumptions used in the budget calculations. To the extent the State uses EPA growth factors and control assumptions, the SIP need only include a statement attesting to this. If a State wants to substitute its own growth factors or control assumptions in the budget analysis, it must provide adequate justification for using the alternative numbers. As stated in the November 7, 1997 NPR (62 FR 60367), EPA believes it is important that consistent emissions growth estimates be used for the State's budget

demonstration and for EPA's calculation of the required statewide emissions budget. The EPA will evaluate any revision to these growth factors or control assumptions that is suggested during the comment period on this rule and may recalculate the required statewide budget to reflect the State's change. Because the revised growth estimates will be included in EPA's budget calculation, lower growth rates could not be considered part of a State's NO_X control strategy to attain that budget unless the change in growth is the result of clearly identified control strategies that can be shown to provide real, permanent, and quantifiable changes in growth. In the November 7, 1997 NPR, EPA encouraged States to request any changes to growth estimates or control assumptions during the comment period for the proposal so that budgets given in the final rulemaking would reflect these changes. Guidance on how to prepare emission growth and projections is listed below.

The EPA is currently considering an optional alternative approach for States to use to meet the major source offset requirements under section 173 of the Act (new source review (NSR) for nonattainment areas).[6] This approach would allow States to create an offset ''pool'' composed of actual emissions reductions that generally will be achieved as a result of NO_X control strategies adopted in response to the SIP call. To create an offset pool, at the time States revise their SIPs to include statewide NO_X control measures, under certain conditions states could set aside a subset of their emissions reductions generated from those measures for the purpose of offsetting anticipated emissions increases of ozone precursors from new and modified major sources that would be subject to nonattainment NSR preconstruction permitting. (The EPA is considering modifying the NSR regulations to consider both NO_X and VOC ozone precursors in all areas. Under such an approach, for offset purposes, VOC emissions increases from new and modified major sources could be offset with NO_X emissions decreases where appropriate.)

The EPA currently anticipates that those States subject to the NO_X SIP call will be able to take advantage of the offset pool idea, as compliance with the SIP call will necessitate emissions reductions that are likely to be creditable as offsets. Specifically, because States' budgets under the SIP call account for a certain increment of new major source growth, states may set aside that increment in an offset pool and still comply with the budgets mandated by the SIP call. Thus, to take full advantage of the offset pool approach, States would need to ensure that they have projected sufficient growth considering major new sources and major modifications to existing major sources that will be locating in existing and new nonattainment areas. In general, EPA believes that sufficient growth assumptions have been built into the budget calculations to allow an adequate margin for new source offsets. Nevertheless, before EPA finalizes the NO_X budgets, States have an opportunity to reevaluate and adjust growth factors and control assumptions to ensure that the final budgets accurately reflect State-specific forecasts of major new source growth. Consequently, EPA recommends that States covered by this rulemaking and interested in using offset pools review their emissions growth assumptions and projections for anticipated new and modified major sources that will become part of their 2007 baseline emissions inventories under this rulemaking to ensure that growth projections accurately reflect the expected new emissions that will be required to be offset under major NSR.

d. Emissions Growth Projection Guidance.

- ''Procedures for Preparing Emissions Projections'' EPA–450/4–91–019, July 1991 (Hard copy only available).
- ''Guidance for Growth factors, Projections, and Control Strategies for the 15 Percent Rate-Of-Progress Plans'' EPA 452/R–93–002, March 1993 (Hard copy only available).

B. Emissions Reporting Requirements for States

As stated in the November 7, 1997 NPR, the EPA believes it is essential that compliance with the regional control strategy be verified. Tracking emissions is the principal mechanism to ensure compliance with the budget and to assure the downwind affected States and EPA that the ozone transport problem is being mitigated. Emissions reporting requirements for States subject to this SIP call are discussed in this Section.

1. Use of Inventory Data

If tracking and periodic reports indicate that a State is not implementing all of its NO_X control measures beginning in September 2002[7] or is off track to meet its statewide budget by 2007, EPA will work with the State to determine the reasons for noncompliance and what course of remedial action is needed. The EPA will expect the State to submit a plan showing what steps it will take to correct the problems. As described more fully in the NPR (62 FR 60364—60369), noncompliance with the NO_X transport SIP may lead EPA to make a finding of failure to implement the SIP and potentially to implement sanctions, if the State does not take corrective action within a specified time period.

The EPA will use 2007 data to assess how each State's SIP actually performed in meeting the statewide NO_X emissions budget. If emissions exceed the required budget in any year after 2006, the control strategies in the SIP will need to be strengthened. The EPA will evaluate the circumstances for the budget failure and may issue a call for States to revise their SIPs, as appropriate.

2. Legal Authority

The legal authority for the proposed State reporting requirements described in this Section resides in sections 110(a) and 301(a) of the Clean Air Act. Specifically, the requirement in section 110(a)(2)(D) that SIPs include ''adequate provisions'' to mitigate certain transport effects on other States implicitly authorizes emissions inventory reporting to EPA, as reporting will be needed and appropriate to verify that a State is in fact meeting its NO_X budget. Section 110(a)(2)(F) provides additional authority for requiring that SIP call submissions include provisions for emissions reporting by sources to a State, correlation of source information by the State, and steps by the State to make the correlated information available to the public. Section 110(a)(2)(K), in turn, requires a State to submit to EPA as requested, data related to modeling the effect of NO_X and other emissions on ambient air quality. The reported emissions inventory data described in this Section will be used by EPA in air quality modeling to assess the effectiveness of the transport rulemaking's regional strategy. Finally, section 301(a) grants EPA broad

[6] The EPA is not now seeking comment on the optional alternative approach of an offset pool. The approach is described here solely for the purpose of informing States of the potential for such an approach and its potential relationship to the growth estimates in the SIP call rulemaking. If EPA pursues this approach, the agency will propose it for comment in a separate **Federal Register** notice and intends to take final action by the end of this year. In particular, to the extent that the offset pool option might elaborate upon or vary from existing Agency policy or guidance, such differences will be addressed in the later notice.

[7] In this discussion of reporting requirements, September 2002 is presumed to be the compliance date for NO_X transport call controls. As discussed earlier, the final rule may adopt a different date for compliance which may, in turn, affect the dates in the final requirements for State reporting.

authority to prescribe such regulations as are necessary to carry out its functions under the CAA. These proposed regulations are necessary for EPA to properly carry out its evaluation of compliance with the SIP call.

3. Background for Reporting Requirements

In the November 7, 1997 NPR, EPA indicated that it intended to work with affected States to determine what reporting procedures are needed to provide adequate assurance that the emissions budgets are being achieved. On January 13, 1998, EPA held a 1-day workshop with the States to discuss tracking issues. The objectives of the workshop were to determine what type and frequency of inventory reporting are feasible for the different source sectors (power generating sources, other point sources, area sources, and mobile sources) to identify key reporting issues related to each sector, and to develop recommendations on reporting requirements to ensure compliance with the SIP call. The goal was to share information and ideas rather than to reach consensus. A summary of the meeting is contained in the docket (docket number V–B–18) for this rulemaking.

The workshop participants generally thought that existing reporting requirements for attainment SIPs should be used whenever possible to minimize any new reporting burden. The States further recommended that the degree of reporting rigor should be directly related to the sectors that the State chooses to control in its NO_X transport strategy. Reporting every 3 years was considered feasible for all source sectors. Reporting on an annual basis was considered both achievable and necessary for all source sectors that a State chooses to regulate specifically for the purpose of meeting the NO_X budgets proposed in the SIP call. This would include all NO_X sources within the State which are subject to measures included by the State in its transport SIP revision in response to this SIP call. In addition, it was noted that sources or source categories that would be participating in a trading program would need to meet the reporting protocols specific to that program. Consideration was also given to establishing uniform monitoring and reporting requirements and a centralized data base for reporting for other sources. Several States indicated support for this concept if there were easy access to the data by all parties. For all source sectors, the States suggested that emissions rather than indicators should be reported.

4. Proposal

After taking into account the suggestions on tracking of the participants in the workshop, EPA today is proposing inventory reporting requirements for States subject to the NO_X SIP call. The regulatory text appears in proposed § 51.122 and is described below.

The EPA is proposing that States report emissions annually starting with data for the year 2003 [8] for any emissions source (point, area, or mobile) to which additional controls are being applied for the purpose of meeting the NO_X budget, with certain exceptions as discussed below, and from any emissions source that will either sell or buy NO_X emission allowances. The EPA is also proposing that States develop and submit comprehensive statewide NO_X inventories, including all NO_X sources, controlled and uncontrolled, every 3 years, starting with data for the year 2002.

The tracking requirements for meeting the NO_X SIP call budget attempt to make use of existing inventory reporting mechanisms as much as possible so that existing requirements are not duplicated. However, the reporting requirements outlined below are more comprehensive than current reporting requirements for attainment SIPs in two respects. This is because EPA proposes that States report emissions from area sources and mobile sources annually if the State adopts new measures to reduce emissions from these sources for purposes of meeting the NO_X budget. Currently, there is no annual reporting requirement for area or mobile sources. In addition, States are not currently required to report on a 3 year cycle emissions from area and mobile sources in attainment areas. States would be required to report Statewide area and mobile source ozone season emissions every third year under the proposed requirements.

Details of reporting for specific source types are set forth below.

5. Annual Reporting

Annual NO_X emissions reporting requirements for point, area and mobile source emissions are to start for the year 2003. The State must submit annual reports for all sources the State chooses to regulate specifically for the purpose of meeting the NO_X budgets proposed in the SIP call. This would include all NO_X sources within the State which are subject to measures included by the State in its transport SIP revision in response to this SIP call. For example, a State would not have to submit an annual report for NO_X emissions for a cement kiln which was controlled prior to 1998 for RACT purposes. However, if the State chose to go beyond RACT requirements for the cement kiln in order to meet its budget, the State would have to report annually the emissions for the source. Emissions inventory reports are to be submitted according to the Reporting Schedule Section below.

a. Point Sources.[9] The EPA proposes that States be required to report NO_X emissions annually for all point sources that are subject to regulations specifically for the purpose of meeting the NO_X budgets proposed in this SIP call. The State must report emissions from such point sources both for the whole year and for the ozone season (May 1 to September 30). The direct reporting from sources to EPA of data used for compliance with the requirements of a trading program meeting the requirements of 40 CFR Part 96 can be used to satisfy this requirement. The EPA is also taking comment on requiring electrical generating units and large industrial boilers to use the monitoring provisions in 40 CFR Part 75 to account for their emissions. This topic is more thoroughly discussed in Section IV.A.3, Approvability Criteria.

b. Area Sources. The EPA proposes that the State determine area source NO_X ozone season emissions for source categories that are controlled beyond otherwise applicable Federal, State or local measures to meet the NO_X budget and report these annually to EPA. A State need not report annually the emissions from an area source sector if the State does not require additional NO_X reductions from that sector in order to meet the transport rule's NO_X budget.

c. Mobile Sources. The EPA proposes that a State determine statewide mobile source NO_X ozone season emissions and report these to EPA annually if the State is requiring additional controls for purposes of meeting the NO_X budget. Reductions from Federal measures are already assumed in the budget. A State need not report annually the emissions from mobile sources if the State does not require additional NO_X reductions from that sector in order to meet the transport rule's NO_X budget.

[8] 2003 would be the year for which the data would be reported. The actual reporting schedule is given in the Reporting Schedule Section.

[9] The EPA is proposing to define point source for this rule as a non-mobile source which emits 100 tons or more per year of NO_X emissions. Non-mobile sources which emit less than 100 tons per year of NO_X would be considered area sources. This definition of point source is consistent with current reporting requirements for NO_X emissions.

6. Reporting Every Third Year (3-Year Cycle or Triennial Reporting)

Consistent with current 3-year reporting requirements, EPA proposes that for every third year, starting in 2002, States would be required to submit to EPA statewide NO_X emissions data from all NO_X sources (point, area, and mobile) within the State.[10] These data would include data from all source categories in the State regardless of whether those sources are being controlled to meet the requirements of the transport rulemaking. For triennial reporting for area and mobile sources, only ozone season emissions must be reported. For triennial reporting for point sources, both ozone season and annual emissions must be reported.

7. 2007 Report

The EPA proposes that in 2007, States submit to EPA statewide NO_X emissions data from all NO_X sources (point, area, and mobile) within the State. This would include data from all source categories in the State regardless of whether those sources are being controlled to meet the requirements of the transport rulemaking. For the 2007 report, only ozone season emissions must be reported for area and mobile sources, while both ozone season and annual emissions must be reported for point sources. The data reporting requirements are identical to the reporting requirements for the 3-year cycle inventories, and this reporting requirement is being proposed to allow evaluation of whether budget requirements are met for 2007. This one-time special inventory is necessary because the ordinary 3-year reporting cycle does not fall in the year 2007. States which must submit the 2007 inventory may project incremental changes in emissions from 2007 to 2008 to allow the 2008 inventory requirement to be more easily met and to reduce the burden on States which must submit full NO_X inventories in consecutive years, i.e., 2007 and 2008.

8. Ozone Season Reporting

The EPA is proposing that the States provide ozone-season inventories for the sources for which the State reports annual, triennial and 2007 emissions. The ozone season emissions may be calculated from annual data by prorating emissions from the ozone season by utilization factors that must be reported and that are further defined in 40 CFR 51.122. For area and mobile sources, only ozone season data must be reported for the annual, triennial, and 2007 inventories. For point sources, the State must report emissions for the whole year, as well as for the ozone season, since States are already required under other existing inventory provisions to submit the data for the whole year. For the annual report, emissions need only be reported for source categories that a State chooses to regulate specifically for the purpose of meeting the NO_X budgets proposed in the SIP call. This would include all NO_X sources within the State which are subject to measures included by the State in its transport SIP revision in response to this SIP call. For the triennial and 2007 reports, ozone season emissions from all NO_X source categories within the State, controlled or uncontrolled, must be reported. The EPA is proposing that each State provide its ozone season calculation method to EPA for approval.

9. Data Reporting Procedures

When submitting a formal NO_X budget emissions report and associated data, the State should formally notify the appropriate EPA Regional Office of its activities. The EPA proposes that States would be required to report emissions data in an electronic format to the location given below. Several options are available for data reporting. The State may choose to continue reporting to the EPA Aerometric Information Retrieval System (AIRS) using the AIRS facility subsystem (AFS) format for point sources. (This option will continue for point sources for some period of time after AIRS is reengineered (before 2002), at which time this choice may be discontinued or modified.) A second option is for the State to convert its emissions data into the Emission Inventory Improvement Program/Electronic Data Interchange (EIIP/EDI) format. This file can then be made available to any requestor, either using E-mail, floppy disk, or value added network, or can be placed on a file transfer protocol (FTP) site. As a third option, the State may submit its emissions data in a proprietary format based on the EIIP data model. For the last two options, the terms ''submitting'' and ''reporting'' data are defined as either providing the data in the EIIP/EDI format or the EIIP based data model proprietary format to EPA, Office of Air Quality Planning and Standards, Emission Factors and Inventory Group, directly or notifying that group that the data are available in the specified format and at a specific electronic location (e.g., FTP site). A fourth option for annual reporting (not for third year reports) is to have sources submit the data directly to EPA. This option will be available to any source in a State that is both participating in a trading program meeting the requirements of 40 CFR part 96 and that has agreed to submit data in this format. The EPA will make both the raw data submitted in this format and summary data available to any State that chooses this option. The EPA also solicits comment on whether this option should be expanded to additional stationary sources.

For the latest information on data reporting procedures, call the EPA Info Chief help desk at (919) 541–5285 or email to info.chief@epamail.epa.gov.

10. Reporting Schedule

The EPA is proposing that States submit the required annual and triennial emissions inventory reports no later than 12 months after the end of the calendar year for which the data are collected. Because downwind nonattainment areas will be relying on the upwind NO_X reductions to assist them in reaching attainment by the required dates, EPA believes it is important that data be submitted as soon as practicable to verify that the necessary emissions reductions are being achieved. Early reports will allow States to more quickly respond to implementation problems detected by the reports. States should formally notify the appropriate EPA Regional Office when making the submittals.

In a related rulemaking effort, EPA is currently developing the consolidated emissions inventory reporting rule. Among other things, the rule will be proposing that all States in the Nation submit statewide inventories of ozone precursors (NO_X, VOC, CO) every 3 years beginning with 1999 data. The third year reporting requirement for the transport rule has been developed to be consistent with that reporting cycle. However, the proposed 2002 start date for the transport rule emissions reports is 3 years later than the start date for the consolidated rule reports. The EPA is considering an 18-month reporting schedule for the latter rule. The EPA expects that, as States gain experience in developing statewide emissions inventories, less time will be needed to gather and quality assure the data. Once States have completed the first cycle of reporting for 1999 under the consolidated rule, they may have sufficient procedures in place to allow for an accelerated reporting schedule. Therefore, because of the importance of the NO_X inventory reports for determining compliance with the NO_X budgets, EPA believes it is appropriate

[10] The actual submittal of data by the State would only be required 12 months after the end of 2002. The data should be submitted according to the schedule in the Reporting Schedule Section.

to require a 12-month reporting schedule for the transport rulemaking.

The EPA recognizes that there are different constraints on data collection for the point, mobile, and area source categories. Therefore, EPA is also soliciting comment on whether different reporting schedules should be established for the different source categories, such that data that can be obtained more readily should be submitted sooner. For example, because point sources are already known to State agencies, and their operating parameters will not change significantly from year to year, the time needed to collect and quality assure data may be shorter than for the other categories. The new data submission procedures discussed above may allow further reductions in the reporting time. The EPA is soliciting comment on whether the State reporting time for point source emissions should be shortened to no later than 6 or 9 months after the end of the calendar year for which the data are collected.

For mobile and area sources, the necessary reporting time frames may be longer than for point sources due to the delay in obtaining activity data from information sources outside the inventory preparing agency. In many cases, surveys to collect new activity data are required by the inventory preparing agency to be able to calculate emissions estimates. As with point sources, the new data submission procedures may allow reductions in the reporting time. The EPA is soliciting comment on whether no later than 6 or 9 months after the end of the applicable calendar year would be a feasible time frame for submitting mobile and area source emissions inventory reports.

If different reporting schedules are established for the different source categories in the final rule, the EPA is proposing that, for the third year complete statewide inventory, States submit a summary report identifying the separate submittals and totaling the statewide NO_X ozone season emissions to demonstrate progress toward, and ultimately compliance with, their NO_X budget.

11. Confidential Data

Emissions data being requested in today's proposal would not be considered confidential by the EPA (See 42 U.S.C. 7414). However, some States may restrict the release of certain types of data, such as process throughput data. Where Federal and State requirements are inconsistent, the EPA Regional Office should be consulted for final reconciliation.

12. Data Elements To Be Reported

In addition to reporting ozone season NO_X emissions, the State should report other critical data necessary to generate and validate these values. This includes data used to identify source categories such as site name, location and (source classification code) SCC codes. It also includes data used to generate the NO_X emissions values such as fuel heat content and activity level. The specific data elements required for each source category are further defined in 40 CFR 51.122.

V. NO_X Budget Trading Program

In the November 7, 1997 proposed rulemaking to reduce the transport of ozone and facilitate attainment of the NAAQS for ozone, EPA offered to develop and administer a multistate NO_X trading program to assist States in the achievement of these goals; today's notice proposes such a program. The trading program being proposed employs a cap on total emissions in order to ensure that emissions reductions under the proposed transport rulemaking are achieved, while providing the flexibility and cost effectiveness of a market-based system. This Section provides background information and a description of the NO_X Budget Trading Program, as well as an explanation of how the trading program would interface with other State and Federal programs. In addition, a model rule for the trading program is proposed. States can voluntarily choose to participate in the NO_X Budget Trading Program by adopting the model rule, which is a fully approvable control strategy for achieving emissions reductions required under the proposed transport rulemaking.

Should the States voluntarily choose to participate in the NO_X Budget Trading Program by adopting the model rule, EPA's authority to cooperate with and assist the States in the implementation of the trading program resides in both State law and the CAA. With respect to State law, any State which elects to adopt the model rule as part of its transport SIP will be authorizing EPA to assist the State in implementing the trading program with respect to the sources in that State. With respect to the CAA, EPA believes that the Agency's assistance to those States that choose to participate in the trading program will facilitate the implementation of the program and minimize any administrative burden on the States. One purpose of title I of the CAA is to offer assistance to States in implementing title I air pollution prevention and control programs (42 U.S.C. 101(b)(3)). In keeping with that purpose, section 103(a) and (b) generally authorize EPA to cooperate with and assist State authorities in developing and implementing pollution control strategies, making specific note of interstate problems and ozone transport. Finally, section 301(a) grants EPA broad authority to prescribe such regulations as are necessary to carry out its functions under the CAA. Taken together, EPA believes that these provisions of the Act authorize EPA to cooperate with and assist the States in implementing the NO_X Budget Trading Program in the ways set forth in the model rule.

A. Program Summary

1. Purpose of the NO_X Budget Trading Program

The OTAG concluded that an emissions trading program could facilitate cost effective emissions reductions from large combustion sources (for more information on OTAG, see Section V.B.1.). When designed and implemented properly, a market-based program offers many advantages over its traditional command-and-control counterpart. The OTAG articulated five principal advantages of market-based systems: (1) Reduced cost of compliance; (2) creation of incentives for early reductions; (3) creation of incentives for emissions reductions beyond those required by regulations; (4) promotion of innovation; and (5) increased flexibility without resorting to waivers, exemptions and other forms of administrative relief (OTAG 1997 Executive Report, pg. 57). These benefits result primarily from the flexibility in compliance options available to sources and the monetary reward associated with avoided emissions in a market-based system. The cost of compliance in a market-based program is reduced because sources have the freedom to pursue various compliance strategies, such as switching fuels, installing pollution control technologies, or buying authorizations to emit from a source that has over-complied. Since an emission rate or emissions level below the level mandated allows the generation of credits or allowances that may be sold on the market, pollution prevention becomes more cost effective, and innovations in less-polluting alternatives and control equipment are encouraged.

A market system that employs a fixed tonnage limitation (or cap) for a source or group of sources provides the greatest certainty that a specific level of emissions will be attained and maintained since a predetermined level

of reductions is ensured. With respect to transport of pollution, an emissions cap also provides the greatest assurance to downwind States that emissions from upwind States will be effectively managed over time. The capping of total emissions of pollutants over a region and through time ensures achievement of the environmental goal while allowing economic growth through the development of new sources or increased use of existing sources. In an uncapped system, (where, for example, sources are required only to demonstrate that they meet a given emission rate), the addition of new sources to the regulated sector or an increase in activity at existing sources can increase total emissions even though the desired emission rate control is in effect.

In the NO_X Budget Trading Program, EPA proposes to implement jointly with participating States, a capped market-based program for certain combustion sources to achieve and maintain an emissions budget consistent with the proposed transport rulemaking. An emissions cap or budget trading program for large combustion sources is a proven and cost-effective method for achieving emissions reductions while allowing regulated sources compliance flexibility.

Although participation in the NO_X Budget Trading Program is discretionary, EPA encourages States to participate in the trading program as a cost-effective way of meeting their emissions reductions obligations under the proposed transport rulemaking. Specifically, today's proposal is designed to assist States in: (1) Achieving, through a program covering certain large stationary combustion sources, emissions reductions required under the proposed transport rulemaking; (2) ensuring flexibility for regulated sources; (3) reducing compliance costs for sources; and (4) reducing administrative costs to States.

Adoption of the NO_X Budget Trading Rule would ensure consistency in certain key operational elements of the program among participating States, while allowing each State flexibility in other important program elements. Uniformity of the key operational elements across the NO_X Budget Trading Program region is necessary to ensure a viable and efficient trading program with low transaction costs and minimum administrative costs for sources, States, and EPA.

The effect of NO_X emissions on air quality in down wind nonattainment areas depends, in part on the distance between sources and receptor areas. Sources that are closer to the nonattainment area tend to have much larger effects on air quality than sources that are far away. In light of this, and as discussed in Section VII, the Agency plans to evaluate alternative approaches in developing the final rule.

The Agency solicits comments on whether a trading program should factor in differential effects of NO_X emissions in an attempt to strike a balance between achieving the cost savings from a broader geographic scope of trading and avoiding the adverse effects on air quality that could result if the geographic domain for trading is inappropriately large or trades across areas are not appropriately adjusted to reflect differential environmental effects. The Agency could consider establishing ''exchange ratios'' for tons traded between areas. The large number of areas in the region violating the standards and the several different weather patterns associated with summertime ozone pollution episodes complicate the development of a stable set of trading ratios. Alternatively, the Agency could consider establishing subregions for trading within the 23-jurisdiction area and apply a discount to or prohibit trades between regions.

The Agency solicits comments on this issue. If after review of alternative approaches (including sub-regional modeling analysis submitted by the States and other commenters), EPA concludes that an alternative approach is appropriate, EPA will issue a SNPR.

2. Emissions Reductions Required by the Proposed Transport Rulemaking

Each of the 22 States and the District of Columbia, determined by EPA in the proposed transport rule to make a significant contribution to nonattainment or interfere with maintenance in another jurisdiction, has been assigned a statewide NO_X emissions budget. Each of these States must submit a SIP revision delineating the controls that will be implemented to meet its specified budget. Each State has complete discretion to develop and adopt a mix of control measures appropriate for meeting its assigned emissions budget. Today's proposal assumes that compliance with the emissions reductions requirements for the transport rulemaking will begin on May 1, 2003, as proposed in the transport rulemaking. If a different compliance deadline is required in the final transport rulemaking, the deadlines in the proposed trading rule will be adjusted accordingly.

In the proposed transport rulemaking, EPA calculated seasonal NO_X emissions budgets for States, assuming activity growth levels through 2007 and the application of reasonable, cost-effective controls that are currently available to achieve NO_X reductions. The statewide budgets were developed by applying appropriate controls to each sector of the total State emissions inventory: large electricity generating devices, point sources other than large electricity generators, nonroad engines, highway vehicles, and area sources. The statewide NO_X budget development process is fully described in Section III.B. of the November 7, 1997 proposal (62 FR 60346).

As outlined in the proposed transport rulemaking, budget levels calculated for nonroad engine, highway vehicle, and area source inventory sectors assume continued application of controls already required for those source sectors in addition to implementation of Federal measures, such as the National Low Emissions Vehicle Program. The statewide seasonal NO_X budgets proposed for the large electricity generating source sector (fossil-fuel burning electricity utility units and nonutility units serving electricity generators greater than 25 MWe) were based on applying a uniform NO_X emission rate of 0.15 lb/mmBtu to projected generating activity levels. Budget estimates for States' nonutility point source sector were developed assuming a 70 percent reduction from future emissions levels of large sources (greater than 250 mmBtu/hour), and application of RACT to medium sized sources (100–250 mmBtu/hour) in this category.

Though States are free to independently determine their control strategies to achieve their statewide budgets, several Federal and/or State programs are already under way or planned for most of the inventory source sectors to assist States in meeting their budgets. For example, meeting individual budget components for highway vehicles and nonroad engines can be achieved through Federal programs without adopting additional new control strategies. In addition, EPA is offering to administer certain aspects of today's proposed regional NO_X Budget Trading Program in order to assist States in developing a regulatory strategy for large stationary combustion sources.

3. Benefits of Participating in the NO_X Budget Trading Program

Participation in the NO_X Budget Trading Program would enable States that have been identified in the proposed transport rulemaking to achieve the required emissions reductions from stationary combustion sources while minimizing the

administrative burden faced by both States and sources. The SIP revision process required by the proposed transport rulemaking would be significantly streamlined for States choosing to include the NO_X Budget Trading Program as a part of the SIP. The EPA proposes that adoption of the model rule will be considered a SIP-approvable control strategy for the proposed transport rulemaking. States electing to participate in the trading program may either adopt the model rule by reference or develop State regulations that are in accordance with the model rule.

The permitting process under the trading program would be significantly streamlined since there will be no need for enforceable compliance plans and few circumstances necessitating permit revisions. Emissions monitoring, a central requirement of the trading program, as well as the availability to the public of emissions data, allowance data, and annual reconciliation information, would ensure that participating States and the public have confidence that the required emissions reductions are being achieved.

Cost savings for sources in States included in the trading program are projected to be substantial. As estimated in the ''Proposed Ozone Transport Rulemaking Regulatory Analysis'' (September 1997 docket # III–B–01), annual incremental costs for a rate-based control approach (at 0.15 lbs/mmBtu) are estimated to be $501 million higher in 2005 than the costs of participating in the NO_X Budget Trading Program (assuming the same emission rate) for the 23 jurisdictions in the proposed transport rulemaking. Moreover, the annual average cost effectiveness of emissions reductions achieved through a regional trading program for the electric power industry is projected to be approximately $1,250 per ton by 2010, while the cost effectiveness of the rate-based approach is projected to be $2,050 per ton by 2010 (pages 2–24 through 2–27).

Sources included in the trading program can also expect increased compliance flexibility, as compared to a rate-based approach that requires each affected source to comply with the 0.15 lbs/mmBtu emission rate and necessitates installation of control equipment for any affected source that cannot meet the limit. Participation in the trading program provides sources the choice of numerous compliance strategies. Moreover, sources can choose to over-comply and generate excess allowances that can be sold on the market or, as discussed below, possibly banked for future use. In addition, sources may change their control approach at any time without regulatory agency approval.

4. EPA's Proposal

Initially, the following sources would be included in the NO_X Budget Trading Program: fossil fuel-fired units (i.e., stationary boilers, combustion turbines, and combined cycle systems) that serve an electrical generator of capacity greater than 25 MWe; and fossil fuel-fired units that do not serve a generator and that have a heat input capacity greater than 250 mmBtu/hr. All such sources located within a State that chooses to join the trading program would be required to participate in the program. Conversely, sources located in States that do not join the trading program would not be eligible to participate. The NO_X budget sources initially included in the trading program represent about 80 percent of the point source portion of the 2007 NO_X baseline emissions inventory and about 65 percent of the point source portion of the 2007 NO_X budget as proposed in the ozone transport rulemaking. Additionally, these sources represent about 90 percent of the emissions reductions required in the proposed ozone transport rulemaking. This core group of sources, therefore, captures the majority of NO_X emissions from the point source sector. States, however, have the option of extending the program to include additional point sources at their discretion, provided these additional point sources can fulfill the requirements set forth for the trading program in this proposal. The EPA is also taking comment on allowing certain new and modified major sources to participate in the trading program at their discretion as a way of potentially meeting the new source offset provisions under section 173 of the CAA, provided the source meets the permitting, monitoring, and accountability requirements of the trading program.[11] The EPA requests comments on broadening the applicability of this trading program to include more types of sources such as process sources, mobile sources, or area sources. Commenters should address each type of source that they recommend be included in the applicability of this program. For each source type, commenters should describe procedures for monitoring emissions and identify responsible parties for the source type. Criteria for monitoring and for responsible parties are outlined below. Additionally, comment is requested on any other types of concerns or issues associated with inclusion of these other source types (e.g., environmental justice; net cost savings likely to accrue from trading; administrative costs for sources, States, and EPA).

Sources in the trading program would be required to monitor and report their emissions in accordance with relevant portions of 40 CFR part 75, which is currently under revision to provide greater flexibility to regulated sources. (40 CFR part 75 revisions will be proposed in a notice entitled ''Acid Rain Program; Continuous Emission Monitoring Revisions'' that will be published in the **Federal Register** in the near future.) The monitoring of emissions is necessary for accountability and to ensure that a ton from one source in one State is equivalent to a ton from another source in the same or another State.

The NO_X allowances—each allowance representing a limited authorization to emit one ton of NO_X—would be the currency used in the trading program. An emissions budget and an allowance-based system ensure achievement of environmental goals within a cost-effective, market-based program and can be implemented through existing infrastructure. A fixed number of NO_X allowances would be allocated to regulated sources in each State for each ozone season in the amount of the NO_X budget set for the trading program in the State. States would have the responsibility for allocating allowances among regulated sources. The proposed NO_X Budget Trading Rule establishes timing requirements for the submission of NO_X allowance allocations to EPA by participating States for inclusion into the NO_X Allowance Tracking System (NATS), which would be operated by EPA.

In addition to timing requirements, today's proposal provides options for a recommended methodology for States to allocate NO_X allowances to their sources covered by the NO_X Budget Trading Program. A specific recommendation would be included in the final trading rule. States would have the flexibility to deviate from EPA's recommendation as long as the timing requirements (40 CFR 96.41) are met and total NO_X allowances allocated to regulated sources do not exceed the number of tons that the State apportions to these sources in the SIP. This would help ensure that the trading program can operate efficiently and effectively across multiple States.

In addition to EPA's traditional role in the approval and oversight of the SIP, EPA would be responsible for managing the emissions data and market functions

[11] For discussion on this subject, see Section F, below, that addresses New Source Review.

of the program, as well as performing annual reconciliation of monitored emissions and allowances. States choosing to join the trading program would be responsible for promulgating the supporting State regulations; submitting NO_X allowance allocations to EPA for inclusion in NATS; and enforcing the permitting, monitoring and excess emissions requirements. As established in the proposed transport rulemaking, the control period would extend from May through September. Based on results presented in the regulatory analysis for the proposed transport rule that suggest no significant changes in the location of emissions reductions resulting from an unrestricted trading program with a consistent control level (''Proposed Ozone Transport Rulemaking Regulatory Analysis,'' September 1997, pages 2–20 and 2–23, docket # III–B–01), trading could occur across participating States free from restrictions (other than the requirement to comply with existing emissions limits under title I and title IV of the Act). These and other program parameters, however, are predicated on the proposed transport rule and may be modified if the final transport rule differs from the proposal.

B. Evolution of the NO_X Budget Trading Program

Market-based systems to control NO_X emissions have been developed within the United States, including: The South Coast Air Quality Management District's Regional Clean Air Incentives Market (RECLAIM) and the Ozone Transport Commission's (OTC) NO_X Budget Program. Today's proposed NO_X Budget Trading Program builds directly upon the OTC program and recommendations from OTAG. In addition, EPA held two public workshops in November and December of 1997 specifically to solicit input on the development of the trading program. The proceedings of these workshops are also summarized in this Section.

1. OTC's NO_X Budget Program

The goals and implementation strategy of the OTC's NO_X Budget Program are similar to those of the proposed transport rule and today's proposed NO_X Budget Trading Program. Taking into account the work that has been done by the OTC, EPA has tried to develop a proposal that will minimize conflicts between the two programs by building upon the terms and provisions in the OTC program. Section V.E of this preamble further discusses the integration issues for the two programs.

On September 27, 1994, the OTC adopted a Memorandum of Understanding (MOU) committing the signatory States to the development and proposal of regionwide NO_X emissions reductions in two phases beginning in 1999 and 2003. The signatory States were Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, and the District of Columbia.

The OTC MOU requires reductions in ozone season NO_X emissions from utility and large industrial combustion facilities in order to further the effort to achieve the health-based NAAQS for ozone. These emissions reduction requirements will be implemented through a regionwide cap-and-trade program. The OTC States, in collaboration with EPA, industry, and environmental groups, drafted and approved a model rule in May 1996. This model rule serves as a template for States to adopt their own rules to implement the budget program defined by the OTC MOU. In addition to adopting rules, States in the OTC program are responsible for allocating NO_X allowances among regulated sources, certifying monitors and monitoring plans, auditing and recertifying sources, and enforcing the provisions of their State rules. In addition to EPA's traditional role in the approval and oversight of the SIP, EPA serves as the administrator for the NATS and the Emissions Tracking System (ETS), the data systems used to implement the OTC program. This entails issuing NO_X allowances and opening accounts, processing transfers and quarterly emissions reports, conducting annual reconciliation of emissions and allowances, and providing technical assistance to States and sources as needed.

To implement the program, the OTC MOU emissions reduction requirements were applied to a 1990 baseline for NO_X emissions in the Ozone Transport Region (OTR) to create an emissions budget for each of the 2 target years: 1999 (Phase II) and 2003 (Phase III). (Phase I required the installation of RACT by May 1995.) This budget was apportioned among all the States; each State is responsible for allocating its budget to regulated sources in its State. Sources are allowed to buy, sell, or trade NO_X allowances, and ultimately must hold allowances sufficient to cover all NO_X emitted during the ozone season. Beginning in 1999, the total NO_X emissions from regulated sources cannot exceed the number of allowances allocated in the OTR.

In order to ensure that NO_X emissions reductions are achieved and allowances are fungible, budget sources are required to monitor and report their NO_X emissions. Most sources use CEMS, as approved by EPA under 40 CFR Part 75. For smaller oil-and gas-burning units, alternative monitoring methods are available.

At the conclusion of each ozone season, sources have an opportunity to evaluate their reported emissions and obtain any additional NO_X allowances they may need to offset their emissions during the ozone season. By December 31 of each year, a regulated source submits a compliance certification report. Should a source lack sufficient allowances to offset emissions for the season, the OTC model rule requires subtraction of allowances from that source's allocation for the following year. If enough NO_X allowances are not held, an automatic offset will be imposed during the following year's ozone season where an amount of NO_X allowances will be deducted from the source in an amount equaling three NO_X allowances for each ton of excess emissions. The source is also subject to the application of existing State and Federal enforcement protocols and penalties.

The NO_X allowances that are not used are automatically carried over into the following year as banked allowances. The banking provisions of the OTC model rule provide for unlimited banking of allowances with a ''progressive flow control'' management scheme to control the withdrawal and use of banked allowances. (For a more detailed discussion of banking, see Section V.E.). Explicit program audit provisions are established in the OTC model rule to ensure that the use of banked NO_X allowances does not threaten the integrity of the system.

Finally, the OTC model rule makes provisions for possible rule modifications in the future. This ''mid-course correction'' provides an opportunity to revise the 2003 emissions reduction target and budget and to modify the OTC model rule in response to refined air quality modeling or other altered circumstances.

2. OTAG Process

The OTAG, a partnership among the 37 easternmost States and the District of Columbia, EPA, industry representatives and environmental groups, was charged with assessing the significance of ozone transport and with recommending to EPA control strategies for reducing this transport. The OTAG's initial meetings were in May and June of 1995, and its final recommendations were issued to

EPA on July 8, 1997 (see 62 FR 60376, Appendix B). The OTAG completed an extensive and comprehensive analysis of ozone transport and control, and EPA has taken OTAG's work and conclusions into account in developing this rulemaking.

The analysis and conclusions of the Trading and Incentives Workgroup of OTAG are particularly relevant to EPA's creation of the NO_X Budget Trading Program. The Trading and Incentives Workgroup was charged with designing market-based approaches to reduce NO_X emissions. This group identified two basic paths to market system implementation—identified as ''Track One'' and ''Track Two''—which could be used to facilitate achievement of the statewide budgets delineated in the proposed transport rulemaking. ''Track One'' was defined as an interstate cap-and-trade program for stationary sources, administered by a central regulatory authority, such as EPA. ''Track Two'' was defined as a market-based system without an emissions cap. As discussed above, trading with a cap better ensures that environmental goals will be met than trading without a cap. Therefore, for the purposes of assisting State achievement of the statewide budgets set forth in the proposed transport rulemaking, EPA is focusing on implementing a ''Track One'' type of program with today's proposed rule and is building upon OTAG's analysis and recommendations regarding the development of Track One programs.

3. EPA Model Trading Program Workshops

The EPA held two public workshops to solicit comments and suggestions from States and other stakeholders on a NO_X cap-and-trade program prior to developing today's proposed NO_X Budget Trading Rule. This Section describes the workshop process. Greater detail regarding program development and feedback received through the workshop process is provided within relevant Sections of this preamble.

The trading rule workshops were held on November 4 and 5, 1997 in Washington DC, and December 10 and 11, 1997 in Arlington, Virginia. Written comments during this pre-proposal phase were welcomed through December 31, 1997. Each workshop consisted of a 2-day forum: the first day was devoted to EPA/State discussions, and the second day was open to all interested parties. Over 150 people participated in each of the workshops. To facilitate meaningful comments from these participants, EPA developed working papers on critical issues that were made available for review prior to each workshop. These papers discussed major issues relevant to developing a NO_X Budget Trading Rule, delineated options and, in some cases, offered recommendations. The issues associated with each working paper were presented at the workshops, followed by open discussion periods allowing workshop participants to comment and discuss each issue.

The first workshop, addressed the foundations of the NO_X Budget Trading Program development. To achieve the required NO_X emissions reductions in the most cost-effective manner, the goals of the trading program were defined as meeting the budget, facilitating trading, and creating a workable program. The necessity of operating the NO_X Budget Trading Program within the framework of the proposed transport rulemaking dictated further requirements, such as a seasonal control period. Four fundamental trading rule components (applicability, monitoring, emissions limitations, and banking) were discussed at length.

After broad concepts for the NO_X Budget Trading Program framework were introduced and discussed at the first workshop, EPA revised and augmented the working papers in accordance with comments and discussion. At the second workshop, EPA presented recommendations and considerations of additional issues, seeking further input from participants. The original working papers on applicability, monitoring, emissions limitations, and banking were expanded, and new papers on the use of output in allocations and the creation of an energy efficiency set-aside were introduced in response to interest expressed at the first workshop. In addition, a paper presenting a skeleton of all the components of a model rule was presented to provide context for input and an indication of how the NO_X Budget Trading Rule as a whole was evolving.

The EPA found the workshop process to be very helpful in generating useful recommendations for developing the framework for the model rule. Today's NO_X Budget Trading Rule proposal incorporates comments and suggestions raised at both workshops, along with nearly fifty written comments received following the workshops. Listening to issues important to States through the workshop process was essential for EPA to develop a program that would meet States' needs. Since the ultimate cost savings of the regional trading program will increase with the number of participating States, it is advantageous to design a regional trading program that will likely be adopted by the greatest number of States. The workshops also served as a forum to discuss which program elements should be consistent among participating States, since consistency in State-adopted rules is essential for a viable regional cap-and-trade program. Also of importance in the workshop process was working with stakeholders, such as affected sources, in order to ensure that the trading program offers the necessary flexibility, as well as compatibility with other programs.

The working papers, a detailed summary of the input received during both workshops, and written comments are included in the proposed transport rulemaking docket (A–96–56, Section 2a).

4. RECLAIM Program

The RECLAIM program, which was adopted by the South Coast Air Quality Management District in October, 1993, and began January 1, 1994, provides another example of a cap-and-trade market system. This program regulates NO_X and sulfur oxides (SO_X) emissions from facilities that generally emit four or more tons per year of either pollutant from permitted equipment in the South Coast Air Basin, centered in Los Angeles.[12] The RECLAIM program currently includes approximately 330 facilities.

The RECLAIM program replaced command-and-control regulations with a market program to provide facilities with added flexibility and lowered compliance costs in achieving reductions required to meet State and Federal requirements for clean air programs. Facilities in the program are collectively required to cut their emissions by a specific amount each year under the program, resulting in an almost 80 percent reduction by 2003 for both SO_X and NO_X. Each facility participating in RECLAIM is allocated RECLAIM trading credits (RTCs) equal to its annual emissions limit. Initially, allocations are based on past peak production and the requirements of existing rules and control measures for each facility. Allocations decline annually through the 2003 compliance year, then remain constant during subsequent years. The RTCs, each representing the limited authorization to emit one pound of pollutant, expire annually. Facilities may trade these RTCs among themselves, providing that every quarter, each facility holds credits

[12] Some sources with annual emissions less than four tons are included in the program by virtue of their inclusion in a SIC category in which the majority of sources emit greater than four tons per year.

equal to or greater than their actual emissions for that quarter.

In terms of NO_X emitters, the RECLAIM program generally requires stationary sources that emit ten or more tons of NO_X annually or which burn any solid fuels to use CEMS to quantify their emissions. Smaller sources have additional monitoring options. Sources that emit four or more tons of NO_X and less than ten tons may use default emission rates. They must demonstrate that these rates are appropriate by monitoring process variables, performing periodic emissions testing, and conducting periodic tune-ups of equipment. The smallest sources in the RECLAIM program (those with annual emissions of less than four tons) may choose to use default emission rates that require less extensive testing and demonstration than those available to the larger sources.

The program's annual report for 1996 concluded that RECLAIM was continuing to meet its emissions reduction goals; an active trading market had developed; and the compliance rate, once it is finalized for the 1996 compliance year, will be in the 85 to 90 percent range.

C. NO_X Budget Trading Program

1. General Provisions

Today's proposed NO_X Budget Trading Rule will be incorporated into the 40 CFR as a new part 96. The subparts of 40 CFR part 96 are described below. The provisions of 40 CFR part 96 will become effective and apply to sources only if a State incorporates 40 CFR part 96 by reference into the State's regulation or adopts regulations that are in accordance with 40 CFR part 96.

a. Purpose. Subpart A of today's proposed NO_X Budget Trading Rule includes Sections describing: To whom the NO_X trading program would apply; the standard requirements for participants in the program (permitting, NO_X allowances, monitoring, excess emissions, and liability provisions); exemptions for retired units from the program requirements; definitions, measurements, and abbreviations; and computation of deadlines stated within the proposal.

b. Definitions, Measurements, Abbreviations, and Acronyms.

Many of the definitions, measurements, abbreviations, and acronyms are the same as those used in 40 CFR part 72 of the Acid Rain Program regulations, in order to maintain consistency among programs. However, additional terms specific to the NO_X Budget Trading Program, such as control period (the period beginning May 1 of each year and ending on September 30 of the same year), NO_X Budget unit (a unit subject to the emissions limitation under the NO_X Budget Trading Program), and several others are added. Key definitions are discussed in relevant Sections below describing the rule.

c. Applicability. The EPA proposes that the NO_X Budget Trading Rule be applicable to a core group of sources that includes all fossil fuel-fired, stationary boilers, combustion turbines, and combined cycle systems (i.e., ''units'') that serve an electrical generator of capacity greater than 25 MWe and to any fossil fuel-fired, stationary boilers, combustion turbines, and combined cycle systems not serving a generator that have a heat input capacity greater than 250 mmBtu/hr. A unit is considered fossil fuel-fired if fossil fuels account for more than 50 percent of the unit's heat input on an annual basis. These sources represent about 80 percent of the point source portion of the 2007 NO_X baseline emissions inventory and about 65 percent of the point source portion of the 2007 NO_X budget in the proposed ozone transport rulemaking. Additionally, these sources represent about 90 percent of the emissions reductions required in the proposed ozone transport rulemaking.

The EPA proposes the above core group of sources based on their significant contribution of NO_X emissions, range of cost-effective emissions reduction options, ability to monitor emissions, and ability to identify responsible parties. The following discussion examines the monitoring and responsible party criteria for the NO_X Budget Trading Program's applicability. Additional options for the trading program's applicability are also presented for consideration. The EPA solicits comment on the appropriateness of including all categories described above in the core group of sources, whether the size cut-offs should be higher or lower for these source categories, and the appropriateness of including other source categories in the core group.

i. Monitoring. In general, sources that participate in a cap-and-trade program must have the ability to accurately and consistently account for their emissions. Accuracy is an important design parameter because it ensures that emissions for all sources covered by the trading program are within the cap. In addition, because each NO_X allowance will have economic value, it is important to ensure that emissions (and thus allowances used) are accurately quantified. Consistency is an important feature because it ensures that accuracy is maintained from source to source and year to year. It also ensures that the sources in the trading program are treated equitably. Finally, consistency facilitates administration of the program for both the regulated community and State and Federal agencies.

When considering what source types to include in the proposed trading program (e.g., large boilers, process sources, mobile sources, area sources), EPA determined that the core sources were capable of accurate and consistent monitoring as outlined below.

- Large Electric Utility Units: For several years, units serving electricity generators greater than 25 MWe (with some exemptions for cogeneration and nonutility electricity generating units) have been complying with the title IV monitoring provisions. The EPA proposes to include these sources in the NO_X Budget Trading Program.
- Other Large Electricity Generating Units: Additionally, with deregulation of electric utilities, it is not clear how ownership of the electricity generating facilities will evolve. Therefore, EPA proposes to include all large electricity generating sources, regardless of ownership, in the trading program. As there is no relevant physical or technological difference between utilities and other power generators, the same monitoring provisions and the size cut-off of greater than 25 MWe are applicable to all units which serve generators.
- Other Large Steam Producing Units: There is also no fundamental physical or technological difference between a boiler, combustion turbine, or combined cycle system that produces steam for eventual production of electricity or for other industrial applications. Thus, EPA believes that the same monitoring provisions can be applied to a boiler, combustion turbine, or combined cycle system used for industrial steam.[13]

ii. Responsible Party. Another critical element of a trading program is to be able to identify a responsible party for each regulated source. The responsible party for a source covered by the trading program would be required to demonstrate compliance with the provisions of the NO_X Budget Trading Program. In general, the large sources included in the proposed trading program have readily identifiable owners and operators that would serve as the responsible party.

[13] Further, assuming a generator efficiency of approximately ⅓, the 25 MWe cutoff being used for electrical power producers is roughly equal to a 250 mmBtu/hr cutoff for steam producing boilers, combustion turbines, and combined cycle systems.

iii. Inclusion of Additional Source Categories. During the public workshops, several commenters recommended allowing a State to include additional sources beyond the core group into the trading program. As the applicability criteria proposed today are intended to define the minimum set of units required to participate in a trading program, inclusion of additional sources is allowed. Some States have existing or planned programs very similar to the one proposed today, but with different applicability criteria (e.g., the OTC NO_X Budget Program). States may choose to modify the applicability language to bring in smaller sources of the same type as those included in the core group or additional source categories. All additional sources (e.g., a certain industrial process) must meet all trading program requirements (including monitoring requirements of 40 CFR part 75 subpart H) and be able to identify a responsible party. The EPA believes that smaller sources of the same type as those included in the core group should be able to meet the trading program requirements and, thus, could be included in a State's trading rule without affecting EPA's streamlined approval of the SIP as described in Section V.D of this preamble.

The EPA is also taking comment on allowing or requiring additional stationary source categories beyond the proposed core group to be part of the trading program. There are three ways that some or all of the sources included in these additional categories could be included. The sources could be included as part of the core program applicability, as an additional list of source categories that a State could choose to include [14], or they could be individually opted-in according to the provisions under 40 CFR part 96 subpart I of the trading rule.

The EPA believes that there are a number of additional source categories that could account for their emissions using the monitoring protocols in 40 CFR part 75. Bringing a source or source category that meets these protocols into the trading program would also not affect EPA's streamlined approval of the SIP. The EPA proposes to develop a list of additional source categories beyond the core group that a State may bring into the trading program without affecting EPA's streamlined approval of the SIP.

If a State chose to bring other source categories beyond those included in this proposed list into the trading program, a more thorough EPA review may be needed. There are two main reasons for this review. The first is to ensure that the monitoring protocols that the State intended to use for the source or source category would provide accurate information and be consistent with the monitoring protocols being used for the core sources in the program. The second is to ensure that EPA could successfully administer the regional NO_X trading program with the addition of these sources. For example, EPA would have to determine that the reporting requirements for these source categories could be supported with the information systems that EPA develops and the resources that EPA employs to administer the program.

The EPA believes that the source categories that are simplest to consider adding are sources that vent all of their emissions to a stack, because existing monitoring protocols (e.g., 40 CFR part 75) can be used to accurately and consistently quantify mass emissions for these categories of sources. The two existing capped NO_X trading programs (the OTC program and the RECLAIM program) have also focused on these types of sources.

The OTC program has generally focused on the same types of sources that are in the proposed core group, electrical generating units and large industrial boilers that burn primarily fossil fuels. One notable exception to this is that Connecticut intends to cover municipal waste incinerators in Phase III of their program, which starts in 2003. The RECLAIM program has focused on a larger breadth of sources. These include industrial boilers and electrical generating units, but they also include: internal combustion engines, heaters, furnaces, kilns and calciners, ovens, fluid catalytic cracking units, dryers, fume incinerators/afterburners, test cells, tail gas units, sulfur acid production units and waste incinerators. In both programs, the monitoring requirements have been based on a tiered system that requires more stringent monitoring for units with higher emissions. Both programs require CEMS for larger units. In general, this would include units larger than 250 mmBtu with capacity factors of greater than 10 percent for the OTC program and units with emissions of ten or more tons of NO_X per year for the RECLAIM program. Both programs also offer less stringent, non-CEMS alternatives for smaller sources.

While RECLAIM has been able to account for emissions from a larger group of source categories than EPA is proposing to include in the core group, RECLAIM has had difficulty with some of these additional source categories. For instance, RECLAIM's 1996 audit explained that the standing working group on RECLAIM CEMS Technical issues (a group formed to address issues relating to RECLAIM monitoring) has focused on issues ''associated mainly with the difficult situations faced by refineries in implementing CEMS requirements.'' The audit goes on to explain that ''this is attributed to the variability of the fuel used in refinery equipment [e.g., catalytic cracking units] as compared to natural gas, the operational variability of much of the affected equipment, and the fact that many of the sources in an older refinery were never constructed with CEMS monitoring in mind''. Additionally, discussions with RECLAIM staff have indicated that units that have high concentrations of particulate emissions and emit to open baghouses, such as asphalt heaters and metal melting furnaces, have been difficult to monitor because of the high concentration of particulates. In short, RECLAIM's experience has indicated that the problems faced by these source categories require more resources for both the regulated community and the regulatory agency. Therefore, while EPA is taking comment on including all types of stationary sources that emit to stacks in the program, EPA believes that some sources are better suited for participating in a trading program because their emissions can more easily be accurately and consistently quantified.

Based on information available to EPA at this time, the specific additional source categories for which EPA is particularly interested in taking comment are: Process heaters, internal combustion engines, kilns and calciners, and municipal waste incinerators. If any of these source categories are included in the final rule as a part of the core group, EPA is proposing that they be included with applicability cut-offs roughly equivalent to the 25 megawatt cut-off used for electrical generating facilities and the 250 mmBtu cutoff used for industrial boilers. The EPA requests comment on the appropriateness of these cut-offs.

The EPA is taking comment on these particular additional categories because EPA believes these sources have the capacity to generate significant amounts of NO_X and are capable of monitoring using the protocols set forth in 40 CFR part 75. These are also source categories that are currently participating in the RECLAIM trading program or those that

[14] 40 CFR part 96 subpart E of the proposed trading rule addresses the allocation of NO_X allowances to NO_X Budget units which includes the core group of sources as well as any additional sources the State may choose to include in the trading program.

at least one of the States in the northeast region has considered including in the OTC NO_X Budget Trading Program.

The EPA believes that these source categories are capable of using 40 CFR part 75 monitoring because they vent all of their emissions to a stack or stacks, which could be monitored using CEMS. The EPA believes that the particular monitoring protocols in 40 CFR part 75 that would be applicable for these sources would be dependent on the fuel burned, the size of the source, and the magnitude of the emissions of the particular unit that was being included in the program. This is consistent with the way that the monitoring protocols are set forth for core sources. For example, all units that burned solid fuel (including all municipal waste combustors and cement kilns and process heaters that burned coal) would use a NO_X emission rate CEM and a flow CEM to determine NO_X mass.

Units that burn oil or gas (internal combustion engines and some process heaters and kilns) would have several other options depending upon their size. Large oil or gas units could use a NO_X emission rate CEM and a fuel flow meter to determine NO_X mass. Infrequently operated units could qualify to use the emission rate curve methodology set forth in Appendix E of 40 CFR part 75, and units with potential emissions [15] of under 25 tons per year could use the default emission factor protocols for low mass emitters set forth in 40 CFR 75.19.

The EPA notes that the currently proposed provisions in 40 CFR 75.19 do not contain default emission factors applicable for these types of units and requests comments on what factors would be appropriate. While smaller and less frequently operated units could use these simplified monitoring methodologies, they would also be allowed to use any of the monitoring methodologies available to other units in the program. The low mass emitter methodology as it is currently proposed was designed to provide very low emitting units a very cost effective way to account for their emissions using conservative uncontrolled default emission factors. Because it is based on conservative uncontrolled default emission factors, it does not allow units that use it to quantify emissions reductions. The owner or operator of a unit that qualified to use this methodology might choose to use another methodology such as the Appendix E methodology or CEMS because this would be more representative of the unit's actual emission rate. Another option that is not in the proposed 40 CFR part 75 rulemaking would be to change the low mass emitter methodology to allow units to use unit specific emission rates and actual unit heat inputs to get more accurate emissions estimates. Since the emission rates that were being used would not be as conservative, units would have to do more quality assurance to demonstrate that their reported emissions were more representative of their actual emissions. This might include periodic testing of emission rates and/or periodic tuning requirements for the equipment. These concepts could also be used in conjunction with controlled default emission rates to verify that the controls are operating properly and that the lower default rates are appropriate. All of these concepts are similar to the monitoring methodologies allowed for the smallest size units in the RECLAIM program.

The EPA is seeking comment on the following issues related to monitoring for both the specific additional source categories that EPA believes are most able to account for their emissions consistently and accurately and any additional stationary source categories that emit to a stack. (All comments related to the use of 40 CFR part 75 for monitoring for these sources should be submitted in the separate rulemaking on 40 CFR part 75 revisions—40 CFR part 75 revisions will be proposed in a notice entitled ''Acid Rain Program; Continuous Emission Monitoring Revisions'' that will be published in the **Federal Register** in the near future—rather than in the instant proceeding.)

1. Can these source categories monitor and report NO_X mass emissions using the protocols set forth in the proposed revisions to 40 CFR part 75? If not, why not?

2. Are there other protocols that should be included which would provide emissions measurement and reporting for these additional sources with accuracy and consistency comparable to that provided under 40 CFR part 75?

3. Are the thresholds set forth in 40 CFR part 75 for different monitoring methodologies appropriate for these types of sources? For example, in order to qualify to use the load vs. emission rate curve methodology set forth in Appendix E of 40 CFR part 75, a unit must have an average capacity factor of less than 10 percent for 3 years and have a maximum capacity factor of no more than 20 percent in any one of those years.

The EPA is also seeking comment on the following issues related to these source categories:

1. Should any of these source categories be included in the core program applicability, i.e., should their inclusion be mandatory for a State to participate in the NO_X Budget Trading Program?

2. Should States, at their option, be allowed to include any of these source categories and still receive streamlined approval of their SIPs?

In addition, EPA is taking comment on whether any other additional stationary source categories should be included. Finally, EPA is taking comment on whether individual States including these source categories would raise concerns about shifting of production activity (and thus emissions) to other States that do not choose to include these categories.

There is more uncertainty for the ability of source categories not identified in the core group or in the list of additional source categories to meet the trading program requirements. Adding other source categories not identified in the final NO_X Budget Trading Program would entail additional obligations for the State (e.g., allocating allowances, certifying monitors, and enforcing trading program requirements), would mean that EPA's approval of the SIP would not be as streamlined, and could affect EPA's ability to administer the region-wide program. Therefore, EPA would strongly encourage any State wishing to participate in the trading program to work with EPA before proposing a rule with expanded applicability criteria beyond that identified in the final NO_X Budget Trading Rule.

iv. Individual Opt-Ins. The EPA is proposing that individual point sources, not otherwise subject to the trading program and located in a State that is participating in the NO_X Budget Trading Program, be allowed to opt-in to the program. For a source to opt-in, it must meet the same monitoring and accountability requirements as other NO_X Budget sources. Thus, under the proposed rule, initial opt-ins would be boilers, combustion turbines, and combined cycle systems below the proposed (or State defined) applicability threshold. The EPA requests comment on whether individual opt-ins should also include any additional sources that may be included as part of the core group of sources as a result of the above discussion under Section iii, Inclusion of Additional Source Categories. The proposed opt-in provisions are further discussed in the opt-in Section of this preamble.

[15] The phrase ''potential emissions'' has a different meaning than the phrase ''potential to emit'' used elsewhere by the Agency.

v. Additional Options for Applicability. The EPA solicits comments on three different options that may be incorporated into the core applicability provision of the proposed trading rule. One option is to expand the trading program's core applicability to include smaller, new sources of the same type as are now proposed for the core applicability that commence operation on or after May 1, 2003, the start of the first ozone season (the first compliance period, after September, 2002). For example, the trading program could apply to all new units serving electricity generators 10 MWe or greater and new units not serving electricity generators and having a heat input capacity equal to or greater than 100 mmBtu/hr. The possibility exists that a significant number of smaller new units would be constructed and that activity from existing NO_X Budget units could be shifted to these new units. Over time, the increased number of smaller, new units not included in the trading program could make up a significant portion of the overall NO_X emissions in comparison to the NO_X emissions from the source categories purportedly included in the NO_X Budget Trading Program. To reduce this potential, it may be desirable to adjust the applicability criteria for new units to ensure that the trading program continues to cover a significant portion of the NO_X emissions for the source categories covered by the program.

A second option would be to expand the core applicability to include all new and modified sources that meet the definition of major new or modified source under the part D nonattainment NSR program and that are of the same type of source included in the proposed core applicability, even if these sources are smaller than the source size under option one, above. This would enable the trading program to integrate more fully with the NSR program. Under this option, the trading program applicability would include all new and modified units (whether or not they serve electricity generators) that commence operation on or after May 1, 2003. If smaller new sources were included in the trading program, these sources would have to meet the monitoring requirements of subpart H of 40 CFR part 75; the proposed revisions to 40 CFR part 75 contain new protocols for units with low NO_X mass emissions. Sources' compliance requirements could be streamlined significantly if they could meet their NSR offset obligations by participating in the NO_X Budget Trading Program (see Section F, below).

A third option would be to provide an exemption from the trading program for existing units that have a very low federally enforceable NO_X emissions limit (e.g., 25 tons per year), regardless of the nameplate capacity or the maximum potential hourly heat input of the unit. Commenters at the public workshops raised this option noting that a trading program generally reduces the cost of compliance. However, for some very infrequently used or very low emitting units, there may be more cost-effective ways to ensure any necessary reductions.

vi. Area and Mobile Sources. Comments were received at the public workshops about the opportunity to include additional sources beyond large stationary sources in the trading program. There was not consensus among workshop participants on this issue. However, most States in attendance were opposed to including area and mobile sources in the trading program at this time.

As noted above, EPA has identified key criteria that are important to the success of the trading program. First, it is essential that these sources are able to monitor at a level of accuracy consistent with the basic objectives of the program. In addition, the proposed trading program requires that all sources covered under the program be held accountable through a responsible party for their total emissions that occur from May through September of each year.

The EPA may consider inclusion of portions of mobile source or area source categories which best meet the key concerns mentioned above (e.g., measurement and accounting of all emissions and identification of responsible parties). Over the past decade, EPA and the States have developed procedures and protocols for Mobile Source Emissions Reduction Credit programs. This effort has focused on the generation of credits for specific categories of programs, including scrappage and clean-fueled fleet programs.

Key issues for the development of these mobile source programs include ensuring that the credits generated reflect real emissions reductions, development and implementation of an effective monitoring program, and identification of a responsible party for the implementation of the program and the ensuing emissions reductions. The EPA requests comment on the adequacy of the existing programs in addressing key issues for mobile source credit programs. Comment is also requested on whether these types of programs, as existing or with modification, should be considered for inclusion in the NO_X Budget Trading Program.

The EPA is interested in innovative ideas for including area and mobile sources in cap-and-trade type trading programs. Comments should address the categories of each source type that could most successfully be incorporated into a cap-and-trade program and that best address the key issues. Commenters should address how inclusion of the specific category recommended may be implemented and the expected effects of including these source types in the program (e.g., integrity of the program, public support, flexibility, cost savings, administrative feasibility). Additionally, comment is requested on any other types of concerns or issues associated with inclusion of these source types (e.g., environmental justice [16]).

d. Retired Unit Exemption. 40 CFR part 96 subpart A of today's proposal provides an exemption from NO_X Budget Trading Program requirements for retired units. The purpose of this provision is to free retired NO_X Budget units from unnecessary requirements (e.g., emissions monitoring and reporting). The EPA proposes an exemption beginning on the day the unit permanently retires, requiring no notice and comment period regarding the retirement. This provision proposes that the NO_X AAR (i.e., the person authorized by the owners and operators to make submissions and handle other matters) submit notification to the permitting authority of the NO_X Budget unit's retirement within 30 days of the cessation of activity. In response, the permitting authority would amend the operating permit in accordance with the exemption and notify EPA of the unit's status as exempt. Criteria within this provision ensure that all program requirements prior to the exemption are fulfilled and records are kept on site to verify the non-emitting status of the retired unit. A retired unit could continue to hold NO_X allowances previously allocated or be allocated NO_X allowances in the future depending on the allocation provisions adopted by the State where the retired unit is located. The number of future year NO_X allowances that a retired unit would be allocated would be dependent on the

[16] The EPA is aware of concerns relating to environmental justice issues. These concerns focus on the possibility that car scrappage programs might allow significant toxic VOC emissions increases in specific areas by concentrating region wide emissions in a local area. The National Environmental Justice Advisory Council (NEJAC) has recommended that the Agency involve stakeholders, analyze local environmental impacts of existing and proposed trading programs, and report back to NEJAC. Refer to Document IV–H–10 in EPA Air Docket A–96–56.

given State's allocation system. The NO_X allowance allocations are discussed below in Section V.C.5 of this preamble.

In order to resume operation without violating program requirements, the NO_X AAR of the NO_X Budget unit must submit a permit application to the permitting authority no less than 18 months (or less, if so specified by the applicable State permitting regulations) prior to the date on which the unit is first to resume operation, to allow the permitting authority time to review and approve the application for the unit's re-entry into the program. If a retired unit resumes operation, EPA proposes to automatically terminate the exemption under this part.

e. Standard Requirements. Today's proposal delineates, in proposed 40 CFR part 96 subpart A the standard requirements, that NO_X budget units and their owners, operators, and NO_X AARs must meet under the NO_X Budget Trading Program. This provision sets forth and provides references to other portions of the trading rule for the full range of program requirements: permits, monitoring, NO_X emissions limitations, excess emissions, recordkeeping and reporting, liability, and effect on other authorities. For example, the permitting, monitoring, and emissions limit requirements are discussed in general and the relevant Sections of the trading rule are cited. The liability provisions state that the requirements of the trading program must be met, and any knowing violations or false statements are subject to enforcement under the applicable State or Federal law. Violations and the associated liability are established to be unit-specific, except in the case of common stacks. The provision addressing the effect on other authorities establishes that no provision of the trading program can be construed to exempt the owners or operators of a NO_X Budget unit from compliance with any other provision of the applicable, approved SIP, any federally enforceable permit, or the CAA. This provision ensures, for example, that a State may set a binding source-specific NO_X limitation and, regardless of how many allowances a NO_X Budget unit holds under the trading program, the emissions limit established in the SIP cannot be violated.

f. Computation of Time. Proposed 40 CFR 96.7 clarifies how to determine the deadlines referenced in the proposal. For example, deadlines falling on a weekend or holiday are extended to the next business day. These are the same computation-of-time provisions as are in the regulation for the Acid Rain Program.

2. NO_X Authorized Account Representative

40 CFR part 96 subpart B of today's proposed NO_X Budget Trading Rule establishes the process for certifying the NO_X AAR and describes his or her duties. A NO_X AAR is the individual who is authorized to represent the owners and operators of each NO_X budget unit at a NO_X budget source in matters pertaining to the NO_X Budget Trading Program. Because the NO_X AAR is representing the owners and operators of all the NO_X Budget units at a NO_X Budget source, the NO_X AAR must certify that he or she was selected by an agreement binding on all such owners and operators and is authorized to act on their behalf. The NO_X AAR's responsibilities include: the submission of permit applications to the permitting authority, submission of monitoring plans and certification applications, holding and transferring NO_X allowances, and submission of emissions data and compliance reports. While the Acid Rain Program refers to the ''designated representative'' as the representative of owners and operators for non-allowance matters and the ''authorized account representative'' as the person for allowance matters, today's proposal uses only one term for all matters and somewhat streamlines the procedures for selection.

The Agency recognizes that the NO_X AAR cannot always be available to perform his or her duties. Therefore, the rule proposes to allow for the appointment of one alternate NO_X AAR (alternate NO_X AAR) for a NO_X budget source. The alternate NO_X AAR would have the same authority and responsibilities as the NO_X AAR. Therefore, unless expressly provided to the contrary, whenever the term ''NO_X authorized account representative'' is used in the rule, it should be read to apply to the alternate NO_X AAR as well. While the alternate NO_X AAR would have full authority to act on behalf of the NO_X AAR, all correspondence from EPA, including reports, would be sent only to the NO_X AAR.

Today's proposal requires the completion and submission of the account certificate of representation form in order to certify a NO_X AAR for a NO_X budget source and all NO_X budget units at the source. There would be one standard form which would be submitted by sources to EPA. The EPA would establish a compliance account for each unit in the NATS. The form would include: The plant name, State, and identifying number (ORIS or facility code); the NO_X AAR name, the NO_X AAR identification number (if already assigned), address, phone, fax, and e-mail (as well as similar information for the alternate NO_X AAR, if applicable); the name of every owner and operator of the source and each NO_X budget unit at the source; and certification language and signature of the NO_X AAR and alternate, if applicable.

In order to change the NO_X AAR, alternate NO_X AAR, or list of owners and operators, EPA is proposing that a new complete account certificate of representation be submitted. The EPA believes the NO_X AAR requirements afford the regulated community with flexibility, while ensuring source accountability and simplifying the administration of the trading program.

3. Permits

a. General Requirements. The EPA has attempted to minimize the number of new procedural requirements for NO_X Budget permitting and to defer, whenever possible, to the permitting programs already established by the permitting authority. The proposed NO_X Budget Trading Program regulations assume that the NO_X budget permit would be a portion of a federally enforceable permit issued to the NO_X Budget source and administered through permitting vehicles such as operating permits programs established under title V of the CAA and 40 CFR part 70. The term ''NO_X budget permit'' throughout this preamble and the NO_X Budget Trading Program regulations therefore refers to the NO_X Budget Trading Program portion of the permit issued by the permitting authority to a NO_X budget source.

b. Title V/Non-Title V Permits. Although many of the NO_X Budget sources that would participate in the NO_X Budget Trading Program must apply for and receive a title V permit, this would not be the case for every NO_X budget source. Sources presently required to have a title V permit are those that are ''major'' sources, as defined in title V and 40 CFR parts 70 and 71. Since there would be some NO_X budget sources that are not major sources, the NO_X Budget Trading Program would require only that a NO_X budget source have a federally enforceable permit, rather than require that each NO_X Budget source have a title V permit. The EPA believes that requiring all NO_X budget sources to have a title V permit would be unduly burdensome and that proper implementation of a NO_X Budget Trading Program can be achieved through federally enforceable permitting vehicles in addition to those established under title V and 40 CFR part 70 or 71.

For sources required to have a title V permit, the NO_X Budget Trading Program attempts, wherever possible, to allow the regulations promulgated by the permitting authority under title V and 40 CFR part 70 or 71 to determine how the NO_X budget permit would be administered. For those sources not required to have a title V permit, the NO_X Budget Trading Program attempts, wherever possible, to allow the permitting authority's non-title V permit regulations to govern how the NO_X budget permit would be administered. Essentially, this would enable the NO_X Budget Trading Program to operate within the regulatory framework already established by permitting authorities for both title V and non-title V permits.

The proposed rule requires that every NO_X budget unit have a federally enforceable permit. The EPA is concerned, however, that some States may not currently have permitting vehicles for the issuance of federally enforceable permits to smaller units that would be subject to the proposed trading rule. For such States, adoption of the NO_X budget rule would also require the State either to issue permits under its title V program to sources that would not otherwise require title V permits or to develop other permitting programs through which federally enforceable permits could be issued to such units.

Therefore, EPA requests comment on the option, for States without programs for issuing federally enforceable permits for smaller NO_X budget units, of not requiring such units to obtain federally enforceable permits. Under this option, the State's NO_X Budget Trading Rule would state that NO_X budget units that are not covered by a federally enforceable permit would still be subject to the emissions, monitoring, and other non-permit requirements of the trading rule, would have their emissions reported to and recorded on the EPA-administered Emissions Tracking System, and would have their NO_X allowance allocations, deductions, and transfers recorded on the EPA-administered NATS. The EPA requests comment on whether, under these circumstances, the units' obligations (e.g., to hold sufficient NO_X allowances each control period to cover NO_X emissions and to monitor emissions in accordance with 40 CFR part 75 subpart H) would be federally enforceable, with or without a federally enforceable permit reiterating the unit's requirements under the NO_X Budget Trading Program.

The EPA is soliciting comment on several other aspects of this issue. First, EPA is interested in State assessments of the extent of the problem in issuing federally enforceable permits to all sources included in the trading program. In particular, EPA seeks information on how many NO_X budget units (or what percent of States' NO_X budget units) would not be issued federally enforceable permits, but for the permit requirements of the proposed trading rule, and on the extent to which non-title V permitting programs are currently established and available for permitting NO_X budget units. Second, EPA seeks comments regarding the feasibility of the approach described above, under which federally enforceable permits would not be required for smaller NO_X budget units if the State lacked an existing program for issuing federally enforceable permits to such units. Lastly, EPA is interested in receiving suggestions regarding other possible approaches to address this matter.

c. NO_X Budget Permit Application Deadlines. The proposed rule sets the initial NO_X budget permit application deadlines for units in operation before January 1, 2000 with either title V or non-title V permits so that the permits will be issued by May 1, 2003. May 1, 2003 is the beginning of the first control period for the NO_X Budget Trading Program, and therefore also the date by which initial NO_X budget permits for existing units must be effective. Application submission deadlines are based on the permitting authority's title V and non-title V requirements for final action on a permit application. For instance, if a permitting authority's permitting regulations allowed 12 months for final action by the permitting authority on a permit application, the application deadline for units in operation before 2000 governed by the permitting rule would be May 1, 2002 (12 months prior to May 1, 2003). The same principle applies to NO_X budget units commencing operation on or after January 1, 2000, except that the application submission deadline is calculated from the later of the date the NO_X budget unit commences operation or from May 1, 2003. The NO_X budget permit renewal application deadlines are the same as those that apply to permit renewal applications in general for sources with title V or non-title V permits. For instance, if a permitting authority requires submission of a title V permit renewal application by a date which is 12 months in advance of a title V permit's expiration, the same date would also apply to the NO_X budget permit application.

d. NO_X Budget Trading Program Permit Application. The NO_X Budget Trading Program requires that a NO_X budget permit application properly identify the source and include the standard requirements under proposed 40 CFR 96.6. The NO_X Budget Trading Program permit application should include all elements of the program (including the standard requirements). Such an approach allows the permitting authority to incorporate virtually all of the applicable NO_X Budget Trading Program requirements into a NO_X budget permit by including as part of such permit the NO_X budget permit application submitted by the source. Directly incorporating the NO_X budget permit application into the NO_X budget permit and, thus, into the source's operating permit or the overarching permit minimizes the administrative burden on the permitting authority of including the NO_X Budget Trading Program applicable requirements, and mirrors the approach successfully implemented by many permitting authorities in issuing Phase II Acid Rain permits under titles IV and V.

e. NO_X Budget Permit Issuance. As stated earlier, most of the procedures needed by a permitting authority to issue NO_X budget permits have already been established by the permitting authority through permitting vehicles such as operating permits programs under title V and 40 CFR part 70 or 71. Generally, the permits regulations promulgated by the permitting authority cover: Permit application, permit application shield, permit duration, permit shield, permit issuance, permit revision and reopening, public participation, and State and EPA review. The proposed NO_X Budget Trading Program permit regulations generally require use of the procedures under these other regulations and add some requirements such as NO_X budget permit application submission and renewal deadlines, NO_X budget permit application information requirements and permit content, and initial NO_X budget permit effective dates.

f. NO_X Budget Permit Revisions. For revisions to the NO_X budget permit, the NO_X Budget Trading Program again defers to the regulations addressing permits revisions promulgated by the permitting authority under title V and 40 CFR part 70 or 71 (for sources requiring a title V permit) or to non-title V permitting regulations (for sources not requiring a title V permit). The proposal also provides that the allocation, transfer, or deduction of NO_X allowances is automatically incorporated in the NO_X budget permit, and does not require a permit revision or reopening by the permitting authority. The NO_X budget permit must, however, expressly state that each unit

must hold enough NO_X allowances to account for NO_X emissions by the allowance transfer deadline for each control period and that there are offsets if the unit does not. The EPA believes that requiring the permitting authority to revise or reopen a NO_X budget permit each time a NO_X allowance allocation, transfer, or deduction is made would be burdensome and unnecessary. This is similar to the approach taken in the Acid Rain Program, where the transfer of SO_2 allowances are treated as ''automatic permit amendments'' that do not require any action by the permitting authority.

4. Compliance Certification

40 CFR part 96 subpart D of today's proposed NO_X Budget Trading Rule sets forth the requirements concerning certification by the NO_X AAR at the end of each control period that the unit was in compliance with the emissions limitation and other requirements of the NO_X Budget Trading Program. The NO_X AAR must submit a compliance certification report for each NO_X budget unit, by November 30 following the control period, to both the permitting authority and the Administrator. This report must identify the NO_X budget unit and include a compliance certification statement. The compliance certification statement must indicate whether all of the applicable requirements of the NO_X Budget Trading Program, including the requirement to hold allowances greater than or equal to emissions and the requirement to monitor and report according to the provisions in 40 CFR part 96 subpart H of today's proposal, were met by the unit for the most recent control period. The report also allows the NO_X AAR to specify which allowances (by serial number) should be deducted from the NO_X budget unit's compliance account and to specify the proportion of NO_X allowances to deduct for each unit if a group of units share a common stack.

The EPA is proposing that annual compliance certification reports must be submitted for several reasons. First, the report provides important information, such as whether there were any changes to the unit's monitoring plan used by EPA to evaluate the unit's monitoring and to determine compliance. Second, the report provides an opportunity for the owner or operator to use the flexibilities allowed in today's proposal to choose which NO_X allowances would be deducted to meet emissions reduction requirements rather than using the default methodologies for deducting allowances that are also set forth in today's proposal. The EPA is proposing that a copy of the compliance certification report be sent to both EPA and to the permitting authority because EPA needs the information in order to administer the compliance period reconciliation process and the permitting authority needs the information in order to ensure compliance with the SIP. The EPA is proposing a deadline of November 30 following the control period for submission because EPA believes this is sufficient time to compile the information required in the report, while still allowing EPA to perform reconciliation before the next control period begins.

5. NO_X Allowance Allocations

40 CFR part 96 subpart E of today's proposed model rule addresses the allocation of NO_X allowances to NO_X budget units. Within each participating State, the NO_X Budget Trading Program would establish a State trading program budget (i.e., a cap of seasonal NO_X emissions for all units included in the program) equal to a fixed total number of NO_X allowances that each State allocates to its NO_X budget units for each control period. States would have the ultimate responsibility for determining the size of their respective trading program budgets. 40 CFR part 96 subpart E of today's proposed rule sets timing requirements for when the allocations should be completed by each State and submitted to EPA for inclusion into the NATS and provides an option for how States may allocate NO_X allowances to the NO_X budget units.

a. Development of State Trading Program Budget. Today's proposal establishes in 40 CFR part 96 subpart E the total number of NO_X tons for the NO_X Budget Trading Program within a specific State. The proposed rule sets the State trading program budget at the level of NO_X emissions apportioned by an approved SIP for the ozone transport rulemaking to the State's sources meeting the definition of ''NO_X budget unit'' in the 2007 statewide emissions budget. Sources meeting the definition of ''NO_X budget unit'' would include the sources in the trading program's core group of sources as well as additional sources that a State may choose to include in the program as discussed above in Section V.C.1.c. The proposed transport rulemaking provides States the flexibility to meet the statewide emissions budgets with a different mix of control measures than were calculated in the transport rulemaking, thus potentially changing the total amount of NO_X tons apportioned to the NO_X budget units. Therefore, a State may determine the number of NO_X tons allotted for the State trading program budget provided the State complies with the overall requirements of the proposed transport rulemaking. Once a State sets the trading program budget, the limit is set for the total number of NO_X allowances that the State may allocate to the State's NO_X budget units for any one control period.

b. Timing Requirements. Today's proposed rule sets requirements for when a State would finalize NO_X allowance allocations for each control period in the NO_X Budget Trading Program and submit them to EPA for inclusion into the NATS. This topic was discussed at both of the public workshops as explained later in this Section. The timing requirements ensure that all NO_X budget units would have sufficient time and the same amount of time to plan for compliance for each control period, and sufficient time and the same amount of time to trade NO_X allowances. The timing requirements would also contribute to the efficient administration of the NO_X Budget Trading Program. By establishing this schedule at the outset of the trading program, both the States and EPA would be able to develop internal procedures for effectively implementing the NO_X allowance provisions of the trading program. This is particularly important for EPA with its role as administrator of the NATS for all participating States. The timing requirements would ensure that EPA would be able to record in the NATS the time sensitive NO_X allowance allocations for the NO_X budget units in all participating States at the same time for each control period.

At the public workshops, a range of options were discussed and commented on for the timing requirements. The timing options generally range from year-by-year allocations, in which the NO_X allowance allocations would be placed into the NATS on an annual basis for the upcoming control period; to a 5 to 10 year allocation where NO_X allowance allocations would be periodically placed into the NATS for 5 to 10 control periods; to a single, permanent allocation where the NO_X allowance allocations would be set only once at the beginning of the trading program and recorded in the NATS for an extended, rolling block of time (e.g., a rolling 30 year period).

Some commenters stated that timing options which provide an opportunity to periodically update the allocation of NO_X allowances to NO_X budget units have certain advantages. First, the current restructuring of the electricity industry may significantly affect the mix

of electricity generators that produce electricity in the future. As the utilization of existing electricity generators changes and new electricity generators begin operations, an allocation regime which is periodically updated would provide an opportunity to reallocate NO_X allowances based on this changing environment. Second, depending on the formula that is used to allocate the NO_X allowances, trading programs that periodically update the allocations may provide an opportunity to reward energy efficiency improvements at specific NO_X budget units. Incentives may be provided for energy efficiency improvements by rewarding NO_X budget units that increase their production efficiency over time with a larger number of NO_X allowances during the next allocation period. However, commenters also noted that allocation systems that are adjusted annually may restrict a NO_X budget unit's ability to plan for compliance by creating uncertainty year to year about the amount of future allocations that the NO_X budget unit would receive. In addition, annual allocations prevent a NO_X budget unit from officially transferring future year NO_X allowances because the NATS only contains the current year's NO_X allowances under this type of system. These commenters generally favored an allocation system that periodically allocates NO_X allowances for 5 to 10 control periods at a time.

Other commenters noted the advantages of a single, permanent allocation where the NO_X allowance allocations would be set only once at the beginning of the trading program. Permanent allocations provide a long planning horizon for the NO_X budget units that receive an allocation. Some commenters noted that permanent allocations provide a strong incentive for the owners or operators of high emitting units to retire or replace the units. Additionally, permanent allocations provide an incentive to improve a NO_X budget unit's energy efficiency and require less resources to administer as compared to updating allocation systems. In a permanent allocation system, all NO_X allowances are allocated to NO_X budget units at the beginning of the trading program. New NO_X budget units that begin operations after the allocation of NO_X allowances would be required to obtain NO_X allowances from the market in order to comply with the trading program requirements, or there would need to be a new source set-aside that increased from year to year, coupled with a declining allocation to existing sources. Therefore, commenters that support an allocation mechanism that provides NO_X allowances to new NO_X budget units were generally opposed to the permanent allocation approach.

In light of the comments from the public workshops, today's proposed rule attempts to strike a balance between systems that change the allocations on an annual basis and systems that establish a single, permanent allocation by proposing a system that allocates NO_X allowances for 5 to 10 years at a time. The proposed rule includes the following timing requirements for the allocation of NO_X allowances: by September 30, 1999, the State would submit to EPA NO_X allowance allocations for the control periods in the years 2003, 2004, 2005, 2006, and 2007. This initial submission date would provide the initial allocation information to NO_X budget units more than 3 years before the start of the trading program and would enable a State to include the first five years of NO_X allowance allocations as a part of its overall SIP submission to meet the requirements of the proposed transport rulemaking. After this initial allocation, two timing options are proposed for the allocations following the year 2007. One option, which is set forth in the proposed rule, is: by January 1, 2003 and January 1 of each year thereafter, the State would submit to EPA allocations for the control period in the year that is 5 years after the applicable submission deadline. Under this option, a State would ensure that its NO_X budget units are always allocated 5 years worth of NO_X allowances in the NATS. A second option, on which comment is also requested, is: By January 1, 2003, a State would submit to EPA NO_X allowance allocations for the control periods in 2008, 2009, 2010, 2011, and 2012. The State would maintain this schedule of submitting NO_X allowance allocations for 5 control periods by January 1 every five years after January 1, 2003. This option would ensure that the State's NO_X budget units are allocated no less than 5 years, and as much as 10 years, worth of NO_X allowances in the NATS at any one time. Under the second option, future allocations are made less frequently and, for some years, based on older data on unit utilization. The second option would also require a larger new source set-aside (as discussed below) to span the longer time frame before new sources would be incorporated in the updated allocation. In addition to the specific options described above, EPA also solicits comments on the full range of possible timing requirements including a single, permanent allocation system and an annually changing allocation system.

Today's proposed trading rule includes a provision that if a State were to fail to meet the timing requirements for submitting NO_X allowance allocations to EPA, EPA would allocate NO_X allowances to NO_X budget units in that State in accordance with 40 CFR 96.42 within 60 days of the applicable deadline. Section 96.42 is the Section of the model rule that will contain EPA's recommended approach for allocating NO_X allowances to NO_X budget units, which is discussed below. This provision is designed to ensure that all NO_X budget units included in the NO_X Budget Trading Program would receive NO_X allowance allocations at the same time for each control period. The EPA solicits comment on this provision.

c. Options for NO_X Allowance Allocation Recommendation

i. Basis for Developing an Allocation Recommendation. The EPA proposes that the final NO_X Budget Trading Rule include a recommended NO_X allowance allocation. This was discussed at length at the public workshops. Three approaches to addressing NO_X allowance allocations in the trading program were presented at the workshops. First, the rule could prescribe one method for allocating NO_X allowances. States that choose to participate in the NO_X Budget Trading Program would need to allocate NO_X allowances as prescribed by the rule. This option would have the benefit of going through public comment as a part of the rule development process. The second approach was for the rule to recommend one method for allocating NO_X allowances. States may choose to use the recommendation, to adjust the recommendation, or to develop an allocation method that is completely different from the recommendation. The third approach was for the rule to be silent on the method for allocating NO_X allowances and require the participating States to independently develop State specific allocation methods.

Workshop participants covered the entire range of approaches in their comments. Commenters in favor of a prescriptive allocation method argued that a standard system ensures that there is equity between NO_X budget units in different States, that the same environmental goals are pursued within all participating States (e.g., promotion of energy efficient units through output based emission limitations), that all State programs have the necessary consistency to promote interstate trading, and that a standard system

reduces industry and government resources necessary to develop and implement NO_X allowance allocations in each State. On the other end of the spectrum, commenters in favor of States having complete flexibility in the allocation method asserted that it is important for States to have the freedom to develop systems that address their specific needs. Furthermore, as long as all States follow the timing requirements for allocations in the proposed rule, the different State methods should be sufficiently compatible to realize the benefits of trading.

The EPA is sensitive to the argument that a more prescriptive proposed rule would ensure a consistent and administratively efficient multi-state program that is equitable for similar NO_X budget units. However, EPA also recognizes that the States which have commented on this subject have unanimously supported some degree of flexibility for developing allocation methods. Because EPA believes it is important for as many States as possible to participate in the NO_X Budget Trading Program, EPA is proposing that the final rule contain a recommendation for how States may allocate NO_X allowances but allow States the flexibility to differ from the recommendation. By including the recommended allocation method, the final rule would provide a complete model for the NO_X Budget Trading Program. This has the potential to ease the regulatory process for States that prefer the recommendation by providing a rule that can be quickly adapted for promulgation as a State rule and, as discussed below, more quickly considered by EPA as part of SIP review. In addition, in order to help facilitate administration of the program, EPA plans on ensuring that the necessary data collection protocols exist to support the option recommended in the final rule. This would include both standard data collection requirements and standard data reporting requirements.

ii. Options for an Allocation Recommendation. NO_X allowances could be distributed to NO_X budget units and other private parties by allocations based on actual operating data, via auctions, or by a variety of other mechanisms. Most of the workshop discussions and comments focused on how to allocate NO_X allowances based on actual operating data. In general terms, three different processes at a unit may be measured and used as a metric for allocating NO_X allowances: (1) The actual emissions (in tons of NO_X) from the unit, (2) the actual heat input (in mmBtu) of the unit, and (3) the actual production output (in terms of electricity generation and/or steam energy) of the unit. The option of allocating NO_X allowances based on a unit's actual NO_X emissions was not generally recommended because it is regarded as providing a perverse incentive by rewarding more NO_X allowances to units that have the greatest NO_X emissions. Heat input and output are regarded as more neutral measures of a unit's utilization, and therefore, more equitable options for basing allocations.

The EPA solicits comments on three options using input or output data for the allocation recommendation that would be included in the final trading rule.[17] The first option is to base the allocation recommendation on heat input data. This option may be desirable because accurate protocols exist for monitoring this data and reporting it to EPA, and several years of certified data are available for most of the affected sources. Additionally, methods currently exist for calculating allocations based on heat input data. It should be noted that in some specific instances, these protocols are designed to conservatively estimate heat input. For instance, new units that do not certify their monitors by the compliance deadline, may report heat input using the unit's maximum potential heat input. In another instance, low mass emitting units that use a simplified emissions estimation methodology would also report using the unit's maximum potential heat input. In both of these cases, the potential over-reporting of heat input, could lead to a larger percentage of allowances being allocated to these units. One potential option for these instances would be to require units in these types of situations to report one heat input value to be used for emissions estimation purposes and another less conservative value to be used for purposes of allowance allocations. Another option would be to apply a discount to reported heat input values in certain circumstances (e.g., during periods when monitors are not certified) for purposes of allocating allowances. The EPA seeks comment on whether this issue needs to be addressed to ensure equitable allocation of allowances. The other two options incorporate the use of output data for the allocation recommendation. The EPA believes that basing allocations on output has the potential benefit of promoting energy efficiency in an allocation system that periodically reallocates the NO_X allowances (see Section V.C.9.b of this preamble).

The second option for which EPA solicits comments would base the allocation recommendation on heat input data for the first five control periods of the trading program (control periods in the years 2003–2007). The allocation recommendation would then be converted to use output data for the control periods after the year 2007. Under this option, heat input data would be used for the first five years because a number of issues for the measurement, collection, and use of output data may not be fully resolved for all of the NO_X budget units that would be included in the trading program prior to the time that the allocation recommendation would need to be finalized for the initial allocation period. Section V.C.9.b of this preamble discusses a number of the issues associated with measuring and using output data. To facilitate the use of output data under this option, EPA proposes to work with stakeholders to design the output based system that would be used after the initial allocation period. As a part of this output based system, EPA would amend its Electronic Data Reporting format so that output data would be available for States through EPA's Emissions Tracking System.

In order to implement this option, EPA suggests the following schedule for developing the output based system that would be used in the allocation recommendation for the control periods after the year 2007: (1) EPA would issue a proposed system for output based allocations by the spring of 1999; (2) EPA would finalize an output based system by fall of 1999; (3) States wishing to use an output based system would adopt the necessary rules by fall of 2000; (4) output data could be measured and collected at NO_X budget units during the control periods in the years 2001 and 2002; (5) output data would be available for States to calculate allocations for the control periods after the year 2007, in time to meet the allocation timing requirements established in today's proposed rule. As discussed under Section V.C.5.b, allocations for the control period in the year 2008 would be submitted to EPA by January 1, 2003 for inclusion into the NATS. The EPA solicits comments on this suggested schedule for establishing a method for output based allocations and comments on the issues raised under Section V.C.9.b of this preamble.

[17] It is important to note that in today's trading program proposal, a State would have the flexibility of determining allocations to its NO_X budget units by whatever system it desires regardless of EPA's allocation recommendation.

The third option for which EPA solicits comments would base the allocation recommendation on output data, to the extent practicable, for all NO_X budget units from the start of the trading program. The allocations for the first five control periods of the trading program would be based on output data currently reported to government agencies other than EPA (such as the Department of Energy's Energy Information Agency, the Federal Energy Regulatory Commission, or State Public Utility Commissions). Depending upon the availability of information, it may be necessary in this option to use output for electricity generating facilities and input data for non-electricity generating facilities for the initial allocation period. The allocation recommendation would then be converted to use output data for all NO_X budget units for the control periods after the year 2007. As in the second option described above, EPA proposes to work with stakeholders to design a complete output based system that would be used after the initial allocation period. Unlike the output data used in the initial allocation period, the allocations for control periods after the year 2007 would be based on output data that would be reported in EPA's Electronic Data Reporting format and designed specifically to support a NO_X allowance allocation system. The EPA suggests the same schedule as outlined above in the second option for developing the complete output based system for allocating NO_X allowances.

iii. Framework for an Allocation Recommendation. As discussed above under Section V.C.5.c.i, EPA proposes to include a specific recommendation in the final trading rule for allocating NO_X allowances to NO_X budget units. This allocation recommendation may be based on either input or output data as outlined in one of the three options presented above under Section V.C.5.c.ii. In addition to the data used to support the allocations, EPA also solicits comments on two other key elements for an allocation recommendation: (1) Using a portion of the State's NO_X allowances as a set-aside for new NO_X budget units for control periods for which the unit was not allocated NO_X allowances, and (2) using either a fuel neutral or output neutral calculation to determine allocations for NO_X budget units.

Today's proposed rule includes an example of a specific allocation methodology that uses heat input data and addresses the above key elements. This allocation methodology would be appropriate for implementing an allocation system entirely based on heat input data or for implementing the initial allocation period of an allocation system that starts out using input data and later is converted to the use of output data. The allocation methodology would need to be modified for the use of output data to implement an allocation system that eventually converts to output data or for an allocation system that begins with using output data. The EPA solicits comment on the following allocation methodology for using input data and on the appropriateness of using the basic framework of this methodology for an output based allocation system. Furthermore, the allocation methodology establishes an allocation set-aside account equaling 2 percent of the State trading program budget for each control period for new NO_X budget units (i.e., units that commence operation during or after the period on which general NO_X allowance allocations are based). Based on analyses conducted using the Integrated Planning Model (IPM) and on the proposal to reallocate allowances every five years, 2 percent appears to be a reasonable portion of NO_X allowances to set aside for new units. The remaining 98 percent of the NO_X allowances are to be allocated to existing NO_X budget units. The EPA requests public comment on the use of a set-aside and on the proposed size of the set-aside, which EPA believes should be large enough to accommodate all new units entering the trading program.

Initial, unadjusted allocations to existing NO_X budget units, which equal 98 percent of the State trading program budget, would be based on actual heat input data (in mmBtu) for the units multiplied by an emission rate of 0.15 lb/mmBtu. For the control periods in the years 2003 through 2007, the heat input used in the allocation calculation equals the average of the heat input for the two highest control periods for the years 1995, 1996, and 1997. For the control periods after 2007, the heat input equals the heat input measured during the control period of the year that is six years before the year in which the allocations are being calculated. Therefore, the allocation calculation combined with the timing requirements discussed under Section V.C.5.b of this preamble results in the following schedule: The allocation for the control period in 2008 should be submitted to EPA by January 1, 2003 and based on heat input data for the control period in the year 2002; the allocation for the 2009 control period should be submitted to EPA by January 1, 2004 and based on 2003 control period heat input data. This schedule would continue indefinitely or until revised (e.g., to base allocations on output) through rulemaking. The heat input data used for calculating the allocations is to be data collected in accordance with the requirements of 40 CFR part 75 for units that were subject to these requirements for the year or years specified by the allocation calculation. For units not subject to 40 CFR part 75 requirements for the year or years specified by the allocation calculation, the heat input data used in the calculation should be the best available heat input data reported by the unit to the State. Once the initial allocation calculation is completed for all the existing NO_X budget units, the allocation for each unit would be adjusted proportionately so that the total allocation equals 98 percent of the State trading program budget.

A separate, allocation set-aside for new units would be established for each control period. Each set-aside would initially hold NO_X allowances equal to 2 percent of the NO_X allowances in the State trading program budget [18]. NO_X allowances in the allocation set-aside would be available to NO_X budget units for control periods that the unit was not allocated allowances because the unit commenced operation during or after the period on which general NO_X allowance allocations are based. To receive NO_X allowances from the allocation set-aside, the NO_X AAR for a unit would submit to the State a NO_X allowance request, in writing or in a format specified by the State. The request would be for no more than 5 consecutive control periods, starting with the control period during which the unit is projected to commence operation. For the 6th year and later, there would be sufficient operating data for the unit to be incorporated into the NO_X allowance allocations with existing NO_X budget units. The NO_X allowance request would be submitted prior to May 1 of the first control period for which NO_X allowances are requested and after the date on which the State issues a permit to construct the NO_X budget unit. The NO_X AAR may not request an amount of NO_X allowances for each control period that exceeds 0.15 lb/mmBtu multiplied by the NO_X

[18] The EPA is soliciting comment in Section F, below, on allowing certain sources, to which the trading program would not be generally applicable, to opt into the NO_X Budget Trading Program in order to fulfill the new source offset provisions under section 173 of the CAA. If this alternative is incorporated into the final trading rule, then the size of the allocation set-aside should be based on the expected new sources that are covered by the general applicability criteria and the additional sources that may opt in.

budget unit's maximum design heat input (in mmBtu) for the hours in the control period starting with the first day in which the unit is projected to operate. Maximum design heat input is used because actual heat input information for the baseyear period used for existing units would not be available since the new unit would have commenced operation during or after the baseline period.

Under this proposal, the State would review and allocate NO_X allowances to new units requesting NO_X allowances according to the order that the requests were received. Upon review, the State would make any necessary adjustments to the requests according to the requirements governing NO_X allowance requests. If the allocation set-aside for the control period for which NO_X allowances are requested has an amount of NO_X allowances not less than the number requested and verified by the State, the State would allocate the full (or adjusted) amount of NO_X allowances requested to the NO_X budget unit. If the set-aside for the control period for which NO_X allowances are requested has a smaller amount of NO_X allowances than the number requested and verified, the State would deny in part the request and only allocate the remaining number of NO_X allowances in the set-aside to the NO_X budget unit. Once the set-aside for a control period has been depleted of all NO_X allowances, the State would not allocate any NO_X allowances to additional units requesting NO_X allowances for the control period. NO_X budget units with NO_X allowance requests that were denied in whole or part would be responsible for obtaining the necessary amount of NO_X allowances from the NO_X allowance market in order to demonstrate compliance with the provisions of the proposed rule. The State would act on all NO_X allowance requests within 60 days upon receipt of the request and notify the NO_X AAR that submitted the request and the EPA of the number of NO_X allowances (if any) allocated for the control period. After September 30 of each year, the EPA would transfer NO_X allowances remaining in the set-aside for the control period to the set-aside for the following control period.

For new NO_X budget units that have been allocated NO_X allowances from the allocation set-aside, the EPA would deduct NO_X allowances following each control period based on the unit's actual utilization for the control period, determined in accordance to the requirements under 40 CFR part 96 subpart H of the proposed rule. Because, as discussed above, the allocation for a new unit from the set-aside is based on maximum design heat input, this procedure adjusts the allocation by actual heat input for the control period of the allocation. This adjustment is a surrogate for the use of actual utilization in a prior baseline period which is the approach used on allocating NO_X allowances to existing units. Without the adjustment procedures, a new unit (e.g., a peaking unit) could be allocated NO_X allowances assuming utilization far out of proportion to actual utilization and the set-aside could be insufficient to provide NO_X allowances for all new units at such an allocation level.

Under the actual utilization adjustment procedure, EPA would deduct a number of NO_X allowances according to the following equation: NO_X allowances deducted for actual utilization adjustment = (Number of NO_X allowances allocated for control period) − ((actual control period utilization (in mmBtu) × 0.15 lb/mmBtu)). The NO_X allowances deducted must have the same or an earlier compliance use date as the year of the control period for which NO_X allowances were allocated from the set-aside. (As discussed below in Section V.C.7.b of this preamble, the proposed rule reflects unlimited banking of NO_X allowances once the trading program begins in 2003. However, EPA is proposing several options concerning banking (including no banking) and requesting comment on them.) The NO_X AAR may identify the serial numbers of the NO_X allowances to be deducted. In the absence of such identification, the EPA would deduct NO_X allowances on a first-in, first-out basis. The EPA would transfer the NO_X allowances deducted into the State's set-aside for the following control period.

If additional NO_X allowances are moved into a set-aside resulting from the transfer of NO_X allowances from a previous year's set-aside or from the actual utilization adjustment, the State would allocate NO_X allowances to those NO_X allowance requests that were denied in whole or in part pursuant to the NO_X allowance request provisions under this Section of the proposed rule. However, requests for NO_X allowances by new units would not be granted retrospectively for control periods that have ended.

An additional option that was considered for inclusion in an EPA recommended allocation methodology was the use of a price signal auction for a portion of NO_X allowances. The transparency of the first SO_2 allowance auctions under Title IV accelerated price discovery and provided useful information to industry for making compliance decisions in the early years of the program. The value for this type of auction for NO_X allowances was discussed at the December public workshop. Commenters generally questioned the need for a price signal auction for NO_X allowances because of the market instruments currently available from the private sector, including several allowance price indexes. Based on these comments, EPA did not include a price signal auction in the proposed options for the allocation recommendation. The EPA solicits comment on this option.

The EPA solicits comments on any other allocation recommendation that may be made in the final rule. Comments should be of comparable detail to the example outlined in this Section.

6. NO_X Allowance Tracking System

40 CFR part 96 subpart F of today's proposed trading rule covers the NATS. The proposed rule is intended to be reasonably consistent with the NATS that was developed for implementation of the OTC's NO_X Budget Program. Such consistency would help to allow the integration of the two programs in the future. It would also save industry and government the time and resources necessary to develop new tracking systems.

The NATS would be an automated system used to track NO_X allowances held by NO_X budget units under the NO_X Budget Trading Program, as well as those allowances held by other organizations or individuals. Specifically, the NATS would track the allocation of all NO_X allowances, holdings of NO_X allowances in accounts, deduction of NO_X allowances for compliance purposes, and transfers between accounts. The primary role of NATS is to provide an efficient, automated means of monitoring compliance with the NO_X Budget Trading Program. The NATS would also provide the allowance market with a record of ownership of allowances, dates of allowance transfers, buyer and seller information, and the serial numbers of allowances transferred. Although today's proposal assigns each allowance a unique serial number, EPA requests comments on the necessity of serial numbers and on whether the administrative burden to allowance holders and EPA of tracking and reporting serial numbers outweighs the benefits of serial numbers for tax and accounting purposes.

The EPA is proposing that NATS contain three primary types of accounts: compliance accounts, overdraft accounts, and general accounts.

Compliance accounts are created for each NO_X budget unit, and overdraft accounts are created for each source with two or more NO_X budget units, upon receipt of the account certificate of representation form. General accounts are created for any organization or individual upon receipt of a general account information form.

a. Compliance Accounts. As part of the implementation of the NO_X Budget Trading Program, EPA is proposing to establish compliance accounts for each NO_X budget unit upon receipt of the account certificate of representation form. These accounts would be identified by a 12-digit account number incorporating the plant's Office of Regulatory Information System's (ORIS) code or facility identification number as well as the number of the unit for which the compliance account is established. Allocations for the first six years (2003–2008), as prescribed by each State, would be transferred into these compliance accounts prior to the first control period in 2003. Prior to the second control period, in 2004, and each year thereafter, allocations for the new sixth year, as prescribed by each State, would be transferred into each compliance account (e.g., in 2004, year 2009 NO_X allowances would be allocated). As for the deadline for transferring NO_X allowances to cover emissions in the control period (i.e., the NO_X allowance transfer deadline of midnight on November 30), each compliance account (supplemented as discussed below by an overdraft account) must hold sufficient NO_X allowances to cover the NO_X budget unit's NO_X emissions for that year's control period.

b. Overdraft Accounts. Today's proposed trading rule provides for an overdraft account that would be automatically created for each source with two or more NO_X budget units, and represented by the source's NO_X AAR. The NO_X AAR may choose whether he or she wishes to utilize the account by transferring allowances into the account before the annual reconciliation process. NO_X allowances transferred into the overdraft account for a NO_X budget source by the NO_X allowance transfer deadline would be available for deduction during annual reconciliation if a NO_X budget unit at that source fails to hold sufficient NO_X allowances to cover emissions in its compliance account. This is similar to the approach used in the OTC NO_X Budget Program and provides additional flexibility for owners and operators in complying with the requirement to hold NO_X allowances covering emissions. If the compliance account and the overdraft account together do not contain enough NO_X allowances, then the unit would be out of compliance. The compliance account must be depleted of all NO_X allowances before the overdraft account is utilized.

The proposed rule would deduct NO_X allowances from the overdraft account beginning with the unit having the lowest NATS account number. The unit that fails to hold sufficient NO_X allowances between the compliance account and the overdraft account would be subject to the same consequences that would apply were only its compliance account being tapped for compliance, including the automatic excess emissions offset deduction and the applicable penalties under State law and the CAA. If the final trading rule includes provisions for the banking of NO_X allowances, such provisions would apply to the NO_X allowances held in the overdraft accounts as well as those held in compliance accounts.

Today's proposal allows the NO_X AAR to identify specific serial numbers for deduction from a compliance account. In the absence of a specific identification of NO_X allowances to be deducted, a FIFO (first-in, first-out) method would determine the order in which NO_X allowances would be deducted. The proposal does not, however, allow for the identification of specific NO_X allowances to be deducted from an overdraft account because NO_X allowance deductions from the overdraft account would take place automatically, in a set order, after the NO_X allowance transfer deadline has passed.

c. Compliance. Once a control period has ended, NO_X budget units would have a window of opportunity (i.e., until the NO_X allowance transfer deadline of midnight on November 30) to evaluate their reported emissions and obtain any additional NO_X allowances they may need to cover the emissions during the ozone season. On November 30 of each year, the NO_X AAR must also submit a compliance certification report for each NO_X budget unit. Should the NO_X budget unit not obtain sufficient NO_X allowances to offset emissions for the season, three NO_X allowances for each ton of excess emissions would be deducted from the unit's compliance account for the following control period. EPA believes that it is important to set up this automatic offset deduction because it ensures that non-compliance with the NO_X emission limitations of this part is a more expensive option than controlling emissions. The automatic offset provisions do not limit the ability of the permitting authority or EPA to take enforcement action under State law or the CAA.

d. General Accounts. Today's proposal allows any person or group to open a general account in NATS. These accounts would be identified by the ''9999'' that would compose the first four digits of the NATS account number. Unlike compliance accounts and overdraft accounts, general accounts cannot be used for compliance but can be used for holding or trading NO_X allowances (e.g., by NO_X allowance brokers or owners of multiple NO_X budget units). General accounts are currently used for SO_2 allowances in the Acid Rain Program.

To open a general account, a person or group must complete the standard general account information form, which is similar to the account certificate of representation that precedes the opening of a compliance account and any overdraft account. The form would include: the NO_X AAR name, phone, fax, and e-mail (as well as similar information for the Alternate NO_X AAR, if applicable); NO_X AAR mailing address; the names of all parties with an ownership interest with the respect to the NO_X allowances in the account; and certification language and signatures of the NO_X AAR and alternate, if applicable.

Revisions to information regarding an existing general account are made by submitting a new general account information form which would be sent to EPA in all cases, whether the form is used to open a new account, or revise information on an existing one. The EPA would notify the NO_X AAR cited on the application of the establishment of his or her account in the NATS or of the registration of requested changes.

7. Banking

a. General Discussion. Banking is the retention of unused allowances from one control period for use in a later control period. Banking allows sources to create reductions beyond required levels and ''bank'' the unused allowances for use later. Generally speaking, banking has several advantages: it can encourage earlier or greater reductions than are required from sources, stimulate the market and encourage efficiency, and provide flexibility in achieving emissions reduction goals (e.g., by allowing for periodic increased generation activity that may occur in response to interruptions of power supply from non-NO_X emitting sources). In addition, a banked allowance is one less ton of pollutant emitted in a given year. On the other hand, banking may result in banked allowances being used to allow emissions in a given year to exceed a State's trading program budget. The

following discussion summarizes the general issues associated with banking and then presents four specific banking options for consideration.

i. Banking After the Start of the Program. Banking after a program starts and the budget is imposed allows sources to retain any allowances not surrendered for compliance at the end of each control period. Once the trading program budget is in place, sources may over-control for one or more seasons and withdraw from the bank in a later season. This type of banking provides the general advantages as described above (encourages early reductions, stimulates the market, and provides flexibility to sources), while also potentially causing NO_X emissions in some control periods to be greater than the allowances allocated for those seasons.

ii. Banking Prior to the Start of the Program. Banking of credits or allowances for reductions prior to the start of the program allows sources to accumulate NO_X allowances for compliance use once the program begins. In addition to the general advantages of banking, this option allows sources to possibly delay required emissions reductions for some sources once the program begins by using banked allowances for compliance. As OTAG analyses concluded, the accumulation of significant amounts of allowances prior to the start of the program could defer the date at which the trading program budget is actually achieved, even though the early reductions may enable some air quality benefits to be realized sooner than anticipated. Early reductions can be realized either through the award of early reduction credits or the creation of a phased-in program.

iii. Management of Banking. Banking clearly introduces another variable into a cap-and-trade program; it may, in fact, inhibit or prohibit achievement of the desired emissions budget in a given season. To limit this variability and promote achievement of a budget, OTAG suggested several different management options: Adjusting the trading program budget downward by decreasing allocations so that expected variations would stay below the desired emissions level; imposing an accelerated rate of retirement on allowances used for emissions during ozone episodes; establishing an absolute limit on the amount of banked allowances that could be used each season or a discount rate on the use of banked allowances over a given level (flow control); and applying a transaction-specific discount rate to all banked allowances used in the future. In considering these options identified by OTAG for managing the use of banked allowances, it is important to remember that the model trading rule is being developed to attain the seasonal budget set forth in the proposed transport rulemaking.

The ''flow control'' option would allow banking, but would discourage the ''excessive use'' of banked allowances by establishing either an absolute limit on the number of banked allowances that could be used each season or a rate discounting the use of allowances over a given level. In the latter case, the number of banked allowances in the system would be tabulated each year to determine what percentage of the overall budget was banked, and therefore whether flow control could affect the use of banked allowances for compliance in the upcoming control period. If this percentage were below a predetermined amount (e.g., 10 percent as is the case with the OTC, since this level roughly equated emissions variations in years of low nuclear power availability), all banked allowances could be used without discounts in the upcoming control period. If this percentage were above the predetermined amount, a withdrawal ratio would be applied to each account holding banked NO_X allowances that could be used for compliance to determine the number that could be used to cover emissions at a 1-to-1 rate, and the number which, if used, would have to be used at a 2-to-1 rate. It is important to note that the withdrawal ratio would be applied only to banked NO_X allowances that could be used for compliance purposes, and therefore only to NO_X allowances banked in compliance and overdraft accounts. The withdrawal ratio would be determined each year prior to the control period to which it would pertain, but it would not be applied until the time of compliance certification at the end of that control period. This schedule provides the sources one full control period to plan for the application of flow control on their compliance and overdraft accounts.

To illustrate flow control, assume the total trading program budget across all participating States was 300,000 allowances, and 35,000 allowances were banked following a control period. Since more than 10 percent of the total trading program budget is banked, a withdrawal ratio would be applied to all accounts holding banked allowances that can be used for compliance in the upcoming control period. In this case, the ratio applied to accounts with banked allowances would be 0.86 (determined by dividing 10 percent of the total trading program budget by the total number of banked allowances, or 30,000/35,000). Thus, if a source holds 1,000 banked allowances at the end of this upcoming control period, it will be able to use 860 on a 1-for-1 basis, but will have to use the remaining 140, if necessary, on a 2-for-1 basis. As a result, if the source used all its banked NO_X allowances to cover emissions in the upcoming control period, the 1,000 allowances would equate to 930 tons of NO_X emissions (860 + 140/2).

In this manner, flow control manages the use of banked allowances beyond a predetermined level, here 10 percent of the region wide trading program budget. This discourages but does not prohibit the use of banked allowances and, thus, mitigates the effects of ''excessive use'' of banked allowances in a given control period. While limiting the annual flow of emissions on the one hand, flow control also preserves the benefits of banking, granting flexibility to sources, stimulating the market and maintaining some incentive to over-comply. Since the withdrawal ratio is known to sources prior to the control period, sources have certainty about how excessive use of banked allowances will be treated, and both States and EPA can minimize their involvement and let the market function relatively unfettered.

b. Options. The EPA is proposing, and requests comment on, four options for whether and how banking may be incorporated into the NO_X Budget Trading Program: (1) Banking is not a feature; (2) banking begins when the trading program begins; (3) units may generate early reduction credits for use after the start of the program and banking continues after the program begins; and (4) banking begins with the first-phase of a two-phase trading program and continues thereafter. The EPA is not adopting or recommending an option in this proposal. In the final rule, EPA intends to adopt a specific approach to banking based on the comments received on the four options and any other approaches suggested by commenters. Although EPA has not focused on any one approach at this time, the proposed rule reflects, for the purpose of illustration, option 2 (i.e., banking when the trading program begins and without any management of banked NO_X allowances).

Each of the four options is discussed below. If banking is allowed, development of a banking provision involves trade offs on the following design features: the length of time (if any) permitted for reductions yielding NO_X allowances prior to the start of the

trading program as determined in the proposed transport rulemaking; the level at which these reductions can be generated; and the type of management imposed on the use of banked NO_X allowances. The longer the period of time allowed for early reductions and the less stringent the level at which NO_X allowances can be generated, the more concern there will be about exceeding the program budget once the program begins. Because of this concern, arising from the potentially numerous banked NO_X allowances available at the start of the program, there may be a need for management of the use of banked NO_X allowances.

The EPA used the IPM model to help investigate the ramifications of different options. The results of this analysis were presented in the working paper on emissions banking presented at EPA's December 1997 model rule workshop, entitled ''Second Draft Working Paper: Emissions Banking. December 1997 Analysis of Banking in a NO_X Trading Program''. This paper is available as item number V–A–28 in Docket No. A–96–56 of the Air and Radiation Docket (see the **ADDRESSES** Section at the beginning of today's notice for further guidance on obtaining information from the docket). The EPA hopes that these analyses will help stakeholders consider the trade-offs in designing programs with banking and provide EPA comments on the best way to structure a trading program. Commenters should consider how best to strike a balance between the advantages of flexibility, encouraged early reductions, and potential lower compliance costs versus the potential exceedance of prescribed budgets due to excessive use of banked allowances in a given control period.

i. Option 1: No Banking. Not allowing banking in the NO_X Budget Trading Program would result in the automatic retirement of any NO_X allowances not surrendered for compliance following each control period. Under this option, the only NO_X allowances available for compliance in each control period would be those allocated within the budget for that control period. As a result, States would be assured of achieving their budgets established under the NO_X Budget Trading Program each control period. However, the ''no banking'' option does eliminate incentives for early reductions, reduces the program's flexibility, and may contribute to a ''use or lose'' mentality for the use of allowances by sources at the end of each control period.

ii. Option 2: Banking After Program Start Only. This option, which does not provide for early reductions, but allows banking of NO_X allowances after the start of the program, was the approach used in the supporting analysis for the proposed transport rulemaking. This option is presented without the imposition of a management system on the use of banked NO_X allowances because the volume of banked NO_X allowances is not expected to be excessive absent the opportunity for early reductions.

iii. Option 3: Early Reduction Credits. This option allows for the generation of early reduction credits for some time period prior to the start of the trading program; the NO_X allowances resulting from early reductions are banked for use once the program starts, and banking is an option throughout the life of the program.

Sources demonstrating tonnage emissions reductions in excess of a predetermined level in the year or years prior to the start date for the program earn early reduction credits; each credit is redeemed for a one-time award of one NO_X allowance. The NO_X allowances awarded for the generation of early reduction credits may be created as additional to the trading program budget, or may be drawn from the budget. If the NO_X allowances awarded for early reductions come from the trading program budget, each State participating in the NO_X Budget Trading Program would establish a set-aside of a small percentage of its seasonal trading program budget for purposes of awarding the generation of early reduction credits. For example, this set-aside could be 2–3 percent of the State trading program budget, pulled from each of the first five years of allocated NO_X allowances. The resulting set-aside could be distributed at the conclusion of the period in which early reduction credits can be generated, on a pro rata basis. Any NO_X allowances not awarded from this reserve would be returned to the State trading program budget for distribution as allocations. The EPA requests comment on this option of taking early reduction credits from the State trading program budgets and details regarding how this could be accomplished, if in a different manner than that suggested here.

If the NO_X allowances awarded for early reductions originate from within the trading program budget, their award could pose a threat to achievement of the budget once the program begins, even though future allocations will necessarily be decreased by an amount equivalent to the NO_X allowances awarded for early reductions. The shift of available NO_X allowances to the beginning of the program could potentially result in more emissions than budgeted levels in the early years of the program. If the NO_X allowances awarded for early reductions are created outside of the trading program budget, there should be even more concern regarding potential exceedance of the trading program budget since all awarded NO_X allowances are in excess of budgeted levels of emissions and thus, potentially have a more pronounced and extended impact on the achievement of the trading program budget. This concern is addressed later in this Section.

The award of NO_X allowances for early reductions under the NO_X Budget Trading Program, whether from within or outside of the budget, would require a case-by-case determination by participating States that the reductions claimed were real, surplus, and quantifiable. Part of this determination would be made based on monitored data. This monitored data should be based on the same standards that are being used to support the ongoing trading program. Therefore, any source wishing to receive early reduction credits would be required to have monitors in place and certified for the entire period that the awards are being made. Early reduction credits could be determined and awarded on either a unit-, source-, company-, or State-level basis. A unit- or source-level determination would necessitate a more substantial proof of legitimacy due to concerns of load-shifting to other units or sources. Load shifting is a particular concern in this instance because relatively few units would be pursuing the early reduction credits, leaving the majority of similar sources at a less stringent control level or no required level. Generally speaking, the opportunity for load shifting from sources subject to some emission control (e.g., units seeking early reduction credits) increases with the number of similar units or sources that are not subject to an equivalent emission control. Whether the load shifting is to units or sources with the same owner or with a different owner as compared to the original unit or source, such load shifting could eliminate the environmental benefit of reduced emissions at the original unit or source. The applicant would have to demonstrate that the requested credits were real and surplus, and not the result of load or production shifting. A company or State-level determination, on the other hand, would reduce, but may not eliminate, load-shifting concerns. The activity of all units owned by the company in the State (but not any other units) would be accounted for in the consideration of eligibility for

early reduction credits. The EPA solicits comment on using a company-level determination in order to reduce concern over utilization shifting.

Incorporating early reduction credits into the NO_X Budget Trading Program would also require determinations of the control level beyond which to award early reduction credits and the time period during which the credits can be earned. The control level should be set within the range of the already established title IV and title I levels and the level in the proposed transport rulemaking; EPA solicits comment on the level of 0.15 lb/mmBtu as proposed in the transport rulemaking. The time in which the credits could be earned could be either one, two, or three years prior to the start of the program; EPA solicits comment on a time period of two years. If the NO_X allowances awarded for early reductions come from outside of the trading program budget, a control level above 0.15 lb/mmBtu or a time period longer than two years may threaten program integrity by allowing the possibility of a large bank being established prior to the start of the program that could significantly delay achievement of the budget. If the NO_X allowances are awarded from within the budget, this control level and time period are still appropriate to protect program integrity, and also ensure that the NO_X allowance set-aside to reward early reductions does not withdraw too many NO_X allowances from the future trading program budget, and pose undue burden on sources in the program. Placing a limit on the number of NO_X allowances which may be awarded for early reductions, such as two percent of the first budget period, and reducing the first period budget by a like amount, could help to protect program integrity and ensure that too many allowances are not withdrawn from the first budget period.

The existence of early reduction credits in the NO_X Budget Trading Program could necessitate the consideration of a management scheme to control the use of banked allowances. A management scheme could be required even if the NO_X allowances are withdrawn from the budget, since exceedance of the budget would still be quite possible due to the shift of available NO_X allowances to the beginning of the program. As discussed above, a flow control management scenario, whereby the use of banked NO_X allowances over a predetermined percentage of the trading program budget would be constricted by a weighted withdrawal ratio, would be one way of discouraging the ''excessive use'' of banked allowances throughout a control period. Under this approach, a withdrawal ratio of two banked NO_X allowances to one for the current control period would be imposed on the use of some banked NO_X allowances whenever the percentage of banked NO_X allowances in the NO_X Budget Trading Program region exceeds 10 percent of the trading program budget for that control period. EPA acknowledges other percentages and withdrawal ratios are also feasible, but solicits comment on 10 percent and 2-for-1 as reasonable levels to ensure program integrity while providing the opportunity to bank NO_X allowances. The proposed flow control management scenario is the same system used in the OTC's model rule to manage the use of banked NO_X allowances. This system simply acts as a safeguard against excessive withdrawals of banked allowances in a given control period; if large amounts of banked NO_X allowances are not used, it will not be invoked.

These four factors together—the origin of the NO_X allowances awarded for early reductions, the time period for reductions, the level beyond which credits can be earned, and the subsequent management scheme for banked NO_X allowances—together determine the impact of the award of early reduction credits on achievement and maintenance of the NO_X Budget Trading Program budget.

iv. Option 4: Phased-In Program. For this option of a program utilizing phased-in emissions reductions, an initial limit or cap would be set at a level representing an emissions reduction less stringent than the desired budget that is the ultimate goal of the trading program. A NO_X budget source could over-control with respect to this preliminary level at one or more units and accrue NO_X allowances, building up a bank to be used to defer emissions reduction requirements when the first phase level is ratcheted downward to achieve the final budget under the trading program. Banking would begin with the first phase of the program and be allowed throughout the life of the program.

Implementing the NO_X Budget Trading Program as a phased-in program requires similar trade-offs to those required to implement early reduction credits, including consideration of the time period of the first phase during which banked allowances can be accumulated, the stringency of the control level and resulting budget mandated in the first phase, and the management scheme imposed. The implementation of a phased-in program, however, unlike the award of early reduction credits, requires all sources to participate in the first phase. In effect, a phased-in program creates an earlier compliance deadline for sources in all States participating in the NO_X Budget Trading Program. Unlike an early reduction credit approach, a phased-in approach would not require applicants to demonstrate that NO_X allowances were surplus of load shifting or States to conduct case-by-case reviews of applications because load shifting would be much less of a concern. This lowered environmental risk should allow a less stringent performance level to be used in the early phase, which would increase the opportunity to bank NO_X allowances. Monitoring and reporting in accordance with prescribed methodologies would be required by the new, earlier compliance deadline in order to track compliance and ensure the integrity of reductions and resulting generation of excess allowances.

To provide time for such monitoring and reporting to be put in place for all NO_X budget units, the first phase could be no sooner than two years prior to the start of the trading program at the level of control and timing mandated in the proposed transport rulemaking. The EPA solicits comment on a time period of two years. As would be the case with early reduction credits, the level of control for the first phase would be set at a level within the range of the title IV level and the level established in the proposed transport rulemaking. The EPA solicits comment on a level of 0.25 lb/mmBtu, a somewhat less stringent level than that considered without a phased-in program. However, even this level of control would enhance the ability of units to bank NO_X allowances and so would increase the need for a management scheme to ensure program integrity. The EPA also solicits comment on a flow control approach incorporating a withdrawal ratio of two to one for some banked NO_X allowances used for compliance in the current control period whenever the percentage of banked allowances in the NO_X Budget Trading Program region exceeds 10 percent of the trading program budget for that control period. Once again, it is important to note the interdependence of the time period for reductions prior to the program start, the level beyond which allowances can be earned, and subsequent management scheme for banked NO_X allowances.

8. Allowance Transfers

The EPA is proposing that once a NO_X AAR is appointed and an account is established in the NATS, NO_X allowances can be transferred to or from the accounts with the submission of an allowance transfer form to EPA.

Transfers can occur between any accounts at any time of year with one exception: transfers of current and past year allowances into and out of compliance accounts and overdraft accounts are prohibited after the NO_X allowance transfer deadline (November 30) of each year until EPA completes the annual reconciliation process by deducting the necessary allowances.

There would be one standard NO_X allowance transfer form. This form would be submitted to the EPA in all cases. The form would include: The transferror and transferee NATS account numbers; the transferror's printed name, phone number, signature, and date of signature; and a list of allowances to be transferred, by serial number.

The EPA is moving towards electronic submission of allowance transfers. Full capability is expected by 2000. AARs would be informed of developments and/or requirements for electronic submissions as they arise.

9. Emissions Monitoring and Reporting

a. Requirements for Point Sources. 40 CFR part 96 subpart H of today's proposed model rule sets forth the emissions monitoring and reporting requirements for the NO_X Budget Trading Program. The EPA is proposing that units subject to the NO_X Budget Trading Program be required to meet the monitoring and reporting provisions that are contained in a proposed new 40 CFR part 75 subpart H to the monitoring and reporting provisions of the Acid Rain regulations. These revisions are being proposed in a separate rulemaking that contains a new subpart H of 40 CFR part 75, which addresses how NO_X mass emissions (i.e., tons of NO_X emitted) should be monitored and reported and which references relevant provisions in the other subparts of 40 CFR part 75 (revisions to be published in the **Federal Register** in the near future). All comments on the new subpart H of 40 CFR part 75 should be submitted in the separate rulemaking on 40 CFR part 75 revisions rather than in the instant proceeding.

The EPA is proposing that States use the proposed 40 CFR part 75 subpart H to support the monitoring and reporting for this program to ensure that emissions are consistently and accurately monitored and reported from unit to unit and from State to State. This consistency and accuracy in monitoring is necessary to ensure that a NO_X allowance actually represents one ton of emissions and that one ton of reported emissions from one source is equivalent to a ton of reported emissions from another source. This establishes the integrity of the NO_X allowance (i.e., the authority to emit one ton of NO_X) and instills confidence in the market mechanisms that are designed to provide sources with flexibility in achieving compliance. The consistency and accuracy in reporting is necessary to ensure that compliance can be determined quickly and consistently and that buyers and sellers of NO_X allowances can determine the value of what they are trading.

The EPA believes that the NO_X mass emissions monitoring provisions in 40 CFR part 75, as it is proposed to be revised, provide a reasonable and cost effective way to consistently and accurately monitor NO_X mass. One of the main advantages of using these provisions to support this program is that many of the NO_X budget units, i.e., existing utility units subject to the Acid Rain program, are already required to meet the monitoring and reporting requirements in the existing 40 CFR part 75. Under the proposed revisions to 40 CFR part 75, the main new requirement for these units would be to calculate and report hourly, quarterly, seasonal and annual NO_X mass emissions. In almost all cases, these values could be determined using existing 40 CFR part 75 monitoring systems.

In addition to sources currently subject to the Acid Rain Program, many additional sources in the OTC that are not subject to the Acid Rain Program, but that are covered by both the OTC's NO_X Budget Program and this proposal, will be meeting many of the monitoring and reporting requirements in existing 40 CFR part 75 by April 1, 1998 in order to comply with the OTC's NO_X Budget Program. Units covered by the proposed trading rule but not required to use the provisions of 40 CFR part 75 to comply with either the Acid Rain Program or the OTC's NO_X Budget Program will also benefit from using monitoring and reporting requirements that are based in large part on existing 40 CFR part 75 requirements that are already being used by a large number of units. Since existing State monitoring regulations vary greatly, and since many States do not currently require the monitoring and reporting of NO_X mass, it is necessary, for purposes of supporting the proposed trading program, to create consistent monitoring and reporting requirements. If 40 CFR part 75 monitoring and reporting are used in the trading program, units not currently using 40 CFR part 75 will have the benefit of much of the expertise and software that has already been developed to support the Acid Rain Program and the OTC NO_X Budget Program.

The notice of the proposed rulemaking concerning revisions to 40 CFR part 75 sets forth in detail the proposed revisions related to monitoring NO_X mass emissions. While comments on the proposed revisions to 40 CFR part 75 (including proposed 40 CFR part 75 subpart H) should be submitted in the separate 40 CFR part 75 rulemaking, an overview of the 40 CFR part 75 revisions is provided here to assist commenters in the instant rulemaking. The proposed 40 CFR part 75 revisions require units to determine NO_X mass emissions by monitoring NO_X emission rate (in lbs/mmBtu) and heat input (in mmBtu) on an hourly basis and by multiplying those two values together. Coal units and other units that burn solid fuel that are covered by the NO_X Budget Trading Program would be required to measure NO_X emission rate using a NO_X emission rate CEM consisting of a NO_X concentration CEM and a diluent CEM (CO_2 or O_2 CEM) and measure heat input using a diluent CEM and a flow CEM. All gas and oil units covered by the NO_X Budget Trading Program would be allowed to use this option or alternatively could measure heat input by using a fuel flowmeter and performing fuel sampling and analysis. This option for determining heat input is set forth in Appendix D of 40 CFR part 75 and referenced in the new subpart H of 40 CFR part 96. Gas and oil units that qualified as either peaking units or low mass emitting units under 40 CFR part 75 would also have additional lower cost monitoring methodologies available to them. Peaking units, for example, could do source testing to create heat input versus NO_X emission rate curves. Then based on hourly measurement of heat input from a fuel flowmeter and fuel sampling and analysis, the heat input versus NO_X emission rate curves would be used to estimate the hourly NO_X emission rate. This option for determining NO_X emission rate is set forth in Appendix E of 40 CFR part 75 and referenced in 40 CFR part 96 subpart H. This rate would be used in conjunction with heat input determined using the provisions in Appendix D of 40 CFR part 75 to determine NO_X mass. A unit that qualifies as a low mass emitting unit could use a default NO_X emission rate and the unit's maximum rated hourly heat input to determine NO_X mass emissions. The low mass emissions unit provisions are in proposed 40 CFR 75.19 and referenced in 40 CFR part 96 subpart H.

The proposed 40 CFR part 75 subpart H requires units to report hourly NO_X mass emissions throughout the year, rather than just in the seasonal control period. The EPA is proposing to make

the monitoring and reporting requirements year round, as under the Acid Rain Program, because EPA believes that this will facilitate integration with other monitoring and reporting requirements, such as New Source Performance Standards (NSPS) requirements, Compliance Assurance Monitoring (CAM) requirements and other State requirements. In the long run, EPA believes that this consolidation can help to ease the overall monitoring and reporting burden on sources.

The proposed changes to 40 CFR part 75 also highlight several additional issues that are particularly pertinent to monitoring NO_X mass emissions. These include: an alternative way to measure NO_X mass emissions using a NO_X concentration CEM and a flow CEM, specific requirements for monitoring NO_X emission rate at common stacks and heat input at common stacks and common fuel pipes, and the reporting of NO_X mass emissions on a total hourly basis rather than on an hourly mass emissions rate basis. More information on these issues can be found in the notice of proposed rulemaking for 40 CFR part 75 which will be published in the **Federal Register** in the near future. All comments on the proposed revisions to 40 CFR part 75, including any related to NO_X mass emissions, should be submitted in the 40 CFR part 75 rulemaking proceeding, rather than in the instant proceeding.

While units would be required to meet the technical monitoring requirements set forth in 40 CFR part 75, the general and administrative requirements related to monitoring are set forth in the proposed trading rule. These include: compliance dates, prohibitions, requirements for certification and recertification of monitors, recordkeeping and reporting requirements and procedures for requests for alternatives to the monitoring requirements.

The EPA is proposing that units that commence operation before January 1, 2000 have certified monitors installed and operating for this program by May 1, 2001, which is earlier than the compliance date (May 1, 2003) for emissions reductions in the proposed transport rulemaking and this trading program. Since no precertification of emissions reductions is needed for sources to make trades, it is important to make sure that the monitoring that is used to certify the emissions is verified before the start of the trading program. While up-front certification of monitors provides a great deal of assurance that sources would be able to account for their emissions, up-front reporting verifies that they can report their emissions. In addition, other aspects of the trading program that are discussed in other parts of this proposal, including a rolling allocation scheme based on updated monitored data and the banking of allowances before the beginning of the program, would require monitoring earlier than May 1, 2003. If a unit commences operation on or after January 1, 2000, it would be required to have certified monitors installed and operating by the later of: May 1, 2001; or 180 days after the unit commences operations or, if the unit is subject to any Acid Rain emission limitation, 90 days after the unit commences commercial operation. Deadlines for installation and certification of monitors are also established with regard to new stacks or flues constructed after the general installation and certification deadlines. Regardless of the deadline for installation and certification of monitors, if any unit is operating on or before May 1, 2001, but the monitors for that unit are not certified by May 1, 2001, the owner or operator must still account for emissions beginning on May 1, 2001 so that this data will be available to support the allocation provisions and possible provisions providing the opportunity to bank allowances before the beginning of the program. Similarly, if any unit is not operating on or before May 1, 2001 the owner or operator must account for emissions from the date and hour the unit commences operation. The owner or operator has three options for accounting for emissions until all of the required monitors are certified: Reference method monitoring; maximum potential values; or data from the monitors before certification is completed if certain quality assurance and data validation procedures are followed. This would be consistent with the requirement to hold NO_X allowances for all emissions in the ozone season and would assist with NSR integration, which requires accounting of all emissions.

The prohibitions Section of the trading rule sets forth several general prohibitions that would apply to all units included in the program. Units would not be able to use alternatives to the requirements in proposed subpart H of 40 CFR part 96 (and proposed revised 40 CFR part 75) unless that alternative was approved according to the procedures set forth for approval of alternatives to the monitoring requirements. The procedures for requests for alternatives to the monitoring requirements vary depending upon whether or not the unit involved is also subject to 40 CFR part 75 for purposes of compliance with title IV of the Act.

Units subject to 40 CFR part 75 for purposes of compliance with an Acid Rain emission limitation would already meet most of the requirements for the NO_X Budget Trading Program, by meeting the requirements for title IV. Before an owner or operator could deviate from the monitoring requirements for 40 CFR part 75 for this trading program or both this program and title IV, approval would have to be obtained from EPA. The EPA would take action on the petition for alternative monitoring in consultation with the appropriate State agency. This differs from the requirements for sources not subject to title IV who would need approval from both the State and EPA. The EPA believes that this is appropriate because EPA currently has authority to approve petitions for these sources. The additional requirements would involve reporting new data and, in a few cases, use of monitors not being used for purposes of title IV. The NO_X budget units subject to title IV would continue to meet the same requirements as other units subject to title IV, but would be required to include some additional data in the quarterly reports that they are already submitting for title IV purposes. This data would include hourly, quarterly, annual and ozone season NO_X mass emissions data. In addition, if a unit subject to title IV had to install additional monitors to comply with this program, those monitors would have to meet the certification and recertification requirements of the NO_X Budget Trading Program. The only reason that a unit would have to install additional monitors for this program would be if its currently installed monitors did not allow it to calculate NO_X mass. This would only be an issue if a unit shared a common stack with other units and chose to measure NO_X emission rate at the unit level, but measured heat input at the common stack level. For purposes of the Acid Rain Program, this unit would be allowed to apportion heat input to the unit level. While EPA believes this methodology is accurate enough for purposes of using heat input to determine reduced utilization, EPA does not believe that it is accurate enough for purposes of determining NO_X mass; EPA's rationale is discussed in the preamble to the 40 CFR part 75 rulemaking which will be published in the **Federal Register** in the near future.

The NO_X budget units not subject to title IV would be subject to essentially the same requirements for certification

and recertification and monitoring and reporting. The owner or operator of a unit would be responsible for initially certifying monitors. The owner or operator would be responsible for providing the permitting authority both a monitoring plan and notification of the time and date of the original certification tests in advance of those tests. The owner or operator would also be responsible for recertifying monitors if any major changes were made to the monitors and would be required to report emissions and other supporting data on a quarterly basis.

An owner or operator wishing to deviate from the monitoring requirements set forth in 40 CFR part 75 would have to petition for approval to do so. Unlike certifications and recertifications which would only have to be approved by the permitting authority, these petitions would have to be approved by both EPA and the permitting authority. There are three main reasons that petitions would have to be approved jointly. The first is that in order to ensure that emissions are accounted for equivalently from source to source and State to State, it is important that there be consistency in approving any alternatives to the allowed monitoring methodologies. By working with the permitting authority in all of the approvals for alternatives, EPA can help ensure this consistency. The second is that in order for EPA to fulfill its role as the repository for emissions data, it is important that all of the data be reported in a consistent format and that EPA be aware of any deviations from that consistent format. The final reason is that EPA cannot approve a SIP that allows a State the unlimited ability to approve alternatives not specifically spelled out in the SIP. If a State wants to approve a methodology that is not specifically part of the SIP, EPA would have to be involved in this approval.

b. Output Information. In general, the information available concerning the operation of a unit can be placed into one of three categories: Input, process, and output. Heat input is a measure of input; specifically, it is the chemical energy of the fuel burned. Variables related to combustion, such as temperature, are process variables. Measures of output from a unit include emissios; steam energy, and, for a unit serving an electricity generator, electrical power produced. Today's proposal presents options for allocating NO_X allowances based on actual information on unit operation. The EPA has received comments that allocations of NO_X allowances under the trading program should be made on the basis of electrical and/or steam output, rather than heat input, measurement.

A system where NO_X allowances are reallocated on an ongoing basis (as is being proposed today) may decrease the incentives for reducing NO_X emissions through the use of more efficient fuels or more efficient equipment. For example, assume a certain unit currently uses 500 mmBtu/hr to generate 50 MWe. Under a simple heat input based allocation scenario, if that unit increased its efficiency by 20 percent, so that it could produce 50MWe while using only 420 mmBtu/hr, it would lose 20 percent of its NO_X allowances in the next NO_X allowance reallocation, even though it is producing the same electricity. However, under an allocation scheme based on output, if this unit's electricity production did not change, it would receive the same number of NO_X allowances. Since a decrease in the amount of fuel needed is generally accompanied by a decrease in NO_X emissions, a unit increasing its efficiency would either have more NO_X allowances to sell on the market or would need to purchase less NO_X allowances to be in compliance. Thus, basing allocations on output gives units additional efficiency options for compliance, which should reduce the overall cost of the program. As an additional benefit, decreases in fuel usage would reduce emissions of other pollutants such as SO_2, mercury, and carbon dioxide (CO_2).

However, EPA is concerned that there may be some issues not yet fully addressed concerning allocation of NO_X allowances based on output. First are issues concerning the development of measurement protocols for output. Measurement protocols are critical for making a fair and expeditious allocation of NO_X allowances. There are two general locations at which power output of an electricity generating facility could be measured: gross generation at the generator, or net generation after plant power requirements have been consumed. Gross generation seems less appropriate, since an allocation based on output would primarily be intended to address efficiency improvements and allocation by gross generation fails to account for a plant's power requirements whose efficiency could be improved. To the extent the power is sold, net generation could be measured at the point of sale. Measurement at the point of sale has an advantage in that it is tracked by the source and the dispatch authority for crediting sales. A workable program requires only that all participants measure generation at the same general location and with the same method.

A second set of issues in allocating using output concerns how to relate product output to emissions output. Electrical generation and distribution systems at plants can be complex, with multiple units emitting through one or more stacks and serving multiple generators. If output is to be measured at the plant level, then it would be appropriate to measure total emissions from the plant, even if that meant measuring emissions from small units. Alternatively, the electrical output from small units could be measured and subtracted from plant-level electrical output to avoid the need to monitor emissions from small or infrequently used units.

For units producing steam that does not feed into a generator, different issues arise. These sources have steam production in addition to (or instead of) power generation as their final output. Allocating emissions to both types (steam producing and power generating) of sources would require the development of a method for converting the steam energy to an electrical power equivalent. The method would likely require assumptions about the efficiency of the conversion. The use of any general efficiency assumption, without considering the configuration and operation of each individual plant, could lead to penalizing plants that operate more efficiently than the general case (by not allocating enough allowances) and giving windfalls to plants that operate less efficiently than the general case (by allocating more allowances than warranted).

The EPA solicits comments on how the issues discussed above could be addressed in order to allow States to base the initial NO_X allowance allocations for this trading program on an output measure or convert an allocation system initially based on input to one based on output. As further explained in the allocation Section of the preamble, EPA may use this information in the development of a final rule that would provide States the opportunity of using output based allocations.

10. Opt-Ins

The NO_X Budget Trading Program includes provisions allowing for units that otherwise would not be subject to the trading program and that are located in a State that is participating in the trading program to voluntarily elect to participate (i.e., opt in). The opt-in provisions can further reduce the cost of complying with the NO_X budget by allowing those units, which may not otherwise be required to reduce NO_X emissions for a State to meet its budget,

to opt in to the trading program and make incremental, lower-cost reductions. The NO_X allowances freed up by the opt-in source's control action can be sold to other NO_X budget units for their compliance with the NO_X emission limitation. In general, units that opt in are treated like other NO_X budget units and are subject to the same requirements to monitor, to hold allowances to account for emissions, and to have a NO_X budget permit. Units that have opted in may also elect to withdrawal from the program if certain requirements are met.

a. Applicability for Opt-In Units. Today's proposal allows sources (i.e., units) to opt-in that are similar to, but smaller in capacity than, the sources covered under the proposed applicability provisions of the NO_X Budget Trading Program. A State would account for the opt-in unit in the State's SIP by adding the opt-in unit's NO_X emissions to the trading program budget in the SIP and subtracting the opt-in unit's NO_X emissions from the part of the SIP not covered under the NO_X Budget Trading Program.[19] The applicability Section of this preamble discusses and requests comment on the participation of other source types and sizes under the trading program. It also discusses whether other additional source categories should be included in the trading program. The sources in these categories could be included as part of the core program applicability, they could be included as an additional list of source categories that a State could choose to include as core sources, or they could be listed as sources that could choose to individually opt in.

b. Allowance Allocations for Opt-In Units. Today's proposal allocates NO_X allowances to an opt-in unit on a year-by-year basis. An opt-in unit is required to monitor and report the NO_X emission rate and the heat input according to the provisions under 40 CFR part 96 subpart H of the proposed rule for one control period prior to the unit entering the trading program. The NO_X emission rate and heat input measured at the unit during this initial period of time would become the unit's baseline emission rate and baseline heat input, respectively. The EPA requests comment on whether emissions rate or heat input data from periods prior to this initial period should also be used to set these baselines. The allocation for an opt-in unit is calculated by multiplying the lesser of the unit's baseline emission rate (in lb/mmBtu) or the most stringent State or Federal emissions limitation applicable to the NO_X budget opt-in source during the control period by the lesser of the unit's baseline heat input or the unit's actual heat input (in mmBtu) measured during the control period prior to the allocation calculation. The State would notify EPA by December 1 to allocate NO_X allowances to an opt-in unit for the next year's control period. While the proposal recommends opt-in allowance allocations based on heat input, EPA solicits comment on whether the allocations should be based on output. The options for using output and the factors considered are analogous to those discussed above concerning general allocations to NO_X budget units.

The EPA proposes to allocate NO_X allowances to opt-in units on a year-by-year basis to ensure that shifts in utilization from these units to other units not covered under the cap do not result in any significant increases in overall NO_X emissions. Such increases in emissions may occur if units outside the cap increase their utilization (and emissions) while NO_X allowances remain under the cap from an opt-in unit that reduces its utilization. The year-by-year allocation regime limits this potential problem while still maintaining continuing economic benefits for a unit to opt in because each of the future year allocations are calculated based on the unit's baseline emissions rate multiplied by the lesser of the baseline heat input or the previous year's utilization. By reducing a unit's actual emission rate below the baseline emission rate, an opt-in unit would continue to earn NO_X allowances to sell in the market in future years as long as they continued to operate at the same level. The EPA solicits comment on the appropriateness of the year-by-year allocations to account for the potential shifts in utilization for the different types of possible opt-in units including units that serve electricity generators as well as other types of industrial units.

c. Units Sharing Stacks or Fuel Pipe Headers With NO_X Budget Units. Today's proposal does not include special or simplified opt-in provisions for non-NO_X budget units that share a common stack or common fuel pipe header with a NO_X budget unit. Allowing these units to participate in the trading program may streamline the monitoring and reporting requirements for the NO_X budget units. For example, if a non-NO_X budget unit sharing a common stack with a NO_X budget unit is opted in to the trading program, it may no longer be necessary to apportion common stack emissions between two units. The NO_X AAR may simply elect the percentage of NO_X allowances to be deducted for each unit, provided that the total number deducted covers the common stack emissions. The EPA solicits comment on the desirability and method of opting in such units.

d. Withdrawal and Termination of Opt-In Units. The proposed trading rule addresses how an opt-in unit may withdraw from the trading program. An opt-in unit may withdraw from the NO_X Budget Program at any time, but a request to withdraw may be effective only on a date specified by the NO_X AAR that is before or after a control period. The EPA believes that the administrative burden for a permitting authority in processing a withdrawal effective during a control period, particularly in ascertaining the disposition of NO_X allowances and in determining compliance for a partial control period, is sufficient to warrant the prohibition of an effective date of withdrawal during a control period. Further, an opt-in source could seek to withdraw during a control period because the opt-in source projects that it will not hold enough NO_X allowances to account for its NO_X emissions for that control period. Under such a scenario, allowing the unit to ''opt out'' of the program during a control period could easily result in higher NO_X emissions, since an opt-in unit could emit enough NO_X to use up its NO_X allowance allocation for the control period prior to the end of that control period, withdraw from the program, and continue to emit NO_X after withdrawal during the control period. Such emissions would not be accounted for with the requisite surrender of NO_X allowances required under the NO_X Budget Program and could occur outside of a State's overall budget for NO_X.

If a NO_X budget opt-in unit becomes a NO_X budget unit under 40 CFR 96.4, the opt-in permit is terminated. This change in status for an opt-in unit could occur as a result of a modification, reconstruction, or repowering that may take place at the unit. An opt-in unit that becomes a NO_X budget unit under 40 CFR 96.4 is required to notify the permitting authority within 30 days of the change in status of the opt-in unit. The permitting authority revises the opt-in permit to reflect the NO_X budget permit content requirements of 40 CFR 96.23 effective as of the date of the

[19] Today's proposal also solicits comment on allowing sources not meeting the above description to opt in, at their discretion, if they are subject to part D nonattainment NSR preconstruction permitting requirements as major new sources or major modifications to existing sources and they can meet the other eligibility criteria of this trading program. The trading program budget in the SIP would not be increased for the new emissions at these opt-in sources because they would be entering the trading program in order to offset their new emissions (see Section F, below).

change in status. The NO_X allowances are deducted or allocated as necessary to ensure that the appropriate number of allowances are allocated to the unit consistent with 40 CFR part 96 subpart E of the proposed trading rule for each partial or full control period after the effective date of the change in status. In addition to the potential of an opt-in unit changing its status and becoming a NO_X budget unit under 40 CFR 96.4, it is also possible that an opt-in unit may become subject to the major new source review (NSR) requirements under section 173 of the Act by making a physical change or a change in the method of operation. In this case, triggering nonattainment NSR may also terminate an opt-in permit as discussed above. In Section C.1.c.v above, EPA seeks comment on treating all sources that are subject to major nonattainment NSR and that are of the same type of source included in the proposed core applicability as NO_X budget units.

11. Program Audits

The EPA would publish a report annually, commencing after the first year of compliance, that would contain, for each NO_X budget unit, the control period NO_X emissions and the number of NO_X allowances deducted for all reasons. This would be done in order for States to track emissions and NO_X allowance transaction activity in neighboring and upwind States. The proposed transport rulemaking has requirements for reporting of additional data to determine compliance for affected States. The EPA would also publish a report beginning in 2007 and every five years thereafter to assess the level of activity and/or emissions shifting from sources included in the NO_X Budget Program to sources not included. An assessment of opt-in sources (e.g., how many, from what sector, source size, duration of participation in program) would also be included in this periodic report.

12. Administration of Program

The administration of this program would be somewhat different from the administration of a typical State program. This is both because of the trading aspects of the program and because of the regional nature of the trading program. In order for the market forces underlying the trading program to work, the sources that participate in the trading program must have confidence in the market. This confidence stems from a number of factors including: a belief that all of the sources included in the program are following the same set of rules, and a belief that trades can be made easily, quickly and with a great deal of confidence that they will not be altered or denied. Several things can help to foster these beliefs and thus a confidence in the market. The first is to start with a consistent set of rules. This can be done by developing a model rule and having all States and sources that participate in the trading program abide by the ground rules set forth in the model rule. The second is to implement those rules in a consistent and efficient manner. Because of the multi-state nature of the program, it would be difficult for any individual State to do that by itself. Therefore, EPA is proposing that this program be implemented jointly by EPA and the States that choose to participate in the program. As part of this joint implementation, States would have specific roles, EPA would have specific roles, and there would be roles that States and EPA would perform jointly.

States would be responsible for developing and promulgating rules consistent with the model rule and for submitting those rules as part of the SIP. States would also be responsible for identifying sources subject to the rule, issuing new or revised permits as appropriate, and determining NO_X allowance allocations. In addition, they would be responsible for receiving, reviewing and approving most monitoring plans and monitoring certification applications, observing monitor certification and ongoing quality assurance testing and performing audits. The final primary area of State responsibility would be enforcement of the trading program. If violations occur, the State would take the lead in pursuing enforcement action. However, once the rules are approved as part of the SIP, they would become federally enforceable, and EPA could also take enforcement action.

The EPA would have two primary roles in administration of the program. The first role would be EPA's traditional role in the approval and oversight of the SIP. The second would be a more unique role for EPA, in which EPA would administer significant portions of the program.

In EPA's traditional role in the SIP process, EPA would be responsible for taking action to approve or disapprove the SIP revision once it was submitted to EPA. Once the SIP revision was approved, EPA would play an oversight role in ensuring that the SIP was completely implemented. This oversight role might include audits of the State program, or taking enforcement action, if EPA believed that sources were violating the SIP.

In EPA's more unique role as administrator of portions of the program, EPA would run both the emissions tracking system (ETS) and the NATS. ETS is the system that units would use to report their emissions data and that EPA would then use to verify total emissions for the control season. The EPA would use the same system that it is currently using to track emissions data from the Acid Rain Program and that it will soon be using to track emissions data from the OTC NO_X Budget Program. There are a number of advantages to the sources, States, and EPA to using this existing system. Since many units are already reporting to the system for purposes of the Acid Rain Program and more units will soon be reporting to the system for purposes of the OTC NO_X Budget Program, using this existing system will represent little change for many units and EPA. This will help to reduce administrative costs for both units and EPA and will help to minimize startup problems associated with a new program. It also means that each State will not need to develop, maintain and operate such a system.

In addition to receiving the emissions data, quality assuring it, and providing reports to both States and units about the emissions data, EPA would have several other responsibilities as the administrator of ETS. The EPA would be involved in approval of any petitions for alternatives to the allowable monitoring methods. The EPA would also be involved in providing units and States assistance in using ETS. This assistance may include: Answering individual questions from units and States, providing guidance documents and training for units and States, and providing software to assist in the submittal of emissions data.

As the administrator of NATS, EPA would be responsible for receiving applications for NO_X AARs, tracking all official transfers of NO_X allowances, and using the end of control season emissions data and NO_X allowance data to determine compliance for the control season. In order for EPA to play this role, each State would have to provide EPA with its NO_X allowance allocations consistent with a prescribed schedule and format. The NO_X AARs for individual sources would have to provide EPA with information about all official NO_X allowance transfers in a prescribed format. The NO_X AAR's would also have to provide EPA with an end of control season compliance certification. At the end of the control season, EPA would use all of this data to determine how many NO_X allowances should be deducted from each unit's compliance account or each source's overdraft account. In the event

that there were not enough NO_X allowances to cover a unit's emissions for a control period, EPA would notify the State and would automatically deduct NO_X allowances for the next year's control period according to the emissions offset provisions set forth in the proposed trading rule.

The main joint role that EPA and States would have is for the approval of alternatives to the allowable monitoring methods. This role is more fully discussed in Section V.C.9 of the preamble on monitoring.

D. SIP Approvability

The EPA's proposed ozone transport rulemaking set forth the general elements that a SIP needed to include (see 62 FR 60364–71). These criteria are more fully explained in Section IV.A of this supplemental proposal. One of the components of an approvable SIP is that it include fully adopted State rules for the regional transport strategy with compliance dates. One possible control strategy that a State might choose would be to implement this NO_X Budget Trading Rule (40 CFR part 96). If a State chooses to implement the NO_X Budget Trading Rule, the proposed ozone transport rulemaking explains that the trading rule will incorporate all necessary SIP criteria into the program design. In general, today's proposed trading rule meets the necessary SIP criteria. However, Section IV.A describes two criteria that a SIP must meet for EPA to approve the NO_X Budget Trading Rule portion of the SIP (see Section IV.A.3 for further discussion).

E. OTC Integration

Twelve of the thirteen OTC jurisdictions have committed to the implementation of a cap-and-trade program in order to achieve region-wide NO_X emissions reductions starting in 1999 to help reduce ozone transport and make progress toward attainment. Nine of those twelve jurisdictions are also included in the proposed ozone transport rulemaking. The goals and implementation strategy of the OTC program are similar to those of the proposed transport rule and today's proposed NO_X Budget Trading Program. However, there is a potential for conflict between the OTC Program and today's proposal. The EPA was involved in the development of the OTC Program and is aware of the issues that the OTC States faced in developing that program. Taking into account the work that has been done, EPA has tried to develop a proposal that will minimize conflicts between the two programs. Some differences still exist concerning applicability, allocations, banking and the use of banked allowances, emissions monitoring, and permitting. The purpose of this Section is to identify how EPA believes that these specific issues can be resolved, so that the goals of the OTC program can be achieved in concert with today's proposal. The EPA believes that these differences can be resolved as the OTC States undertake rulemakings to implement Phase III (beginning in 2003) of the OTC program.

1. Applicability

a. State Applicability. On a regional level, the NO_X Budget Trading Program is applicable to any of the 23 jurisdictions identified in the proposed transport rulemaking electing to participate. Three of the OTC States (Maine, New Hampshire, and Vermont), however, are not among the 23 jurisdictions cited in the proposed transport rulemaking. The OTC States have requested EPA to consider how these States may participate in the trading program. The EPA sees, and requests comment on, two options for addressing these States. One option is to exclude Maine, New Hampshire, and Vermont from participation in the NO_X Budget Trading Program; the other is to offer the States the opportunity to join the trading program by complying with the overall requirements of the proposed transport rulemaking. The EPA proposes the two alternative options and requests comment on them.

Denying Maine, New Hampshire, and Vermont the opportunity to participate in the NO_X Budget Trading Program can be justified by their exclusion from the proposed transport rulemaking. Based on analysis of the entire 37 State OTAG region, EPA proposed to determine that only 23 jurisdictions are significant contributors to a nonattainment or maintenance problem in another State. Since these three States were not among the 23 jurisdictions covered by the proposed transport rulemaking, arguably they should not be permitted to participate in the trading program designed to help achieve mandated reductions in the targeted States. Excluding Maine, New Hampshire, and Vermont from the trading program would restrict the ability for sources in these States to trade NO_X allowances with sources in other OTC States that are included in the proposed transport rulemaking and participating in today's proposed trading program. A second option would be to allow Maine, New Hampshire, and Vermont to participate in the NO_X Budget Trading Program by voluntarily enrolling in the proposed ozone transport rulemaking and implementing the requirements therein. This second option would assist with the integration of the OTC program with the NO_X Budget Trading Program by maintaining the ability for sources located in Maine, New Hampshire, and Vermont to trade NO_X allowances with sources located in the other participating OTC States.

b. Source Applicability. The source applicability criteria for today's proposed NO_X Budget Trading Program identifies a minimum, core group of sources. These core sources are fossil fuel-fired units (i.e., stationary boilers, combustion turbines, and combined cycle systems) serving electrical generators greater than 25 megawatts and other units not serving generators and having a heat input greater than 250 mmBtu per hour. Beyond the core sources, this proposal contains criteria for States to include additional sources in the trading program, as well as the process for allowing individual units to opt in.

The OTC program applies to a similar universe: fossil fuel-fired boilers and indirect heat exchangers of 250 mmBtu or greater, electricity generating units of 15 megawatts or greater, and ''opt-in'' sources. The main difference in applicability criteria between the OTC program and today's proposed NO_X Budget trading program is that the OTC includes units between 15 and 25 megawatts. However, today's proposal allows States to include smaller sources of the same type as those included in the core group such as electrical generating units between 15 and 25 megawatts, without affecting EPA's streamlined approval of the SIP as described in Section V.D of this preamble. This allows the OTC program applicability provisions to be reasonably compatible with those in the NO_X Budget Trading Program.

2. Allocations

Today's proposal establishes NO_X allowances as the currency for the NO_X Budget Program, and recommends a methodology for participating States to allocate NO_X allowances among NO_X budget sources. States are provided the flexibility to deviate from the recommendation, as long as the timing requirements for completion of allocations and submission of the information to EPA for inclusion into the NATS are met, the control periods for which allowances are allocated are the same, and total NO_X allowances allocated do not exceed the number of tons that the State apportions to NO_X budget sources in the SIP.

The OTC provides States full discretion to develop and adopt their own allocation methodologies. The

resulting allocation processes are in some cases incompatible with EPA's software capabilities, beyond the scope of EPA's resources to administer, and inconsistent with the efficient and orderly functioning of a NO_X allowance market. This experience showed the need for greater consistency among States for the allocation process. As a result, the OTC States would need to revise their allocation methodologies for Phase III of the OTC to be consistent with the timing requirements of the NO_X Budget Trading Program. Since the OTC is still discussing the implementation of Phase III, EPA believes that the schedule for this proposal provides an opportunity to develop allocation plans that meet the timing requirements in today's proposed trading program. Each OTC State would still be able to determine the specific allocation to each source provided the total number of allowances allocated did not exceed the trading program budget.

3. Emissions Banking

The OTC program provides for the banking of early reductions in 1997 and 1998 and of excess Phase II NO_X allowances in 1999 through 2002. Furthermore, the OTC program includes the use of a flow control mechanism to manage the use of banked allowances as described under Section V.C.7 of this preamble and an audit to assess the program's performance. Today's proposal solicits comments on four banking options that are discussed under the banking Section of this preamble. The EPA requests comments on how the OTC banking provisions may be integrated with the banking options under the proposed NO_X Budget Trading Program.

4. Emissions Monitoring and Reporting

The monitoring and reporting requirements in the proposed NO_X Budget Trading Program are based on the requirements in proposed revisions to 40 CFR part 75, the monitoring and reporting regulations under the Acid Rain Program. The monitoring and reporting requirements in the OTC's NO_X Budget Program are based on the current version of 40 CFR part 75 and on additional guidance that was developed in a collaborative process among States, sources, and EPA. This additional guidance sets forth requirements for reporting NO_X mass emissions which are not currently set forth in 40 CFR part 75 and provides some additional flexibilities for sources not subject to the Acid Rain Program. For sources that are subject to both the Acid Rain Program and the OTC NO_X Budget Program, use of the revised 40 CFR part 75 would require few changes to address the NO_X mass monitoring and reporting requirements in this proposal. However, for some sources that are only subject to the OTC NO_X Budget Program, the use of the revised 40 CFR part 75 in the proposal may require some changes.

The most significant change under the proposed NO_X Budget Trading Program would be that all units that burn coal or other solid fuels would be required to use a flow monitor and a diluent monitor to measure heat input. Under the OTC NO_X Budget Program, these units currently have two options for monitoring heat input: the first option is to use a flow monitor and a diluent monitor, and the second is to petition the State to use an alternative heat input methodology. There are two main reasons that EPA is proposing to limit the options for monitoring heat input for these types of units. First, EPA believes that in order to ensure fairness and to ensure that the emissions reductions required by this program are realized, it is important to have accurate and consistent monitoring across all of the sources. To date, no source under the OTC NO_X Budget Program has completed any testing to demonstrate that the alternatives are as consistent and accurate as the flow monitoring methodology. Second, EPA does not believe that there are significant cost savings associated with allowing the alternatives. In order to demonstrate that the alternative is as consistent and accurate as the flow monitoring methodology, the source is required to do initial certification testing and ongoing quality assurance testing very similar to the testing required for the use of flow monitoring methodology. The capital costs associated with setting up platforms and ladders so that this testing can be performed is one of the most significant capital costs associated with the flow monitor methodology, but this cost would also have to be incurred in order to perform testing on the alternative methodology. Similarly, some of the most significant costs associated with the ongoing use of the flow monitor methodology are ongoing quality assurance and data reporting. Performing similar quality assurance and data reporting is also a requirement for any alternative methodology. For these reasons, EPA believes the costs would be similar. In addition, if the alternatives are allowed, there would be an additional administrative burden placed on both States and sources in preparing and reviewing applications for alternative methodologies.

In addition to the specific requirement to use flow monitors for coal-fired facilities, the proposed revisions to 40 CFR part 75 change some of the ongoing quality assurance tests for flow monitors. The number of levels at which flow relative accuracy test audits (RATAs) have to be performed is reduced, but an additional quarterly quality assurance of the flow monitors has been added. The EPA believes that the combined effect of these changes reduces the overall cost of flow monitoring, while at the same time improving the quality of the data.

Another significant change between the OTC NO_X Budget Program and the proposed NO_X Budget Trading Program would be in the options allowed for low mass emitting units, or peaking units, that burn oil and/or gas. The OTC NO_X Budget Program offers a number of different options for these units, in addition to the CEM options that are allowed for all sources in the program. While these different options provide more flexibility, they also create more confusion and complexity for smaller sources. The EPA believes that by proposing fewer options, and simplifying these allowable options as much as possible, both cost and confusion for smaller sources can be minimized. The two non-CEM options that the proposed revisions to 40 CFR part 75 will allow for smaller sources are the use of a default emission rate based on unit type and fuel burned, and the use of source testing to determine unit specific NO_X emission rate versus load curves. The use of default emission rates is proposed to be limited to units that have actual emissions and projected emissions using such default emission rates of less than 25 tons per year. The use of the unit specific NO_X emission rate versus load curves is proposed to be limited to units that qualify as peaking units (a unit that has an average capacity of no more than 10.0 percent for three years, with a maximum capacity of no more than 20.0 percent in any one of those years.)

Most of the other changes in the proposed revisions to 40 CFR part 75 that would affect OTC NO_X Budget Trading Program sources are designed to reduce monitoring costs and provide additional flexibilities. These include: a reduction in fuel sampling for units that use fuel sampling and analysis to determine heat input; more flexibility for the scheduling of quality assurance testing to accommodate unexpected unit outages; and an option to reduce the amount of missing data that must be reported during periods of monitor recertification. More information on all of the proposed revisions to 40 CFR part

75 can be found in the proposal for that rule (notice entitled ''Acid Rain Program; Continuous Emission Monitoring Revisions'' that will be published in the **Federal Register** in the near future); comments on them should be submitted in that separate rulemaking.

5. Permitting

The OTC program does not explicitly require permits that are issued or modified for use under the OTC program to be federally enforceable. The proposed NO_X Budget Trading Rule requires federally enforceable permits. The EPA's rationale for requiring federally enforceable permits is further explained in Section V.C.3 of this preamble. This would potentially require the OTC States to amend the permitting provisions in the OTC program.

F. New Source Review

Under section 173 of the CAA, new and modified major sources located in nonattainment areas must offset their new emissions. The EPA believes that this requirement can be met through a source's participation in the NO_X Budget Trading Program defined in today's proposed rule. Simply put, in a system where the level of emissions cannot exceed an absolute mass emissions cap, new sources of emissions subject to the system must acquire sufficient NO_X allowances elsewhere in the system to offset any new emissions. Those sources from whom NO_X allowances are acquired must also hold sufficient NO_X allowances to cover their emissions. Therefore, since the trading program budget would not be increased for sources seeking offsets, NO_X allowances which are acquired necessarily come from actual emissions decreases that take place from other sources that are covered by the cap.

A key issue is how sources whose emissions increases are subject to the major NSR offset requirements may become participants in the trading program. All new units meeting the proposed applicability criteria, and all emissions increases at existing units meeting these criteria, would be subject to the NO_X Budget Trading Rule and, therefore, would be participants in the trading program. However, sources in need of NSR offsets but which do not meet the proposed applicability criteria may wish to participate in the trading program so as to satisfy their NSR offset requirement. The EPA notes that today's proposed rule makes no specific provision for the inclusion of these types of sources. Since EPA believes there may be significant benefits to integrating any new source review requirements with the NO_X Budget Trading Program, inclusion in the trading program of new sources that do not meet the proposed applicability criteria may well be helpful to both those sources and States that are concerned about finding offsets for new sources. The EPA solicits comments on allowing the opt in of new and modified sources, not otherwise subject to the program, in order to satisfy the section 173 offset provisions through participation in the trading program. Commenters should consider how these sources would be integrated into the trading program in a simple and straightforward manner which would not compromise any of the program's goals or requirements. For example, EPA expects that any source opting into the trading program would have to meet the permitting, monitoring, and accountability requirements applicable to core sources. At this time, EPA also solicits recommendations on: (1) How the section 173(c)(1) requirements pertaining to the geographic location of offsets can be met under the NO_X Budget Trading Program and (2) how to reconcile the seasonal nature of the proposed rule with the NSR requirements that the total annual tonnage of new emissions increases must be offset.

G. End Use Energy Efficiency and Renewable Energy

1. Background

This Section discusses the potential for a provision within a State's NO_X Budget Trading Rule to recognize and encourage the contribution that energy efficiency and renewables can make in meeting the NO_X budget. The December workshop with State, industry and non-governmental organization representatives included a discussion of a possible role for energy efficiency and renewables. As stated in the December workshop, energy efficiency and renewables can be important components of an effective NO_X reduction strategy. Greater deployment of energy efficiency and renewables technologies cannot only be a cost-effective means of preventing emissions of NO_X. It can also be a cost-effective way of preventing emissions of greenhouse gases, such as carbon dioxide (CO_2), and toxic substances, such as mercury.

There is a large potential for greater energy efficiency improvements that reduce energy demand. In addition, renewable resources that reduce demand at the consumer level are available, including technologies that generate electricity, such as rooftop photovoltaics, and technologies that reduce electricity demand such as solar hot water heaters. Greater penetration of energy efficiency and distributed renewable resources in the marketplace can save companies and individuals money and promote economic growth, thus reducing the economic cost of compliance with environmental requirements. These savings can be passed on to consumers through lower electricity rates.

The EPA has examined the potential for energy efficiency and renewables in the SIP call region. The most recent information on this potential comes from the Department of Energy's (DOE's) ''5-lab study,'' which quantifies the potential for energy efficiency and renewables to reduce carbon emissions in the U.S. via two scenarios. The first is the study's ''Efficiency'' case which consists of the potential for cost-effective energy efficiency and renewables technologies to penetrate the market given an invigorated promotion effort for greater market transformation. The second scenario is the ''High Efficiency'' case, which demonstrates the potential for emissions reductions from energy efficiency and renewables measures that are optimistic, but feasible to undertake. Both the DOE study and the findings and results from similar analyses that have been conducted in the last several years in different States or groups of States within the proposed ozone transport rulemaking region show substantial potential for NO_X reductions and ancillary benefits from greater adoption of energy efficiency and renewable technologies. According to an analysis based on the DOE 5-lab study, approximately 1,700 TBtu of energy can be saved by 2007, resulting in over 100,000 tons of avoided seasonal NO_X emissions in the SIP call region if the area achieves the increased rate of energy efficiency improvement outlined in the ''Efficiency'' case. These potentials increase to over 3,000 TBtu of energy saved and over 200,000 tons of avoided seasonal NO_X emissions (or 13 percent of the total tons of reductions needed) under the 5-lab ''High Efficiency'' case. The associated carbon emissions reductions are nearly 30 million metric tons of carbon equivalent (MMTCE) by 2007 for the ''Efficiency'' case, and over 50 MMTCE for the ''High Efficiency'' case.

In a recent study of energy efficiency opportunities in the mid-Atlantic States region (including New York, New Jersey and Pennsylvania), the American Council for an Energy-Efficient Economy (ACEEE) concluded that over

2,800 TBtu of energy could be saved in this area by 2010 under their aggressive efficiency scenario. This translates into over 200,000 tons of seasonal NO_X reduced by 2007, and nearly 160 million metric tons (MMT) of carbon emissions avoided. Enhanced deployment of energy efficiency technologies and distributed renewable resources, therefore, may be an important policy tool for States to consider in achieving multiple environmental objectives.

There are substantial economic benefits and compliance cost implications for using energy efficiency as a NO_X reduction strategy in the proposed ozone transport rulemaking region. The economic benefits of achieving the 5-lab study's ''Efficiency'' case level of improvement include the potential for creating a net increase of over 80,000 jobs. For the ''High Efficiency'' case, over 160,000 new jobs would be created. The mid-Atlantic study shows a net increase of approximately 16,000 new jobs created in the region, with a corresponding increase in gross State product (GSP) of over $60 billion by achieving the efficiency potential outlined in the study. Taking advantage of all of the energy efficiency and renewables potential in the SIP call region prior to applying other NO_X control methods, such as selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR), can lower the overall compliance costs of meeting the NO_X budget as well as reduce overall societal costs. The EPA's initial analyses show that compliance costs can be reduced in 2005 by nearly $150 million through accelerated adoption of energy efficiency and renewables consistent with the 5-lab study in the proposed ozone transport rulemaking region.

2. Energy Efficiency and Renewables Set-Aside Options

The EPA recognizes and has performed analyses that demonstrate the benefits of aggressive adoption of energy efficiency and renewables technologies as a NO_X reduction strategy in the proposed NO_X Budget Trading Program for the proposed ozone transport rulemaking region. However, EPA is not proposing a specific approach for an energy efficiency and renewables set-aside for NO_X Budget Trading Program in this action.

During the December workshop and in the discussion paper that was distributed afterward, EPA stated that an energy efficiency and renewables set-aside approach put forward by the Agency should meet three important goals: (1) reduce the total economic cost of meeting the proposed NO_X budget, (2) promote energy efficiency and renewables as effective NO_X and pollutant-reducing strategies through the accelerated adoption of such practices and technologies, and (3) reduce future CO_2-related liabilities by recognizing the positive impacts of energy efficiency and renewables on carbon emissions. In addition, EPA stressed that two key principles should guide the design of its approach for a set-aside program: (1) A set-aside program should encourage actions that increase efficiency that would not otherwise occur without the program, and (2) the set-aside program should maintain the integrity of the NO_X cap. The EPA noted in its December workshop discussion paper that the difficulties in designing an approach consistent with our objectives of reducing cost and meeting the goals and principles above are not trivial. At this time, EPA does not have adequate information to propose an approach that will accomplish the goals and meet the Agency's purposes, while adhering to the principles and addressing the design issues outlined at the December workshop.

The EPA is not including a proposal in this notice to include an energy efficiency and renewables set-aside in the NO_X Budget Trading Program. The EPA continues to consider whether and how to develop an approach to include energy efficiency and renewables in the NO_X Budget Trading Program. As part of this action, EPA today requests that interested parties submit information addressing the design issues and questions that require further investigation which are outlined below. Should EPA conclude in the future that there is adequate information to design an approach for including an energy efficiency and renewables set-aside to meet its purposes, EPA will either issue a proposal or guidance as appropriate.

While EPA continues to examine the possibility of designing an approach for a set-aside, EPA encourages States to consider including energy efficiency and renewables in their State NO_X Budget Trading programs.

• Issue (1) Rewarding Efficiency Improvements Above ''Business as Usual''

In developing an approach for energy efficiency and renewables in the NO_X Budget Trading Program, EPA believes it is important that the system encourage actions that increase the penetration of energy efficiency and renewables improvements beyond the normal rate at which they are currently and continuously incorporated into all sectors of the U.S. economy. Some remarks received in response to the discussion paper were of the opinion that it is unnecessary to be concerned with business-as-usual projects (or ''anyway'' tons or ''anyway'' projects), specifically because the respondents believe that the restructuring of the electric utility industry will result in the decline of demand side management (DSM) programs and reduce the rate of business-as-usual energy efficiency and renewables adoption to below a meaningful level. However, because energy efficiency projects often yield very attractive internal rates of return, many above 35 percent, and because there are many public information programs and private businesses aiming at getting more energy efficient and renewables products and choices into the market, there is likely to be a continuing level of energy efficiency improvement in the U.S. economy. Allocating NO_X allowances to existing, mandated and expected energy efficiency and renewables measures means that fewer allowances will be available to encourage incremental projects. The issue is in determining how to differentiate between the various types of measures and, particularly in future years, determining what types of measures were likely to have happened without the set-aside program. In regard to the amount of ''business-as-usual'' energy improvement due to energy efficiency and renewables, EPA requests the following information:

Question 1. How do States determine the amount of ''business-as-usual'' energy efficiency and renewables occurring across all sectors of the economy?

Question 2. What information do States and other entities have about the amounts and types of energy efficiency and renewables that have been occurring over the last 3–5 years?

The EPA suggested three options for determining projects eligible for set-aside NO_X allowances in its December workshop discussion paper. One option is to limit the reward of ''business-as-usual'' projects may be to require that projects attain a sizable efficiency improvement, over and above a set minimum. This will require the development of a set of average energy improvement metrics for the residential, commercial and industrial sectors. As an example, projects for efficiency in the commercial building sector would be compared to a target set below the average energy use per square foot that achieves a particular and higher level of efficiency than that of ''business as usual'' in that sector. Only projects that meet or exceed the target would be eligible to be awarded allowances, and

the size of the award would be based on the increment of improvement between the ''business as usual'' average and the achievement or exceedance of the target.

Two other options involve varying the length of the efficiency reward for different types of energy efficiency improvement measures, or restricting the number of NO_X allowances available to certain types of improvements. Under the second approach, certain types of energy efficiency improvements that have already been implemented or are likely to be implemented without an additional incentive (e.g., regulatorily mandated improvements unless implemented early, or energy efficiency improvements of products that bring them up to the industry average) would be allocated a shorter stream of allowances, while new and innovative energy efficiency improvements (incremental projects above ''business-as-usual'') would be allocated a longer stream of NO_X allowances. Under the third approach, the number of NO_X allowances allocated to energy efficiency improvements likely to occur anyway is restricted to some portion (e.g., 50 percent) of the full number of NO_X allowances they qualify for given the actual or expected load reduction.

Of the three options, the first seems to offer the best possibility for limiting rewards for energy efficiency improvements that would have occurred anyway. Options two and three would allocate a potentially smaller portion of NO_X allowances to projects that have already been implemented, are mandated, or are deemed to belong to a classification of improvements judged to be those likely to occur anyway. Either of these latter two approaches is difficult because it requires that a State be able to differentiate between those measures that would have been implemented anyway versus other types of energy efficiency improvements. Option one would require that projects attain a sizable efficiency improvement, over and above a set minimum. This would require the development of a set of energy improvement metrics for the residential, commercial and industrial sectors to use to distinguish baseline from accelerated or enlarged adoption of energy efficiency and renewables. One possibility for energy efficiency projects under this option would be to develop a set of energy use or intensity benchmarks that these projects would be required to meet or exceed in order to be eligible.

The EPA could use information from its own energy efficiency programs, such as Energy Star Buildings and Energy Star Homes, as a starting point for developing benchmarks in the residential and commercial buildings sectors. For example, in its Energy Star Homes program, home builders agree to construct new homes that will be 30 percent more energy efficient than the Model Energy Code (MEC). The EPA could establish the ''30 percent better than MEC'' as the benchmark that must be attained for applicants wishing to receive set-aside NO_X allowances based on new home developments that are more energy efficient. The applicant would have to first demonstrate that the homes built meet this benchmark, and then could be awarded NO_X allowances based on the improvement that reaching the benchmark represents in that sector. In considering the development of benchmarks to limit the rewarding of ''business-as-usual'' projects, EPA requests the following information:

Question 3. Do States and potential applicants for energy efficiency and renewables NO_X allowances have sufficient information about energy improvement metrics (e.g., energy use per square foot, MEC) or can they gather sufficient information about upgrade projects in order to be able to compare the results of these projects with a benchmark developed for that category (residential, commercial or industrial) of upgrade?

Question 4. If so, specifically what types of energy improvement measurements and information about upgrade projects are recorded or gathered by States and/or potential applicants for energy efficiency and renewables upgrades or projects?

Question 5. In addition to Energy Star Buildings and Energy Star Homes what other options are there for developing benchmarks in the residential and commercial buildings sectors?

Question 6. What kinds of benchmarks could be developed for industrial sector energy efficiency and renewables improvements, and how could they be developed? Since industries have both process and non-process energy use, how could benchmarks be developed for process (e.g., motors, compressed air, fans) and non-process (facility lighting and HVAC) efficiency measures in the industrial sector?

Question 7. In order to be able to use benchmarks for industrial sector energy efficiency it is necessary to separate the facility's non-process energy use from its process-related energy use. What methods might be used for distinguishing between an industrial facility's non-process energy use from its process energy use?

• Issue (2) Appropriate Size of the Set-Aside Allowance Pool

The EPA indicated in the December workshop discussion paper that the energy efficiency and renewables allowance pool within the budget for the NO_X Budget Trading Program should be set at an amount large enough to maximize the opportunities to promote energy efficiency and renewables projects, but not so large as to overstate the efficiency potential so that there are excess NO_X allowances that go unallocated. As pool size is related to the rewarding ''business-as-usual'' issue, EPA listed two alternatives in the December workshop discussion paper: (1) Limit the size of the pool and allocate NO_X allowances based on criteria that would minimize their allocation to ''business-as-usual'' projects, or (2) establish a larger pool so that there is room for both ''business-as-usual'' projects as well as incremental energy efficiency projects being undertaken. Using three different methods and the projections for energy efficiency potential from the 5-lab study, EPA showed that a set-aside pool in the range of 5–20 percent of the total electricity NO_X budget for a State or across the region could be considered

Note: these figures do not include a portion of the nonutility boiler NO_X budget.

The EPA received remarks indicating that a set-aside pool should be not less than 20 percent to allow for the full potential of both energy efficiency and renewables projects. Another recommendation made to EPA is that no specific pool size should be set within the budget for the NO_X Budget Trading Program. Rather, a State could opt to take all proposals for efficiency and renewables ''off-the-top'' of the allocation pool, and allocate the remainder to NO_X Budget units. Other respondents to the December discussion paper remarked that an ''off-the-top'' scheme would allow too little certainty for NO_X Budget units in planning for how to meet the NO_X cap. With regard to pool size, EPA requests the following information:

Question 8. What is a reasonable estimate for a pool size within the budget for the NO_X Budget Trading Program to award incremental energy efficiency projects that would not be undertaken without the availability of set-aside NO_X allowances?

Question 9. For States that may be interested in an ''off-the-top'' allocation method as opposed to a fixed percentage set-aside for energy efficiency and renewables projects, what allocation mechanisms could be designed to provide greater certainty to NO_X budget

units about the number of non-set-aside NO_X allowances for planning purposes for the upcoming ozone season?

Once a pool size is determined, the main issue of concern is how to translate load reductions into allowances. The December workshop discussion paper outlines three basic methods under consideration by EPA. The first method would be to develop a flat, region-wide, average NO_X rate that represents the average NO_X emissions reductions expected for a kWh reduced. For this method, the rate could be based on one of three NO_X rates: (1) The average NO_X rate calculated by dividing the total NO_X emissions in an area on an annual or seasonal basis by the total fossil fuel generation in that area for the same time period, expressed in lbs per kWh State or region specific data; (2) an average NO_X rate calculated by multiplying the proposed ozone transport rulemaking NO_X rate of 0.15 lbs per mmBtu by a system wide average heat rate in Btu per kWh; or (3) an average ''marginal'' NO_X rate in lbs per kWh representing the generation mix most likely to be backed out on the ''margin.'' This marginal NO_X rate is calculated by dividing the difference in NO_X emissions in an uncapped scenario between a reference or baseline amount of electricity demand and a reduced amount of demand (e.g., from energy efficiency) by the amount of generation (kWh) avoided due to the reduction in energy demand.

The second method would be to develop a regional or a State specific NO_X rate (average or marginal) in lbs/kWh utilizing the IPM model which would more accurately take into account the generation mix in each State and the power pools in which they participate. Developing a regional or a State specific rate would therefore take into account the amount of NO_X reduction actually attributed to energy efficiency in an uncapped NO_X environment. This method would likely result in different NO_X factors for each State. The third method would be to develop measure-specific marginal NO_X rates which would more accurately represent the load shape associated with particular energy efficiency measures (i.e., commercial lighting or industrial motors), or alternatively, NO_X factors for ''typical'' residential, commercial and industrial loads. This method would therefore more accurately represent the marginal generation units that would likely be dispatched less.

The third method, if used to develop measure-specific factors, could potentially result in dozens of different NO_X rates and would likely be too administratively burdensome. The first and second methods may result in either overstating or understating emissions reductions for a particular State. One respondent expressed a preference for State-specific NO_X factors to be used in translating energy savings into NO_X reductions and the corresponding NO_X allowances. Although State-by-State factors may more accurately reflect the fuel mix of a particular State, the use of different rates and whether States consistently use either an average or a marginal NO_X rate may impact the value of allowances. If inconsistent methods are used from one State to the next, then one State's efficiency allowances may be construed to be of greater value than another State's. In order to evaluate the three methods or an alternative to these methods, EPA requests the following information:

Question 10. What access do States or end users have to information necessary to obtain or calculate the average NO_X rate or the marginal NO_X rate for their State or power pool that may be used for translating energy efficiency savings into tons of NO_X reductions?

Question 11. If a marginal NO_X rate is not available or calculable and an average NO_X rate is used, how would a State or end user take into account the type of different fossil fuel mix that the efficiency savings is coming from? Is this necessary to do?

- Issue (3) Eligibility of and Allocation to Applicants and Projects

Although the scope of the set-aside comprises appropriate end use energy efficiency and distributed renewables improvements, it is not intended to limit the types of entities that may apply for allowances based on completed end use efficiency and renewables upgrades. But keeping in mind EPA's overall objective of rewarding real reductions, States may want to consider what types of end users could implement efficiency and renewables actions that best fit the criteria of providing real reductions, and focus their efforts on providing incentive for those types of entities. The EPA generally believes that entities that would be provided this incentive should be entities that would not otherwise be holding allowances for the purposes of being able to emit NO_X. Entities holding such NO_X allowances for these purposes have a direct incentive to take actions that will lower their need for NO_X allowances or free up NO_X allowances for trading, and so do not need an additional incentive. With regard to the industrial sector, the previous discussion and questions about whether benchmarks can be determined for improvements in the industrial sector, and whether or not industrial building energy use can be separated from industrial process use may be relevant to this discussion. Concerning which end users it may be more or less appropriate to award with NO_X allowances for reductions achieved through greater energy efficiency and use of renewable resources, EPA requests the following information:

Question 12. In determining which entities should be eligible to apply for set-aside NO_X allowances, is it appropriate to limit eligibility to those entities that would not otherwise be holding NO_X allowances for the purposes of being able to emit NO_X? If not, why not?

In addition, for reasons of administrative ease, it may be best for entities to be required to meet a minimum level of efficiency improvement or NO_X reduction. The purpose of this requirement would be to prevent the submission of large numbers of applications for small amounts of reductions, which may cause an excessive administrative burden, particularly in terms of time required for processing and verification. For example, applications for NO_X allowances of less than one ton of NO_X may be impractical because an allowance is defined as one ton of NO_X emissions. It may be advisable to set a higher threshold of NO_X reductions, such as five or ten tons or more, as a minimum for application. This would mean that an applicant for set-aside NO_X allowances would have to bring in energy efficiency and renewables projects that total no less than five or ten tons of NO_X reductions in order to be considered for an award. Concerning minimum thresholds for an award, EPA requests the following information:

Question 13. How many applications could a State reasonably review on an annual basis for the set-aside without causing an inordinate administrative burden? What would be the incremental administrative cost associated with the application process for the set-aside?

There is also a concern about whether or not the location of the applying entity or where the energy efficiency or renewables improvement is implemented matters. The location of the applying entity theoretically should not matter, as long as the energy efficiency and renewables improvements result in NO_X reductions in the proposed ozone transport rulemaking region.

However, there may be concern about awarding allowances for end use efficiency for projects in a State within the ozone transport rulemaking region where the load reduction or the majority

of the load reduction is realized at an electricity generating unit that is located outside the NO_X Budget Trading Program region. If it is likely that the end use efficiency will result in load reductions occurring outside of the proposed ozone transport rulemaking region, then the amount of NO_X allowances to be awarded should perhaps be adjusted to exclude the reductions occurring outside the region. This is in keeping with the principle of maintaining the integrity of the NO_X budget. However, in order to do this, States must be able to reasonably estimate what amount of generation is produced within the region versus that which is being imported from outside the area. In this regard, EPA requests the following information:

Question 14. Will States be able to reasonably estimate the amount of generation produced within their States and being imported from within the proposed ozone transport rulemaking region versus that which is being imported from outside the region? How?

Question 15. Is it necessary to make adjustments that would be to account for reductions from energy efficiency or renewables occurring outside the proposed ozone transport rulemaking region, and if so, what mechanisms are there for doing so?

There is also the matter of whether allowances for energy efficiency improvements should be awarded for actions that occur during the years prior to the start date for the NO_X Budget Trading Program. Since the first year for the trading program is 2003, it may be possible to award NO_X allowances for energy efficiency and renewables measures that are initiated and come on line between the finalization of the proposed NO_X Budget Trading Rule and the 2003 control period. This would effectively give end users credit for early actions taken to become more energy efficient or to bring on new renewable resources prior to the need for additional/other controls to meet the NO_X budget. In considering giving credit for early actions in the form of NO_X allowances from the set-aside pool, EPA requests the following information:

Question 16. What amount or level of incremental energy efficiency improvements or renewable resources, greater than ''business-as-usual,'' could/may come on line if credit for early action is given in the form of NO_X allowances from a set-aside that would be available for trading once the trading program begins?

Question 17. If no incremental projects could come on line under an early credit scheme, what are the barriers preventing them?

Another topic of importance in this area is the timing of applications for projects to be considered for NO_X allowances and how entities should apply. This concerns whether or not an end user may be awarded energy efficiency or renewables NO_X allowances prior to the implementation of the improvement, or if an award can only be made after the improvement is in place and has demonstrated results. While it would be unwise to award allocations based on estimated savings alone, greater incentive is provided to potential projects if the applicant has some degree of reasonable certainty of receiving allowances for a project that is being considered, provided that the expected energy savings and NO_X reductions are achieved. One option is to design a two-step application process, where an applicant makes a submission sufficiently prior to the first ozone season for which that efficiency/renewable project will be operational. The State would review the project proposal and pre-qualify that the project is eligible for allowances. Then prior to an ozone season, the applicant must make a demonstration (e.g., of six months or more) and verify whether the appropriate efficiency standard(s) or benchmark(s) has been met. If the demonstration and verification requirements are met, the State would then issue the appropriate amount of an allowance award. This option may provide more certainty to the project sponsor or applicant prior to undertaking the project and may give the State a better estimate of what level of activity will occur for efficiency set-aside allowances prior to the ozone season. However, this option will require two rounds of review for each project or application and so may be more administratively burdensome.

Another option would be to use a single-step application process, where applications would be made several months ahead of an ozone season for projects that are in place and can demonstrate and verify reductions at time of application. If the project meets eligibility criteria and expected reductions have occurred in line with efficiency standard or benchmark, the State would certify that applicant be awarded allowances for the appropriate ozone season(s). This second option may be less burdensome, but it may be more difficult to determine under this method which projects could be interpreted as ''business-as-usual'' types of projects, since they will already have been put in place without any guarantee of receiving NO_X allowances. In regard to determining the process for a project to apply for allowances, EPA requests the following information:

Question 18. Which option for reviewing and processing of applications for energy efficiency and renewables NO_X allowances is preferable and why? What is the estimated administrative burden associated with each option?

Question 19. Are there other options for reviewing and processing applications that offer a reasonable degree of incentive and certainty to applicants while minimizing the administrative burden to States? What is the estimated administrative burden?

The final matter in this issue area is how to handle over or under subscription of an energy efficiency and renewables set-aside pool. Two options outlined in EPA's December workshop discussion paper for dealing with leftover NO_X allowances in a given year or period include: (1) Banking the allowances to be used for potential shortfalls in future years, or (2) retiring them. The two options outlined in the December workshop discussion paper for dealing with shortfalls in NO_X allowances in a given year or period include: (1) Deferring allocation of allowances for later applicants in the cycle until the following year, or (2) setting aside a larger portion of allowances from the NO_X budget to award end use energy efficiency and renewables if shortfalls become a chronic problem. One response to this issue in the December workshop discussion paper recommends not setting a specific level of allowances in the set-aside, but rather allocating all NO_X allowances necessary to cover the eligible applications for efficiency and renewables measures in a given period first, then allocating the balance of allowances to NO_X budget units. However, the EPA is concerned that this method provides too little certainty to NO_X budget units in terms of being able to plan for the number of allowances they will need for a given ozone season and to consider allowance trading. Another suggestion received recommends discounting the allowances in the pool sufficiently to be able to cover any over subscription in a given period. This method would likely result in differences in the amount of allowances allocated to equivalent projects that are submitted for consideration in different periods. With respect to under or over subscription of the allowance pool, EPA requests the following information:

Question 20. Which of the options listed above for over subscription and for under subscription of the set-aside

pool is more administratively feasible for a State, and why?

Question 21. What other options or suggestions could be considered for handling the over subscription or under subscription of the set-aside pool?

• Issue (4) Persistence of Efficiency Award

Because energy efficiency and renewables measures result in permanent improvements in energy use and NO_X reductions, it may be appropriate to award energy efficiency and renewables NO_X allowances to these projects for more than one year. This provides a stream of allowances and provides greater incentive for incremental projects to be undertaken. There are tradeoffs, however, between the length of the stream of allowances awarded to a project and the ability to maintain sufficient availability of allowances over time to provide incentive for new projects that might not otherwise be financially viable. A shorter stream of energy efficiency NO_X allowances provides greater availability of such NO_X allowances over time to reward new projects, but provides less of an incentive (due to lower value) to undertake such projects. A longer stream provides more financial incentive, but limits the availability of allowances for future projects.

One respondent to the EPA December workshop discussion paper suggested that a five-year stream of allowances should be sufficient to provide incentive for new projects that might not otherwise be financially viable. And since the proposed NO_X Budget Trading Rule sets a five-year period as the duration of the initial allowance allocation to NO_X budget units, EPA believes that it is appropriate to set the duration of energy efficiency awards to five years. With regard to an appropriate duration of award for energy efficiency and renewables projects, EPA requests the following information:

Question 22. How large an incentive would a multi-year or a five-year stream of allowances provide for new energy efficiency or renewables projects that might not occur otherwise?

Question 23. What kinds of incremental projects might be implemented as the result of a multi-year or five-year stream of NO_X allowances?

• Issue (5) Verification Requirements and Procedures

In order to ensure that energy savings are measured in a reliable and consistent manner that provides valid information about the NO_X reductions achieved, and that can be used in translating these savings into their associated NO_X reductions for purposes of awarding NO_X allowances, a set-aside program should have effective verification requirements and procedures.

Some respondents to the December workshop discussion paper affirmed the need for strong measurement and verification protocols, but also stressed that it is important that the methods chosen should not be too complex. In addition, it was suggested that the methods and the degree of verification fit the type of measure and the entity. However, it is important that the methods used for measurements are reasonably consistent among all entities participating in any set-aside programs in the proposed ozone transport rulemaking region. Further, some respondents stated that the methods used for awarding set-aside allowances should be as accurate as the methods used for monitoring NO_X budget units for their use of allowances.

There are three major existing energy efficiency measurement protocols that may be used to verify reductions for purposes of a set-aside program: (1) The Conservation Verification Protocol (CVP) of the Acid Rain Program, (2) the International Performance Measurement and Verification Protocol (IPMVP) developed by DOE with energy service company (ESCO) input, and (3) New Jersey's Measurement Protocol for Commercial, Industrial and Residential Facilities (MPCIRF).

The CVP prescribes measurement methods and confidence levels for utilities to use in claiming sulfur dioxide (SO_2) allowances for savings produced by DSM measures. Although the CVP is comprehensive, this protocol may not be appropriate to EPA's purposes in a NO_X set-aside program because the CVP was developed for utilities, and the set-aside focuses on demand side improvements. DOE developed the IPMVP with ESCOs so they could use them with their customers to develop performance contracts for efficiency measures. The IPMVP however, has no regulatory component, and some of the verification methods it prescribes do not require the actual measurement of energy savings. The MPCIRF prescribes precise monitoring and verification methodologies by project type and also provides procedures for developing new monitoring and verification methods. In order to determine what kinds of reliable protocols exist or may need to be developed, EPA requests the following information:

Question 24. What is the degree of reliability and validity of the verification methods used in these protocols? What is the administrative burden associated with the use of one or more of these protocols?

Question 25. Are there particular parts or sections of one or more of these protocols that work particularly well and should be included in or used as a model in developing a new measurement and verification protocol? Why?

Question 26. What other protocols besides the CVP, the IPMVP and the MPCIRF exist that States or other entities have used to monitor and verify energy efficiency projects?

Question 27. What is the degree of reliability and validity of the verification methods used in these alternative protocols, and what is the associated administrative burden?

Where the degree of reliability and validity in the measurement of energy efficiency and renewables improvements is low, it is possible for a tradeoff to be made between the level of verification required (i.e., the certainty of load reduction) and the possibility that a given measure will not result in the expected load reduction. A discount factor or rate that is commensurate with the level of uncertainty of the reductions can be applied to lower the total amount of load reduction that would be awarded allowances. The less stringent the verification requirements, the higher the discount rates should be set.

One option in developing alternative verification/NO_X allowance discounting strategies is to determine the uncertainty bounds associated with a specific verification approach, and then set the discount rate such that there is, for example, a 90 or 95 percent probability that all of the allowances that would be awarded represent true load reductions. For a more conservative approach, the rate could be set at a 99 percent probability level. One variation on this option is to establish several verification/discount strategies rather than just one. These strategies could range from a low verification/high discount rate to a high verification/low or no discount rate. With regard to verification/allowance discounting strategies, EPA requests the following information:

Question 28. What are other options to the verification/allowance discounting strategies outlined above?

Question 29. What kinds of record keeping are currently done by States or others to monitor the progress and track the results of energy efficiency and renewables projects being done?

Question 30. Which option seems most manageable for States? Why?

VI. Interaction with Title IV NO_X Rule

On April 13, 1995, EPA promulgated NO_X emission rate limitations (in lb/mmBtu) for certain types of coal-fired utility boilers for the Acid Rain Program under title IV of the Act (60 FR 18751, April 13, 1995). The EPA set limits of 0.45 and 0.50 lb/mmBtu, respectively, for tangentially fired boilers and dry bottom, wall fired boilers (''Group 1 boilers''). On December 19, 1996, EPA promulgated additional NO_X emission rate limitations for Phase II of the program, i.e., revised limits for Group 1 boilers and new limits for cell burner, cyclone, wet bottom, and vertically fired boilers (''Group 2 boilers'') (61 FR 67112, December 19, 1996). In setting the December 19, 1996 NO_X limits, EPA also promulgated a final rule provision (which was to be included in 40 CFR part 76 of the acid rain regulations) that addressed the relationship between NO_X requirements under titles I and IV of the CAA. As part of recent litigation in which the December 19, 1996 regulations were upheld by the Court (*Appalachian Power* v. *U.S. EPA*, No. 96–1497, slip op. (D.C. Cir., February 13, 1998)), EPA requested a remand, which was granted by the Court, of 40 CFR 76.16 in order to provide additional opportunity for public comment on the provision. The EPA is therefore including in today's action a proposed 40 CFR 76.16 that is largely the same as the remanded rule provision. Obviously, in proposing a new 40 CFR 76.16, EPA is not requesting comment on any aspect of the December 19, 1996 final rule, including any issues addressed by the Court in *Appalachian Power*.

The EPA believes that NO_X reduction initiatives under title I and title IV should be coordinated, consistent with statutory requirements, in a way that promotes the goal of achieving necessary NO_X reductions in a cost-effective manner. In particular, today's proposed 40 CFR 76.16, which is proposed to be added to 40 CFR part 76 of the Acid Rain regulations under title IV, promotes this goal through provisions that address the interaction of: (i) efforts under title I, e.g., the proposed transport rulemaking, to reduce NO_X emissions through cap-and-trade programs; and (ii) the establishment of the title IV Phase II NO_X limits, i.e., the revised limits of 0.40 and 0.46 lb/mmBtu respectively for tangentially fired and dry bottom, wall-fired utility boilers and the new limits of 0.68, 0.86, 0.84, and 0.80 lb/mmBtu respectively for cell burner, cyclone, wet bottom, and vertically fired utility boilers.

Many utility boilers subject to the title IV Phase II NO_X limits are likely to face significant, additional NO_X reduction requirements as a result of the proposed SIP call. If, as EPA recommends, the proposed SIP call requirements are implemented in the form of a cap-and-trade program and the program results in utility NO_X emission reductions exceeding those that would be required by utility boilers complying with title IV Phase II NO_X limits, EPA believes that the cap-and-trade system should be relied on, in lieu of the title IV Phase II NO_X limits, to the fullest extent permissible under the CAA. Under such an approach, the reductions achievable under title IV will still be realized but in a manner that allows utilities to take advantage of the cost savings that result from flexibility, within a cap, to trade allowances among utilities, as well as among boilers owned by a single utility. Under the Acid Rain Program in title IV (as under other emission limit programs), each individual utility boiler must generally meet the applicable NO_X limit; only boilers with the same owner or operator may average their emissions and comply with a weighted average NO_X limit under a NO_X averaging plan.[20] Relief from the title IV Phase II NO_X limits is appropriately limited to utility boilers in the State or States covered by the cap-and-trade regime.

Under today's proposed § 76.16, the Administrator retains the authority to relieve boilers subject to a cap-and-trade program under title I from the Phase II NO_X limits under section 407(b)(2) if the Administrator finds that alternative compliance through the cap-and-trade program will achieve the same or more overall NO_X reductions from those boilers than will the section 407(b)(2) emission limitations. Section 76.16 sets forth the criteria that the cap-and-trade program must meet in order to ensure that the program will yield the necessary NO_X reductions. Since alternative compliance will be allowed only if the necessary NO_X reductions will still be made, this approach is consistent with the purposes of title IV and the Act in general.

The EPA believes that it has the authority under section 407(b)(2) to provide relief from the revised Group 1 limits and the Group 2 limits where the cap-and-trade program, replacing those limits, provides for the same or greater NO_X emissions reductions and thus the same or greater environmental protection. With regard to Group 1 boilers not subject to the existing Group 1 limits until 2000 (i.e., Group 1 Phase II boilers), section 407(b)(2) provides that the Administrator ''may'' establish more stringent emission limitations if more effective low NO_X burner technology is available (42 U.S.C. 7651f(b)(2)). The Administrator exercised her discretion to revise generally the Group 1 limits because more effective low NO_X burner technology is available, and the resulting additional reductions are cost effective, represent a reasonable step toward achieving regional NO_X reductions that are likely to be needed, and are consistent with section 401(b) (61 FR 671137). If it is determined that, for boilers in certain States, NO_X emissions will be the same or lower under a cap-and-trade program than under the revised Group 1 limits (and the Group 2 limits), it is reasonable to conclude that it is not necessary to revise the Group 1 limits for those boilers. Imposing the revised Group 1 limits on boilers subject to such a cap-and-trade program could limit the flexibility of utilities under the cap-and-trade program and thereby limit the potential cost savings from trading. While emissions averaging under section 407(e) provides some flexibility for a utility to overcontrol at its cheaper-to-control boilers and undercontrol at its more-expensive-to-control boilers, averaging is limited by statute to boilers with the same owner or operator. In contrast, under a cap-and-trade program, utilities may overcontrol at some of their units and sell NO_X allowances to other utilities that may undercontrol at some of their units. It is this greater flexibility, within a total annual emissions cap, that provides the opportunity to reduce compliance costs. If boilers subject to a cap-and-trade program are relieved of compliance with the revised Group 1 limits, this will likely result in achievement of reductions in a more cost-effective manner than if the revised Group 1 limits continued to be imposed on these boilers.

Section 407(b)(2) gives the Administrator discretion to make more stringent the initial Group 1 limits established in 1995, i.e., 0.45 and 0.50 lb/mmBtu respectively for tangentially fired and dry bottom wall-fired utility boilers (60 FR 18751), but not to relax these initial limits. Thus, the initial Group 1 limits will apply to Group 1 boilers covered by a cap-and-trade program. While retaining the initial Group 1 limits means that there may be less flexibility than if there were no

[20] In addition, if it is demonstrated that a boiler with installed NO_X control technology designed to meet the applicable standard NO_X limit cannot meet that limit, the boiler may be assigned a less stringent, alternative emission limitation under title IV.

section 407 limits on these boilers, relieving the boilers of the revised Group 1 limits still results in some increased flexibility and therefore is likely to yield cost savings.

Similarly, with regard to Group 2 boilers, section 407(b)(2) requires that the Administrator, taking account of environmental and energy impacts, set emission limits that are based on the reductions achievable using available control technologies with cost effectiveness comparable to low NO_X burners on Group 1 boilers. In setting the Group 2 limits, the Administrator relied in part on the additional NO_X reductions that will result and determined that these reductions are cost effective, represent a reasonable step toward achieving necessary regional NO_X reductions, and are consistent with section 401(b) (61 FR 67114). Again, if greater reductions from boilers in a State or group of States can be achieved through a cap-and-trade program in a more cost-effective manner than through imposition of Group 2 limits (and revised Group 1 limits) on the boilers, it is reasonable to relieve those units of the Group 2 limits. Taking account of these environmental and cost impacts, the Administrator can, in such circumstances, allow the cap-and-trade program to apply in lieu of the Group 2 limits.

Proposed 40 CFR 76.16 establishes the procedural and substantive requirements for relieving boilers of the revised Group 1 limits and the Group 2 limits. The proposed rule itself does not grant or require such relief. Instead, under the proposed rule, the Administrator has the discretion to act, on a case-by-case basis consistent with the established procedures, to provide such relief if he or she determines that the substantive requirements are met.

Consideration of whether to relieve boilers under a cap-and-trade program of the section 407(b)(2) limits may be initiated either by a petition by a State or group of States or on the Administrator's own motion. Because of the large number of utility companies and coal-fired boilers and the complexities that would result if relief from the section 407(b)(2) limits were considered on a boiler-by-boiler or utility-by-utility basis, the rule requires that any request for, and any determination whether to grant, such relief be made for an entire State or entire group of States. The cap-and-trade program involved must cover, for an entire State or group of States, all the units for which relief is sought or considered. This approach has the added benefit of making it more likely that the cap-and-trade program involved will be broad enough to provide a robust NO_X allowance market.

Further, the cap-and-trade program may be established through SIPs or FIPs covering the States involved. The relief from section 407(b)(2) limits is potentially available whether the cap-and-trade program is adopted voluntarily by States or imposed by EPA under title I. State petitions for such relief may be submitted, and the Administrator's consideration of whether to grant relief may begin, before the SIPs or FIPs (including revised SIPs or FIPs) establishing the cap-and-trade program are final and federally enforceable. This allows the process of deciding whether to grant relief from the section 407(b)(2) limits to be coordinated with the processing of these SIPs or FIPs. However, relief may not be granted until the SIPs or FIPs establishing the cap-and-trade program are actually in place, i.e., are final and federally enforceable.

The substantive requirements that must be met by the cap-and-trade program are essentially the same whether the program is implemented through a SIP or FIP and whether the consideration of relief from section 407(b)(2) limits is initiated by petition or on the Administrator's own motion. The Administrator has discretion to grant relief only if the cap-and-trade program meets certain requirements aimed at ensuring that the necessary NO_X reductions will still be achieved and that the program creates an opportunity for cost savings. First, each unit that is in the State or group of States and that would otherwise be subject to title IV NO_X emission limits must be subject to either (i) a cap on total annual NO_X emissions or (ii) two or more seasonal caps that together limit total annual NO_X emissions. This allows for a cap-and-trade program with different caps during different seasons, e.g., a summer cap consistent with the proposed trading rule and a cap for the rest of the year.

Second, the units must be allowed to trade authorizations to emit NO_X within the applicable cap. This element is what provides utilities the flexibility to reduce the costs of making the reductions necessary for achievement of the cap. If a utility demonstrates that relief from the title IV Phase II NO_X limits for units in a given State will make compliance less cost effective by limiting the utility's ability to use NO_X averaging plans to comply with the title IV NO_X limits that will still be applicable to the utility's units, the Administrator is required to take this into consideration in determining whether to approve such relief for units in that State.

Third, the units must surrender authorizations to emit NO_X (i.e., NO_X allowances) to account for their NO_X emissions during the period covered by the cap. It should be noted that this provision—and indeed the proposed 40 CFR 76.16 in general—do not address, and do not either require or bar, banking of NO_X allowances.

In addition, the units must be required to surrender allowances to account for any NO_X emissions consequences of reducing utilization at the generation facilities covered by the cap and shifting utilization to generation facilities not covered by the cap. This addresses a problem that potentially arises if a cap-and-trade program covers some but not all generation facilities. If, for example, a utility can reduce the use of a unit covered by the cap and offset the resulting reduced generation with increased generation at a unit not covered by the cap, circumvention of the cap may result. Shifting of utilization may be accomplished because of the nature of the electricity industry, which in general operates through an interstate transmission grid to which the generation facilities are connected. Because of the offsetting utilization changes at the two units, the atmosphere may receive the same total amount of NO_X emissions from the units. In addition, since only the reduced-utilization unit is subject to the cap and so allowances are used only to account for that unit's emissions, the unused allowances are available for use by other units subject to the cap. The net result is that the total emissions in the atmosphere (including emissions by the reduced-utilization unit, the increased-utilization unit, and the units acquiring and using the unused allowances) may exceed the cap. This is analogous to the reduced utilization problem in the SO_2 cap-and-trade program in Phase I, during which most units in the U.S. are not covered by the requirement to hold allowances for their SO_2 emissions (58 FR 60950, 60951, January 11, 1993). Section 408(c)(1)(B) of the CAA and 40 CFR 72.91 and 72.92 of the acid rain regulations require SO_2 allowance surrender to account for the emissions consequences of reduced utilization (60 FR 18462–63, 1995).

The NO_X cap-and-trade program must include appropriate allowance surrender provisions to address this problem by requiring NO_X allowance surrender to the extent necessary to account for the increased NO_X emissions, if any, at generation facilities (i.e., combustion devices serving

generators) not covered by the cap. The EPA recognizes that any allowance surrender provisions can only approximate the emissions consequences of shifting utilization from within-the-cap facilities to outside-the-cap facilities, (60 FR 18466). The EPA will evaluate NO_X allowance surrender provisions in light of this limitation and of the importance of adopting provisions that are workable and not overly complicated. The EPA believes that effective NO_X allowance surrender provisions can be developed that are less complex than those in place for reduced utilization in the SO_2 allowance trading program. The EPA also notes that the larger the group of States covered by the cap, and the more comprehensive the coverage by the cap of generation facilities in such States, the smaller the potential for shifting utilization from units under the cap to units outside the cap. The proposed rule, therefore, provides that the Administrator will consider showings that accounting for shifting utilization is not necessary because such shifting will not likely result in higher total NO_X emissions from sources in the State or the group of States involved or other States.

Fourth, the total annual emissions by all units that are subject to the cap and that would otherwise be subject to the section 407(b) limits must be equal to or less than the total annual emissions of such units if they were subject to the section 407(b) limits (without adjusting for alternative emission limitations and NO_X averaging plans). In determining the units' total annual emissions under the section 407(b) limits, the effect of alternative emission limitations—which reduce the amount of NO_X reductions achieved and whose precise levels for individual units would be difficult if not impossible to project—will not be considered. Requiring the cap-and-trade program to yield the same or fewer total annual emissions than the section 407(b) limits without considering alternative emission limitations will help ensure that the environmental benefits of the section 407(b)(2) are preserved under the cap-and-trade program (Economic Incentive Program Rules, 59 FR 16690, 16694, April 7, 1994).

In addition, the effect of averaging will not be considered in determining the units' total annual NO_X emissions because of the following reasons. If averaging is limited to units that are also subject to the cap-and-trade program, averaging is unnecessary to consider separately because it would not affect the total emissions of the averaging units under the section 407(b) limits (60 FR 18756 which explains that, considering actual annual utilization, actual weighted average emission rate of units in averaging plan cannot exceed weighted average emission rate if each unit had emitted at its 40 CFR 76.5, 76.6, or 76.7 limit and 60 FR 18769). If averaging includes units not subject to the cap-and-trade program and those units select emission rates under the plan that exceed the standard limits, this could have the effect of understating the reductions achieved under the title IV limits.

In order to avoid disputes over what period to use in comparing total annual emissions under the cap-and-trade program and the section 407(b) limits, the rule specifies how to select the period. The approach in the rule ensures that actual data is available for such period.

In addition to the substantive requirements for relieving units of the section 407(b)(2) limits, the rule addresses the procedures that the Administrator must follow in determining whether to exercise his or her discretion to grant relief. The Administrator must make this determination in a draft decision, subject to notice and comment, and then in a final decision. The draft decision must set forth not only the determination and its basis but also the specific procedures that will govern the issuance and any appeal of the final decision.

The proposed 40 CFR 76.16 imposes certain minimum procedural provisions that must be set forth in the draft decision. These procedural requirements are closely modeled after the procedures in 40 CFR part 72 of the Acid Rain regulations for the issuance of Acid Rain permits. Notice of the draft decision must be provided by service on interested persons, designated representatives of any sources with units otherwise subject to the title IV Phase II NO_X limits, and the air pollution control agencies in States that may be affected by the draft decision. The State agencies that must be provided notice include not only the States in which the units involved are located, but also neighboring States. The description in the proposed rule of the neighboring States (and areas in which there are federally recognized Indian Tribes) on which notice must be served is based on the provisions of the definition of ''affected States'' and the affected State review provisions in the 40 CFR part 71 regulations, which govern federal issuance of title V operating permits (61 FR 34202, 34229, and 34242–43, July 1, 1996). Notice must also be provided in the **Federal Register** and equivalent State publications. Notice in newspapers in general circulation in the areas in which the units involved are located is not required. The EPA maintains that newspaper notice in these circumstances is unnecessary, particularly since any NO_X cap-and-trade program being evaluated will have to go through notice and comment in order to be included in a SIP or FIP. Newspaper notice could also be unworkable in light of the number of units and States that could be involved.

The provisions for public comment period and public hearing are essentially the same as those in 40 CFR part 72. Notice must be given of the final decision in the same manner as notice of the draft decision. Any appeals of the final decision are governed by 40 CFR part 78, which governs other acid-rain-related decisions of the Administrator.

Finally, after the Administrator decides to relieve units of the section 407(b)(2) limits in light of a given cap-and-trade program, the SIP or FIP could potentially be revised in a way that may affect the cap-and-trade program and the basis for the Administrator's decision. In such circumstances, the Administrator may reconsider the decision to grant relief from the section 407(b)(2) limits. The ability to reconsider is explicitly preserved in the rule in order to ensure that the environmental benefit of the section 407(b)(2) limits that would otherwise apply to the units involved continues to be realized.

VII. Air Quality Assessment of the Statewide Emissions Budgets

A. Background Information

This Section contains an assessment of the impacts of the proposed budgets on ozone concentrations within the OTAG region. The assessment is based on photochemical modeling of the entire OTAG region for three emissions scenarios, a Base Year, a 2007 Base Case and the proposed statewide budgets. Modeling was performed for the four OTAG episodes using the OTAG version of UAM-V. The emissions associated with each State's budget were modeled collectively to examine the net benefits of the budgets applied across the 23 jurisdictions. The procedures for developing the emissions inputs for the Base Case and the Budget scenario are described in Section VII.B, Emissions Scenarios. A number of metrics were used to evaluate the impacts of the budgets on ozone concentrations, as described in Section VII, C, Analysis of Modeling Results. Finally, the results of

this assessment are provided in Section VII.D, Analysis Results and Findings. All of the model-ready emissions inputs and model predictions can be obtained in electronic form from the following EPA website: http://www.epa.gov/scram001/regmodcenter/t28.htm

B. Emissions Scenarios

The EPA modeled three emissions scenarios for each of the four OTAG episodes: Base Year, 2007 CAA Base Case, and 2007 Budget (command and control). Collectively, these scenarios are designed to provide a means to examine the expected impacts of the proposed budgets on ozone within the OTAG modeling domain. The Base Year scenario is intended to generally reflect emissions during the 1994–1996 time period. The CAA Base Case reflects growth to 2007 and controls mandated by the 1990 Clean Air Act Amendments, similar to the OTAG ''2007 Base1c'' scenario. The 2007 Budget scenario caps NO_X emissions, by State, at the level in the SIP call, as modified to correct minor errors and omissions identified by EPA subsequent to the November 7, 1997 SIP call.

1. Development of Emissions Inputs

a. Electric Generation Sources. For electric generation units (EGU), the Base Year is a composite of 1995 and 1996. The 1996 emissions were used unless heat input at a State level was higher in 1995. For those States, 1995 emissions were used. This is consistent with the budget development approach. For the 2007 Base Case, growth was applied to existing sources and CAA mandated controls, including title IV and RACT, were applied to all sources in the modeling domain. No additional controls beyond those mandated by the CAA were applied. For the 2007 Budget scenario, growth was applied to existing sources and the emission rate for each source >25 MWe in the 23 jurisdictions covered by the SIP call was set at .15 lb/mmBtu. Note that this application of the .15 lb/MMBtu limit does not reflect an emissions trading program. For sources outside the 23 jurisdictions but inside the modeling domain, the 2007 CAA Base Case emission rates were retained. Details on the development of these emissions scenarios are described in the revised Budget TSD.

b. Non-Electric Generation Point Sources. For the non-EGU point sources, the Base Year is 1995. The emissions are essentially the OTAG 1990 emissions projected to 1995 with a few minor changes. The 2007 emissions are the OTAG Base1c emissions with changes. The main change that was made was to reclassify certain sources as non-utility where they were incorrectly classified as utilities in the OTAG inventory. For the Budget scenario, a 70 percent reduction was applied to uncontrolled 2007 projected emissions for large sources (i.e. >250 MMBtu/hr). For medium sources (i.e. <=250 MMBtu/hr and emitting more than 1 ton/day) RACT was applied. For all small sources in the 23 jurisdictions and all sources outside these areas but inside the modeling domain, the 2007 CAA Base Case emissions were used.

c. Mobile and Area Sources. For the highway, nonroad and stationary area source sectors, EPA used the OTAG 1995 emissions for the Base Year and the OTAG 2007 Basic emissions for the 2007 CAA Base Case. For the Budget scenario, emissions for these sectors were modeled using OTAG ''level 0'' for highway mobile and OTAG ''level 1'' for stationary and nonroad area sources within the 23 jurisdictions covered by the SIP call. For areas outside these areas but inside the modeling domain, the 2007 CAA Base Case emissions were used.

2. Emission Summaries

State-level summaries of the weekday NO_X emissions used for modeling the Base Year, 2007 CAA Base Case, and Budget scenario are shown in Tables VII–1 through VII–3, respectively. For the purpose of these summaries, area sources include both stationary and nonroad area sources. The mobile emissions are day-specific and are presented for July 7, 1988. Where partial States are included in the modeling domain, only the emissions from the part of the State in the domain are presented. Table VII–4 shows the percent reduction between the 2007 CAA Base Case and the Budget NO_X emissions used as input for modeling.

C. Analysis of Modeling Results

1. Technical Procedures

The impacts of the proposed budgets on 1-hour and 8-hour ozone concentrations in each State are evaluated using various ozone ''metrics'' [21]. The focus of the analysis is on ozone predictions above the 1-hour and 8-hour NAAQS in areas which currently measure violations of these standards. This State-level assessment is supplemented with the OTAG Standard Table of Metrics to quantify the impacts in several ozone ''problem areas'' identified by OTAG. The remainder of this Section describes the procedures for calculating the metrics used in this assessment.

a. State-Level Analysis. Nine metrics were used to quantify the impacts of the budgets on ozone concentrations in each State. The metrics are listed below and defined in Section C.1.a.ii, Procedures for Calculating State-Level Metrics.

1-Hour Metrics

Metric 1—the number of grid cells with 1-hour daily maximum ozone concentrations >=125 ppb,

Metric 2—the magnitude and frequency of the ''ppb'' reductions in 1-hour daily maximum ozone concentrations >=125 ppb,

Metric 3—the number of days with 1-hour daily maximum ozone concentrations >=125 ppb, and

Metric 4—the ''areal exposure'' to hourly ozone concentrations >=125 ppb [22] (see definition in Section C.1.a.ii, Procedures for Calculating State-Level Metrics).

8-Hour Metrics

Metric 5—the number of grid cells with average second high 8-hour ozone concentrations >=85 ppb,

Metric 6—the magnitude and frequency of the ''ppb'' reductions in average second high 8-hour ozone concentration >=85 ppb,

Metric 7—the number of grid cells with 8-hour daily maximum ozone concentrations >=85 ppb,

Metric 8—the magnitude and frequency of the ''ppb'' reductions in 8-hour daily maximum 8-hour ozone concentrations >=85 ppb, and

Metric 9—the number of days with 8-hour daily maximum ozone concentrations >=85 ppb.

i. Selection of Grid Cells for Analysis. As noted above, the focus of this analysis is to evaluate the impacts of the budgets on concentrations in areas which violate the NAAQS. In this regard, the first step in calculating the metrics was to select appropriate sets of grid cells for analysis. The approach to grid cell selection is similar to that used in the proposed SIP call, Section II, ''Weight of Evidence Determination of Significant Contribution'' to quantify the contributions from upwind subregions on downwind nonattainment. Different sets of grid cells were selected for analyzing the results relative the 1-hour NAAQS and the 8-hour NAAQS. For both standards, there are two generic types of grid cells. The first type must meet the following

[21] Metrics are an aggregate of ozone concentrations or the difference in ozone concentrations between two or more scenarios. Metrics are used to provide a means of quantitatively evaluating multiple strategies.

[22] In brief, this metric represents the sum of the concentrations for all hourly ozone values >=125 ppb, divided by the area (km^2) covered by predictions >=125 ppb.

two-part test: (a) The grid cell must correspond geographically to (i.e. overlay) a county which currently violates the NAAQS and (b) the grid cell must have predicted ozone concentrations above the concentration level of the NAAQS (e.g. >=125 ppb for the 1-hour NAAQS and >=85 ppb for the 8-hour NAAQS). The second generic type of grid cell must meet only the second part of this two part test. That is, the grid cell must have predicted ozone above the NAAQS but may or may not be associated with a county violating the NAAQS. The 1-hour and 8-hour State-level metrics identified above were calculated for both types of grid cells. The rationale and procedures followed in the grid cell selection process are described below.

First, 1994–1996 ambient monitoring data were used to identify counties which currently violate the 1-hour and 8-hour NAAQS. A list of these counties is contained in the docket for this notice. The grid cells in the OTAG region were then screened to identify those grids which at least partially overlay one of the 1-hour violating counties. The same procedure was followed using the 8-hour violating counties. This process resulted in one set of grid cells associated with areas violating the 1-hour NAAQS and a separate set associated with areas violating the 8-hour NAAQS. The next step was to select the subset of 1-hour ''violating grid cells'' which also have predicted ozone concentrations above the NAAQS. For this, the 1-hour daily maximum concentrations for the 2007 Base Case model runs were examined to identify which grid cells had predicted values >=125 ppb during any one of the 4 episodes. The grid cells that met this test were then selected for analysis using the 1-hour metrics.

For the 8-hour analysis, the procedures for selecting the subset of grid cells was more complicated due to the distinction between the form of the 8-hour NAAQS and the episodic nature of the model predictions. In this regard, two sets of 8-hour predictions were included for analysis. One set considers those grid cells with 8-hour daily maximum concentrations >=85 ppb in the 2007 Base Case model runs (this set is analogous to the set of 1-hour data described above). Thus, a set of grid cells which (a) corresponds to counties violating the 8-hour NAAQS and (b) has 8-hour predictions >=85 ppb was selected for calculating the 8-hour metrics. However, although the analysis of 8-hour daily maximum values may provide useful information on the impacts of the budgets relative to high 8-hour concentrations, these data do not necessarily correspond to the form of the 8-hour NAAQS. In this regard, we also considered the approach followed in the proposed SIP call for dealing with this issue. That approach involved using ozone measurements to ''link'' the fourth highest 8-hour form of the NAAQS, based on three years of data, to the episodes modeled by OTAG (Staff Report-Procedures for Linking the OTAG Episodes to the 8-Hour Ozone NAAQS, October 1997, docket number, II–A–25). The results of that analysis indicate that the episodic average of the second highest 8-hour observed concentrations during the 1991, 1993, and 1995 episodes correspond best ''overall'' to the fourth highest 8-hour values calculated using 3 years of measured data. For the assessment of the budgets, the second highest 8-hour values averaged across the 1991, 1993, and 1995 episodes were calculated for each grid cell. Those grid cells which (a) correspond to counties violating the 8-hour NAAQS and (b) have an average second high 8-hour prediction >=85 ppb were selected for calculating the 8-hour metrics. Thus, for the 8-hour analysis, separate metrics were calculated for the daily maximum 8-hour values and for the average second high 8-hour values.

The previous discussion dealt with selecting grid cells which meet the two-part ''monitoring plus modeling'' test for both the 1-hour and 8-hour NAAQS. The other type of grid cell selected for analysis must only meet the model prediction part of the tests described above. The rationale for using this second type of grid cell is discussed next. Although the ''violating county'' grid cells may be most appropriate for this assessment because they are associated with areas violating the NAAQS, there are a number of limitations with this approach which warrant further consideration. First, in terms of the modeling data, the requirement that high ozone predictions spatially coincide with violating counties may be overly limiting given the uncertainties in the modeled wind regimes associated with the regional nature of the meteorological inputs. Also, the set of ''violating county'' grid cells excludes all grid cells that are over water and not touching any State land areas. In the real atmosphere, sea breeze and lake breeze wind flows can transport high ozone levels over water back on-shore to affect coastal land areas. This meteorological process is not fully treated in the model because of the coarse horizontal resolution of the grid cells (i.e. 12 km). Thus, high concentrations predicted just offshore may be inappropriately excluded from an analysis that is limited to the set of ''violating county'' grid cells. In terms of limitations to the monitoring data, there are relatively large areas in some portions of the domain without any monitors. Since the model predicts concentrations in grid cells which cover the entire domain, the model predictions may indicate an ozone problem in areas without monitors. In an attempt to address these concerns, grid cells were selected for analysis based on model predictions only. The criteria for selecting these grid cells involved the modeling part of the two part test described above. That is, for the 1-hour NAAQS a set of grid cells was selected if they have daily maximum 1-hour predictions >=125 ppb. Similarly, there are two sets of 8-hour grid cells. One set contains those grid cells with daily maximum 8-hour predictions >=85 ppb and the other set contains grid cells with an average second high 8-hour value >=85 ppb. Also, note that in this approach, all grid cells over land as well as over each of the Great Lakes and in a band 60 km (5 grid cells) wide along the East Coast are considered depending on whether or not they passed these 1-hour and 8-hour concentration tests.

ii. Procedures for Calculating State-Level Metrics. Each of the 1-hour and 8-hour metrics identified in Section C.1.a, State-Level Analysis, was calculated for the two types of grid cells described above. The procedures for calculating these metrics are described next. The results are discussed in Section D, Analysis Results and Findings. Metric 1 was calculated by first screening the 2007 Base Case 1-hour daily maximum predictions for each grid cell to select only those days with concentrations >=125 ppb. The daily maximum predictions from the Budget scenario for these same days and grids were also selected for analysis. The values from the Budget scenario were then subtracted from the corresponding 2007 Base Case values to derive a set of ''ppb'' differences for each day [23] and grid cell with ozone >=125 ppb in the Base Case. These ''ppb'' reductions were then grouped into seven concentration ranges (i.e. 2–5 ppb, 5–10 ppb, 10–15 ppb, 15–20 ppb, 20–25 ppb, and >25 ppb) and tallied by State. Metric 2 is simply a tabulation of the number of grid cells with at least one daily maximum ozone 1-hour concentration >=125 ppb. This metric was calculated

[23] Note that EPA followed the procedures established by OTAG by excluding predictions from the first three days of each episode from the calculation of metrics. These days are considered ''ramp-up'' days when ''initial'' conditions to the model might effect predictions.

for both the 2007 Base Case and the Budget scenario. For Metric 3, the number of days with a daily maximum ozone prediction >=125 ppb was tallied for each grid cell for both the 2007 Base Case and for the Budget scenario. These data were aggregated to show the number of grid cells that had 1 day, 2–4 days, 5–9 days, 10–14 days, or >=15 days with predicted 1-hour daily maximum ozone concentrations >=125 ppb. Metric 4 (areal exposure) was calculated by first summing all hourly concentrations that are >=125 ppb (i.e. add together the predicted hourly ''ppb'' values that are >=125 ppb) for each grid cell individually, for each day. These ''daily exposure'' values in each grid were then summed by grid cell over all days in all 4 episodes to produce the total exposure for each grid cell. The resulting grid cell exposure values were summed by State for all grid cells (with predictions >=125 ppb) in the State. The State total exposure values were then divided by the total area covered by the grid cells used in the calculations to produce the ''areal exposure'' values in units of ppb-hrs per km^2.

Procedures for calculating the five 8-hour metrics are similar to those followed for calculating the corresponding 1-hour metrics except that the 8-hour values (i.e. the 8-hour daily maxima and the average second high 8-hour values) were used in the calculations.

b. OTAG Standard Table of Metrics. As part of OTAG, a Standard Table of Metrics was developed to evaluate the relative effectiveness of OTAG's strategies. This table contains a set of 22 metrics which are calculated for each of 22 geographic areas. The OTAG Standard Table of Metrics for the Budget scenario compared to the 2007 Base Case is provided in the docket. From this full set of data, five of the metrics calculated for the 12 OTAG ozone ''problem areas'' were selected for analysis because of their relevance to this assessment. These metrics are listed below. The remaining OTAG metrics were not considered as applicable primarily because they do not focus on concentrations above the NAAQS. The 12 OTAG ''ozone problem areas'' are shown in Figure 1. The other 10 areas for which the OTAG metrics were calculated overlap these 12 areas. Note that the OTAG metrics are calculated using all grid cells that meet the criteria of the individual metrics. No attempt was made by OTAG to relate the grid cells used in these calculations to counties violating the NAAQS.

1-hr Metrics

- Number of grid cells with a 1-hour daily maximum ozone concentrations >124 and >140 ppb,
- ''Weighted sum of differences'' when the 2007 Base Case prediction is >124 ppb,
- Number of grid cells with a decrease of more than 4 ppb (2007 Base vs Budget) in daily maximum ozone when the 2007 Base Case ozone is >124 ppb, and
- Number of grid cells with an increase of more than 4 ppb (2007 Base vs Budget) in daily maximum ozone when the 2007 Base Case ozone is >124 ppb.

8-hr Metrics

- Number of grid cells with 8-hour daily maximum ozone concentrations >84 and >100 ppb.

The preceding 1-hour and 8-hour OTAG metrics are self-explanatory, except for the ''weighted sum of differences.'' In calculating this metric the change in daily maximum 1-hour ozone in a grid cell is multiplied by the corresponding 2007 Base Case ozone prediction in that grid cell. These concentration-''weighted'' differences are calculated for each day and then summed for the episode. Finally, the sum of ''weighted'' differences is divided by the sum of the 2007 Base Case daily maximum concentrations to produce the values for this metric. This metric provides a means for examining the ''average'' ozone reduction in a way that gives more importance or ''weight'' to reductions that occur at high concentrations.

D. Analysis Results and Findings

1. Introduction

The results and conclusions found in this Section are based on the suite of metrics outlined above in Section C, Analysis of Modeling Results. The discussion is organized such that the impacts on 1-hour concentrations and the impacts on 8-hour concentrations are presented separately. For each NAAQS the results for the State-level metrics are followed by the results for the OTAG ''problem areas.''

As indicated in Section C.1, Technical Procedures, the focus of this assessment is on the impacts of the budgets on 1-hour and 8-hour ozone above the NAAQS in areas which currently measure violations of these standards. In this regard, the discussion of the State-level impacts addresses only those metrics calculated using the ''violating county'' grid cells. The data for all metrics calculated using the set of grid cells selected based on model predictions only are included in the docket. Also, the discussion for the 8-hour NAAQS is based on the metrics calculated for the average second high 8-hour concentrations since this was found to best represent the form of the 8-hour NAAQS. The data for metrics calculated using the 8-hour daily maximum predictions are included in the docket.

For the State-level analyses, the modeling domain was divided into several regions. The impacts across the 23 jurisdictions subject to the SIP call are addressed separately for States in the Midwest, Southeast, and Northeast. The States included in each of these regions are listed in Table VII–5. For completeness, all of the metrics were also calculated for those States within the domain that are not subject to the SIP call. These data are included in the docket.

a. Impacts on 1-Hour Ozone Concentrations. The State-level analyses of 1-hour concentrations included Metrics 1–4: (1) The number of grid cells with 1-hour daily maximum concentrations >= 125 ppb; (2) the magnitude and frequency of the ''ppb'' reductions in 1-hour daily maximum ozone concentrations >= 125 ppb; (3) the number of days with 1-hour daily maximum ozone concentrations >= 125 ppb; and, (4) the ''areal exposure'' to hourly ozone concentrations >= 125 ppb. For ease of communication in the discussion of results, the following terminology is used in referring to these metrics:

Metric 1: the extent of ''nonattainment,''

Metric 2: the magnitude and frequency of ''nonattainment,''

Metric 3: the number of ''nonattainment'' days in each grid cell, and

Metric 4: exposure to ''nonattainment.''

In addition to the State-level analysis, the impacts on 1-hour ozone in the OTAG ''problem areas'' were investigated using several of the standard OTAG metrics, including: (1) The number of grid cells with daily maximum 1-hour ozone >124 ppb; and the number of grid cells with daily maximum 1-hour ozone >140 ppb; (2) the weighted sum of differences when the 2007 Base Case prediction is >124 ppb; and, (3) the number of grid cells with an increase of more than 4 ppb when the 2007 Base Case ozone is >124 ppb versus the number of grid cells with a decrease of more than 4 ppb when the 2007 Base Case ozone is >124 ppb. This last metric is designed to compare the regional benefits of NO_X emissions reductions to possible local disbenefits.

The results for these OTAG metrics follow the discussion of the State-level results.

i. State-Level Analyses—1-Hour Concentrations. The 1-hour metrics for States in the Midwest, Southeast, and Northeast are provided in Tables VII–6, VII–7, and VII–8, respectively. For the Midwest, the results indicate that the overall extent of 1-hour nonattainment (Metric 1) is reduced by 74 percent in this region as a result the emissions reductions provided by the Budget scenario. The results for Metric 2 indicate that over 50 percent of the ''ppb'' reductions in ozone are in the 10–15 ppb range or greater, with reductions in the magnitude of nonattainment at more than 25 ppb in Illinois and Indiana. In Michigan, nearly all of the reductions were in the range of 10–15 ppb or more. The results for Metric 3 show a large reduction in the number of 1-hour nonattainment days in four out of the five States having nonattainment in the 2007 Base Case. Note that although the number of nonattainment days in Ohio did not decline, the concentrations on these days were reduced, but not to below 125 ppb. In terms of exposure to nonattainment (Metric 4), there were large reductions in exposure for each of the 3 episodes that produced high concentrations in this region (i.e. 1988, 1991, and 1995). Overall, exposure to nonattainment was reduced by 77 percent in the Midwest as a result of the emissions reductions associated with the budget.

States in the Southeast are also predicted to have large benefits in mitigating the 1-hour nonattainment problem as a result of the budgets. The overall extent of nonattainment (Metric 1) is predicted to decline by 44 percent in this region with reductions of approximately 50 percent in Tennessee and Alabama. Large ''ppb'' reductions are also predicted using Metric 2. The four States with 1-hour nonattainment problems in the region (Alabama, Georgia, Tennessee, and Virginia) have reductions of 15 ppb or more. In Alabama, 34 percent of the reductions exceed 20 ppb and in Georgia, 48 percent of the reductions exceed 20 ppb. The number of nonattainment days is also reduced in the Southeast (Metric 3), but not to the same degree as in the Midwest. Still, the number of grid cells with one or more nonattainment days is reduced by 25 percent in Georgia and by 38 percent and 43 percent in Alabama and Tennessee, respectively. Looking at Metric 4 indicates that the total exposure to nonattainment across the Southeast was cut in half. For individual States and specific episodes, the reduction in exposure in this region ranged from 30 percent to 100 percent.

The emissions reductions in the budget are predicted to produce an overall 48 percent decline in the extent of nonattainment in the Northeast (Metric 1). The extent of nonattainment in Maryland and Pennsylvania was reduced by approximately 50 percent and by more than 70 percent in Delaware, Massachusetts, New Jersey, and Rhode Island. The ''ppb'' reductions (Metric 2) were greater than 25 ppb in Delaware, Maryland, Massachusetts, New Jersey, and Pennsylvania. The results for Metric 2 also indicate that the magnitude of nonattainment is reduced by 15 ppb or more in seven of the Northeast States (Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, and Pennsylvania). The total number of grid cells across the region with more than two nonattainment days declined by 46 percent (Metric 3), while the number of grid cells with more than five nonattainment days declined by 75 percent. Also, the exposure to nonattainment (Metric 4) in the Northeast was reduced in half as a result of the budgets. Except for Washington, DC, which had relatively low exposure because it covers a much smaller area than the Northeast States, the total exposure to nonattainment was reduced in the range from 44 percent in Connecticut to 89 percent in Maine.

ii. Ozone Problem Area Analyses—1-Hour Concentrations. In reviewing the metrics for the ozone ''problem areas,'' the analyses are restricted to the 3 sections of the Northeast Corridor and selected ozone problem areas: Richmond, Atlanta, Nashville, St. Louis, Louisville-Cincinnati, Lake Michigan Area, Detroit, Pittsburgh and Charlotte. The metrics are presented in Table VII–9 for each episode considered along with a composite for all four episodes.

The results for the three portions of the Northeast Corridor indicate that there is an overall decline of 40 percent to 67 percent in the number of grid cells with concentrations exceeding 124 and a somewhat comparable decrease of 51 percent to 65 percent in exceedences of 140 ppb. Reductions in these two metrics occur across all four episodes. The ''weighted sum of differences'' metric provides a way to quantify the ''ppb'' reductions in ozone with greater ''weight'' given to the reductions when concentrations are high. The results for this metric indicate that most of the ''ppb'' reductions in the three Northeast Corridor areas range from approximately 12 ppb to 18 ppb.

Examining the 1-hour metrics for the other problem areas indicates that all of the areas were predicted to have large decreases in the number of grid cells exceeding 124 ppb and 140 ppb. In general, the reductions in this metric are comparable to what was predicted for the Northeast Corridor. Specifically, in six areas (Nashville, Louisville-Cincinnati, Richmond, St Louis, Pittsburgh, and Charlotte), the number of grid cells >124 ppb decreases by 70 percent or more. Considering the ''weighted sum of differences'' metric, the ''ppb'' reduction in six of the areas outside the Northeast Corridor (Atlanta, Richmond, Nashville, Louisville-Cincinnati, Pittsburgh, and Charlotte) were generally close to, or greater than, 20 ppb.

In addition to evaluating the impact of the budgets in terms of ozone reductions, the model predictions were also examined to determine the extent of any increase or ''disbenefit'' in ozone concentrations. In this regard, EPA compared the number of grid cells exceeding 124 ppb that had more than a 4 ppb increase versus the number of such grid cells with more than a 4 ppb decrease. The results indicate that the extent of reductions in ozone far exceeds any increases. In two of the three Northeast Corridor areas, as well as in all of the other problem areas, more than 90 percent of the daily maximum values exceeding 124 ppb were reduced by 4 ppb or more. In terms of ozone ''disbenefits,'' five areas had no increases greater than 4 ppb. In those areas with a predicted increase, these increases represent a very small fraction of the total number of exceedences of 124 ppb.

b. Impacts on 8-Hour Ozone Concentrations. The analyses presented in this Section for the 8-hour ozone concentrations follow the same format as the previous discussion on 1-hour ozone concentration metrics. The State-level analysis is presented first followed by the analysis of the OTAG Metrics. The State-level metrics include Metric 5: the number of grid cells with average second high 8-hour ozone concentrations >= 85 ppb and Metric 6: the magnitude and frequency of the ''ppb'' reductions in average second high 8-hour ozone concentrations >= 85 ppb. Note that fewer 8-hour metrics are considered in this analysis because the link to the form of the 8-hour NAAQS results in a single average second high value in each grid cell. Thus, metrics involving ''multiple days'' or ''multiple hours'' are not directly applicable to the 8-hour NAAQS. Like the 1-hour discussion, for ease of communication of results, the following terminology is used in referring to these metrics:

Metric 5: the extent of ''nonattainment'' and

Metric 6: the magnitude and frequency of reductions in ''nonattainment.''

The 8-hour analysis includes the same geographic regions as the 1-hour analysis.

i. State-Level Analyses—8-Hour Concentrations. The results for the 8-hour metrics are presented for the Midwest, Southeast and Northeast in Tables VII–10, VII–11, and VII–12, respectively. In the Midwest, the proposed budgets reduced the overall extent of 8-hour nonattainment (Metric 5) by 89 percent. Six States (Kentucky, Indiana, Illinois, Michigan, Ohio, and West Virginia) have reductions of more than 80 percent. The magnitude and frequency of reductions is also large (Metric 6). Specifically, 97 percent of all of the ''ppb'' reductions are 5 ppb or greater and 21 percent of the reductions are 15 ppb or greater. In the Southeast, the overall extent of nonattainment (Metric 5) declines by 78 percent. All of the States in this region (Alabama, Georgia, North Carolina, South Carolina, Tennessee, and Virginia) show a decline in this metric of 60 percent or more. In addition, 80 percent of the ''ppb'' reductions are 10 ppb or greater with reductions of over 20 ppb in North Carolina. The Northeast region has a somewhat lesser reduction in the extent of 8-hour nonattainment (Metric 5) compared to the other two regions, with an overall reduction in this metric of 65 percent. Two States (New Jersey and Connecticut) have reductions in the extent of 8-hour nonattainment of approximately 60 percent while two other States (Delaware and Pennsylvania), along with Washington, DC have reductions in this metric of over 90 percent. In terms of the magnitude of the ''ppb'' reductions in nonattainment (Metric 6), approximately 97 percent of the reductions are greater than 5 ppb, 62 percent are greater than 10 ppb, and 9 percent are greater than 15 ppb. Looking at the individual States indicates that four States (Delaware, Maryland, New Jersey, and Pennsylvania) all have ''ppb'' reductions in the 15–20 ppb range.

ii. Ozone Problem Area Analyses—8-Hour Concentrations.

To investigate impacts on 8-hour ozone in the OTAG ''problem areas,'' two of the standard OTAG metrics were analyzed:

- the number of grid cells with 8-hour daily maximum ozone > 84 ppb; and
- the number of cells with 8-hour daily maximum ozone > 100 ppb.

The results, as provided in Table VII–13, indicate that the extent of high 8-hour concentrations in the northern and central portions of Northeast Corridor is generally reduced by 30 percent to 40 percent, considering all 4 episodes combined. The reductions are somewhat greater in the southern Corridor at 46 percent to 67 percent. For the problem areas outside the Corridor, seven of the areas (Atlanta, Charlotte, Louisville-Cincinnati, Nashville, Pittsburgh, and Richmond) had reductions of approximately 60 percent or more in the extent of 8-hour concentrations exceeding 84 ppb and 100 ppb.

2. Summary and Conclusions

In summary, the air quality impacts of the proposed budgets were modeled for the four OTAG episodes. The result were evaluated by comparing ozone predictions from the Budget scenario to a 2007 Base Case reflecting emissions reductions associated with CAA control programs. A number of 1-hour and 8-hour metrics were used to quantify the impacts at the State-level. In addition, several of the relevant metrics from the OTAG Standard Table of Metrics were examined to evaluate the impacts in ozone ''problem areas'' within the region.

The results of this analysis lead to the following major conclusions:

(1) The emissions reductions associated with the proposed statewide budgets are predicted to produce large reductions in both 1-hour and 8-hour concentrations in areas which currently violate the NAAQS and which would likely continue to have violations in the future without the SIP call budget reductions.

(2) Looking at individual ozone ''problem areas'' considered by OTAG shows similar results, based on the available metrics.

(3) Any ''disbenefits'' due to the NO_X reductions associated with the budgets are expected to be very limited compared to the extent of the ''benefits'' expected from these budgets.

(4) Even though the budgets are expected to reduce 1-hour and 8-hour ozone concentrations across all 23 jurisdictions, the analysis indicates that nonattainment problems requiring additional local control measures will likely continue in some areas currently violating the NAAQS (see also Section I.B, Updates with 1994–96 Air Quality Data).

E. Alternative Approaches

The effect of NO_X emissions on air quality in areas violating air quality standards depends, in part, on the distance between sources and receptor areas. Sources that are closer to areas violating air quality standards tend to have larger effects on air quality than sources that are far away. If there is significant variation in the contribution of emissions in different subregions within the 23-jurisdiction area, alternative approaches to calculating States' budgets other than those based on the application of uniform control measures will be evaluated. On the other hand, the large number of nonattainment areas spread out over the region and the several different weather patterns associated with summertime ozone pollution episodes should also be considered when evaluating a subregional approach. The EPA plans to evaluate alternative approaches in developing the final rule. These will consider alternative uniform approaches at levels below and above the proposal level as well as regional approaches that apply different control levels to different geographic regions.

The EPA solicited comment in the November 7, 1997 NPR on approaches for establishing State emissions budgets that factor in the differential effects on air quality in areas violating a standard. Comments advocating alternative approaches would be most helpful if they set forth concrete proposals on what analysis should form the basis of budget calculations. For example, some have suggested an approach that would attempt to quantify more explicitly the cost effectiveness of emissions reductions in terms of improvements in ambient ozone concentrations in areas violating a standard (measured, for example, as cost per population-weighted changes in parts per billion peak ozone concentration) taking into account the location of control measures through subregional modeling. If after review of alternative approaches (including sub-regional modeling analyses submitted by the States and other commenters), EPA concludes that a new approach is appropriate, EPA will issue a SNPR.

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Figure VII–1. Twelve of the Ozone "Problem Areas" Selected by OTAG

Figure VII-1. Twelve of the Ozone "Problem Areas" Selected by OTAG.

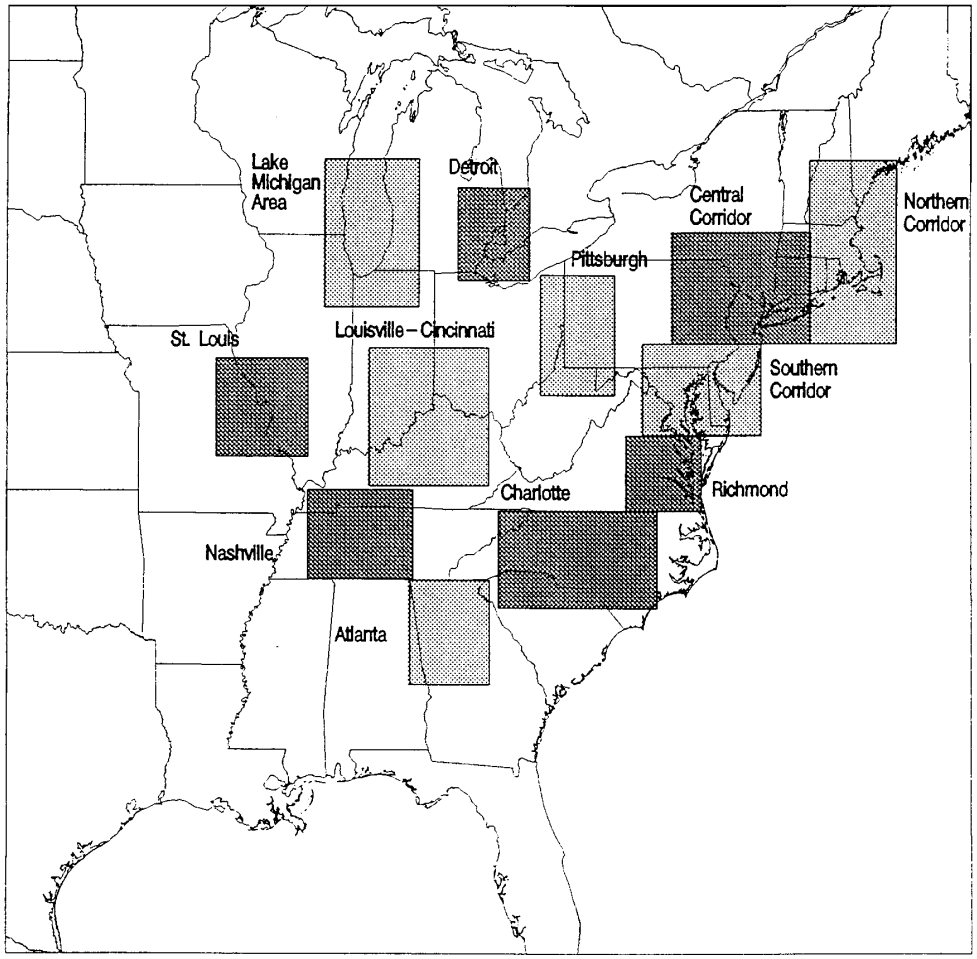

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TABLE VII–1.—BASE YEAR (1995/96) MODELING EMISSIONS OF NO_X

[Tons/day]

State	EGU	Non-EGU	Area	Highway	Total
Alabama	720.16	246.58	351.01	431.09	1748.84
Arkansas	188.47	58.55	212.98	232.64	692.64
Connecticut	54.10	36.10	128.47	211.86	430.53
Delaware	58.64	28.26	45.35	63.44	195.69
District of Columbia	3.97	2.58	18.52	19.96	45.03
Florida	1004.44	121.73	375.44	793.65	2295.26
Georgia	634.73	185.30	290.50	655.60	1766.13
Illinois	862.93	519.40	552.99	724.46	2659.78
Indiana	1138.63	280.04	380.34	495.91	2294.92
Iowa	252.19	69.31	179.77	239.78	741.05
Kansas	277.06	159.31	430.15	193.23	1059.75
Kentucky	1107.62	103.18	457.30	358.09	2026.19
Louisiana	346.66	870.30	720.25	300.05	2237.26
Maine	9.43	52.03	32.32	118.05	211.83
Maryland	336.13	90.36	186.20	307.20	919.89
Massachusetts	111.40	73.86	235.31	290.73	711.30
Michigan	555.44	353.14	383.65	633.21	1925.44
Minnesota	215.18	61.45	182.61	360.58	819.82
Mississippi	194.65	173.26	278.40	270.34	916.65
Missouri	588.13	74.08	237.45	417.50	1317.16
Nebraska	96.15	36.86	142.89	116.47	392.37
New Hampshire	65.36	6.97	43.95	96.20	212.48
New Jersey	143.02	143.33	265.11	404.10	955.56
New York	375.07	126.63	494.87	823.37	1819.94
North Carolina	969.62	186.09	238.08	608.02	2001.81
North Dakota	0.00	0.46	26.11	16.53	43.10
Ohio	1701.82	307.42	478.37	757.73	3245.34
Oklahoma	337.30	100.69	400.76	316.23	1154.98
Pennsylvania	878.45	531.22	402.97	630.38	2443.02
Rhode Island	21.82	2.21	28.05	53.40	105.48
South Carolina	429.77	169.16	164.21	352.85	1115.99
South Dakota	44.54	0.37	23.65	51.03	119.59
Tennessee	957.50	371.13	452.50	474.18	2255.31
Texas	1172.84	1290.89	760.77	1200.77	4425.27
Vermont	0.20	1.04	13.32	60.65	75.21
Virginia	432.34	146.16	357.88	578.05	1514.43
West Virginia	873.65	282.88	137.26	168.66	1462.45
Wisconsin	311.71	110.90	224.92	360.40	1007.93
Total	17471.12	7373.23	10334.68	14186.39	49365.42

TABLE VII–2.—2007 CAA BASE CASE MODELING EMISSIONS OF NO_X

[Tons/day]

State	EGU	Non-EGU	Area	Highway	Total
Alabama	619.16	314.95	361.70	416.80	1712.61
Arkansas	241.34	67.74	278.52	218.21	805.81
Connecticut	62.85	37.62	120.02	159.47	379.96
Delaware	85.86	34.82	40.33	60.30	221.31
District of Columbia	3.81	2.03	26.99	20.96	53.79
Florida	1193.66	143.06	396.06	935.38	2668.16
Georgia	635.45	224.98	306.47	599.03	1765.93
Illinois	908.72	442.08	558.24	622.86	2531.9
Indiana	1164.89	344.53	426.76	491.79	2427.97
Iowa	318.51	79.17	193.78	242.36	833.82
Kansas	278.16	200.10	387.65	206.14	1072.05
Kentucky	958.00	125.90	486.02	338.91	1908.83
Louisiana	370.72	797.24	764.56	288.99	2221.51
Maine	7.31	62.32	39.78	116.31	225.72
Maryland	289.05	94.67	227.65	271.66	883.03
Massachusetts	188.69	72.86	239.72	240.22	741.49
Michigan	511.62	402.98	428.71	622.31	1965.62
Minnesota	269.07	74.35	188.95	375.95	908.32
Mississippi	239.02	180.66	406.62	246.82	1073.12
Missouri	604.78	81.31	224.18	420.19	1330.46
Nebraska	93.92	41.46	136.45	119.41	391.24
New Hampshire	118.61	8.03	36.31	86.94	249.89
New Jersey	154.00	145.28	271.11	381.86	952.25

TABLE VII–2.—2007 CAA BASE CASE MODELING EMISSIONS OF NO_X—Continued

[Tons/day]

State	EGU	Non-EGU	Area	Highway	Total
New York	356.59	138.02	391.91	777.35	1663.87
North Carolina	672.59	227.44	250.26	551.56	1701.85
North Dakota	0.00	0.40	37.24	17.47	55.11
Ohio	1237.97	361.08	494.11	710.83	2803.99
Oklahoma	365.45	124.90	521.39	316.14	1327.88
Pennsylvania	906.73	558.46	382.86	556.86	2404.91
Rhode Island	10.47	2.34	22.85	51.46	87.12
South Carolina	437.29	235.36	186.94	365.30	1224.89
South Dakota	49.91	0.64	34.31	51.89	136.75
Tennessee	610.64	461.38	517.64	496.75	2086.41
Texas	1271.05	1114.13	825.12	1073.35	4283.65
Vermont	0.20	1.04	13.76	63.05	78.05
Virginia	415.27	168.41	411.85	603.89	1599.42
West Virginia	571.47	283.37	115.44	158.49	1128.77
Wisconsin	325.87	141.67	225.54	315.35	1008.43
Total	16548.70	7796.78	10977.80	13592.61	48915.89

TABLE VII–3.—2007 BUDGET MODELING EMISSIONS OF NO_X

[Tons/day]

State	EGU	Non-EGU	Area	Highway	Total
Alabama	224.26	159.58	335.69	386.24	1105.77
Arkansas	241.34	67.74	262.83	202.88	774.79
Connecticut	47.31	22.25	101.66	118.71	289.93
Delaware	40.59	15.18	36.83	57.67	150.27
District of Columbia	2.45	1.69	26.75	15.46	46.35
Florida	1193.66	143.06	351.44	875.17	2563.33
Georgia	246.29	96.16	267.79	529.59	1139.83
Illinois	278.01	278.58	477.65	529.99	1564.23
Indiana	377.70	195.89	398.19	454.61	1426.39
Iowa	318.51	79.17	176.64	227.15	801.47
Kansas	278.16	200.10	373.76	194.01	1046.03
Kentucky	283.92	79.77	462.46	315.42	1141.57
Louisiana	370.72	797.24	717.26	274.46	2159.68
Maine	7.31	62.32	37.87	109.26	216.76
Maryland	103.61	51.86	196.22	195.28	546.97
Massachusetts	112.86	43.88	208.53	157.66	522.93
Michigan	203.44	235.01	388.17	555.53	1382.15
Minnesota	269.07	74.35	166.35	353.51	863.28
Mississippi	239.02	180.66	370.67	229.32	1019.67
Missouri	196.28	60.26	194.63	375.51	826.68
Nebraska	93.92	41.46	127.59	112.49	375.46
New Hampshire	118.61	8.03	34.64	86.94	248.22
New Jersey	83.04	83.57	241.65	268.82	677.08
New York	266.18	96.55	340.98	642.00	1345.71
North Carolina	252.33	127.56	214.94	498.25	1093.08
North Dakota	0.00	0.40	36.37	16.33	53.1
Ohio	381.07	207.70	458.48	631.24	1678.49
Oklahoma	365.45	124.90	503.59	294.70	1288.64
Pennsylvania	357.05	314.54	343.61	499.34	1514.54
Rhode Island	10.81	2.34	18.98	38.89	71.02
South Carolina	151.97	127.09	164.62	337.58	781.26
South Dakota	49.91	0.64	31.29	48.65	130.49
Tennessee	191.00	240.31	451.78	461.03	1344.12
Texas	1271.05	1114.13	712.99	974.78	4072.95
Vermont	0.20	1.04	12.50	59.13	72.87
Virginia	176.69	73.05	379.47	544.69	1173.9
West Virginia	179.92	141.03	107.50	147.62	576.07
Wisconsin	124.49	77.21	192.28	284.20	678.18
Total	9108.20	5626.30	9924.65	12104.11	36763.26

TABLE VII–4.—PERCENT REDUCTION BETWEEN 2007 CAA BASE CASE AND BUDGET $N0_X$ EMISSIONS FOR MODELING

[Tons/day]

State	2007 Base case	Budget	Percent reduction
Alabama	1712.61	1105.77	35.4
Arkansas	805.81	774.79	3.9
Connecticut	379.96	289.93	23.7
Delaware	221.31	150.27	32.1
District of Columbia	53.79	46.35	13.8
Florida	2668.16	2563.33	3.9
Georgia	1765.93	1139.83	35.5
Illinois	2531.9	1564.23	38.2
Indiana	2427.97	1426.39	41.3
Iowa	833.82	801.47	3.9
Kansas	1072.05	1046.03	2.4
Kentucky	1908.83	1141.57	40.2
Louisiana	2221.51	2159.68	2.8
Maine	225.72	216.76	4.0
Maryland	883.03	546.97	38.1
Massachusetts	741.49	522.93	29.5
Michigan	1965.62	1382.15	29.7
Minnesota	908.32	863.28	5.0
Mississippi	1073.12	1019.67	5.0
Missouri	1330.46	826.68	37.9
Nebraska	391.24	375.46	4.0
New Hampshire	249.89	248.22	0.7
New Jersey	952.25	677.08	28.9
New York	1663.87	1345.71	19.1
North Carolina	1701.85	1093.08	35.8
North Dakota	55.11	53.1	3.6
Ohio	2803.99	1678.49	40.1
Oklahoma	1327.88	1288.64	3.0
Pennsylvania	2404.91	1514.54	37.0
Rhode Island	87.12	71.02	18.5
South Carolina	1224.89	781.26	36.2
South Dakota	136.75	130.49	4.6
Tennessee	2086.41	1344.12	35.6
Texas	4283.65	4072.95	4.9
Vermont	78.05	72.87	6.6
Virginia	1599.42	1173.9	26.6
West Virginia	1128.77	576.07	49.0
Wisconsin	1008.43	678.18	32.7
Total	48915.89	36763.26	24.8

TABLE VII–5.—LIST OF STATES IN EACH ANALYSIS REGION

Midwest	Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, West Virginia, Wisconsin.
Southeast	Alabama, Georgia, North Carolina, South Carolina, Tennessee, Virginia.
Northeast	Connecticut, Delaware, District of Columbia, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island.
Non-SIP Call States	Arkansas, Florida, Iowa, Kansas, Louisiana, Maine, Minnesota, Mississippi, Nebraska, New Hampshire, North Dakota, Oklahoma, South Dakota, Texas, Vermont.

TABLE VII–6.—1-HR AIR QUALITY METRICS FOR MIDWEST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

[Modeled values include Daily Max 1-hr for all 4 Episodes]

	MO	WI	IL	IN	MI	OH	KY	WV	Total
Metric 1: Number of Grid Cell-Days with a Daily Max Ozone Value>=125 ppb									
2007 Base	4	0	10	3	23	3	0	0	43
2007 Budget	2	0	2	0	4	3	0	0	11
Difference	−2	0	−8	−3	−19	0	0	0	−32
Percent	−50.00	0.00	−80.00	−100.00	−82.61	0.00	0.00	0.00	−74.42
Metric 2: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction									
Magnitude of ozone reduction									
2–5 ppb	0	0	0	0	0	0	0	0	0
5–10 ppb	1	0	1	1	1	1	0	0	5
10–15 ppb	2	0	3	0	15	1	0	0	21
15–20 ppb	0	0	3	0	7	1	0	0	11
20–25 ppb	0	0	0	0	0	0	0	0	0
>25 ppb	0	0	2	2	0	0	0	0	4

TABLE VII–6.—1-HR AIR QUALITY METRICS FOR MIDWEST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)—Continued

[Modeled values include Daily Max 1-hr for all 4 Episodes]

	MO	WI	IL	IN	MI	OH	KY	WV	Total
Metric 3: Number of Grid Cells>=125 ppb, by Number of Days									
Baseline 2007	MO	WI	IL	IN	MI	OH	KY	WV	Total
Number of Days >=125 ppb:									
=1 day	2	0	6	5	0	3	3	0	19
2–4 days	1	0	2	9	0	0	0	0	12
5–9 days	0	0	0	0	0	0	0	0	0
10–14 days	0	0	0	0	0	0	0	0	0
>=15 days	0	0	0	0	0	0	0	0	0
Total	3	0	8	14	0	3	3	0	31
NO_X SIP Call:									
=1 day	0	0	2	4	0	0	3	0	9
2–4 days	1	0	0	0	0	0	0	0	1
5–9 days	0	0	0	0	0	0	0	0	0
10–14 days	0	0	0	0	0	0	0	0	0
>=15 days	0	0	0	0	0	0	0	0	0
Total	1	0	2	4	0	0	3	0	10
Difference (days)	−2	0	−6	−10	0	−3	0	0	−21
Percent	−66.7	0.0	−75.0	−71.4	0.0	−100.0	0.0	0.0	−67.7

Metric 4: Percent Reduction in Areal Exposures to ozone >=125 ppb

	July '88	July '91	July '93	July '95	All episodes				
MO	58.3	49.5	*	*	40.4				
WI	*	*	*	*	*				
IL	84.8	49.9	*	100.0	75.0				
MI	*	*	*	88.6	88.6				
KY	*	*	*	*	*				
IN	*	*	*	100.0	100.0				
OH	*	*	*	*	*				
WV	*	*	*	*	*				
Total	73.7	51.3	*	90.2	76.6				

*No areas >=125 ppb

TABLE VII–7.—1-HR AIR QUALITY METRICS FOR SOUTHEAST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

[Modeled values include Daily Max 1-hr for all 4 Episodes]

	TN	AL	GA	SC	NC	VA	Total
Metric 1: Number of Grid Cell-Days with a Daily Max Ozone Value >+ 125 ppb							
2007 Base	27	108	203	0	0	14	352
2007 Budget	13	53	117	0	0	13	196
Difference	−14	−55	−86	0	0	−1	−156
Percent	−51.85	−50.93	−42.36	0.00	0.00	−7.14	−44.32
Metric 2: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction							
Magnitude of ozone reduction							
2–5 ppb	4	1	2	0	0	1	8
5–10 ppb	11	20	9	0	0	6	46
10–15 ppb	7	27	31	0	0	4	69
15–20 ppb	3	23	64	0	0	1	91
20–25 ppb	0	16	53	0	0	0	69
>25 ppb	0	21	44	0	0	0	65
Metric 3: Number of Grid Cells >= 125 ppb, by Number of Days							
Baseline 2007	TN	AL	GA	NC	VA	SC	Total
Number of Days >= 125 ppb							
= 1 day	7	9	5	0	0	0	21
2–4 days	6	14	15	0	1	0	36
5–9 days	1	8	17	0	2	0	28
10–14 days	0	1	3	0	0	0	4
>= 15 days	0	0	0	0	0	0	0
Total	14	32	40	0	3	0	89
NO_x SIP Call:							
= 1 day	6	6	8	0	0	0	20
2–4 days	2	11	10	0	1	0	24
5–9 days	0	3	11	0	2	0	16
10–14 days	0	0	1	0	0	0	1
>=15 days	0	0	0	0	0	0	0
Total	8	20	30	0	3	0	61
Difference (days)	−6	−12	−10	0	0	0	−28
Percent	−42.9%	−37.5%	−25.0%	0.0%	0.0%	0.0%	−31.5%

Metric 4: Percent Reduction in Areal Exposures to Ozone >= 125 ppb

	July '88	July '91	July '93	July '95	All Episodes		
TN	100.0	29.5	72.0	52.4	60.2		
AL	71.7	100.0	57.7	63.0	60.0		

TABLE VII–7.—1-HR AIR QUALITY METRICS FOR SOUTHEAST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)—Continued

[Modeled values include Daily Max 1-hr for all 4 Episodes]

	TN	AL	GA	SC	NC	VA	Total
GA	59.4	100.0	46.9	55.6	51.0		
NC	*	*	*	*	*	.....	.....
VA	18.7%	*	*	58.2%	24.1%	.....	.....
SC	*	*	*	*	*	.....	.....
Total	50.1	89.7	51.0	57.5	53.0	.....	.....

*No areas >= 125 ppb.

TABLE VII–8.—1-HR AIR QUALITY METRICS FOR NORTHEAST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

[Modeled values include Daily Max 1-hr for all 4 Episodes]

	MD	DC	DE	PA	NJ	NY	CT	RI	MA	Total
Metric 1: Number of Grid Cell-Days with a Daily Max Ozone Value >= 125 ppb										
2007 Base	251	3	12	34	183	221	231	8	61	738
2007 Budget	111	3	3	17	54	154	141	2	13	381
Difference	−140	0	−9	−17	−129	−67	−90	−6	−48	−357
Percent	−55.78	0.00	−75.00	−50.00	−70.49	−30.32	−38.96	−75	−78.69	−48.37
Metric 2: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction										
Magnitude of ozone reduction										
2–5 ppb	7	0	0	3	5	26	16	0	3	60
5–10 ppb	27	1	0	7	12	63	58	2	7	177
10–15 ppb	43	0	0	14	41	89	115	6	27	335
15–20 ppb	91	0	1	6	90	24	25	0	15	252
20–25 ppb	40	0	6	2	19	1	0	0	2	70
>25 ppb	32	0	5	1	12	0	0	0	7	57

Metric 3: Number of grid Cells >= 125 ppb, by Number of Days

Baseline 2007	PA	NY	MD	DC	DE	NJ	CT	MA	RI	Total
Number of Days >= 125 ppb:										
=1 days	16	0	5	0	6	22	2	17	4	72
2–4 days	7	15	26	1	3	35	41	13	2	143
5–9 days	0	28	25	0	0	9	17	3	0	82
10–14 days	0	0	1	0	0	0	0	0	0	1
>=15 days	0	0	0	0	0	0	0	0	0	0
Total	23	43	57	1	9	66	60	33	6	298
NO_X SIP Call:										
=1 days	15	6	12	0	3	24	18	13	2	93
2–4 days	1	27	23	1	0	12	37	0	0	101
5–9 days	0	11	7	0	0	0	3	0	0	21
10–14 days	0	0	0	0	0	0	0	0	0	0
>=15 days	0	0	0	0	0	0	0	0	0	0
Total	16	44	42	1	3	36	58	13	2	215
Difference (days)	−7	1	−15	0	−6	−30	−2	−20	−4	−83
Percent	−30.4	2.3	−26.3	0.0	−66.7	−45.5	−3.3	−60.6	−66.7	−27.9

Metric 4: Percent Reduction in Areal Exposures to Ozone >= 125 ppb

	July '88	July '91	July '93	July '95	All episodes
PA	63.7	100.00	*	100.0	67.3
NY	40.2	55.33	*	43.5	47.2
MD	51.8	86.79	49.0	78.6	59.8
DC	8.9	*	*	*	8.9
DE	82.0	*	*	100.0	84.5
NJ	74.5	95.81	100.0	100.0	81.2
CT	31.6	68.51	100.0	61.1	43.9
MA	82.2	95.78	*	85.2	86.7
ME	92.3	82.80	*	*	89.3
Total	52.4	71.08	51.0	67.9	59.1

*No areas >= 125 ppb

TABLE VII–9.—SELECTED OTAG METRICS FOR 1-HR STANDARD

	No. corridor	Cn corridor	So. corridor	Rich-mond	Atlanta	Nashville	Louis-Cinci	St. Louis	Lk. MI area	Detroit	Pitts-burgh	Charlotte
Peak 1-Hr Total—# OF GRID CELLS >124 PPB												
July 4–11, 1988:												
2007 Base Case	337	484	522	148	38	56	71	10	46	54	27	157
2007 Budget	147	314	214	27	19	14	22	4	0	34	1	19
Difference	−190	−170	−308	−121	−19	−42	−49	−6	−46	−20	−26	−138
Percent	−56.4%	−35.1%	−59.90%	−81.8%	−50.0%	−75.0%	−69.0%	−60.0%	−100.0%	−37.0%	−96.3%	−87.9%
July 16–21, 1991:												
2007 Base Case	497	282	111	1	10	0	19	5	113	0	0	0
2007 Budget	160	141	19	0	0	0	10	2	58	0	0	0
Difference	−337	−141	−92	−1	−10	0	−9	−3	−55	0	0	0
Percent	−67.8%	−50.0%	−82.9%	−100.0%	−100.0%	0.0%	−47.4%	−60.0%	−48.7%	0.0%	0.0%	0.0%

TABLE VII–9.—SELECTED OTAG METRICS FOR 1-HR STANDARD—Continued

	No. corridor	Cn corridor	So. corridor	Rich-mond	Atlanta	Nashville	Louis-Cinci	St. Louis	Lk. MI area	Detroit	Pitts-burgh	Charlotte
July 22–29, 1993:												
2007 Base Case	1	5	105	38	178	39	4	1	0	0	0	123
2007 Budget	0	3	28	11	84	7	0	0	0	0	0	23
Difference	−1	−2	−77	−27	−94	−32	−4	−1	0	0	0	−100
Percent	−100.0%	−40.0%	−73.3%	−71.1%	−52.8%	−82.1%	−100.0%	−100.0%	0.0%	0.0%	0.0%	−81.3%
July 10–18, 1995:												
2007 Base Case	217	127	165	49	149	35	43	6	343	4	1	20
2007 Budget	137	74	37	19	47	6	9	0	233	1	0	3
Difference	−80	−53	−128	−30	−102	−29	−34	−6	−110	−3	−1	−17
Percent	−36.9%	−41.7%	−77.6%	−61.2%	−68.5%	−82.9%	−79.1%	−100.0%	−32.1%	−75.0%	−100.0%	−85.0%
2007 Base Case	217	127	165	49	149	35	43	6	343	4	1	20
2007 Budget	137	74	37	19	47	6	9	00	233	1	0	3
Difference	−80	−53	−128	−30	−102	−29	−34	−6	−110	−3	−1	−17
Percent	−36.9%	−41.7%	−77.6%	−61.2%	−68.5%	−82.9%	−79.1%	−100.0%	−32.1%	−75.0%	−100.0%	−85.0%
All Episodes:												
2007 Base Case	1052	898	903	236	375	130	137	22	502	58	28	300
2007 Budget	444	532	298	57	150	27	41	6	291	35	1	45
Difference	−608	−366	−605	−179	−225	−103	−96	−16	−211	−23	−27	−255
Percent	−57.8%	−40.8%	−67.0%	−75.8%	−60.0%	−79.2%	−70.1%	−72.7%	−42.0%	−39.7%	−96.4%	−85.0%
Peak 1-Hr Total—# οφ Γριδ Ψελλσ • 140 ππβ												
July 4–11, 1988:												
2007 Base Case	122	219	229	35	20	21	5	2	0	16	1	34
2007 Budget	52	139	95	4	6	9	0	0	0	2	0	4
Difference	−70	−80	−134	−31	−14	−12	−5	−2	0	−14	−1	−30
Percent	−57.4%	−36.5%	−58.5%	−88.6%	−70.0%	−57.1%	−100.0%	−100.0%	0.0%	−87.5%	−100.0%	−88.2%
July 16–21, 1991:												
2007 Base Case	149	114	11	0	4	0	5	0	28	0	0	0
2007 Budget	29	20	4	0	0	0	4	0	0	0	0	0
Difference	−120	−94	−7	0	−4	0	−1	0	−28	0	0	0
Percent	−80.5%	−82.5%	−63.6%	0.0%	−100.0%	0.0%	−20.0%	0.0%	−100.0%	0.0%	0.0%	0.0%
July 22–29, 1993:												
2007 Base Case	0	0	21	14	99	8	0	0	0	0	0	38
2007 Budget	0	0	4	0	38	1	0	0	0	0	0	5
Difference	0	0	−17	−14	−61	−7	0	0	0	0	0	−33
Percent	0.0%	0.0%	−81.0%	−100.0%	−61.6%	−87.5%	0.0%	0.0%	0.0%	0.0%	0.0%	−86.8%
July 10–18, 1995:												
2007 Base Case	142	59	35	22	49	3	14	0	191	0	0	4
2007 Budget	63	32	3	4	20	0	1	0	96	0	0	0
Difference	−79	−27	−32	−18	−29	−3	−13	0	−95	0	0	−4
Percent	−55.6%	−45.8%	−91.4%	−81.8%	−59.2%	−100.0%	−92.9%	0.0%	−49.7%	0.0%	0.0%	−100.0%
All Episodes:												
2007 Base Case	413	392	296	71	172	32	24	2	219	16	1	76
2007 Budget	144	191	106	8	64	10	5	0	96	2	0	9
Difference	−269	−201	−190	−63	−108	−22	−19	−2	−123	−14	−1	−67
Percent	−65.1%	−51.3%	−64.2%	−88.7%	−62.8%	−68.8%	−79.2%	−100.0%	−56.2%	−87.5%	−100.0%	−88.2%
Weighted Sum of Differences When the Base is > 124 ppb												
July 4–11, 1988	−13.8	−9.6	−18.5	−22.3	−18.3	−23.9	−17.4	−18.5	−13.8	−10	−24.5	−25.1
July 16–21, 1991	−15.1	−13.7	−16.9	−10.4	−29	0	−13.3	−6.1	−10.9	0	0	0
July 22–29, 1993	−5.7	−4.6	−15.8	−20	−21.3	−21.7	−26.2	−10.9	0	0	0	−22.6
July 10–18, 1995	−15.8	−11.5	−16.8	−19	−21.5	−22.1	−27.4	−16	−12.6	−8.5	−40.8	−23.7
# Grid Cells with more than a 4 ppb Decrease when Base is > 124 ppb												
July 4–11, 1988	330	386	496	144	38	55	67	10	46	51	27	156
Percent of Total	97.9%	79.8%	95.0%	97.3%	100.0%	98.2%	94.4%	100.0%	100.0%	94.4%	100.0%	99.4%
July 16–21, 1991	496	276	104	1	10	0	16	3	104	0	0	0
Percent of Total	99.8%	97.9%	93.7%	100.0%	100.0%	0.0%	84.2%	60.0%	92.0%	0.0%	0.0%	0.0%
July 22–29, 1993	1	3	102	38	178	37	4	1	0	0	0	123
Percent of Total	100.0%	60.0%	97.1%	100.0%	100.0%	94.9%	100.0%	100.0%	0.0%	0.0%	0.0%	100.0%
July 10–18, 1995	217	111	161	48	149	35	43	6	326	4	1	20
Percent of Total	100.0%	87.4%	97.6%	98.0%	100.0%	100.0%	100.0%	100.0%	95.0%	100.0%	100.0%	100.0%
All Episodes	1044	776	863	231	375	127	130	20	476	55	28	299
Percent of Total	99.2%	86.4%	95.6%	97.9%	100.0%	97.7%	94.9%	90.9%	94.8%	94.8%	100.0%	99.7%
# Grid Cells with more than a 4 ppb Increase when Base is > 124 ppb												
July 4–11, 1988	2	32	7	2	0	0	1	0	0	1	0	0
Percent of Total	0.6%	6.6%	1.3%	1.4%	0.0%	0.0%	1.4%	0.0%	0.0%	1.9%	0.0%	0.0%
July 16–21, 1991	0	0	2	0	0	0	2	0	2	0	0	0
Percent of Total	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	10.5%	0.0%	1.8%	0.0%	0.0%	0.0%
July 22–29, 1993	0	1	3	0	0	0	0	0	0	0	0	0
Percent of Total	0.0%	20.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
July 10–18, 1995	0	0	1	0	0	0	0	0	0	0	0	0
Percent of Total	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TABLE VII–9.—SELECTED OTAG METRICS FOR 1-HR STANDARD—Continued

	No. corridor	Cn corridor	So. corridor	Rich-mond	Atlanta	Nashville	Louis-Cinci	St. Louis	Lk. MI area	Detroit	Pitts-burgh	Charlotte
All Episodes	2%	33%	13%	2%	0%	0%	3%	0%	2%	1%	0%	0%
Percent of Total	0.2%	3.7%	1.4%	0.8%	0.0%	0.0%	2.2%	0.0%	0.4%	1.7%	0.0%	0.0%

TABLE VII–10.—8-HR AIR QUALITY METRICS FOR MIDWEST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

	MO	WI	IL	IN	MI	OH	KY	WV	Total
Metric 5: Number of Grid Cell-Days with an Average 2nd High Ozone Value >=85 ppb									
Scenario									
2007 Base	2	0	7	31	21	39	43	7	150
2007 Budget	2	0	1	3	1	2	7	0	16
Difference	0	0	−6	−28	−20	−37	−36	−7	−134
Percent	0.00	0.00	−85.71	−90.32	−95.24	−94.87	−83.72	−100.00	−89.33
Metric 6: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction									
Magnitude of Ozone Reduction									
2–5 ppb	1	0	0	1	1	0	2	0	5
5–10 ppb	1	0	5	2	12	16	6	0	42
10–15 ppb	0	0	2	16	8	21	19	6	72
15–20 ppb	0	0	0	9	0	2	12	1	24
20–25 ppb	0	0	0	3	0	0	4	0	7
>25 ppb	0	0	0	0	0	0	0	0	0

TABLE VII–11.—8-HR AIR QUALITY METRICS FOR SOUTHEAST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

	TN	AL	GA	SC	NC	VA	Total
Metric 5: Number of Grid Cell-Days with an Average 2nd High Ozone Value≤=85ppb							
Scenario							
2007 Base	48	39	44	13	52	16	212
2007 Budget	10	12	17	1	4	3	47
Difference	−38	−27	−27	−12	−48	−13	−165
Percent	−79.17	−69.23	−61.36	−92.31	−92.31	−81.25	−77.83
Metric 6: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction							
Magnitude of Ozone Reduction							
2–5 ppb	5	0	0	0	0	0	5
5–10 ppb	23	3	4	5	2	1	38
10–15 ppb	17	28	32	6	42	13	138
15–20 ppb	2	8	8	2	5	2	27
20–25 ppb	0	0	0	0	3	0	3
>25 ppb	0	0	0	0	0	0	0

TABLE VII–12.—8-HR AIR QUALITY METRICS FOR NORTHEAST REGION (GRID CELLS SELECTED BASED ON ''MONITORED'' AND ''MODELED'' NONATTAINMENT)

	MD	DC	DE	PA	NJ	NY	CT	RI	MA	Total
Metric 5: Number of Grid Cell-Days with an Average 2nd High Ozone Value>=85 ppb										
Scenario										
2007 Base	84	1	30	73	99	45	29	0	11	257
2007 Budget	40	0	1	4	37	33	11	0	6	91
Difference	−44	−1	−29	−69	−62	−12	−18	0	−5	−166
Percent	−52.38	−100.00	−96.67	−94.52	−62.63	−26.67	−62.07	0.00	−45.45	−65
Metric 6: Number of Grid Cell-Days with Ozone Reductions, by Magnitude of the Reduction										
Magnitude of Ozone Reduction										
2–5 ppb	1	0	0	1	1	6	1	0	1	11
5–10 ppb	18	1	3	19	17	34	28	0	9	129
10–15 ppb	57	0	13	46	75	0	0	0	1	192
15–20 ppb	7	0	14	7	6	0	0	0	0	34
20–25	0	0	0	0	0	0	0	0	0	0
>25 ppb	0	0	0	0	0	0	0	0	0	0

TABLE VII–13.—SELECTED OTAG METRICS FOR 8–HR STANDARD

	No. corridor	Cn. corridor	So. corridor	Rich-mond	Atlanta	Nashville	Louis-Cinci	St. Louis	Lk. MI Area	Detroit	Pitts-burgh	Charlotte
Peak 8–Hr Total—# of Grids > 84 ppb												
July 4–11, 1988:												
2007 Base Case	1624	1959	1696	580	154	485	1653	196	853	478	850	1195
2007 Budget	1132	1256	1115	313	68	139	447	32	435	253	197	450
Difference	−492	−703	−581	−267	−86	−346	−1206	−164	−418	−225	−653	−745
Percent	−30.3%	−35.9%	−34.3%	−46.0%	−55.8%	−71.3%	−73.0%	−83.7%	−49.0%	−47.1%	−76.8%	−62.3%

TABLE VII–13.—SELECTED OTAG METRICS FOR 8–HR STANDARD—Continued

	No. corridor	Cn. corridor	So. corridor	Rich-mond	Atlanta	Nashville	Louis-Cinci	St. Louis	Lk. MI Area	Detroit	Pitts-burgh	Charlotte
July 16–21, 1991:												
2007 Base Case	1333	1034	1058	112	56	93	875	129	615	172	605	71
2007 Budget	1019	573	552	12	21	10	198	37	512	51	81	0
Difference	−314	−461	−506	−100	−35	−83	−677	−92	−103	−121	−524	−71
Percent	−23.6%	−44.6%	−47.8%	−89.3%	−62.5%	−89.2%	−77.4%	−71.3%	−16.7%	−70.3%	−86.6%	−100.0%
July 22–29, 1993:												
2007 Base Case	161	204	610	206	855	395	545	56	79	23	59	1562
2007 Budget	88	134	315	92	374	125	78	17	24	2	0	387
Difference	−73	−70	−295	−114	−481	−270	−467	−39	−55	−21	−59	−1175
Percent	−45.3%	−34.3%	−48.4%	−55.3%	−56.3%	−68.4%	−85.7%	−69.6%	−69.6%	−91.3%	−100.0%	−75.2%
July 10–18, 1995:												
2007 Base Case	653	714	1489	527	693	708	1072	124	994	311	468	754
2007 Budget	437	321	642	142	260	160	215	52	712	150	20	96
Difference	−216	−393	−847	−385	−433	−548	−857	−72	−282	−161	−448	−658
Percent	−33.1%	−55.0%	−56.9%	−73.1%	−62.5%	−77.4%	−79.9%	−58.1%	−28.4%	−51.8%	−95.7%	−87.3%
All Episodes:												
2007 Base Case	3771	3911	4853	1425	1758	1681	4145	505	2541	984	1982	3582
2007 Budget	2676	2284	2624	559	723	434	938	138	1683	456	298	933
Difference	−1095	−1627	−2229	−866	−1035	−1247	−3207	−367	−858	−528	−1684	−2649
Percent	−29.0%	−41.6%	−45.9%	−60.8%	−58.9%	−74.2%	−77.4%	−72.7%	−33.8%	−53.7%	−85.0%	−74.0%
Peak 8–Hr Total—Grid Cells > 100 ppb												
July 4–11, 1988:												
2007 Base Case	817	862	975	302	64	149	383	25	320	139	215	458
2007 Budget	418	555	413	96	26	32	50	6	92	74	13	75
Difference	−399	−307	−562	−206	−38	−117	−333	−19	−228	−65	−202	−383
Percent	−48.8%	−35.6%	−57.6%	−68.2%	−59.4%	−78.5%	−86.9%	−76.0%	−71.3%	−46.8%	−94.0%	−83.6%
July 16–21, 1991:												
2007 Base Case	868	501	448	13	21	1	190	22	302	18	62	0
2007 Budget	511	305	109	0	4	0	22	7	204	1	0	0
Difference	−357	−196	−339	−13	−17	−1	−168	−15	−98	−17	−62	0
Percent	−41.1%	−39.1%	−75.7%	−100.0%	−81.0%	−100.0%	−88.4%	−68.2%	−32.5%	−94.4%	−100.0%	0.0%
July 22–29, 1993:												
2007 Base Base Case	34	59	212	85	322	97	71	4	0	0	0	399
2007 Budget	11	30	63	25	151	23	1	0	0	0	0	81
Difference	−23	−29	−149	−60	−171	−74	−70	−4	0	0	0	−318
Percent	−67.6%	−49.2%	−70.3%	−70.6%	−53.1%	−76.3%	−98.6%	−100.0%	0.0%	0.0%	0.0%	−79.7%
July 10–18, 1995:												
2007 Base Case	328	255	544	105	259	159	225	27	553	60	15	98
2007 Budget	230	139	139	34	112	28	27	1	423	17	1	6
Difference	−98	−116	−405	−71	−147	−131	−198	−26	−130	−43	−14	−92
Percent	−29.9%	−45.5%	−74.4%	−67.6%	−56.8%	−82.4%	−88.0%	−96.3%	−23.5%	−71.7%	−93.3%	−93.9%
All Episodes:												
2007 Base Case	2047	1677	2179	505	666	406	869	78	1175	217	292	955
2007 Budget	1170	1029	724	155	293	83	100	14	719	92	14	162
Difference	−877	−648	−1455	−350	−373	−323	−769	−64	−456	−125	−278	−793
Percent	−42.8%	−38.6%	−66.8%	−69.3%	−56.0%	−79.6%	−88.5%	−82.1%	−38.8%	−57.6%	−95.2%	−83.0%

VIII. Impact on Small Entities

The Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.* (RFA), provides that whenever an agency is required to publish a general notice of proposed rulemaking, it must prepare and make available a regulatory flexibility analysis, unless it certifies that the proposed rule, if promulgated, will not have ''a significant economic impact on a substantial number of small entities.'' *Id.*, section 605(b). Courts have interpreted the RFA to require a regulatory flexibility analysis only when small entities will be subject to the requirements of the rule. See, *e.g.*, *Mid-Tex Electric Cooperative, Inc.* v. *FERC*, 773 F.2d 327 (D.C. Cir. 1985) (agency's certification need only consider the rule's impact on regulated entities and not indirect impact on small entities not regulated).

In the proposed rulemaking, which EPA published by notice dated November 7, 1997, 62 FR 60318, EPA noted that the proposed rule would not directly regulate small entities. Instead, the proposed rule would require States to develop, adopt, and submit SIP revisions that would achieve the necessary NO_X emission reductions, and would leave to the States the task of determining how to obtain those reductions, including which entities to regulate. The EPA also noted, in the proposed rule, that because affected States would have discretion to choose which sources to regulate and how much emissions reductions each selected source would have to achieve, EPA could not, at the time of the proposal, predict the effect of the rule on small entities.

The purposes of the RFA, the RFA's statutory requirements for regulatory flexibility analyses, and the caselaw all shed light on the meaning of the term ''impact'' as used in the RFA. These sources indicate that a rule can have an ''impact'' of concern under the RFA only with respect to sources subject to the requirements of the rule.

The RFA's ''Findings and Purposes'' section states,

> It is the purpose of this Act to establish as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and information requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation.

Pub. L. 96–354, section 2(b). This statement of purpose indicates that Congress intended the RFA to ensure that agencies tailored the requirements of their regulations to the resources and capabilities of entities ''subject to [such] regulation.'' Other provisions of the RFA reflect this statement of purpose. For example, RFA sections 603 and 604 require that the initial and final regulatory flexibility analyses identify the types and estimate the numbers of small entities ''to which the proposed rule will apply'' (sections 603(b)(3) and 604(a)(3)); and other RFA provisions make clear that the regulatory flexibility analyses are to focus on how to minimize rule requirements for small entities (sections 603(c)(1) and (4), 605(a)(5)). Taken as a whole, these provisions suggest that agencies should undertake the RFA analyses only with respect to rules to which small entities are subject.

Two Federal court cases support this interpretation of ''impact': *Mid-Tex Elec. Co-op* v. *FERC*, 773 F.2d 327, 342 (D.C. Cir. 1985), summarized above, and *United Distribution Companies* v. *FERC*, 88 F.3d 1105 (D.C. Cir. 1996). In *United Distribution Companies*, the court stated that the *Mid-Tex* court—

> * * * conducted an extensive analysis of the RFA provisions governing when a regulatory flexibility analysis is required and concluded that no analysis is necessary when an agency determines ''that the rule will not have a significant economic impact on a substantial number of small entities *that are subject to the requirements of the rule.*''

Id. at 1170 (quoting *Mid-Tex* court, emphasis added by *United Distribution* court). For a more detailed analysis by EPA of the RFA, see ''Final Rule: National Ambient Air Quality Standards for Ozone,'' 62 FR 38856, 38888 (July 18, 1997).

For the reasons indicated above, EPA certified that the proposed rule would ''not have, if promulgated, a significant economic impact on a substantial number of small entities.'' The Agency received a number of comments on this certification, including several challenging the certification as improper under the RFA. The EPA is currently considering these comments and will respond to them in light of the rulemaking record after comments are received on this supplemental proposal.

Today's supplemental proposal does not contain anything that would adversely affect small entities. The SIP criteria and emissions reporting requirements proposed in today's action would apply only to States, and would not, by themselves, subject any other entities to any regulation. The NO_X budget trading program is a recommendation to States, but not a requirement, and thus does not subject any entities to any requirements. In addition, the trading program, if adopted by a State, would provide sources subject to the State NO_X controls additional flexibility in meeting SIP requirements. Thus, the trading program would have a beneficial effect on State-regulated sources, including small entities subject to those State requirements. Accordingly, EPA certifies that this supplemental proposal will not, if promulgated, have a significant economic impact on a substantial number of small entities.

As noted in Section VI, Interaction with Title IV NO_X Rule, today's supplemental proposal includes, in addition to provisions directly related to the NO_X SIP call, a revision to the 40 CFR Part 76, which implements the NO_X requirements of the acid rain provisions in Title IV of the CAA Amendments and which applies directly to sources. The revision is designed to lessen the administrative requirements imposed on sources affected by the acid rain program that are in States that adopt a NO_X cap-and-trade program. Because the only impact of this revision will be to ease administrative requirements, it will not have any adverse effect on any small entity that may be subject to the rule's requirements. Accordingly, I certify that this part of today's proposed rule will not have a significant economic effect on a substantial number of small entities.

IX. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, 2 U.S.C. 1532, EPA generally must prepare a written statement, including a cost-benefit analysis, for any proposed or final rule that ''includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more * * * in any one year.'' A ''Federal mandate'' is defined under section 421(6), 2 U.S.C. 658(6), to include a ''Federal intergovernmental mandate'' and a ''Federal private sector mandate.'' A ''Federal intergovernmental mandate,'' in turn, is defined to include a regulation that ''would impose an enforceable duty upon State, local, or tribal governments,'' section 421(5)(A)(i), 2 U.S.C. 658(5)(A)(i), except for, among other things, a duty that is ''a condition of Federal assistance,'' section 421(5)(A)(i)(I). A ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector,'' with certain exceptions, section 421(7)(A), 2 U.S.C. 658(7)(A).

Before promulgating an EPA rule for which a written statement is needed under section 202 of the UMRA, section 205, 2 U.S.C. 1535, of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule.

Under section 203 of UMRA, 2 U.S.C. 1533, before EPA establishes any regulatory requirements ''that might significantly or uniquely affect small governments'' EPA must have developed a small government agency plan. The plan must provide for notifying potentially affected small governments; enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates; and informing, educating, and advising small governments on compliance with the regulatory requirements.

Under section 204 of UMRA, 2 U.S.C. 1534, if an agency proposes a rule that contains a ''significant Federal intergovernmental mandate[], the agency must develop a process to permit elected officials of State, local, and tribal governments to provide input into the development of the proposal.

The EPA addressed these issues, in the proposed rulemaking as to the proposed NO_X SIP call. However, as noted in Section VI, Interaction with Title IV NO_X Rule, today's supplemental proposal includes, in addition to provisions directly related to the proposed NO_X SIP call, a revision to the 40 CFR Part 76, which implements the NO_X requirements of the acid rain provisions in Title IV of the CAA Amendments and which applies directly to sources. The revision is designed to lessen the administrative requirements imposed on sources affected by the acid rain program that

are in States that adopt a NO_X cap-and-trade program. Because the only impact of this part of the rule will be to ease administrative requirements, it will not impose costs that would trigger the requirements of UMRA sections 202, 204, or 205. For the same reason, this part of the rule would not result in regulatory requirements that might significantly affect small governments; moreover, this part of the proposed rule would not impose requirements unique to small governments. Thus, the requirements of section 203 (2 U.S.C. 1533) do not apply to the revisions to 40 CFR Part 76.

X. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1857.01) and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M St. SW, Washington, DC 20460 or by calling (202) 260–2740.

The EPA believes that it is essential that compliance with the regional control strategy be verified. Tracking emissions is the principal mechanism to ensure compliance with the budget and to assure the downwind affected States and EPA that the ozone transport problem is being mitigated. If tracking and periodic reports indicate that a State is not implementing all of its NO_X control measures beginning with the compliance date for NO_X controls or is off track to meet its statewide budget by 2007, EPA will work with the State to determine the reasons for noncompliance and what course of remedial action is needed. The reporting requirements are mandatory and the legal authority for the proposed reporting requirements resides in section 110(a) and 301(a) of the CAA. Emissions data being requested in today's proposal would not be considered confidential by EPA. Certain process data may be identified as sensitive by a State and are then treated as ''State-sensitive'' by EPA.

The reporting and record keeping burden for this collection of information is described below:

Respondents/Affected Entities: States, along with the District of Columbia, which are included in the NO_X SIP call.

Number of Respondents: 23.

Frequency of Response: Annually, triennially.

Estimated Annual Hour Burden per Respondent: 282.

Estimated Annual Cost per Respondent: $7,942.68.

Estimated Total Annual Hour Burden: 6,486.

Estimated Total Annualized Cost: $182,682.00.

There are no additional capital or operating and maintenance costs associated with the reporting requirements of the proposed rule. During the 1980s, an EPA initiative established electronic communication with each State environmental agency. This included a computer terminal for any States needing one in order to communicate with the EPA's national data base systems. Costs associated with replacing and maintaining these terminals, as well as storage of data files, have been accounted for in the ICR for the existing annual inventory reporting requirements (OMB # 2060–0088).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M St., SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St. NW, Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' Comments are requested by June 22, 1998. Include the ICR number in any correspondence.

XI. Judicial Review

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This Section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if (i) the agency action consists of ''nationally applicable regulations promulgated, or final action taken, by the Administrator,'' or (ii) such action is locally or regionally applicable, if ''such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination.''

Any final action related to the NO_X SIP Call is ''nationally applicable'' within the meaning of section 307(b)(1). As an initial matter, through this rule, EPA interprets section 110 of the Act in a way that could affect future actions regulating the transport of pollutants. In addition, the SIP Call, as proposed, would require 22 States and the District of Columbia to establish emissions budgets for NO_X. The SIP Call also is based on a common core of factual findings and analyses concerning the transport of ozone and its precursors between the different States subject to the SIP Call. Finally, EPA plans to establish in the final rule uniform approvability criteria that would be applied to all States subject to the SIP call. For these reasons, the Administrator also is determining that any final action regarding the NO_X SIP Call is of nationwide scope and effect for purposes of section 307(b)(1). Thus any petitions for review of final actions regarding the SIP Call must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date final action is promulgated in the **Federal Register**.

XII. Regulatory Analysis

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is ''significant'' and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or

State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

As EPA indicated in the proposed rulemaking, this action is a ''significant regulatory action'' because it would have an annual effect on the economy of approximately $2 billion. 62 FR 60318, 60373. Accordingly, the notice of proposed rulemaking was submitted to OMB for review. For the same reason, today's supplemental notice of proposed rulemaking was submitted to OMB for review. Any written comments from OMB to EPA and any written EPA response to those comments are included in the docket. The docket is available for public inspection at the EPA's Air Docket Section, which is listed in the **ADDRESSES** section of this preamble.

List of Subjects

40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Carbon monoxide, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Transportation, Volatile organic compounds.

40 CFR Part 76

Environmental protection, Acid rain program, Air pollution control, Nitrogen dioxide, Reporting and recordkeeping requirements.

40 CFR Part 96

Environmental protection, Administrative practice and procedure, Air pollution control, Nitrogen dioxide, Reporting and recordkeeping requirements.

Dated: April 28, 1998.

Carol M. Browner,

Administrator.

For the reasons set forth in the preamble, parts 51, 76, and 96 of chapter I of title 40 of the Code of Federal Regulations are proposed to be amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

1. The authority citation for part 51 continues to read as follows:

Authority: 42 U.S.C. 7401, 7410, 7411, 7412, 7413, 7414, 7470–7479, 7501–7508, 7601, and 7602.

Subpart G—Control Strategy

2. Subpart G is amended to add §§ 51.121 and 51.122 to read as follows:

§ 51.121 Requirements for state implementation plan revisions relating to budgets for emissions of oxides of nitrogen.

(a) The EPA Administrator finds that the State implementation plans (SIPs) for the States listed in paragraph (c) of this section are substantially inadequate to comply with the requirements of section 110(a)(2)(D) of the Clean Air Act, 42 U.S.C. 7410(a)(2)(D), and to mitigate adequately the interstate pollutant transport described in section 184 of the Clean Air Act, 42 U.S.C. 7511c, with respect to nonattainment areas under the 1-hour ozone national ambient air quality standards (NAAQS), to the extent that those SIPs do not provide for compliance with a budget of emissions of nitrogen oxides (''NO_X budget'') as described in paragraph (e) of this section. To cure such inadequacy, each of the States listed in paragraph(c) of this section must submit to EPA a SIP revision that provides for compliance with such NO_X budget and associated SIP provisions described in this section.

(b) The EPA Administrator determines that the States listed in paragraph (c) of this section must submit SIP revisions under section 110(a)(1) of the Clean Air Act, 42 U.S.C. 7410(a)(1), that provide for compliance with a NO_X budget, as described in paragraph (e) of this section and associated SIP provisions described in this section, to comply with the requirements of section 110(a)(2)(D) of the Clean Air Act, 42 U.S.C. 7410(a)(2)(D), with respect to nonattainment areas under the 8-hour ozone NAAQS.

(c) The States subject to paragraphs (a) and (b) of this section are: Alabama, Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia, Wisconsin, and the District of Columbia.

(d)(1) The SIP submissions required under paragraphs (a) and (b) of this section must be submitted by no later than September 30, 1999.

(2) The State makes an official submission of its SIP revision to EPA only when:

(i) The submission conforms to the requirements of appendix V to this part; and

(ii) The State delivers five copies of the plan to the appropriate Regional Office, with a letter giving notice of such action.

(e)(1) The NO_X budget for a State listed in paragraph (c) of this section is defined as the total amount of NO_X emissions allowed from all sources in that State, as indicated in paragraph (e)(4) of this section with respect to that State.

(2) The SIP must provide for compliance with the NO_X budget during each ozone season, which includes May 1 through September 30 of the year 2007 and each subsequent year.

(3) The SIP must require implementation of its control measures by no later than September 30, 2002.

(4) The State-by-State amounts of the NO_X budget are as follows:

State	Budget
Alabama	155,617
Connecticut	39,909
Delaware	21,010
District of Columbia	7,000
Georgia	159,013
Illinois	218,679
Indiana	200,345
Kentucky	158,360
Maryland	73,628
Massachusetts	73,575
Michigan	199,238
Missouri	116,246
New Jersey	93,464
New York	185,537
North Carolina	153,106
Ohio	236,443
Pennsylvania	207,250
Rhode Island	10,132
South Carolina	109,267
Tennessee	187,250
Virginia	162,375
West Virginia	81,701
Wisconsin	95,902
Total	2,945,046

(f) Each SIP revision must set forth control measures to meet the NO_X budget which include 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) Should a State elect to impose control measures on NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe or boilers with a maximum design heat input greater than 250 mmBtu/hr as a means of meeting its NO_X budget, then those measures must either:

(i) Impose a NO_X mass emissions cap on each source;

(ii) Impose a NO_X emission rate limit on each source and assume maximum operating capacity for every such source for purposes of estimating mass NO_X emissions; or

(iii) Impose any other regulatory requirement which the State has demonstrated to EPA provides equivalent or greater assurance than options in paragraphs (e)(2) (i) or (ii) of this section that the State will meet its NO_X budget.

(g)(1) Each SIP revision must demonstrate that the measures, rules, and regulations contained in it are adequate to provide for the timely compliance with the NO_X budget during the 2007 ozone season.

(2) The demonstration must include the following:

(i) Each revision must contain a detailed baseline inventory of NO_X mass emissions from point, area, and mobile sources in the year 2007 absent the control measures specified in the SIP submission. The State must use the same baseline inventory that EPA used in calculating the State's NO_X budget.

(ii) Each revision must contain a summary of NO_X mass emissions in 2007 projected to result from implementation of each of the new control measures and from all NO_X sources together following implementation of such control measures. The summary must assume the same NO_X mass emissions for mobile sources assumed by EPA in calculating the State's budget, unless the State has adopted measures more stringent than the Federal measures incorporated into the budget calculation. The State must provide EPA with a summary of the computations, assumptions, and judgments used to determine the degree of reduction of projected emissions that will result from the implementation of the control measures.

(iii) Each revision must identify the sources of the data used in the projection of emissions.

(h) Each revision must comply with § 51.116 (regarding data availability).

(1) Each revision must provide for monitoring the status of compliance with any rules and regulations adopted to meet the NO_X budget. Specifically, the revision must meet the following requirements:

(i) The 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—

(A) Information on the amount of NO_X emissions from the stationary sources; and

(B) 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;

(ii) The revision must comply with § 51.212 of this part (regarding testing, inspection, enforcement, and complaints);

(iii) If the revision contains any transportation control measures, then the revision must comply with § 51.213 (regarding transportation control measures);

(iv) If the revision contains measures to control NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe or greater or boilers with a maximum design heat input greater than 250 mmBtu/hr, then the revision must require such sources to use a continuous emissions monitoring system.

(2) [Reserved]

(i) [Reserved]

(j) Each revision must show that the State has legal authority to carry out the revision, including authority to:

(1) Adopt emissions standards and limitations and any other measures necessary for attainment and maintenance of the State's NO_X budget specified in 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 recordkeeping and to make inspections and conduct tests of air pollution sources.

(4) 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; also authority for the State to make such data available to the public as reported and as correlated with any applicable emissions standards or limitations.

(k)(1) The provisions of law or regulation which the State determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations 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 Act.

(l)(1) A revision may assign legal authority to local agencies in accordance with section 51.232.

(2) Each revision must comply with section 51.240 (regarding general plan requirements).

(m) Each revision shall contain legally enforceable compliance schedules setting forth September 30, 2002 as the date by which all sources or categories of such sources must be in compliance with any applicable requirement of the SIP revision.

(n) Each revision must comply with section 51.280 (regarding resources).

(o) For purposes of the SIP revisions required by this section, EPA may make a finding under section 179(a)(1) through (4) of the Act, 42 U.S.C. 7509(a)(1)-(4), starting the sanctions process set forth in section 179(a) of the Act. Any such finding will be deemed a finding under section 52.31(c) and sanctions will be imposed in accordance with the order of sanctions and the terms for such sanctions established in section 52.31.

(p) Each revision must provide for State compliance with the reporting requirements set forth in section 51.122 of this part.

§ 51.122 Emissions reporting requirements for SIP revisions relating to budgets for NO_x emissions.

(a) For its transport SIP revision under section 51.121 of this part, each State must submit to EPA NO_X emissions data as described in this section.

(b) Each revision must provide for periodic reporting by the State of NO_X emissions data to demonstrate that the emissions budget set forth in section 51.121(e)(4) is being met.

(1) *Annual reporting.* Each revision must provide for annual reporting of NO_X emissions data from all of the following sources and source categories:

(i) All NO_X sources within the State which the State chooses to regulate specifically for the purpose of meeting the NO_X budgets submitted under section 51.121(e)(4). This would include all NO_X sources within the State which are subject to measures included by the State in its transport SIP revision submitted under section 51.121. On road and nonroad mobile sources are not included unless controls greater than those Federally mandated are required for these sources.

(ii) The direct reporting of data from sources to EPA used for compliance

with the requirements of a trading program meeting the requirements of 40 CFR part 96 and/or direct reporting of data from sources to EPA used for meeting the monitoring and reporting requirements of subpart H of 40 CFR part 75 can be used to satisfy this requirement.

(2) *Triennial reporting.* Each plan must provide for triennial (i.e., every third year) reporting of NO_X emissions data from all sources within the State.

(3) *Year 2007 reporting.* Each plan must provide for reporting of year 2007 NO_X emissions data from all sources within the State.

(4) The data availability requirements in section 51.116 must be followed for all data submitted to meet the requirements of paragraphs (b)(1), (2) and (3) of this section.

(c) The data reported in paragraph (b) of this section for stationary point sources must meet the following minimum criteria:

(1) For annual data reporting purposes the data must include the following minimum elements:

(i) Inventory year.
(ii) State FIPS code.
(iii) County FIPS code.
(iv) Federal ID code (plant).
(v) Federal ID code (point).
(vi) Federal ID code (process).
(vii) Federal ID code (stack).
(vii) Site Name.
(viii) Physical Address.
(ix) SCC.
(x) Pollutant code.
(xi) Annual emissions.
(xii) Ozone Season emissions.
(xiii) Area designation.

(2) In addition, the annual data must include the following minimum elements as applicable to the emissions estimation methodology.

(i) Fuel heat content (annual).
(ii) Fuel heat content (seasonal).
(iii) Source of fuel heat content data.
(iv) Activity throughput (annual).
(v) Activity throughput (seasonal).
(vi) Source of activity/throughput data.
(vii) Winter throughput (%).
(viii) Spring throughput (%).
(ix) Summer throughput (%).
(x) Fall throughput (%).
(xi) Work weekday emissions.
(xii) Emission factor.
(xiii) Source of emission factor.
(xiv) Hr/day in operation.
(xv) Operations Start time (hour).
(xvi) Day/wk in operation.
(xvii) Wk/yr in operation.

(3) The triennial and 2007 inventories must include the following data elements:

(i) The data required in paragraphs (c)(1) and (c)(2) of this section.
(ii) X coordinate (latitude).
(iii) Y coordinate (longitude).
(iv) Stack height.
(v) Stack diameter.
(vi) Exit gas temperature.
(vii) Exit gas velocity.
(viii) Exit gas flow rate.
(ix) SIC.
(x) Boiler/process throughput design capacity.
(xi) Maximum design rate.
(xii) Maximum capacity.
(xiii) Primary control efficiency.
(xiv) Secondary control efficiency.
(xv) Control device type.

(d) The data reported in paragraph (b) of this section for area sources must include the following minimum elements:

(1) For annual inventories it must include:

(i) Inventory year.
(ii) State FIPS code.
(iii) County FIPS code.
(iv) SCC.
(v) Emission factor.
(vi) Source of emission factor.
(vii) Activity/throughput level (annual).
(viii) Activity throughput level (seasonal).
(ix) Source of activity/throughput data.
(x) Spring throughput (%).
(xi) Summer throughput (%).
(xii) Fall throughput (%).
(xiii) Control efficiency (%).
(xiv) Pollutant code.
(xv) Ozone Season emissions.
(xvi) Source of emissions data.
(xvii) Hr/day in operation.
(xviii) Day/wk in operation.
(xix) Wk/yr in operations.

(2) The triennial and 2007 inventories must contain at a minimum all the data required in paragraph (d)(1) of this section.

(e) The data reported in paragraph (b) of this section for mobile sources must meet the following minimum criteria:

(1) For the annual, triennial, and 2007 inventory purposes the following data must be reported:

(i) Inventory year.
(ii) State FIPS code.
(iii) County FIPS code.
(iv) Emission factor.
(v) Source of emission factor.
(vi) Activity (VMT by Roadway Class).
(vii) Source of activity data.
(viii) Pollutant code.
(ix) Summer work weekday emissions.
(x) Ozone season emissions.
(xi) Source of emissions data.

(2) [Reserved.]

(f) Approval of ozone season calculation by EPA. Each State must submit for EPA approval an example of the calculation procedure used to calculate ozone season emissions along with sufficient information for EPA to verify the calculated value of ozone season emissions.

(g) *Reporting schedules.* (1) Annual reports are to begin with data for the year 2003.

(2) Triennial reports are to begin with data for the year 2002.

(3) Year 2007 data are to be submitted for the year 2007.

(4) States must submit data for a required year by 12 months after the end of the calendar year for which the data are collected.

(h) Data Reporting Procedures. When submitting a formal NO_X budget emissions report and associated data, States shall notify the appropriate EPA regional office.

(1) States are required to report emissions data in an electronic format to the location given in paragraph (h)(5) of this section. Several options are available for data reporting.

(2) An agency may choose to continue reporting to the EPA Aerometric Information Retrieval System (AIRS) system using the AIRS facility subsystem (AFS) format for point sources. (This option will continue for point sources for some period of time after AIRS is reengineered (before 2002), at which time this choice may be discontinued or modified.)

(3) An agency may convert its emissions data into the Emission Inventory Improvement Program/ Electronic Data Interchange (EIIP/EDI) format. This file can then be made available to any requestor, either using E-mail, floppy disk, or value added network (VAN), or can be placed on a file transfer protocol (FTP) site.

(4) An agency may submit its emissions data in a proprietary format based on the EIIP data model.

(5) For options in paragraphs (h)(3) and (4) of this section, the terms *submitting* and *reporting* data are defined as either providing the data in the EIIP/EDI format or the EIIP based data model proprietary format to EPA, Office of Air Quality Planning and Standards, Emission Factors and Inventory Group directly or notifying this group that the data are available in the specified format and at a specific electronic location (e.g., FTP site).

(6) For annual reporting (not for triennial reports) a State may have sources submit the data directly to EPA. This option will be available to any source in a State that is both participating in a trading program meeting the requirements of part 96 of this chapter and that has agreed to accept data in this format. The EPA will

make both the raw data submitted in this format and summary data available to any State that chooses this option.

(i) *Definitions.* As used in this section, the following words and terms shall have the meanings set forth below:

(1) *Annual emissions.* Actual emissions for a plant, point, or process, either measured or calculated.

(2) *Ash content.* Inert residual portion of a fuel.

(3) *Area designation.* The designation of the area in which the reporting source is located with regard to the ozone national ambient air quality standard. This would include attainment or nonattainment designations. For nonattainment designations, the classification of the nonattainment area must be specified, i.e., transitional, marginal, moderate, serious, severe, or extreme.

(4) *Boiler design capacity.* A measure of the size of a boiler, based on the reported maximum continuous steam flow. Capacity is calculated in units of MMBtu/hr.

(5) *Control device type.* The name of the type of control device (e.g., wet scrubber, flaring, or process change).

(6) *Control efficiency.* The emissions reduction efficiency of a primary control device, which shows the amount of reduction of a particular pollutant from a process' emissions due to controls or material change. Control efficiency is usually expressed as a percentage or in tenths.

(7) *County/parish/reservation (FIPS).* Federal Information Placement System (FIPS). FIPS is the system of unique numeric codes developed by the government to identify States, counties, towns, and townships for the entire United States, Puerto Rico, and Guam.

(8) *Day/wk in operations.* Days per week that the emitting process operates.

(9) *Emission factor.* Ratio relating emissions of a specific pollutant to an activity or material throughput level.

(10) *Exit gas flow rate.* Numeric value of stack gas flow rate.

(11) *Exit gas temperature.* Numeric value of an exit gas stream temperature.

(12) *Exit gas velocity.* Numeric value of an exit gas stream velocity.

(13) *Fall throughput (%).* Portion of throughput for the three Fall months (September, October, November). This represents the expression of annual activity information on the basis of four seasons, typically spring, summer, fall, and winter. It can be represented either as a percentage of the annual activity (e.g., production in summer is 40 percent of the year's production), or in terms of the units of the activity (e.g., out of 600 units produced, spring = 150 units, summer = 250 units, fall = 150 units, and winter = 50 units).

(14) *Federal ID code (plant).* Unique codes for a plant or facility, containing one or more pollutant-emitting sources.

(15) *Federal ID code (point).* Unique codes for the point of generation of emissions, typically a physical piece of equipment.

(16) *Federal ID code (stack number).* Unique codes for the point where emissions from one or more processes are released into the atmosphere.

(17) *Federal Information Placement System (FIPS).* The system of unique numeric codes developed by the government to identify States, counties, towns, and townships for the entire United States, Puerto Rico, and Guam.

(18) *Heat content.* The thermal heat energy content of a solid, liquid, or gaseous fuel. Fuel heat content is typically expressed in units of Btu/lb of fuel, Btu/gal of fuel, joules/kg of fuel, etc.

(19) *Hr/day in operations.* Hours per day that the emitting process operates.

(20) *Maximum design rate.* Maximum fuel use rate based on the equipment's or process' physical size or operational capabilities.

(21) *Maximum nameplate capacity.* A measure of the size of a generator, and is put on the unit's nameplate by the manufacturer. The data element is reported in MW or KW.

(22) *Ozone season.* The period May 1 through September 30 of a year.

(23) *Physical address.* Street address of facility.

(24) *Point source.* A non-mobile source which emits 100 tons of NO_X or more per year. A non-mobile source which emits less NO_X per year than this amount is an area source.

(25) *Pollutant code.* A unique code for each reported pollutant that has been assigned in the EIIP Data Model. Character names are used for criteria pollutants, while Chemical Abstracts Service (CAS) numbers are used for all other pollutants. Some States may be using SAROAD codes for pollutants, but these should be able to be mapped to the EIIP Data Model pollutant codes.

(26) *Process rate/throughput.* A measurable factor or parameter that is directly or indirectly related to the emissions of an air pollution source. Depending on the type of source category, activity information may refer to the amount of fuel combusted, the amount of a raw material processed, the amount of a product that is manufactured, the amount of a material that is handled or processed, population, employment, number of units, or miles traveled. Activity information is typically the value that is multiplied against an emission factor to generate an emissions estimate.

(27) *SCC. Source category code.* A process-level code that describes the equipment or operation emitting pollutants.

(28) *Secondary control efficiency (%).* The emission reduction efficiency of a secondary control device, which shows the amount of reduction of a particular pollutant from a process' emissions due to controls or material change. Control efficiency is usually expressed as a percentage or in tenths.

(29) *SIC.* Standard Industrial Classification code. U.S. Department of Commerce's categorization of businesses by their products or services.

(30) *Site name.* The name of the facility.

(31) *Spring throughput (%).* Portion of throughput or activity for the three spring months (March, April, May). See the definition of Fall Throughput.

(32) *Stack diameter.* Stack physical diameter.

(33) *Stack height.* Stack physical height above the surrounding terrain.

(34) *Start date (inventory year).* The calendar year that the emissions estimates were calculated for and are applicable to.

(35) *Start time (hour).* Start time (if available) that was applicable and used for calculations of emissions estimates.

(36) *State/providence/territory (FIPS).* Federal Information Placement System (FIPS). FIPS is the system of unique numeric codes developed by the government to identify States, counties, towns, and townships for the entire United States, Puerto Rico, and Guam.

(37) *Summer throughput (%).* Portion of throughput or activity for the three summer months (June, July, August). See the definition of Fall Throughput.

(38) *Summer work weekday emissions.* Average day's emissions for a typical day.

(39) *VMT by Roadway Class.* VMT stands for vehicle miles traveled and is an expression of vehicle activity that is used with emission factors. The emission factors are usually expressed in terms of grams per mile of travel. Since VMT does not directly correlate to emissions that occur while the vehicle is not moving, these non-moving emissions are incorporated into EPA's MOBILE model emission factors.

(40) *Winter throughput (%).* Portion of throughput or activity for the three winter months (December, January, February). See the definition of Fall Throughput.

(41) *Week/year in operation.* Weeks per year that the emitting process operates.

(42) *Work Weekday.* Any day of the week except Saturday or Sunday.

(43) *X coordinate (latitude).* East-west geographic coordinate of an object.

(44) *Y coordinate (longitude).* North-south geographic coordinate of an object.

PART 76—ACID RAIN NITROGEN OXIDES EMISSION REDUCTION PROGRAM

3. The authority citation for part 76 continues to read as follows:

Authority: 42 U.S.C. 7601 and 7651, *et seq.*

4. Section 76.16 is added to read as follows:

§ 76.16 Alternative compliance.

(a)(1) A State or group of States may submit a petition requesting that the Administrator, on his or her own motion, may:

(i) Require the owners or operators of the Group 1, Phase II coal-fired utility units with a tangentially fired boiler or a dry bottom wall fired boiler in the State or the group of States to be subject to the applicable emission limitations for NO_X in § 76.5, in lieu of the applicable emission limitations for NO_X in § 76.7; and

(ii) Provide that the owners or operators of the Group 2 coal-fired utility units with a cell burner boiler, cyclone boiler, wet bottom boiler, or vertically fired boiler in the State or the group of States are not subject to the applicable emission limitations for NO_X in § 76.6.

(2) A petition under paragraph (a)(1) of this section must demonstrate that the requirements in paragraphs (b)(1) and (2) of this section are met.

(3) A petition under paragraph (a)(1) of this section may be submitted, but may not be approved by the Administrator, before the State implementation plan or Federal implementation plan covering the entire State, or the State implementation plans or Federal implementation plans covering the entire group of States, under paragraph (b) of this section become final and federally enforceable.

(b) The Administrator may take the actions in paragraphs (a)(1)(i) and (ii) of this section if he or she finds that, under the State implementation plan or Federal implementation plan covering the entire State or the State implementation plans or Federal implementation plans covering the entire group of States:

(1) Each unit that is in the State or the group of States and that, but for the provisions of this section, would be subject to emission limitations under this part

(i) Is subject to:

(A) A cap on total annual NO_X emissions; or

(B) Two or more seasonal caps that together limit total annual NO_X emissions;

(ii) May trade authorizations to emit NO_X within each such cap, provided that the Administrator will consider (to the extent demonstrated to his or her satisfaction) whether the cost savings from trading will be offset by elimination of the ability of an owner or operator of a unit in the State or the group of States to use a NO_X averaging plan under § 76.11 in lieu of emission limitations under § 76.5, § 76.6, or § 76.7 that remain applicable under the provisions of this section; and

(iii) Must use authorizations to emit NO_X to account for:

(A) Any NO_X emissions by such unit; and

(B) Any NO_X emissions resulting from reducing utilization of such unit below its baseline utilization (adjusted for changes in demand for electricity) and shifting utilization to any other unit, or combustion device serving a generator, that is not subject to each such cap, unless it is demonstrated to the satisfaction of the Administrator that any NO_X emissions under this paragraph (b)(1)(iii)(B) will not result in higher total NO_X emissions from sources in the State or group of States or in other States; and

(2)(i) Total annual NO_X emissions by all units that are in the State or the group of States and that, but for the provisions of this section, would be subject to emission limitations under this part will be equal to or lower than total annual NO_X emissions by such units if each such unit is treated as subject to the applicable emission limitation in § 76.5, § 76.6, or § 76.7 that would apply but for the provisions of this section.

(ii) In the case of a petition under paragraph (a) of this section, total annual NO_X emissions by the units will be determined using the actual utilizations of the units for the last 4 calendar quarters prior to submission of the petition. In the case of action by the Administrator on his or her own motion under paragraph (a) of this section, total annual NO_X emissions by the units will be determined using the actual utilizations of the units for the last 4 calendar quarters prior to issuance of the draft decision under paragraph (c) of this section.

(c) In acting on a petition or on his or her own motion under paragraph (a) of this section, the Administrator will issue, for public comment, a draft decision on the petition or a draft decision to act on his or her own motion and then a final decision. The Administrator may issue a draft decision, but not final decision, on a petition or on his or her own motion before the State implementation plan or Federal implementation plan covering the entire State, or the State implementation plans or Federal implementation plans covering the entire group of States, under paragraph (b) of this section become final and federally enforceable. The draft decision will set forth procedures that will govern issuance of the final decision and will provide for:

(1) Service of notice of issuance of the draft decision on.

(i) Any interested person;

(ii) The designated representative of each source with one or more units that, but for the provisions of this section, would be subject to the applicable emission limitation in § 76.6 or § 76.7; and

(iii) The air pollution control agencies that:

(A) Have jurisdiction over a unit covered by the draft decision;

(B) Are in a State, or area in which there is a federally recognized Indian tribe, whose air quality may be affected by the draft decision and that is contiguous to the State, or the area in which there is a federally recognized Indian tribe, where a unit covered by the draft decision is located; or

(C) Are in a State, or area in which there is a federally recognized Indian tribe, within 50 miles of a unit covered by the draft decision.

(2) Publication of notice of issuance of the draft decision in the **Federal Register** and in any State publication designed to give general public notice in the States in which the units covered by the draft decision are located;

(3) A public comment period of at least 30 days and extension or reopening of the comment period by the Administrator for good cause;

(4) A public hearing, upon request or on the Administrator's own motion, to the extent the Administrator determines that a public hearing will contribute to the decision-making process by clarifying one or more significant issues affecting the draft decision;

(5) Consideration by the Administrator of the comments on the draft decision received during the public comment period or any public hearing and written response by the Administrator to any such relevant comments;

(6) Notice of issuance of a final decision using the methods set forth in paragraphs (c)(1) and (2) of this section for providing notice of the draft decision; and

(7) Appeals, governed by part 78 of this chapter, of the final decision.

(d) If, after the Administrator issues a final decision under paragraph (c) of this section and takes the actions set forth in paragraphs (a)(1)(i) and (ii) of this section with regard to a State or group of States, a State implementation plan or Federal implementation plan covering the entire State or entire group of States is revised in a way that may affect the basis for the findings on which such decision is based, the Administrator may, upon petition or on his or her own motion, reconsider such decision.

(e) For purposes of this section, the term ''State'' shall mean one of the 48 contiguous States or the District of Columbia.

Authority: 42 U.S.C. 7401, 7403, 7410, and 7601.

5. Part 96 is added consisting of §§ 96.1 through 96.88 to read as follows:

PART 96—NO_X BUDGET TRADING PROGRAM

Subpart A—NO_X Budget Trading Program General Provisions

Sec.
96.1 Purpose.
96.2 Definitions.
96.3 Measurements, abbreviations, and acronyms.
96.4 Applicability.
96.5 Retired unit exemption.
96.6 Standard requirements.
96.7 Computation of time.

Subpart B—Authorized Account Representative for NO_X Budget Sources

96.10 Authorization and responsibilities of the NO_X authorized account representative.
96.11 Alternate NO_X authorized account representative.
96.12 Changing the NO_X authorized account representative, alternate NO_X authorized account representative; changes in the owners and operators.
96.13 Account certificate of representation.
96.14 Objections concerning the NO_X authorized account representative.

Subpart C—Permits

96.20 General NO_X Budget permit requirements.
96.21 Submission of NO_X Budget permit applications.
96.22 Information requirements for NO_X Budget permit applications.
96.23 NO_X Budget permit contents.
96.24 Effective date of initial NO_X Budget permit.
96.25 NO_X Budget permit revisions.

Subpart D—Compliance Certification

96.30 Compliance certification report.
96.31 Permitting authority's and Administrator's action on compliance certifications.

Subpart E—NO_X Allowance Allocations

96.40 State trading program budget.
96.41 Timing requirements for NO_X allowance allocations.
96.42 NO_X allowance allocations.

Subpart F—NO_X Allowance Tracking System

96.50 NO_X Allowance Tracking System accounts.
96.51 Establishment of accounts.
96.52 NO_X Allowance Tracking System responsibilities of NO_X authorized account representative.
96.53 Recordation of NO_X allowance allocations.
96.54 Compliance.
96.55 Banking. [Reserved]
96.56 Account error.
96.57 Closing of general accounts.

Subpart G—NO_X Allowance Transfers

96.60 Scope and submission of NO_X allowance transfers.
96.61 EPA recordation.
96.62 Notification.

Subpart H—Monitoring and Reporting

96.70 General requirements.
96.71 Initial certification and recertification procedures.
96.72 Out of control periods.
96.73 Notifications.
96.74 Recordkeeping and reporting.
96.75 Petitions.

Subpart I—Individual Unit Opt-ins

96.80 Applicability.
96.81 General.
96.82 NO_X authorized account representative.
96.83 Applying for NO_X Budget opt-in permit.
96.84 Opt-in process.
96.85 NO_X Budget opt-in permit contents.
96.86 Withdrawal from NO_X Budget Trading Program.
96.87 Change in regulatory status.
96.88 NO_X allowance allocations to opt-in units.

Authority: 42 U.S.C. 7401, 7403, 7410, and 7601.

Subpart A—NO_X Budget Trading Program General Provisions

§ 96.1 Purpose.

This part establishes general provisions and the applicability, permitting, allowance, excess emissions, monitoring, and opt-in provisions for the NO_X Budget Trading Program as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor. The owner or operator of a unit, or any other person, shall comply with the requirements of this part only if such compliance is required by a State that has jurisdiction over the unit and that incorporates by reference or otherwise adopts the requirements of this part. A State that adopts the requirements of this part authorizes the Administrator to assist the State in implementing the NO_X Budget Trading Program by carrying out the functions set forth for the Administrator in this part.

§ 96.2 Definitions.

The terms used in this part shall have the meanings set forth in this section as follows:

Account certificate of representation means the completed and signed submission required by subpart B of this part for certifying the designation of a NO_X authorized account representative for a NO_X Budget source or a group of identified NO_X Budget sources who is authorized to represent the owners and operators of such source or sources and of the NO_X Budget units at such source or sources with regard to matters under the NO_X Budget Trading Program.

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

Acid Rain emissions limitation means, as defined in § 72.2 of this chapter, a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program under title IV of the Clean Air Act.

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

Allocate or *allocation* means the determination by the permitting authority or the Administrator of the number of NO_X allowances to be initially credited to a NO_X Budget unit or an allocation set-aside.

Automated data acquisition and handling system or *DAHS* means that component of the CEMS, or other emissions monitoring system approved for use under subpart H 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 H of this part.

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.

Clean Air Act means the Clean Air Act, 42 U.S.C. 7401, *et seq.*, as amended by Pub. L. No. 101–549 (November 15, 1990).

Combined cycle system means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines

configured to improve overall efficiency of electricity generation or steam production.

Combustion turbine means an enclosed fossil or other fuel-fired device that is comprised of 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.

Commence commercial operation means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For purposes of § 96.70 and except as provided in § 96.5, for a unit that is a NO_X Budget unit under § 96.4 on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. For purposes of § 96.70 and except as provided in § 96.5 or subpart I of this part, for a unit that is not a NO_X Budget unit under § 96.4 on the date the unit commences commercial operation, the date the unit becomes a NO_X Budget unit under § 96.4 shall be the unit's date of commencement of commercial operation.

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. For purposes of § 96.21, § 96.42, or § 96.70 and except as provided in § 96.5, for a unit that is a NO_X Budget unit under § 96.4 on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. For purposes of § 96.21, 96.42, or 96.70 and except as provided in § 96.5 or subpart I of this part, for a unit that is not a NO_X Budget unit under § 96.4 on the date of commencement of operation, the date the unit becomes a NO_X Budget unit under § 96.4 shall be the unit's date of commencement of operation.

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

Compliance account means a NO_X Allowance Tracking System account, established by the Administrator for the NO_X Budget unit under subpart F of this part, in which the NO_X allowance allocations for the unit are initially recorded and in which are held NO_X allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_X Budget emissions limitation.

Compliance certification means a submission to the permitting authority or the Administrator, as appropriate, that is required under subpart D of this part to report a NO_X Budget source's or a NO_X Budget unit's compliance or noncompliance with this part and that is signed by the NO_X authorized account representative in accordance with subpart B of this part.

Compliance use date means the first control period for which a NO_X allowance can be used for the purpose of meeting a unit's NO_X Budget emissions limitation.

Continuous emission monitoring system or *CEMS* means the equipment required under subpart H of this part to sample, analyze, measure, and provide, by readings taken at least once every 15 minutes, a permanent record of emissions, expressed in pounds per million British thermal units (lb/mmBtu) for nitrogen oxides. The equipment also provides, for each hour, a permanent record of emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included in a continuous emission monitoring system:

(1) Flow monitor;

(2) Nitrogen oxides pollutant concentration monitors;

(3) Diluent gas monitor (oxygen or carbon dioxide);

(4) A continuous moisture monitor when such monitoring is required by subpart H of this part; and

(5) An automated data acquisition and handling system.

Control period means the period beginning May 1 of a year and ending on September 30 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 NO_X authorized account representative and as determined by the Administrator in accordance with subpart H of this part.

Energy Information Administration means the Energy Information Administration of the United States Department of Energy.

EPA means the United States Environmental Protection Agency.

Excess emissions means any tonnage of nitrogen oxides emitted by a NO_X Budget unit during a control period that exceeds the NO_X Budget emissions limitation for the unit.

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

Fossil fuel-fired means the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel comprises more than 50 percent of the annual heat input on a Btu basis.

General account means a NO_X Allowance Tracking System account, established under subpart F of this part, that is not a compliance account or an overdraft account.

Generator means a device that produces electricity.

Heat input means the product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the Administrator by the NO_X authorized account representative and as determined by the Administrator in accordance with subpart H of this part, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

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 from 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 equal to or greater 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 ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

Maximum potential hourly heat input means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use appendix D of part 75 of this chapter to report heat input, this value should be calculated, in accordance with part 75 of this chapter, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this

value should be reported, in accordance with part 75 of this chapter, using the maximum potential flowrate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

Maximum potential NO_X emission rate means the emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of appendix F of part 75 of this chapter, using the maximum potential nitrogen oxides concentration as defined in section 2 of appendix A of part 75 of this chapter, and either the maximum oxygen concentration (in percent O_2) or the minimum carbon dioxide concentration (in percent CO_2), under all operating conditions of the unit except for unit start up, shutdown, and upsets.

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

Most stringent State or Federal NO_X emissions limitation means, with regard to a NO_X Budget opt-in source, 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 the maximum electrical generating output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

Non-title V permit means a federally enforceable permit administered by the permitting authority pursuant to the Clean Air Act and regulatory authority under the Clean Air Act, other than title V of the Clean Air Act and part 70 or 71 of this chapter.

NO_X allowance means an authorization by the permitting authority or the Administrator under the NO_X Budget Trading Program to emit up to one ton of nitrogen oxides during the control period of the specified year or of any year thereafter.

NO_X allowance deduction or *deduct NO_X allowances* means the permanent withdrawal of NO_X allowances by the Administrator from a NO_X Allowance Tracking System compliance account or overdraft account to account for the number of tons of NO_X emissions from a NO_X Budget unit for a control period, determined in accordance with subpart H of this part, or for any other allowance surrender obligation under this part.

NO_X allowances held or *hold NO_X allowances* means the NO_X allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with subpart G of this part, in a NO_X Allowance Tracking System account.

NO_X Allowance Tracking System means the system by which the Administrator records allocations, deductions, and transfers of NO_X allowances under the NO_X Budget Trading Program.

NO_X Allowance Tracking System account means an account in the NO_X Allowance Tracking System established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of NO_X allowances.

NO_X allowance transfer deadline means midnight of November 30 or, if November 30 is not a business day, midnight of the first business day thereafter and is the deadline by which NO_X allowances may be submitted for recordation in a NO_X Budget unit's compliance account, or the overdraft account of the source where the unit is located, in order to meet the unit's NO_X Budget emissions limitation for the control period immediately preceding such deadline.

NO_X authorized account representative means, for a NO_X Budget source or NO_X Budget unit at the source, the natural person who is authorized by the owners and operators of the source and all NO_X Budget units at the source, in accordance with subpart B of this part, to represent and legally bind each owner and operator in matters pertaining to the NO_X Budget Trading Program or, for a general account, the natural person who is authorized, in accordance with subpart F of this part, to transfer or otherwise dispose of NO_X allowances held in the general account.

NO_X Budget emissions limitation means the tonnage equivalent of the NO_X allowances allocated to a NO_X Budget unit for use in a control period adjusted, as of the NO_X allowance transfer deadline, by transfers to or from the unit's compliance account, or the overdraft account of the source where the unit is located, of NO_X allowances available for compliance deductions for the unit for the control period in accordance with § 96.54.

NO_X Budget opt-in permit means a NO_X Budget permit covering a NO_X Budget opt-in source.

NO_X Budget opt-in source means a unit that has been elected to become a NO_X Budget unit under the NO_X Budget Trading Program and whose opt-in permit has been issued and is in effect under subpart I of this part.

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

NO_X Budget source means a source that includes one or more NO_X Budget units.

NO_X Budget Trading Program means a regional nitrogen oxides air pollution control and emission reduction program established in accordance with this part and pursuant to § 51.121 of this chapter, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.

NO_X Budget unit means a unit that is subject to the NO_X Budget Trading Program emissions limitation under § 96.4 or § 96.80.

Operating means, with regard to a unit under §§ 96.22(d)(2) and 96.80, having documented heat input for more than 876 hours in the 6 months immediately preceding the submission of an application for an initial NO_X Budget permit under § 96.83(a).

Operator means any person who operates, controls, or supervises a NO_X Budget unit, a NO_X Budget source, or unit for which an application for a NO_X Budget opt-in permit under § 96.83 is being or has been submitted and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

Opt-in means to be elected to become a NO_X Budget unit under the NO_X Budget Trading Program through a final, effective NO_X Budget opt-in permit under subpart I of this part.

Overdraft account means the NO_X Allowance Tracking System account, established by the Administrator under subpart F of this part, for each NO_X Budget source where there are two or more NO_X Budget units.

Owner means any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a NO_X Budget unit or in a unit for which an application for a NO_X Budget opt-in permit under § 96.83 is being or has been submitted; or

(2) Any holder of a leasehold interest in a NO_X Budget unit or in a unit for which an application for a NO_X Budget opt-in permit under § 96.83 is being or has been submitted; or

(3) Any purchaser of power from a NO_X Budget unit or from a unit for which an application for a NO_X Budget opt-in permit under § 96.83 is being or has been submitted under a life-of-the-unit, firm power contractual arrangement. However, 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, upon the revenues or income from the NO_X Budget unit or the unit for which an application for a NO_X Budget opt-in permit under § 96.83 is being or has been submitted; or

(4) With respect to any general account, any person who has an ownership interest with respect to the NO_X allowances held in the general account and who is subject to the binding agreement for the NO_X authorized account representative to represent that person's ownership interest with respect to 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 NO_X Budget Trading Program in accordance with subpart C of this part.

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 writing or by authorized electronic transmission), as indicated in an official correspondence 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 NO_X allowances, the movement of NO_X allowances by the Administrator from one NO_X Allowance Tracking System account to another, 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 appendix A of part 60 of this chapter.

Serial number means, when referring to NO_X allowances, the unique identification number assigned to each NO_X allowance by the Administrator, under § 96.53(c).

Source means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the Clean Air Act. 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 48 contiguous States and the District of Columbia specified in § 51.121(c) of this chapter, or any non-federal authority in or including such States or the District of Columbia (including local agencies, and Statewide agencies) or any eligible Indian tribe in an area of such State or the District of Columbia, that adopts a NO_X Budget Trading Program pursuant to § 51.121 of this chapter. To the extent a State incorporates by reference this part, the term ''State'' shall mean the incorporating State. The term ''State'' shall have its conventional meaning where such meaning is clear from the context.

State trading program budget means the total number of NO_X tons apportioned to all NO_X Budget units in a given State, in accordance with the NO_X Budget Trading Program, for use in a given control period.

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,'' ''service,'' or ''mailing'' 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 as meeting the requirements of title V of the Clean Air Act and part 70 or 71 of this chapter.

Ton or tonnage means any ''short ton'' (i.e., 2,000 pounds). For the purpose of determining compliance with the NO_X Budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with subpart H of this part, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.

Unit means a stationary boiler, combustion turbine, or combined cycle system.

Unit load means the total (i.e., gross) output of a unit in any control period (or other specified time period) produced by combusting a given heat input of fuel, expressed in terms of:

(1) The total electrical generation (MWe) for use within the plant and for sale; or

(2) In the case of a unit that uses heat input for purposes other than electrical generation, the total steam pressure (psia) produced by the unit.

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

Unit operating hour or *hour of unit operation* means any hour (or fraction of an hour) during which a unit combusts any fuel.

Utilization means the heat input (expressed in mmBtu/time) for a unit.

§ 96.3 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this part are defined as follows:

Btu—British thermal unit.
hr—hour.
Kwh—kilowatt hour.
lb—pounds.
mmBtu—million Btu.
MWe—megawatt electrical.
ton—2000 pounds
CO_2—carbon dioxide.
NO_X—nitrogen oxides.
O_2—oxygen.

§ 96.4 Applicability.

The following units in a State shall be NO_X Budget units, and any source that includes one or more such units shall be a NO_X Budget source, subject to the requirements of this part:

(a) Any unit that, any time on or after January 1, 1995, serves a generator with a nameplate capacity greater than 25 MWe; or

(b) Any unit that is not a unit under paragraph (a) of this section and that, any time on or after January 1, 1995, does not serve a generator and has a maximum design heat input greater than 250 mmBtu/hr.

§ 96.5 Retired unit exemption.

(a) This section applies to any NO_X Budget unit, other than a NO_X Budget opt-in source, that is permanently retired.

(b)(1) Any NO_X Budget unit, other than a NO_X Budget opt-in source, that is permanently retired shall be exempt from the NO_X Budget Trading Program, except for the provisions of this section, §§ 96.2, 96.3, 96.4, 96.7 and subparts E, F, and G of this part.

(2) The exemption under paragraph (b)(1) of this section shall become effective the day on which the unit is permanently retired. Within 30 days of permanent retirement, the NO_X authorized account representative (authorized in accordance with subpart

B of this part) shall submit a statement to the permitting authority otherwise responsible for administering a NO_X Budget permit for the unit. A copy of the statement shall be submitted to the Administrator. The statement shall state (in a format prescribed by the permitting authority) that the unit is permanently retired and will comply with the requirements of paragraph (c) of this section.

(3) After receipt of the notice under paragraph (b)(2) of this section, the permitting authority will amend the permit covering the source at which the unit is located to add the provisions and requirements of the exemption under paragraphs (b)(1) and (c) of this section.

(c) *Special provisions.* (1) A unit exempt under this section shall not emit any nitrogen oxides, starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with subpart E of this part.

(2)(i) A unit exempt under this section and located at a source that is required, or but for this exemption would be required, to have a title V operating permit shall not resume operation unless the NO_X authorized account representative of the source submits a complete NO_X Budget permit application under § 96.22 for the unit not less than 18 months (or such lesser time provided under the permitting authority's title V operating permits regulations) prior to the later of May 1, 2003 or the date on which the unit is to first resume operation.

(ii) A unit exempt under this section and located at a source that is required, or but for this exemption would be required, to have a non-title V permit shall not resume operation unless the NO_X authorized account representative of the source submits a complete NO_X Budget permit application under § 96.22 for the unit not less than 18 months (or such lesser time provided under the permitting authority's non-title V permits regulations) prior to the later of May 1, 2003 or the date on which the unit is to first resume operation.

(3) The owners and operators and, to the extent applicable, the NO_X authorized account representative of a unit exempt under this section shall comply with the requirements of the NO_X Budget Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit that is exempt under this section is not eligible to be a NO_X Budget opt-in source under subpart I of this part.

(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the permitting authority or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(6) *Loss of exemption.* (i) On the earlier of the following dates, a unit exempt under paragraph (b) of this section shall lose its exemption:

(A) The date on which the NO_X authorized account representative submits a NO_X Budget permit application under paragraph (c)(2) of this section; or

(B) The date on which the NO_X authorized account representative is required under paragraph (c)(2) of this section to submit a NO_X Budget permit application.

(ii) For the purpose of applying monitoring requirements under subpart H of this part, a unit that loses its exemption under this section shall be treated as a unit that commences operation or commercial operation on the first date on which the unit resumes operation.

§ 96.6 Standard requirements.

(a) *Permit Requirements.* (1) The NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall:

(i) Submit to the permitting authority a complete NO_X Budget permit application under § 96.22 in accordance with the deadlines specified in § 96.21(b) and (c);

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a NO_X Budget permit application and issue or deny a NO_X Budget permit.

(2) The owners and operators of each NO_X Budget source and each NO_X Budget unit at the source shall have a NO_X Budget permit issued by the permitting authority and operate the unit in compliance with such NO_X Budget permit.

(b) *Monitoring requirements.* (1) The owners and operators and, to the extent applicable, the NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall comply with the monitoring requirements of subpart H of this part.

(2) The emissions measurements recorded and reported in accordance with subpart H of this part shall be used to determine compliance by the unit with the NO_X Budget emissions limitation under paragraph (c) of this section.

(c) *Nitrogen oxides requirements.* (1) The owners and operators of each NO_X Budget source and each NO_X Budget unit at the source shall hold NO_X allowances available for compliance deductions under § 96.54, as of the NO_X allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_X emissions for the control period from the unit, as determined in accordance with subpart H of this part, plus any amount necessary to account for actual utilization under § 96.42(d) for the control period.

(2) Each ton of nitrogen oxides emitted in excess of the NO_X Budget emissions limitation shall constitute a separate violation of this part, the Clean Air Act, and applicable State law.

(3) A NO_X Budget unit shall be subject to the requirements under paragraph (c)(1) of this section starting on the later of May 1, 2003 or the date on which the unit commences operation.

(4) NO_X allowances shall be held in, deducted from, or transferred among NO_X Allowance Tracking System accounts in accordance with subparts E, F, G, and I of this part.

(5) A NO_X allowance shall not be deducted, in order to comply with the requirements under paragraph (c)(1) of this section, for a control period in a year prior to the year for which the NO_X allowance was allocated.

(6) A NO_X allowance allocated by the permitting authority under the NO_X Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_X Budget Trading Program. No provision of the NO_X Budget Trading Program, the NO_X Budget permit application, the NO_X Budget permit, or an exemption under § 96.5 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.

(7) A NO_X allowance allocated by the permitting authority or the Administrator under the NO_X Budget Trading Program does not constitute a property right.

(8) Upon recordation by the Administrator under subpart F, G, or I of this part, every allocation, transfer, or deduction of a NO_X allowance to or from a NO_X Budget unit's compliance account or the overdraft account of the source where the unit is located is

deemed to amend automatically, and become a part of, the NO_X Budget unit's NO_X Budget permit by operation of law without any further review.

(d) *Excess emissions requirements.* (1) The owners and operators of a NO_X Budget unit that has excess emissions in any control period shall:

(i) Surrender the NO_X allowances required for deduction under § 96.54(d)(1); and

(ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under § 96.54(d)(3).

(2) [Reserved]

(e) *Recordkeeping and Reporting Requirements.* (1) Unless otherwise provided, the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The account certificate of representation for the NO_X authorized account representative for the source and each NO_X Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with § 96.13; ''provided'' that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(ii) All emissions monitoring information, in accordance with subpart H of this part; ''provided'' that to the extent that subpart H of this part provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X Budget Trading Program.

(iv) Copies of all documents used to complete a NO_X Budget permit application and any other submission under the NO_X Budget Trading Program or to demonstrate compliance with the requirements of the NO_X Budget Trading Program.

(2) The NO_X authorized account representative of a NO_X Budget source and each NO_X Budget unit at the source shall submit the reports and compliance certifications required under the NO_X Budget Trading Program, including those under subparts D, H, or I of this part.

(f) *Liability.* (1) Any person who knowingly violates any requirement or prohibition of the NO_X Budget Trading Program, a NO_X Budget permit, or an exemption under § 96.5 shall be subject to enforcement pursuant to applicable State or Federal law.

(2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.

(3) No permit revision shall excuse any violation of the requirements of the NO_X Budget Trading Program that occurs prior to the date that the revision takes effect.

(4) Each NO_X Budget source and each NO_X Budget unit shall meet the requirements of the NO_X Budget Trading Program.

(5) Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget source (including a provision applicable to the NO_X authorized account representative of a NO_X Budget source) shall also apply to the owners and operators of such source and of the NO_X Budget units at the source.

(6) Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget unit (including a provision applicable to the NO_X authorized account representative of a NO_X budget unit) shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under subpart H of this part, the owners and operators and the NO_X authorized account representative of one NO_X Budget unit shall not be liable for any violation by any other NO_X Budget unit of which they are not owners or operators or the NO_X authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

(g) *Effect on Other Authorities.* No provision of the NO_X Budget Trading Program, a NO_X Budget permit application, a NO_X Budget permit, or an exemption under § 96.5 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X Budget source or NO_X Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

§ 96.7 Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the NO_X Budget Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the NO_X Budget Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the NO_X Budget Trading Program, falls on a weekend or a State or Federal holiday, the time period shall be extended to the next business day.

Subpart B—NO_X Authorized Account Representative for NO_X Budget Sources

§ 96.10 Authorization and responsibilities of the NO_X authorized account representative.

(a) Except as provided under § 96.11, each NO_X Budget source, including all NO_X Budget units at the source, shall have one and only one NO_X authorized account representative, with regard to all matters under the NO_X Budget Trading Program concerning the source or any NO_X Budget unit at the source.

(b) The NO_X authorized account representative of the NO_X Budget source shall be selected by an agreement binding on the owners and operators of the source and all NO_X Budget units at the source.

(c) Upon receipt by the Administrator of a complete account certificate of representation under § 96.13, the NO_X authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO_X Budget source represented and each NO_X Budget unit at the source in all matters pertaining to the NO_X Budget Trading Program, not withstanding any agreement between the NO_X authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO_X authorized account representative by the permitting authority, the Administrator, or a court regarding the source or unit.

(d) No NO_X Budget permit shall be issued, and no NO_X Allowance Tracking System account shall be established for a NO_X Budget unit at a source, until the Administrator has received a complete account certificate of representation under § 96.13 for a NO_X authorized account representative of the source and the NO_X Budget units at the source.

(e) (1) Each submission under the NO_X Budget Trading Program shall be submitted, signed, and certified by the NO_X authorized account representative

for each NO_X Budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NO_X authorized account representative: ''I am authorized to make this submission on behalf of the owners and operators of the NO_X Budget sources or NO_X Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

(2) The permitting authority and the Administrator will accept or act on a submission made on behalf of owner or operators of a NO_X Budget source or a NO_X Budget unit only if the submission has been made, signed, and certified in accordance with paragraph (e)(1) of this section.

§ 96.11 Alternate NO_X authorized account representative.

(a) An account certificate of representation may designate one and only one alternate NO_X authorized account representative who may act on behalf of the NO_X authorized account representative. The agreement by which the alternate NO_X authorized account representative is selected shall include a procedure for authorizing the alternate NO_X authorized account representative to act in lieu of the NO_X authorized account representative.

(b) Upon receipt by the Administrator of a complete account certificate of representation under § 96.13, any representation, action, inaction, or submission by the alternate NO_X authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_X authorized account representative.

(c) Except in this section and §§ 96.10(a), 96.12, 96.13, and 96.51, whenever the term ''NO_X authorized account representative'' is used in this part, the term shall be construed to include the alternate NO_X authorized account representative.

§ 96.12 Changing the NO_X authorized account representative alternate NO_X authorized account representative; changes in the owners and operators.

(a) Changing the NO_X authorized account representative. The NO_X authorized account representative may be changed at any time upon receipt by the Administrator of a superseding complete account certificate of representation under § 96.13. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_X authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(b) Changing the alternate NO_X authorized account representative. The alternate NO_X authorized account representative may be changed at any time upon receipt by the Administrator of a superseding complete account certificate of representation under § 96.13. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_X authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new alternate NO_X authorized account representative and the owners and operators of the NO_X Budget source and the NO_X Budget units at the source.

(c) *Changes in the owners and operators.* (1) In the event a new owner or operator of a NO_X Budget source or a NO_X Budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NO_X authorized account representative and any alternate NO_X authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the permitting authority or the Administrator, as if the new owner or operator were included in such list.

(2) Within 30 days following any change in the owners and operators of a NO_X Budget source or a NO_X Budget unit, including the addition of a new owner or operator, the NO_X authorized account representative or alternate NO_X authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

§ 96.13 Account certificate of representation.

(a) A complete account certificate of representation for a NO_X authorized account representative or an alternate NO_X authorized account representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the NO_X Budget source and each NO_X Budget unit at the source for which the account certificate of representation is submitted.

(2) The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NO_X authorized account representative and any alternate NO_X authorized account representative.

(3) A list of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source.

(4) The following certification statement by the NO_X authorized account representative and any alternate NO_X authorized account representative: ''I certify that I was selected as the NO_X authorized account representative or alternate NO_X authorized account representative, as applicable, by an agreement binding on the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_X Budget Trading Program on behalf of the owners and operators of the NO_X Budget source and of each NO_X Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the permitting authority, the Administrator, or a court regarding the source or unit.''

(5) The signature of the NO_X authorized account representative and any alternate NO_X authorized account representative and the dates signed.

(b) Unless otherwise required by the permitting authority or the Administrator, documents of agreement or notice referred to in the account certificate of representation shall not be submitted to the permitting authority or the Administrator. Neither the permitting authority nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

§ 96.14 Objections concerning the NO_X authorized account representative.

(a) Once a complete account certificate of representation under § 96.13 has been submitted and received, the permitting authority and the Administrator will rely on the account certificate of representation unless and until a superseding complete account certificate of representation under § 96.13 is received by the Administrator.

(b) Except as provided in § 96.12(a) or (b), no objection or other communication submitted to the permitting authority or the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO_X authorized account representative shall affect any representation, action, inaction, or submission of the NO_X authorized account representative or the finality of any decision or order by the permitting authority or the Administrator under the NO_X Budget Trading Program.

(c) Neither the permitting authority nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NO_X authorized account representative, including private legal disputes concerning the proceeds of NO_X allowance transfers.

Subpart C—Permits

§ 96.20 General NO_X budget trading program permit requirements.

(a) Each NO_X Budget source shall have a federally enforceable permit, which shall include a NO_X Budget permit, administered by the permitting authority.

(1) For NO_X Budget sources required to have a title V operating permit, the NO_X Budget portion of the title V permit shall be administered in accordance with the permitting authority's title V operating permits regulations promulgated under part 70 or 71 of this chapter, except as provided otherwise by this subpart or subpart I of this part. The applicable provisions of such title V operating permits regulations shall include, but are not limited to, those provisions addressing operating permit applications, operating permit application shield, operating permit duration, operating permit shield, operating permit issuance, operating permit revision and reopening, public participation, and State and EPA review.

(2) For NO_X Budget sources required to have a non-title V permit, the NO_X Budget portion of the non-title V permit shall be administered in accordance with the permitting authority's regulations promulgated to administer non-title V permits, except as provided otherwise by this subpart or subpart I of this part. The applicable provisions of such non-title V permits regulations may include, but are not limited to, provisions addressing permit applications, permit application shield, permit duration, permit shield, permit issuance, permit revision and reopening, public participation, and State and EPA review.

(b) Each NO_X Budget permit (including a draft or proposed NO_X Budget permit, if applicable) shall contain all applicable NO_X Budget Trading Program requirements and shall be a complete and segregable portion of the permit under paragraph (a) of this section.

§ 96.21 Submission of NO_X Budget permit applications.

(a) *Duty to apply.* The NO_X authorized account representative of any NO_X Budget source with one or more NO_X Budget units shall submit to the permitting authority a complete NO_X Budget permit application under § 96.22 by the applicable deadline in paragraph (b) of this section.

(b)(1) For NO_X Budget sources required to have a title V operating permit:

(i) For any source, with one or more NO_X Budget units under § 96.4 that commence operation before January 1, 2000, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 covering such NO_X Budget units to the permitting authority at least 18 months (or such lesser time provided under the permitting authority's title V operating permits regulations for final action on a permit application) before May 1, 2003.

(ii) For any source, with any NO_X Budget unit under § 96.4 that commences operation on or after January 1, 2000, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 covering such NO_X Budget unit to the permitting authority at least 18 months (or such lesser time provided under the permitting authority's title V operating permits regulations for final action on a permit application) before the later of May 1, 2003 or the date on which the NO_X Budget unit commences operation.

(2) For NO_X Budget sources required to have a non-title V permit:

(i) For any source, with one or more NO_X Budget units under § 96.4 that commence operation before January 1, 2000, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 covering such NO_X Budget units to the permitting authority at least 18 months (or such lesser time provided under the permitting authority's non-title V permits regulations for final action on a permit application) before May 1, 2003.

(ii) For any source, with any NO_X Budget unit under § 96.4 that commences operation on or after January 1, 2000, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 covering such NO_X Budget unit to the permitting authority at least 18 months (or such lesser time provided under the permitting authority's non-title V permits regulations for final action on a permit application) before the later of May 1, 2003 or the date on which the NO_X Budget unit commences operation.

(c) *Duty to Reapply.* (1) For a NO_X Budget source required to have a title V operating permit, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 for the NO_X Budget source covering the NO_X Budget units at the source in accordance with the permitting authority's title V operating permits regulations addressing operating permit renewal.

(2) For a NO_X Budget source required to have a non-title V permit, the NO_X authorized account representative shall submit a complete NO_X Budget permit application under § 96.22 for the NO_X Budget source covering the NO_X Budget units at the source in accordance with the permitting authority's non-title V permits regulations addressing permit renewal.

§ 96.22 Information requirements for NO_X Budget permit applications.

A complete NO_X Budget permit application shall include the following elements concerning the NO_X Budget source for which the application is submitted, in a format prescribed by the permitting authority:

(a) Identification of the NO_X Budget source, including plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration, if applicable;

(b) Identification of each NO_X Budget unit at the NO_X Budget source and whether it is a NO_X Budget unit under § 96.4 or under subpart I of this part;

(c) The standard requirements under § 96.6; and

(d) For each NO_X Budget opt-in unit at the NO_X Budget source, the following

certification statements by the NO_X authorized account representative:

(1) ''I certify that each unit for which this permit application is submitted under subpart I of this part is not a NO_X Budget unit under 40 CFR 96.4 and is not covered by a retired unit exemption under 40 CFR 96.5 that is in effect.''

(2) If the application is for an initial NO_X Budget opt-in permit, ''I certify that each unit for which this permit application is submitted under subpart I is currently operating, as that term is defined under 40 CFR 96.2.''

§ 96.23 NO_X Budget permit contents.

(a) Each NO_X Budget permit (including any draft or proposed NO_X Budget permit, if applicable) will contain, in a format prescribed by the permitting authority, all elements required for a complete NO_X Budget permit application under § 96.22 as approved or adjusted by the permitting authority.

(b) Each NO_X Budget permit is deemed to incorporate automatically the definitions of terms under § 96.2 and, upon recordation by the Administrator under subparts F, G, or I of this part, every allocation, transfer, or deduction of a NO_X allowance to or from the compliance accounts of the NO_X Budget units covered by the permit or the overdraft account of the NO_X Budget source covered by the permit.

§ 96.24 Effective date of initial NO_X budget permit.

The initial NO_X Budget permit covering a NO_X Budget unit for which a complete NO_X Budget permit application is timely submitted under § 96.21(b) shall become effective by the later of:

(a) May 1, 2003;

(b) May 1 of the year in which the NO_X Budget unit commences operation, if the unit commences operation on or before May 1 of that year;

(c) The date on which the NO_X Budget unit commences operation, if the unit commences operation during a control period; or

(d) May 1 of the year following the year in which the NO_X Budget unit commences operation, if the unit commences operation on or after October 1 of the year.

§ 96.25 NO_X Budget permit revisions.

(a) For a NO_X Budget source with a title V operating permit, except as provided in § 96.23(b), the permitting authority will revise the NO_X Budget permit, as necessary, in accordance with the permitting authority's title V operating permits regulations addressing permit revisions.

(b) For a NO_X Budget source with a non-title V permit, except as provided in § 96.23(b), the permitting authority will revise the NO_X Budget permit, as necessary, in accordance with the permitting authority's non-title V permits regulations addressing permit revisions.

Subpart D—Compliance Certification

§ 96.30 Compliance certification report.

(a) *Applicability and deadline.* For each control period in which one or more NO_X Budget units at a source are subject to the NO_X Budget emissions limitation, the NO_X authorized account representative of the source shall submit to the permitting authority and the Administrator by November 30 of that year, a compliance certification report for each source covering all such units.

(b) *Contents of report.* The NO_X authorized account representative shall include in the compliance certification report under paragraph (a) of this section the following elements, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NO_X Budget emissions limitation for the control period covered by the report:

(1) Identification of each NO_X Budget unit;

(2) At the NO_X authorized account representative's option, the serial numbers of the NO_X allowances that are to be deducted from each unit's compliance account under § 96.54 for the control period;

(3) At the NO_X authorized account representative's option, for units sharing a common stack and having NO_X emissions that are not monitored separately or apportioned in accordance with subpart H of this part, the percentage of allowances that is to be deducted from each unit's compliance account under § 96.54(e); and

(4) The compliance certification under paragraph (c) of this section.

(c) *Compliance certification.* In the compliance certification report under paragraph (a) of this section, the NO_X authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NO_X Budget units at the source in compliance with the NO_X Budget Trading Program, whether each NO_X Budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NO_X Budget Trading Program applicable to the unit, including:

(1) Whether the unit was operated in compliance with the NO_X Budget emissions limitation;

(2) Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NO_X emissions to the unit, in accordance with subpart H of this part;

(3) Whether all the NO_X emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with subpart H of this part. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions has been made;

(4) Whether the facts that form the basis for certification under subpart H of this part of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under subpart H of this part, if any, has changed; and

(5) If a change is required to be reported under paragraph (c)(4) of this section, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

§ 96.31 Permitting authority's and Administrator's action on compliance certifications.

(a) The permitting authority or the Administrator may review and conduct independent audits concerning any compliance certification or any other submission under the NO_X Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions.

(b) The Administrator may deduct allowances from or return allowances to a unit's compliance account or a source's overdraft account based on the information in the compliance certifications or other submissions, as adjusted under paragraph (a) of this section.

Subpart E—NO_X Allowance Allocations

§ 96.40 State trading program budget.

The State trading program budget allocated by the permitting authority under § 96.42 will equal the total number of tons of NO_X emissions apportioned to the NO_X Budget units under § 96.4 in the State, as determined by the applicable, approved State implementation plan.

§ 96.41 Timing requirements for NO_X allowance allocations.

(a) By September 30, 1999, the permitting authority will submit to the Administrator the NO_X allowance allocations, in accordance with § 96.42, for the control periods in 2003, 2004, 2005, 2006, and 2007. If the permitting authority fails to submit to the Administrator the NO_X allowance allocations in accordance with this paragraph (a), the Administrator will allocate NO_X allowances for the applicable control periods, in accordance with § 96.42, within 60 days of the deadline for submission by the permitting authority.

(b) By December 31, 2002 and December 31 of each year thereafter, the permitting authority will submit to the Administrator the NO_X allowance allocations, in accordance with § 96.42, for the control period in the year that is 6 years after the year of the applicable deadline for submission under this paragraph (b). If the permitting authority fails to submit to the Administrator the NO_X allowance allocations in accordance with this paragraph (b), the Administrator will allocate NO_X allowances for the applicable control period, in accordance with § 96.42, within 60 days of the applicable deadline for submission by the permitting authority.

§ 96.42 NO_X allowance allocations.

(a)(1) The heat input (in mmBtu) used for calculating NO_X allowance allocations for each NO_X Budget unit under § 96.4 will be:

(i) For a NO_X allowance allocation under § 96.41(a), the average of the two highest amounts of the unit's heat input for the control periods in 1995, 1996, and 1997; and

(ii) For a NO_X allowance allocation under § 96.41(b), the unit's heat input for the control period in the year that is 6 years before the year for which the NO_X allocation is being calculated.

(2) The unit's total heat input for the control periods in each year specified under paragraph (a)(1) of this section will be determined in accordance with part 75 of this chapter if the NO_X Budget unit was otherwise subject to the requirements of part 75 of this chapter for the year, or will be based on the best available data reported to the permitting authority for the unit if the unit was not otherwise subject to the requirements of part 75 of this chapter for the year.

(b) For each control period under § 96.41, the permitting authority will allocate to all NO_X Budget units under § 96.4 in the State that commenced operation before May 1 of the period used to calculate heat input under paragraph (a)(1) of this section, a total number of NO_X allowances equal to 98 percent of the tons of NO_X emissions in the State trading program budget under § 96.40 in accordance with the following procedures:

(1) The permitting authority will allocate NO_X allowances to each NO_X Budget unit in an amount equaling 0.15 lb/mmBtu multiplied by the heat input determined under paragraph (a) of this section.

(2) If the initial total number of NO_X allowances allocated to all NO_X Budget units in the State for a control period under paragraph (a)(1) of this section does not equal 98 percent of the number of tons of NO_X emissions in the State trading program budget, the permitting authority will adjust the total number of NO_X allowances allocated to all such NO_X Budget units for the control period under paragraph (a)(1) of this section so that the total number of NO_X allowances allocated equals 98 percent of the number of tons of NO_X emissions in the State trading program budget. This adjustment will be made by: multiplying each unit's allocation by the total number of NO_X allowances allocated under paragraph (a)(1) of this section divided by 98 percent of the number of tons of NO_X emissions in the State trading program budget, and rounding to the nearest whole allowance as appropriate.

(c) For each control period under § 96.41, the permitting authority will allocate NO_X allowances to NO_X Budget units under § 96.4 in the State that commenced operation on or after May 1 of the period used to calculate heat input under paragraph (a)(1) of this section, in accordance with the following procedures:

(1) The permitting authority will establish a separate allocation set-aside for each control period. Each allocation set-aside will be allocated NO_X allowances equal to 2 percent of the tons of NO_X emissions in the State trading program budget under § 96.40.

(2) The NO_X authorized account representative of a NO_X Budget unit under paragraph (c) of this section may submit to the permitting authority a request, in writing or in a format specified by the permitting authority, to be allocated NO_X allowances for no more than five consecutive control periods under § 96.41, starting with the control period during which the NO_X Budget unit is projected to commence operation. The NO_X allowance allocation request must be submitted prior to May 1 of the first control period for which the NO_X allowance allocation is requested and after the date on which the permitting authority issues a permit to construct the NO_X Budget unit.

(3) In a NO_X allowance allocation request under paragraph (c)(2) of this section, the NO_X authorized account representative may request for a control period NO_X allowances in an amount that does not exceed 0.15 lb/mmBtu multiplied by the NO_X Budget unit's maximum design heat input (in mmBtu/hr) multiplied by the number of hours remaining in the control period starting with the first day in the control period on which the unit is projected to operate.

(4) The permitting authority will review, and allocate NO_X allowances pursuant to, NO_X allowance allocation requests under paragraph (c)(2) of this section in the order that the requests are received by the permitting authority.

(i) Upon receipt of a NO_X allowance allocation request, the permitting authority will determine whether, and will make any necessary adjustments to the request to ensure that, the control period and the number of allowances specified are consistent with the requirements of paragraphs (c)(2) and (3) of this section.

(ii) If the allocation set-aside for the control period for which NO_X allowances are requested has an amount of NO_X allowances not less than the number requested (as adjusted under paragraph (c)(4)(i) of this section), the permitting authority will allocate the full, adjusted amount of the NO_X allowances requested to the NO_X Budget unit.

(iii) If the allocation set-aside for the control period for which NO_X allowances are requested has a smaller amount of NO_X allowances than the number requested (as adjusted under paragraph (b)(4)(i) of this section), the permitting authority will deny in part the request and allocate only the remaining number of NO_X allowances in the allocation set-aside to the NO_X Budget unit.

(iv) Once an allocation set-aside for a control period has been depleted of all NO_X allowances, the permitting authority will deny, and will not allocate any NO_X allowances pursuant to, any NO_X allowance allocation requests under which NO_X allowances

have not already been allocated for the control period.

(5) Within 60 days of receipt of a NO_X allowance allocation request, the permitting authority will take appropriate action under paragraph (c)(4) of this section and notify the NO_X authorized account representative that submitted the request and the Administrator of the number of NO_X allowances (if any) allocated for the control period to the NO_X Budget unit.

(6) After September 30 of each year, the Administrator will transfer any NO_X allowances remaining in the allocation set-aside for the control period for the year to the allocation set-aside for the following control period.

(7) If additional NO_X allowances are placed in the allocation set-aside for the control period pursuant to paragraphs (c)(6) or (d)(2) of this section, the permitting authority will allocate NO_X allowances, in accordance with paragraph (c)(4) of this section, to any NO_X allowance allocation requests that were originally denied in whole or in part. The permitting authority will notify the NO_X authorized account representative that submitted the request and the Administrator of the number of NO_X allowances (if any) allocated under this paragraph (c)(7).

(d) For a NO_X Budget unit that is allocated NO_X allowances under paragraph (c) of this section for a control period, the Administrator will deduct NO_X allowances under § 96.54(b) or (e) to account for the actual utilization of the unit during the control period.

(1) The Administrator will calculate the number of NO_X allowances to be deducted to account for the unit's actual utilization using the following formula, provided that the number of NO_X allowances to be deducted shall be zero if the number calculated is less than zero:

Unit's NO_X allowances deducted for actual utilization = (Unit's NO_X allowances allocated for control period)—(Unit's actual control period utilization x 0.15 lb/mmBtu) where:

''Unit's NO_X allowances allocated for control period'' is the number of NO_X allowances allocated to the unit for the control period under paragraph (c) of this section.

''Unit's actual control period utilization'' is the utilization (in mmBtu), as defined in § 96.2, of the unit during the control period.

(2) Any NO_X allowances deducted by the Administrator in accordance with paragraph (d) of this section will be transferred by the Administrator to the permitting authority's allocation set-aside for the following control period.

Subpart F—NO_X Allowance Tracking System

§ 96.50 NO_X Allowance Tracking System accounts.

(a) Nature and function of compliance accounts and overdraft accounts. Consistent with § 96.51(a), the Administrator will establish one compliance account for each NO_X Budget unit and one overdraft account for each source with one or more NO_X Budget units. Allocations of allowances pursuant to subpart E of this part, transfers of allowances pursuant to subpart G of this part, and deductions of allowances to cover NO_X emissions, account for actual utilization, or offset excess emissions of NO_X pursuant to § 96.54 will be recorded in the compliance accounts or overdraft accounts in accordance with this subpart.

(b) Nature and function of general accounts. Consistent with § 96.51(b), the Administrator will establish, upon request, a general account for any person. Transfers of allowances pursuant to subpart G of this part will be recorded in the general account in accordance with this subpart.

§ 96.51 Establishment of accounts.

(a) *Compliance accounts and overdraft accounts.* Upon receipt of a complete account certificate of representation under § 96.13, the Administrator will establish:

(1) A compliance account for each NO_X Budget unit for which the account certificate of representation was submitted; and

(2) An overdraft account for each source for which the account certificate of representation was submitted and that has two or more NO_X Budget units.

(b) *General accounts.* (1) Any person may apply to open a general account for the purpose of holding and transferring allowances. A complete application for a general account shall be submitted to the Administrator and shall include the following elements in a format prescribed by the Administrator:

(i) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NO_X authorized account representative and any alternate NO_X authorized account representative;

(ii) At the option of the NO_X authorized account representative, organization name and type of organization;

(iii) A list of all persons subject to a binding agreement for the NO_X authorized account representative to represent their ownership interest with respect to the allowances held in the general account;

(iv) The following certification statement by the NO_X authorized account representative and any alternate NO_X authorized account representative: ''I certify that I was selected as the NO_X authorized account representative or the NO_X alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NO_X Budget Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account.''

(v) The signature of the NO_X authorized account representative and any alternate NO_X authorized account representative and the dates signed.

(2) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section:

(i) The Administrator will establish a general account for the person or persons for whom the application is submitted.

(ii) The NO_X authorized account representative and any alternate NO_X authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to NO_X allowances held in the general account in all matters pertaining to the NO_X Budget Trading Program, not withstanding any agreement between the NO_X authorized account representative or any alternate NO_X authorized account representative and such person. Any such person shall be bound by any order or decision issued to the NO_X authorized account representative or any alternate NO_X authorized account representative by the Administrator or a court regarding the general account.

(iii) Each submission concerning the general account shall be submitted, signed, and certified by the NO_X authorized account representative or the alternate NO_X authorized account representative for the persons having an ownership interest with respect to NO_X allowances held in the general account. Each such submission shall include the following certification statement by the NO_X authorized account representative: ''I am authorized to make this

submission on behalf of the persons having an ownership interest with respect to the NO_X allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.''

(iv) The Administrator will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with paragraph (b)(2)(iii) of this section.

(3)(i) An application for a general account may designate one and only one NO_X authorized account representative and one and only one alternate NO_X authorized account representative who may act on behalf of the NO_X authorized account representative. The agreement by which the alternate NO_X authorized account representative is selected shall include a procedure for authorizing the alternate NO_X authorized account representative to act in lieu of the NO_X authorized account representative.

(ii) Upon receipt by the Administrator of a complete application for a general account under paragraph (b)(1) of this section, any representation, action, inaction, or submission by the alternate NO_X authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NO_X authorized account representative.

(4)(i) The NO_X authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (b)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NO_X authorized account representative prior to the time and date when the Administrator receives the superseding application for a general account shall be binding on the new NO_X authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.

(ii) The alternate NO_X authorized account representative for a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (b)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NO_X authorized account representative prior to the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate NO_X authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.

(iii)(A) In the event a new person having an ownership interest with respect to NO_X allowances in the general account is not included in the list of such persons in the account certificate of representation, such new person shall be deemed to be subject to and bound by the account certificate of representation, the representation, actions, inactions, and submissions of the NO_X authorized account representative and any alternate NO_X authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the Administrator, as if the new person were included in such list.

(B) Within 30 days following any change in the persons having an ownership interest with respect to NO_X allowances in the general account, including the addition of persons, the NO_X authorized account representative or alternate NO_X authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the NO_X allowances in the general account to include the change.

(5)(i) Once a complete application for a general account under paragraph (b)(1) of this section has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (b)(4) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NO_X authorized account representative for a general account shall affect any representation, action, inaction, or submission of the NO_X authorized account representative or the finality of any decision or order by the Administrator under the NO_X Budget Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the NO_X authorized account representative for a general account, including private legal disputes concerning the proceeds of NO_X allowance transfers.

(c) Account identification. The Administrator will assign a unique identifying number to each account established under paragraph (a) or (b) of this section.

§ 96.52 NO_X Allowance Tracking System responsibilities of NO_X authorized account representative.

(a) Following the establishment of a NO_X Allowance Tracking System account, all submissions to the Administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of NO_X allowances in the account, shall be made only by the NO_X authorized account representative for the account.

(b) Authorized account representative identification. The Administrator will assign a unique identifying number to each NO_X authorized account representative.

§ 96.53 Recordation of NO_X allowance allocations.

(a) The Administrator will record the NO_X allowances for 2003, 2004, 2005, 2006, and 2007 in the NO_X Budget units' compliance accounts and the allocation set-asides, as allocated under subpart E of this part. The Administrator will also record the NO_X allowances allocated under § 96.88(a)(1) and (b) for each NO_X Budget opt-in source in its compliance account.

(b) Each year, after the Administrator has made all deductions from a NO_X Budget unit's compliance account and the overdraft account pursuant to § 96.54, the Administrator will record NO_X allowances, as allocated to the unit under subpart E of this part or under § 96.88(a)(2) and (b), in the compliance account for the year after the last year for which allowances were previously allocated to the compliance account. Each year, the Administrator will also record NO_X allowances, as allocated under subpart E of this part, in the allocation set-aside for the year after the last year for which allowances were previously allocated to an allocation set-aside.

(c) Serial numbers for allocated NO_X allowances. When allocating NO_X allowances to and recording them in an account, the Administrator will assign each NO_X allowance a unique

identification number that will include digits identifying the year for which the NO_X allowance is allocated.

§ 96.54 Compliance.

(a) *NO_X allowance transfer deadline.* The NO_X allowances are available to be deducted for compliance with a unit's NO_X Budget emissions limitation for a control period in a given year only if the NO_X allowances:

(1) Have compliance use dates prior to or the same as that year; and

(2) Are held in the unit's compliance account, or the overdraft account of the source where the unit is located, as of the NO_X allowance transfer deadline for that control period or are transferred into the compliance account or overdraft account by a NO_X allowance transfer correctly submitted for recordation under § 96.60 by the NO_X allowance transfer deadline for that control period.

(b) *Deductions for compliance.* (1) Following the recordation, in accordance with § 96.61, of NO_X allowance transfers submitted for recordation in the unit's compliance account or the overdraft account of the source where the unit is located by the NO_X allowance transfer deadline for a control period, the Administrator will deduct NO_X allowances available under paragraph (a) of this section to cover the unit's NO_X emissions (as determined in accordance with subpart H of this part), or to account for actual utilization under § 96.42(d), for the control period:

(i) From the compliance account; and

(ii) Only if no more NO_X allowances available under paragraph (a) of this section remain in the compliance account from the overdraft account. In deducting allowances for units at the source from the overdraft account, the Administrator will begin with the unit having the compliance account with the lowest NO_X Allowance Tracking System account number and end with the unit having the compliance account with the highest NO_X Allowance Tracking System account number (with account numbers sorted beginning with the left-most character and ending with the right-most character and the letter characters assigned values in alphabetical order and less than all numeric characters).

(2) The Administrator will deduct NO_X allowances first under paragraph (b)(1)(i) of this section and then under paragraph (b)(1)(ii) of this section:

(i) Until the number of NO_X allowances deducted for the control period equals the number of tons of NO_X emissions, determined in accordance with subpart H of this part, from the unit for the control period for which compliance is being determined, plus the number of NO_X allowances required for deduction to account for actual utilization under § 96.42(d) for the control period; or

(ii) Until no more NO_X allowances available under paragraph (a) of this section remain in the respective account.

(c)(1) *Identification of NO_X allowances by serial number.* The NO_X authorized account representative for each compliance account may identify by serial number the NO_X allowances to be deducted from the unit's compliance account under paragraph (b), (d), or (e) of this section. Such identification shall be made in the compliance certification report submitted in accordance with § 96.30.

(2) *First-in, first-out.* The Administrator will deduct NO_X allowances for a control period from the compliance account, in the absence of an identification or in the case of a partial identification of NO_X allowances by serial number under paragraph (c)(1) of this section, or the overdraft account on a first-in, first-out (FIFO) accounting basis in the following order:

(i) Those NO_X allowances with a compliance use date the same as the year of the control period and that were allocated to the unit under subpart E or I of this part;

(ii) Those NO_X allowances with a compliance use date the same as the year of the control period and that were transferred and recorded in the account pursuant to subpart G of this part, in order of their date of recordation;

(iii) Those NO_X allowances with an earlier compliance use date than the year of the control period and that were allocated to the unit under subpart E or I of this part; and

(iv) Those NO_X allowances with an earlier compliance use date than the year of the control period and that were transferred and recorded in the account pursuant to subpart G of this part, in order of their date of recordation.

(d) *Deductions for excess emissions.* (1) After making the deductions for compliance under paragraph (b) of this section, the Administrator will deduct from the unit's compliance account or the overdraft account of the source where the unit is located a number of NO_X allowances, with a compliance use date the same as the year after the control period in which the unit has excess emissions, equal to three times the number of the unit's excess emissions.

(2) If the compliance account or overdraft account does not contain sufficient NO_X allowances, the Administrator will deduct the required number of NO_X allowances, regardless of their compliance use date, whenever NO_X allowances are recorded in either account.

(3) Any allowance deduction required under paragraph (d) of this section shall not affect the liability of the owners and operators of the NO_X Budget unit for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the Clean Air Act or applicable State law. The following guidelines will be followed in assessing fines, penalties or other obligations:

(i) For purposes of determining the number of days of violation, if a NO_X Budget unit has excess emissions for a control period, each day in the control period (153 days) constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.

(ii) Each ton of excess emissions is a separate violation.

(e) *Deductions for units sharing a common stack.* In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned in accordance with subpart H of this part, the NO_X authorized account representative of the units may identify the percentage of NO_X allowances to be deducted from each such unit's compliance account to cover the unit's share of NO_X emissions from the common stack for a control period. Such identification shall be made in the compliance certification report submitted in accordance with § 96.30.

Notwithstanding paragraph (b)(2)(i) of this section, the Administrator will deduct NO_X allowances until the number of NO_X allowances equals the identified percentage of the number of tons of NO_X emissions, as determined in accordance with subpart H of this part, from the common stack for the control period in the year for which compliance is being determined or, if no percentage is identified, an equal percentage for each such unit.

(f) The Administrator will record in the appropriate compliance account or overdraft account all deductions from such an account pursuant to paragraphs (b), (d), or (e) of this section.

§ 96.55 Banking [Reserved].

§ 96.56 Account error.

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any NO_X Allowance Tracking System account. Within 10 business days of making such correction, the Administrator will notify

the NO_X authorized account representative for the account.

§ 96.57 Closing of general accounts.

(a) The NO_X authorized account representative of a general account may instruct the Administrator to close the account by submitting a statement, in writing or in a format specified by the Administrator, requesting deletion of the account from the NO_X Allowance Tracking System and by correctly submitting for recordation under § 96.60 an allowance transfer of all NO_X allowances in the account to one or more other NO_X Allowance Tracking System accounts.

(b) If a general account shows no activity for a period of a year or more and does not contain any NO_X allowances, the Administrator may notify the NO_X authorized account representative for the account that the account will be closed and deleted from the NO_X Allowance Tracking System following 20 business days after the notice is sent. The account will be closed after the 20-day period unless before the end of the 20-day period the Administrator receives a correctly submitted transfer of NO_X allowances into the account under § 96.60 or a statement, in writing or in a format specified by the Administrator, submitted by the NO_X authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

Subpart G—NO_X Allowance Transfers

§ 96.60 Scope and submission of NO_X allowance transfers.

The NO_X authorized account representatives seeking recordation of a NO_X allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the NO_X allowance transfer shall include the following elements in a format specified by the Administrator:

(a) The numbers identifying both the transferror and transferee accounts;

(b) A specification by serial number of each NO_X allowance to be transferred; and

(c) The printed name and signature of the NO_X authorized account representative of the transferror account and the date signed.

§ 96.61 EPA recordation.

(a) Within 5 business days of receiving a NO_X allowance transfer, except as provided in paragraph (b) of this section, the Administrator will record a NO_X allowance transfer by moving each NO_X allowance from the transferror account to the transferee account as specified by the request, provided that:

(1) The transfer is correctly submitted under § 96.60;

(2) The transferror account includes each NO_X allowance identified by serial number in the transfer; and

(3) The transfer meets all other requirements of this part.

(b) A NO_X allowance transfer that is submitted for recordation following the NO_X allowance transfer deadline and that includes any NO_X allowances with a compliance use date that is prior to or the same as the year of the control period to which the NO_X allowance transfer deadline applies will not be recorded until after completion of the process of recordation of NO_X allowance allocations in § 96.53(b).

(c) Where a NO_X allowance transfer submitted for recordation fails to meet the requirements of paragraph (a) of this section, the Administrator will not record such transfer.

§ 96.62 Notification.

(a) *Notification of recordation.* Within 5 business days of recordation of a NO_X allowance transfer under § 96.61, the Administrator will notify each party to the transfer. Notice will be given, in writing or in a format to be specified by the Administrator, to the NO_X authorized account representatives of both the transferror and transferee accounts.

(b) *Notification of non-recordation.* Within 10 business days of receipt of a NO_X allowance transfer that fails to meet the requirements of § 96.61(a), the Administrator will notify, in writing or in a format to be specified by the Administrator, the NO_X authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer; and

(2) The reasons for such non-recordation.

(c) Nothing in this section shall preclude the submission of a NO_X allowance transfer for recordation following notification of non-recordation.

Subpart H—Monitoring and Reporting

§ 96.70 General requirements.

The owners and operators, and to the extent applicable, the NO_X authorized account representative of a NO_X Budget unit, shall comply with the monitoring and reporting requirements as provided in this subpart and in subpart H of part 75 of this chapter. For purposes of complying with such requirements, the definitions in § 96.2 and in § 72.2 of this chapter shall apply, and the terms ''affected unit,'' ''designated representative,'' and ''continuous emission monitoring system'' (or ''CEMS'') in part 75 of this chapter shall be replaced by the terms ''NO_X Budget unit,'' ''NO_X authorized account representative,'' and ''continuous emission monitoring system'' (or ''CEMS''), respectively, as defined in § 96.2.

(a) *Compliance dates.* (1)(i) The owner or operator of each NO_X Budget unit under § 96.4 that commences operation before January 1, 2000 shall ensure that all monitoring systems required under this subpart for monitoring NO_X emission rate and heat input are installed, all certification tests required under § 96.71 are successfully completed, and all other provisions of this subpart and part 75 of this chapter applicable to such systems are met on or before May 1, 2000.

(ii) The owner or operator of each NO_X Budget unit under paragraph (a)(1) of this section that has not successfully completed all certification tests required under § 96.71 by May 1, 2001 shall determine and report hourly NO_X emission rate and heat input, starting on such date until all such certification tests are successfully completed, using either:

(A) The maximum potential NO_X emission rate and the maximum potential hourly heat input of the unit;

(B) Reference methods under § 75.22 of this chapter; or

(C) Monitored data validated using the procedures in § 75.20(b)(3) of this chapter where the term ''recertification'' is replaced by the term ''initial certification.''

(2)(i) The owner or operator of each NO_X Budget unit under § 96.4 that commences operation on or after January 1, 2000 shall ensure that all monitoring systems required under this subpart for monitoring NO_X emission rate and heat input are installed, all certification tests required under § 96.71 are successfully completed, and all other provisions of this subpart and part 75 applicable to such systems are met on or before the later of the following dates:

(A) May 1, 2001; or

(B) Not later than the earlier of 180 days after the date on which the unit commences operation or, for units under § 96.4(a), 90 days after the date on which the unit commences commercial operation.

(ii) The owner or operator of each NO_X Budget unit under paragraph (a)(2) of this section that has not successfully completed all certification tests required under § 96.71 by the later of May 1, 2001 or the date on which the unit

commences operation shall determine and report hourly NO_X emission rate and heat input, starting on such date until all such certification tests are successfully completed, using either:

(A) The maximum potential NO_X emission rate and the maximum potential hourly heat input of the unit;

(B) Reference methods under § 75.22 of this chapter; or

(C) Monitored data validated using the procedures in § 75.20(b)(3) of this chapter where the term ''recertification'' is replaced by the term ''initial certification.''

(3)(i) The owner-operator of a NO_X Budget unit that completes construction of a new stack or flue after the applicable deadline in paragraph (a)(1)(i) or (2)(i) of this section or under subpart I of this part, shall ensure, with regard to such new stack or flue, that all monitoring systems required under this subpart for monitoring NO_X emission rate and heat input are installed, all certification tests required under § 96.71 are successfully completed, and all other provisions of this subpart and part 75 are met not later than 90 days after the date on which emissions first exit to the atmosphere through such new stack or flue.

(ii) The owner or operator of each NO_X Budget unit under paragraph (a)(3)(i) of this section that has not successfully completed all certification tests required under § 96.71 by not later than 90 days after the date on which emissions first exit to the atmosphere through the new stack or flue under paragraph (a)(3)(i) of this section shall determine and report hourly NO_X emission rate and heat input, starting on such date until all such certification tests are successfully completed, using either:

(A) The maximum potential NO_X emission rate and the maximum potential hourly heat input of the unit;

(B) Reference methods under § 75.22 of this chapter; or

(C) Monitored data validated using the procedures in § 75.20(b)(3) of this chapter where the term ''recertification'' is *replaced* by the term ''initial certification.''

(4) The provisions of this subpart are applicable to a unit for which an application for a NO_X Budget opt-in permit is being or has been submitted, as provided in subpart I of this part.

(b) *Prohibitions.* (1) No owner or operator of a NO_X Budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with § 96.75.

(2) No owner or operator of a NO_X Budget unit shall operate the unit so as to discharge, or allow to be discharged, NO_X emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a NO_X Budget unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_X mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a NO_X Budget unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by a retired unit exemption under § 96.5 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the permitting authority for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The NO_X authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with § 96.71(b)(2)(i).

§ 96.71 Initial certification and recertification procedures.

(a) The owner or operator of a NO_X Budget unit that is subject to an acid rain emissions limitation shall comply with the initial certification and recertification procedures of part 75 of this chapter, except that:

(1) If, prior to January 1, 1998, the Administrator approved a petition under § 75.17(a) or (b) of this chapter for apportioning the combined NO_X emission rate measured in a common stack or a petition under § 75.66 of this chapter for an alternative to a requirement in § 75.17 of this chapter, the petition shall be resubmitted to the Administrator under § 96.75(a) to determine if the approval should apply under the NO_X Budget Trading Program.

(2) For any additional NO_X emission rate CEMS required under the common stack provisions in § 75.72 of this chapter, the owner or operator shall meet the requirements of paragraph (b) of this section.

(b) The owner or operator of a NO_X Budget unit that is not subject to an acid rain emissions limitation shall comply with the following initial certification and recertification procedures, and the owner or operator of a NO_X Budget unit that is subject to an acid rain emissions limitation shall meet the following initial certification and recertification procedures for any additional NO_X emission rate CEMS required under the common stack provisions in § 75.72 of this chapter.

(1) *Requirements for initial certification or recertification.* (i) The owner or operator shall ensure that each monitoring system required by subpart H of part 75 of this chapter (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter and shall ensure that all applicable certification tests are successfully completed by the deadlines specified in § 96.70(a). In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this part, in a location where no such monitoring system was previously installed, initial certification is required.

(ii) Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that is determined by the permitting authority or the Administrator to significantly affect the ability of the system to accurately measure or record NO_X emission rate or heat input or to meet the requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system by performing all of the recertification testing required under § 75.20 of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that is determined by the permitting authority or the Administrator to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system. Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients. Any change to a continuous emissions monitoring system for which

the permitting authority or the Administrator determines that a relative accuracy test audit (RATA) is not necessary, shall not require recertification, and any other tests that the permitting authority or the Administrator determines to be necessary (e.g., linearity checks, calibration error tests, automated data acquisition and handling system (DAHS) verifications) shall be performed. These other tests shall be considered diagnostic tests rather than recertification tests. The data validation procedures in § 75.20(b)(3) of this chapter shall be applied (replacing the term ''recertification'' with the term ''diagnostic'') to linearity checks, 7-day calibration error tests, and cycle time tests when these are required as diagnostic tests.

(2) *Certification approval process for initial certifications and recertification.* (i) *Notification of certification.* The NO_X authorized account representative shall submit to the permitting authority a written notice of the dates of certification in accordance with § 96.73.

(ii) *Certification application.* The NO_X authorized account representative shall submit to the permitting authority a certification application for each monitoring system required under subpart H of part 75 of this chapter. A complete certification application shall include the information specified in § 75.73 of this chapter.

(iii) Upon the earlier of the successful completion of the required certification procedures of paragraph (b)(1) of this section or the hour in which data that were considered conditionally valid according to the procedures in § 75.20(b)(3) of this chapter for the monitoring system or component thereof, the monitoring system or component thereof shall be deemed provisionally certified for use under the NO_X Budget Trading Program for a period not to exceed 120 days after receipt by the permitting authority of the complete certification application for the monitoring system or component thereof under paragraph (b)(2)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the permitting authority does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of receipt of the complete certification application by the permitting authority.

(iv) *Certification application formal approval process.* The permitting authority will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (b)(2)(ii) of this section. In the event the permitting authority does not issue such a notice within such 120-day period, each monitoring system which meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the NO_X Budget Trading Program.

(A) *Approval notice.* If the certification application is complete and shows that each continuous emission monitoring system meets the applicable performance requirements of part 75 of this chapter, then the permitting authority will issue a written notice of approval of the certification application within 120 days of receipt.

(B) *Incomplete application notice.* A certification application will be considered complete when all of the applicable information required to be submitted under paragraph (b)(2)(ii) of this section has been received by the permitting authority. If the certification application is not complete, then the permitting authority will issue a written notice of incompleteness that sets a reasonable date by which the NO_X authorized account representative must submit the additional information required to complete the certification application. If the NO_X authorized account representative does not comply with the notice of incompleteness by the specified date, then the permitting authority may issue a notice of disapproval under paragraph (b)(2)(iv)(C) of this section.

(c) *Disapproval notice.* If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of this part, or if the certification application is incomplete and the requirement for disapproval under paragraph (b)(2)(iv)(B) of this section has been met, the permitting authority will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the permitting authority and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality-assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in paragraph (b)(2)(v) of this section for each monitoring system or component thereof which is disapproved for initial certification.

(D) *Audit decertification.* The permitting authority may issue a notice of disapproval of the certification status of a monitor in accordance with § 96.72(b).

(v) *Procedures for loss of certification.* If the permitting authority issues a notice of disapproval of a certification application under paragraph (b)(2)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (b)(2)(iv)(D) of this section, then:

(A) The owner or operator shall substitute, for each hour of unit operation during the period of invalid data, the maximum potential NO_X emission rate or the maximum potential hourly heat input of the unit as applicable, until the earlier of the time, date, and hour (after the monitoring system or component thereof is adjusted, repaired, or replaced) when certification tests are successfully completed or the time, date, and hour specified under the data validation procedures under § 75.20(b)(3) of this chapter;

(B) The NO_X authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with the procedures in paragraphs (b)(2)(i) and (ii) of this section; and

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the permitting authority's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

§ 96.72 Out of control periods.

(a) Whenever any monitoring system fails to meet the quality assurance requirements of Appendix B of part 75 of this chapter, data shall be substituted using the applicable procedures in subpart D of part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 96.71 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or recertification application submission and at the time

of the audit, the permitting authority will issue a notice of disapproval of the certification status of such system or component. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the permitting authority or the Administrator. By issuing the notice of disapproval, the permitting authority revokes prospectively the certification status of the system or component. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests. The owner or operator shall follow the initial certification or recertification procedures in § 96.71 for each disapproved system.

§ 96.73 Notifications.

The NO_X authorized account representative for a NO_X Budget unit shall submit written notice to the permitting authority and the Administrator in accordance with § 75.61 of this chapter, except that if the unit is not subject to an acid rain emissions limitation, the notification is only required to be sent to the permitting authority.

§ 96.74 Recordkeeping and reporting.

(a) The owner or operator of a NO_X Budget unit that is subject to an acid rain emissions limitation shall meet recordkeeping and reporting requirements in subparts F and G of part 75 of this chapter and paragraph (b) of this section, except that:

(1) For any additional NO_X emission rate CEMS required under the common stack provisions of § 75.72 of this chapter, the owner or operator shall meet the requirements of paragraph (b)(2) of this section;

(2) If the NO_X authorized account representative for the unit is not the same person as the designated representative for the unit under subpart B of part 72 of this chapter, all submissions under subpart F or G of part 75 of this chapter must be signed by both the NO_X authorized account representative and the designated representative; and

(3) Each quarterly report submitted to meet the requirements of § 75.64 of this chapter shall also include the data and information required in § 75.73 of this chapter.

(b) For NO_X Budget units that are not subject to an acid rain emissions limitation:

(1) *Monitoring Plans.* The owner or operator shall comply with requirements of § 75.62 of this chapter, except that the monitoring plan shall include all of the information required by § 75.73 of this chapter.

(2) *Certification Applications.* The NO_X authorized account representative shall submit an application to the permitting authority within 45 days after completing all initial certification or recertification tests including the information required under § 75.73 of this chapter.

(3) *Quarterly reports.* (i) (A) Except as provided in paragraph (b)(3)(i)(B) of this section, the NO_X authorized account representative shall submit electronically a quarterly report for each calendar quarter beginning with the earlier of the calendar quarter that includes the date of initial provisional certification under § 96.71(b)(2)(iii) or May 1, 2001. Data shall be reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or May 1, 2001.

(B) If the unit commences operation after May 1, 2001, the NO_X authorized account representative shall submit electronically a quarterly report for each calendar quarter beginning with the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to the date that the unit commenced operation.

(ii) Each quarterly report shall be submitted to the Administrator within 30 days following the end of each calendar quarter and shall include, for each NO_X Budget unit (or group of units using a common stack), all of the data and information required in § 75.73 of this chapter.

(iii) *Compliance certification.* The NO_X authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(A) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications; and

(B) With regard to a unit with add-on emission controls and for all hours where data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the monitoring plan and the substitute values do not systematically underestimate NO_X emissions.

(iv) The NO_X authorized account representative shall comply with all of the quarterly reporting requirements in § 75.64(d), (f), and (g) of this chapter.

§ 96.75 Petitions.

(a)(1) The NO_X authorized account representative of a NO_X Budget unit that is subject to an acid rain emissions limitation may submit a petition under § 75.66 of this chapter to the Administrator requesting approval to apply an alternative to any requirement of this subpart. Application of an alternative to any requirement of this subpart is in accordance with this subpart only to the extent that the petition is approved by the Administrator, in consultation with the permitting authority.

(2) Notwithstanding paragraph (a)(1) of this section, if the petition requests approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of § 75.70 of this chapter, the petition is governed by paragraph (b) of this section.

(b)(1) The NO_X authorized account representative of a NO_X Budget unit that is not subject to an acid rain emissions limitation may submit a petition under § 75.66 of this chapter to the permitting authority and the Administrator requesting approval to apply an alternative to any requirement of this subpart. The NO_X authorized account representative of a NO_X Budget unit that is subject to an acid rain emissions limitation may submit a petition under § 75.66 of this chapter to the permitting authority and the Administrator requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of § 75.50 of this chapter. (2) Application of an alternative to any requirement of this subpart is in accordance with this subpart only to the extent the petition under paragraph (b)(1) of this section is approved by both the permitting authority and the Administrator.

Subpart I—Individual Unit Opt-Ins

§ 96.80 Applicability.

A unit that is in the State, is not a NO_X Budget unit under § 96.4, and is operating, may qualify, under this subpart, to become a NO_X Budget opt-in source. A unit that is a NO_X Budget unit, is covered by a retired unit exemption under § 96.5 that is in effect, or that is not operating, is not eligible to become a NO_X Budget opt-in source.

§ 96.81 General.

Except otherwise as provided in this part, a NO_X Budget opt-in source shall be treated as a NO_X Budget unit for purposes of applying subparts A through H of this part.

§ 96.82 NO_X authorized account representative.

A unit for which an application for a NO_X Budget opt-in permit is being or has been submitted, or a NO_X Budget opt-in source, located at the same source as one or more NO_X Budget units, shall have the same NO_X authorized account representative as such NO_X Budget units.

§ 96.83 Applying for NO_X Budget opt-in permit.

(a) *Applying for initial NO_X Budget opt-in permit.* In order to apply for an initial NO_X Budget opt-in permit, the NO_X authorized account representative of a unit qualified under § 96.80 may submit to the permitting authority at any time, except as provided under § 96.86(g):

(1) A complete NO_X Budget permit application under § 96.22;

(2) A monitoring plan submitted in accordance with subpart H of this part; and

(3) A complete account certificate of representation under § 96.13, if no NO_X authorized account representative has been previously designated for the unit.

(b) *Duty to reapply.* The NO_X authorized account representative of a NO_X Budget opt-in source shall submit a complete NO_X Budget permit application under § 96.22 to renew the NO_X Budget opt-in permit in accordance with § 96.21(c) and, if applicable, an updated monitoring plan in accordance with subpart H of this part.

§ 96.84 Opt-in process.

The permitting authority will issue or deny a NO_X Budget opt-in permit for a unit for which an initial application for a NO_X Budget opt-in permit under § 96.83 is submitted, in accordance with § 96.20 and the following:

(a) *Interim review of monitoring plan.* The permitting authority will determine, on an interim basis, the sufficiency of the monitoring plan accompanying the initial application for a NO_X Budget opt-in permit under § 96.83. A monitoring plan is sufficient, for purposes of interim review, if the plan appears to contain information demonstrating that the NO_X emissions rate and heat input of the unit are monitored and reported in accordance with subpart H of this part. A determination of sufficiency shall not be construed as acceptance or approval of the unit's monitoring plan.

(b) If the permitting authority determines that the unit's monitoring plan is sufficient under paragraph (a) of this section and after completion of monitoring system certification under subpart H of this part, the NO_X emissions rate and the heat input of the unit shall be monitored and reported in accordance with subpart H of this part for one full control period during which monitoring system availability is not less than 80 percent and during which the unit is in full compliance with any applicable State or Federal emissions or emissions-related requirements. Solely for purposes of applying the requirements in the prior sentence, the unit shall be treated as a ''NO_X Budget unit'' prior to issuance of a NO_X Budget opt-in permit covering the unit.

(c) Based on the information monitored and reported under paragraph (b) of this section, the unit's baseline heat rate shall be calculated as the unit's total heat input (in mmBtu) for the control period and the unit's baseline NO_X emissions rate shall be calculated as the unit's total NO_X mass emissions (in lb) for the control period divided by the unit's baseline heat rate.

(d) After calculating the baseline heat input and the baseline NO_X emissions rate for the unit under paragraph (c) of this section, the permitting authority will serve a draft NO_X Budget opt-in permit on the NO_X authorized account representative of the unit.

(e) *Confirmation of intention to opt-in.* Within 20 days after the issuance of the draft NO_X Budget opt-in permit, the NO_X authorized account representative of the unit must submit to the permitting authority, in writing, a confirmation of the intention to opt in the unit or a withdrawal of the application for a NO_X Budget opt-in permit under § 96.83. The permitting authority will treat the failure to make a timely submission as a withdrawal of the NO_X Budget opt-in permit application.

(f) *Issuance of draft NO_X Budget opt-in permit.* If the NO_X authorized account representative confirms the intention to opt in the unit under paragraph (e) of this section, the permitting authority will issue the draft NO_X Budget opt-in permit in accordance with § 96.20.

(g) Not withstanding paragraphs (a) through (f) of this section, if at any time before issuance of a draft NO_X Budget opt-in permit for the unit, the permitting authority determines that the unit does not qualify as a NO_X Budget opt-in source under § 96.80, the permitting authority will issue a draft denial of a NO_X Budget opt-in permit for the unit in accordance with § 96.20.

(h) *Withdrawal of application for NO_X Budget opt-in permit.* A NO_X authorized account representative of a unit may withdraw its application for a NO_X Budget opt-in permit under § 96.83 at any time prior to the issuance of the final NO_X Budget opt-in permit. Once the application for a NO_X Budget opt-in permit is withdrawn, a NO_X authorized account representative wanting to reapply must submit a new application for a NO_X Budget permit under § 96.83.

(i) *Effective date.* The effective date of the initial NO_X Budget opt-in permit shall be May 1 of the first control period starting after the issuance of the initial NO_X Budget opt-in permit by the permitting authority. The unit shall be a NO_X Budget opt-in source and a NO_X Budget unit as of the effective date of the initial NO_X Budget opt-in permit.

§ 96.85 NO_X Budget opt-in permit contents.

(a) Each NO_X Budget opt-in permit (including any draft or proposed NO_X Budget opt-in permit, if applicable) will contain all elements required for a complete NO_X Budget opt-in permit application under § 96.22 as approved or adjusted by the permitting authority.

(b) Each NO_X Budget opt-in permit is deemed to incorporate automatically the definitions of terms under § 96.2 and, upon recordation by the Administrator under subpart F, G, or I of this part, every allocation, transfer, or deduction of NO_X allowances to or from the compliance accounts of each NO_X Budget opt-in source covered by the NO_X Budget opt-in permit or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located.

§ 96.86 Withdrawal from NO_X Budget Trading Program.

(a) *Requesting withdrawal.* To withdraw from the NO_X Budget Trading Program, the NO_X authorized account representative of a NO_X Budget opt-in source shall submit to the permitting authority a request to withdraw effective as of a specified date prior to May 1 or after September 30. The submission shall be made no later than 90 days prior to the requested effective date of withdrawal.

(b) *Conditions for withdrawal.* Before a NO_X Budget opt-in source covered by a request under paragraph (a) of this section may withdraw from the NO_X Budget Trading Program and the NO_X Budget opt-in permit may be terminated under paragraph (e) of this section, the following conditions must be met:

(1) For the control period immediately before the withdrawal to be effective, the NO_X authorized account

representative must submit or must have submitted to the permitting authority an annual compliance certification report in accordance with § 96.30.

(2) If the NO_X Budget opt-in source has excess emissions for the control period immediately before the withdrawal is to be effective, the Administrator will deduct or have deducted from the NO_X Budget opt-in source's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, the full amount required under § 96.54(d) for the control period.

(3) After the requirements for withdrawal under paragraphs (b)(1) and (2) of this section are met, the Administrator will deduct from the NO_X Budget opt-in source's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, NO_X allowances equal in number to and with the same or earlier compliance use date as any NO_X allowances allocated to that source under § 96.88 for any control period for which the withdrawal is to be effective. The Administrator will close the NO_X Budget opt-in source's compliance account and will establish, and transfer any remaining allowances to, a new general account for the owners and operators of the NO_X Budget opt-in source. The NO_X authorized account representative for the NO_X Budget opt-in source shall become the NO_X authorized account representative for the general account.

(c) A NO_X Budget opt-in source that withdraws from the NO_X Budget Trading Program shall comply with all requirements under the NO_X Budget Trading Program concerning all years for which such NO_X Budget opt-in source was a NO_X Budget opt-in source, even if such requirements arise or must be complied with after the withdrawal takes effect.

(d) *Notification.* (1) After the requirements for withdrawal under paragraphs (a) and (b) of this section are met (including deduction of the full amount of NO_X allowances required), the permitting authority will issue a notification to the NO_X authorized account representative of the NO_X Budget opt-in source of the acceptance of the withdrawal of the NO_X Budget opt-in source as of a specified effective date that is after such requirements have been met and that is prior to May 1 or after September 30.

(2) If the requirements for withdrawal under paragraphs (a) and (b) of this section are not met, the permitting authority will issue a notification to the NO_X authorized account representative of the NO_X Budget opt-in source that the NO_X Budget opt-in source's request to withdraw is denied. If the NO_X Budget opt-in source's request to withdraw is denied, the NO_X Budget opt-in source shall remain subject to the requirements for a NO_X Budget opt-in source.

(e) *Permit amendment.* After the permitting authority issues a notification under paragraph (d)(1) of this section that the requirements for withdrawal have been met, the permitting authority will revise the NO_X Budget permit covering the NO_X Budget opt-in source to terminate the NO_X Budget opt-in permit as of the effective date specified under paragraph (d)(1) of this section. A NO_X Budget opt-in source shall continue to be a NO_X Budget opt-in source until the effective date of the termination.

(f) *Reapplication upon failure to meet conditions of withdrawal.* If the permitting authority denies the NO_X Budget opt-in source's request to withdraw, the NO_X authorized account representative may submit another request to withdraw in accordance with paragraphs (a) and (b) of this section.

(g) *Ability to return to the NO_X* Budget Trading Program. Once a NO_X Budget opt-in source withdraws from the NO_X Budget Trading Program and its NO_X Budget opt-in permit is terminated under this section, the NO_X authority account representative may not submit another application for a NO_X Budget opt-in permit under § 96.83 for the unit prior to the date that is 4 years after the date on which the terminated NO_X Budget opt-in permit became effective.

§ 96.87 Change in regulatory status.

(a) *Notification.* When a NO_X Budget opt-in source becomes a NO_X Budget unit under § 96.4, the NO_X authorized account representative shall notify in writing the permitting authority and the Administrator of such change in the NO_X Budget opt-in source's regulatory status, within 30 days of such change.

(b) *Permitting authority's and Administrator's action.* (1)(i) When the NO_X Budget opt-in source becomes a NO_X Budget unit under § 96.4, the permitting authority will revise the NO_X Budget opt-in source's NO_X Budget opt-in permit to meet the requirements of a NO_X Budget permit under § 96.23 as of an effective date that is the date on which such NO_X Budget opt-in source becomes a NO_X Budget unit under § 96.4.

(ii)(A) The Administrator will deduct from the compliance account for the NO_X Budget unit under paragraph (b)(1)(i) of this section, or the overdraft account of the NO_X Budget source where the unit is located, NO_X allowances equal in number to and with the same or earlier compliance use date as:

(*1*) Any NO_X allowances allocated to the NO_X Budget unit (as a NO_X Budget opt-in source) under § 96.88 for any control period after the last control period during which the unit's NO_X Budget opt-in permit was effective; and

(*2*) If the effective date of the NO_X Budget permit revision under paragraph (b)(1)(i) of this section is during a control period, the NO_X allowances allocated to the NO_X Budget unit (as a NO_X Budget opt-in source) under § 96.88 for the control period multiplied by the ratio of the number of days, in the control period, starting with the effective date of the permit revision under paragraph (b)(1)(i) of this section, divided by the total number of days in the control period.

(B) The NO_X authorized account representative shall ensure that the compliance account of the NO_X Budget unit under paragraph (b)(1)(i) of this section, or the overdraft account of the NO_X Budget source where the unit is located, includes the NO_X allowances necessary for completion of the deduction under paragraph (b)(1)(ii)(A) of this section. If the compliance account or overdraft account does not contain sufficient NO_X allowances, the Administrator will deduct the required number of NO_X allowances, regardless of their compliance use date, whenever NO_X allowances are recorded in either account.

(iii) (A) For every control period during which the NO_X Budget permit revised under paragraph (b)(1)(i) of this section is effective, the NO_X Budget unit under paragraph (b)(1)(i) of this section will be treated, solely for purposes of NO_X allowance allocations under § 96.42, as a unit that commenced operation on the effective date of the NO_X Budget permit revision under paragraph (b)(1)(i) of this section and will be allocated NO_X allowances under § 96.42.

(B) Notwithstanding paragraph (b)(1)(iii)(A) of this section, if the effective date of the NO_X Budget permit revision under paragraph (b)(1)(i) of this section is during a control period, the following number of NO_X allowances will be allocated to the NO_X Budget unit under paragraph (b)(1)(i) of this section under § 96.42 for the control period: the number of NO_X allowances otherwise allocated to the NO_X Budget unit under § 96.42(c) for the control period multiplied by the ratio of the number of days, in the control period, starting with the effective date of the permit revision under paragraph (b)(1)(i) of this section,

divided by the total number of days in the control period.

(2)(i) When the NO_X authorized account representative of a NO_X Budget opt-in source does not renew its NO_X Budget opt-in permit under § 96.83(b), the Administrator will deduct from the NO_X Budget opt-in unit's compliance account, or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located, NO_X allowances equal in number to and with the same or earlier compliance use date as any NO_X allowances allocated to the NO_X Budget opt-in source under § 96.88 for any control period after the last control period for which the NO_X Budget opt-in permit is effective. The NO_X authorized account representative shall ensure that the NO_X Budget opt-in source's compliance account or the overdraft account of the NO_X Budget source where the NO_X Budget opt-in source is located includes the NO_X allowances necessary for completion of such deduction. If the compliance account or overdraft account does not contain sufficient NO_X allowances, the Administrator will deduct the required number of NO_X allowances, regardless of their compliance use date, whenever NO_X allowances are recorded in either account.

(ii) After the deduction under paragraph (b)(2)(i) of this section is completed, the Administrator will close the NO_X Budget opt-in source's compliance account. If any NO_X allowances remain in the compliance account after completion of such deduction and any deduction under § 96.54, the Administrator will close the NO_X Budget opt-in source's compliance account and will establish, and transfer any remaining allowances to, a new general account for the owners and operators of the NO_X Budget opt-in source. The NO_X authorized account representative for the NO_X Budget opt-in source shall become the NO_X authorized account representative for the general account.

§ 96.88 NO_X allowance allocations to opt-in units.

(a) *NO_X allowance allocation.* (1) By December 31 immediately before the first control period for which the NO_X Budget opt-in permit is effective, the permitting authority will allocate NO_X allowances to the NO_X Budget opt-in source and submit to the Administrator the allocation for the control period in accordance with paragraph (b) of this section.

(2) By no later than December 31, after the first control period for which the NO_X Budget opt-in permit is in effect, and December 31 of each year thereafter, the permitting authority will allocate NO_X allowances to the NO_X Budget opt-in source, and submit to the Administrator allocations for the next control period, in accordance with paragraph (b) of this section.

(b) For each control period for which the NO_X Budget opt-in source has an approved NO_X Budget opt-in permit, the NO_X Budget opt-in source 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 NO_X Budget opt-in source's baseline heat input determined pursuant to § 96.84(c); or

(ii) The NO_X Budget opt-in source'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 permitting authority will allocate NO_X allowances to the NO_X Budget opt-in source in an amount equaling the heat input (in mmBtu) determined under paragraph (b)(1) of this section multiplied by the lesser of:

(i) The NO_X Budget opt-in source's baseline NO_X emissions rate (in lb/mmBtu) determined pursuant to § 96.84(c); or

(ii) The most stringent State or Federal NO_X emissions limitation applicable to the NO_X Budget opt-in source during the control period.

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