US ERA ARCHIVE DOCUMENT

# SUPPORTING STATEMENT

# Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule) EPA ICR # 2152.02

#### 1. IDENTIFICATION OF THE INFORMATION COLLECTION

# 1(a) Title of the Information Collection

"Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule) - Final Rule."

#### 1(b) Short Characterization/Abstract

The United States (U.S.) Environmental Protection Agency (EPA) has promulgated a Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule) (CAIR) that includes new reporting requirements and combines these new requirements with existing requirements from the Consolidated Emissions Reporting Rule (CERR), the Emission Reporting Requirements for Ozone State Implementation Plan (SIP) Revisions Relating to Statewide Budgets for  $NO_X$  Emissions to Reduce Regional Transport of Ozone ( $NO_X$  SIP Call) and the Acid Rain Program under Title IV of the CAA Amendments of 1990. Each of these three existing requirements has an approved ICR in place. The current ICRs are: for the CERR, ICR # 0916.10, for the  $NO_X$  SIP Call, ICR # 1857.03 and for the Acid Rain Program, ICR # 1633.13.

This supporting statement and ICR is being submitted to account for the incremental burden associated with the CAIR. As such, this supporting statement references the burden analysis included in ICR #s 0916.10, 1857.03 and 1633.13 and estimates the change in burden resulting from the CAIR beyond the scope of these ICRs.

EPA today adopts a rule that, among other things, details the additions and changes to reporting requirements associated with CAIR. These changes can be logically divided in to two categories: 1. Changes to existing requirements for emission reporting under the CERR and  $NO_X$  SIP Call and 2. The addition of reporting requirements to support emissions trading in States using the CAIR model cap and trade rules. Throughout this Supporting Statement, the burden analysis associated with these two categories will be discussed sequentially as "Emission Reporting Requirements" and "Emission Trading Requirements."

#### **Emission Reporting Requirements**

Taken together, the existing emissions reporting requirements under the  $NO_X$  SIP Call and CERR are already rather comprehensive in terms of the States covered and the information required. Therefore, the practical impact of the changes in CAIR is to impose only three new requirements.

First, in Arkansas, Florida, Iowa, Louisiana, Mississippi and Wisconsin which we have determined make significant contributions to ozone nonattainment in another State but are not among the 21 States subject to the  $NO_X$  SIP Call  $^1$ , the required emissions reporting will be expanded to match those of the  $NO_X$  SIP Call States. The change requires that they report  $NO_X$  emissions during the 5-month ozone season, in addition to the existing requirement for reporting emissions for the full year. This new requirement begins with the triennial inventory year prior to the CAIR implementation date. This will be the 2008 inventory year, the report for which will be due to EPA by June 1, 2010.

Second, under the existing CERR, yearly reporting is required only for sources whose emissions exceed specified amounts. Under the CAIR, the 23 States and the District of Columbia subject to the CAIR for reasons of PM<sub>2.5</sub> must report to EPA each year a set of specified data elements for all sources subject to new controls adopted specifically to meet the CAIR requirements related to PM<sub>2.5</sub>, unless the sources participate in an EPA-administered emissions trading program. This is like the every-year reporting requirement for controlled sources under the NO<sub>x</sub> SIP Call, but covering SO<sub>2</sub> in addition to NO<sub>x</sub> and covering the whole year – since the PM<sub>2.5</sub> NAAQS at issue is the annual NAAQS – rather than only the ozone season. This rule could increase the number of sources for which States must submit reports each year rather than only every third year, if a State chooses to control non-EGU sources under the CAIR or if the State does not join the EPA trading programs for EGUs. This new requirement will begin with the 2009 inventory year, the report for which will be due to EPA by June 1, 2011. After the 2009 reporting year, this new requirement will have no effect on States that fully comply with the CAIR by requiring their EGUs to participate in the EPA model capand-trade programs.

Third, EPA is eliminating a requirement of the  $NO_x$  SIP Call for a special all-sources report by affected States for the year 2007, due December 31, 2008. The normal cycle of every-third-year reporting would also produce the same type of all-sources reports for 2005 and 2008. The EPA originally intended to use the information on 2007 emissions to re-assess the effectiveness of the  $NO_x$  SIP Call in eliminating upwind  $NO_x$  emissions that contribute significantly to downwind ozone nonattainment as of the latest 1-hour ozone attainment date within the region. The large majority of the emissions reductions required by the  $NO_x$  SIP Call have been assigned to sources that participate in the EPA-administered trading program, which has independent procedures to ensure that emissions reductions are achieved. We now believe that examining

 $<sup>^{1}</sup>$ For the purposes of the burden estimates, the State of Georgia is considered a NO<sub>X</sub> SIP Call State. However, it should be noted that EPA has proposed to stay the NO<sub>X</sub> SIP Call as it relates to Georgia. (See 70 FR 9897-9901, March 1, 2005.) Burden increases and decreases for NO<sub>X</sub> SIP Call States are relatively small; therefore, there will be little variation in burden totals if Georgia's NO<sub>X</sub> SIP Call requirements are removed under a separate action.

2005 and 2008 inventory submissions and the annual reporting on controlled sources will permit us to evaluate the effectiveness of individual State rules or implementation practices in reducing emissions. We no longer need the special 2007 emissions inventory information to broadly revisit the  $NO_X$  SIP Call, and we recognize that preparing that inventory could draw resources away from more important work by State air agencies.

# **Emission Trading Requirements**

For this ICR, it is assumed that each State will adopt the relevant CAIR  $SO_2$ , annual  $NO_X$  and ozone season  $NO_X$  model trading rules, and the burden associated with these programs is evaluated. The trading program burden would include the paperwork burden related to (1) transferring and tracking allowances; (2) allocation of allowances to affected units; (3) permitting; (4) annual year end compliance certification; and (5) monitoring and reporting. The monitoring and reporting requirements of a trading program will require capital and labor expenditures by industry, and these are evaluated.

Like with the Acid Rain Program and the NO<sub>X</sub> SIP Call, the ability to buy and sell (or transfer) allowances is expected to provide substantial economic benefits by encouraging the greatest emissions reductions where costs of reductions are lowest. Allowance trading cannot be implemented, however, unless regulations governing emissions monitoring and permitting of sources are in place as well. To ensure compliance with the emissions reduction requirements and to provide the regionwide consistency needed to foster the allowance market, the designated representative of the owners and operators of each source with affected units are required to have CAIR requirements integrated into their Title V permits for the affected source and to certify that an approved SO<sub>2</sub> and NO<sub>X</sub> emissions monitoring system has been installed and is properly operated at each affected unit.

For affected units currently required to monitor using Part 75 provisions, information for the allocation methodology will be recorded and collected as part of the emissions monitoring and reporting process.

While many sources have already installed necessary emissions monitoring equipment due to requirements under other regulations, some sources will need to install new monitors or upgrade existing monitors. Capital costs also usually include the cost of initial certification of new or upgraded monitors is included as part of start-up costs.

Emissions monitoring and reporting by sources in the cap and trade program is fundamental to the allowance trading system. EPA will use the data contained in the reports to verify actual emissions. Without accurate monitoring and reporting of emissions, the integrity of the allowance system would be undermined, and there would be no assurance that the cap is achieved and emissions had been reduced. To meet the emissions monitoring, recordkeeping and reporting requirements, affected units are required to (1) submit a monitoring plan and certification reports for each monitoring system, (2) record hourly emissions data, and (3) submit reports of their emissions and operating data to EPA. Sources with monitors already certified

under Part 75 may be exempt from initial certification requirements.

All participants in the allowance transfer system are required either to complete and submit an allowance transfer form for each allowance transfer or to perform the transfer on-line. Participants in the transfer system that are not affected sources, such as allowance brokers, fuel suppliers and environmental groups are also required to file a one time account information application to establish accounts in the allowance tracking systems. For sources affected by the CAIR, allowance transfers currently conducted under the Acid Rain and NO<sub>x</sub> SIP Call Programs will in the future occur in the context of the CAIR Trading Program.

#### 2. NEED FOR AND USE OF THE COLLECTION

# 2(a) Need/Authority for the Collection

One of the goals of this rulemaking is to consolidate the emission inventory reporting requirements found in several existing regulations and streamline the activities involved in submitting the emissions data to EPA. This will enable the EPA to achieve uniformity and completeness in emission inventories used to support national, regional, and local air quality planning and attainment.

While the CAA does not provide a specific authorization for a national emissions data base, the CAA provides the EPA ample legislative authority for acquiring such data. Emissions data are of vital importance to the EPA for fulfilling a host of monitoring, standard-setting, rulemaking, reviewing, and reporting duties. Section 110 and 301(a) of the CAA provide a primary authority for a national emissions data base. Section 110 requires each State to prepare a plan which provides for implementation, maintenance, and enforcement of the primary standard for each pollutant for which air quality criteria have been issued. This plan must include provisions for periodic reports identifying sources and listing amounts of emissions. Section 301(a) authorizes the Administrator to promulgate necessary regulations.

Congressional support for collecting and reporting emissions data is demonstrated in three sections of the CAA. Section 110(a)(2)(F) requires that each State provide for periodic reports on the nature and amounts of emissions of criteria pollutants from stationary sources.

Sections 182(a)(3)(A) and 187(a)(5) of the CAA specify periodic inventory requirements for ozone and CO nonattainment areas, respectively. Section 182(a)(3)(A) requires States with ozone nonattainment areas to submit a current inventory of actual emissions of VOC,  $NO_X$ , and CO every 3 years. Section 187(a)(5) requires a similar inventory of actual CO emissions for CO nonattainment areas. Periodic inventories include emission estimates for all point, nonpoint, onroad mobile, nonroad mobile, and biogenic sources. Section 172(c)(3) also provides the Administrator with discretionary authority to require other emissions data as deemed necessary for State Implementation Plan (SIP) development in nonattainment areas to meet the NAAQS. In 1998, EPA promulgated the  $NO_X$  SIP Call which requires the affected States and the District

of Columbia to submit SIP revisions providing for NO<sub>X</sub> reductions to reduce their adverse impact on downwind ozone nonattainment areas. (63 FR 57356, October 27, 1998). As part of that rule, codified in 40 CFR 51.122, EPA established emissions reporting requirements to be included in the SIP revisions required under that action. Another set of emissions reporting requirements, termed the Consolidated Emissions Reporting Rule (CERR), was promulgated by EPA in 2002, and is codified at 40 CFR part 51 subpart A. (67 FR 39602, June 10, 2002). These requirements replaced the requirements previously contained in subpart Q, expanding their geographic and pollutant coverages while simplifying them in other ways.

As noted above, at present, two sections of title 40 of the CFR contain emissions reporting requirements applicable to States: subpart A of part 51 (the CERR) and section 51.122 in subpart G of part 51 (the  $NO_X$  SIP Call reporting requirements). The rulemaking consolidates these, with modifications as detailed below. The modifications are intended to achieve the additional reporting needed to verify the reductions required by the CAIR.

Under the  $NO_X$  SIP Call requirements in section 51.122, emissions of  $NO_X$  for a defined 5-month ozone season (May 1 through September 30) from sources that the State has subjected to emissions control to comply with the requirements of the  $NO_X$  SIP Call are required to be reported by the affected States to EPA every year. However, emissions of sources reporting directly to EPA as part of the  $NO_X$  trading program are not required to be reported by the State to EPA every year. The affected States are also required to report ozone season emissions and typical summer daily emissions of  $NO_X$  from all sources every third year (2005, 2008, etc.). This triennial reporting process does not have an exemption for sources participating in the emissions trading programs.

Emissions reporting under the  $NO_X$  SIP Call as first promulgated was required starting for the emissions reporting year 2002, the year prior to the start of the required emissions reductions. The reports are due to EPA on December 31 of the calendar year following the inventory year. For example, emissions from all sources and types in the 2002 ozone season were required to be reported on December 31, 2003. However, because the Court which heard challenges to the  $NO_X$  SIP Call delayed the implementation by one year to 2004, no State was required to start reporting until the 2003 inventory year. In addition, EPA recently promulgated a rule to subject Georgia and Missouri to the  $NO_X$  SIP Call with an implementation date of 2007. (See 69 FR 21604, April 21, 2004.) For them, emissions reporting begins with 2006. These emissions reporting requirements under the  $NO_X$  SIP Call affect the District of Columbia and 20 of the 28 States affected by the CAIR.

# 2(b) Practical Utility/Users of the Data

# **Emission Reporting Requirements**

Emissions data and related information on stationary point and nonpoint sources, as well as nonroad mobile and onroad mobile sources, are routinely used by the OAQPS and the EPA Regional Offices in carrying out a variety of activities. These activities support regulatory

functions as well as functions that are more programmatic in nature such as trends analyses. Such projects include:

- Evaluation of existing control strategies, such as the NO<sub>x</sub> SIP Call, for States and larger areas;
- Evaluation of proposed control strategies for States and larger areas, including applications of regional scale models;
- Development of national control strategies and preparation of Regulatory Impact Analyses (RIA);
- Preparation and publication of national summaries of emissions including trend analyses;
- As a data base to assist in the identification of important source categories for future regulation; and
- Preparation of the stationary source portion of a report to Congress on SO<sub>2</sub> emissions. This report is required by Section 406 of the CAA and is due on a 5-year cycle that began on January 1, 1995. The report must contain an inventory of national annual SO<sub>2</sub> emissions from industrial sources (as defined in Title IV of the CAA).

EPA's Office of Research and Development (ORD) uses emissions source data in determining priorities for control technology research and as a key data component in the application of regional scale models. The EPA's Regional Offices use emissions and other source parameters to support source inspections and in the analyses of the impact of new or modified sources within an area. EPA's Emission Factor and Inventory Group (EFIG) use the data to assess and analyze trends in criteria pollutant emissions over time.

In addition to supporting projects and initiatives internal to EPA, both the OAQPS and the Regional Offices respond to numerous requests for reports on emission sources. Typically this is done under the Freedom of Information Act. Most requests come from contractors and consultants involved in special studies; a smaller number come from the press and universities and others involved in research.

The collection of emissions data specific to nonattainment areas for certain criteria air pollutants is necessary to comply with requirements specified in Title I of the CAA. States with nonattainment areas rely on current information for point, nonpoint, and mobile sources to revise their SIPs and to plan for emission reductions mandated by the CAA. In addition, a statewide inventory compiled at least every 3 years for all point, nonpoint, and mobile sources is considered to be a key tool to assist States in meeting CAA requirements that address emissions tracking, compliance issues, and mid-course adjustments. Statewide emission inventories can be used by States affected by pollution transport from upwind areas to develop more efficient

control strategies to meet the NAAQS. Statewide emission inventories that were developed by EPA (the NEI) are being used by the Regional Planning Organizations (RPOs) as the starting point for the development of statewide emission inventories used in the regional haze program to define control strategies.

# **Emission Trading Requirements**

Permit applications, including proposed compliance plans, will be used by States and EPA to issue operating permits and to allocate allowances. A permit application is legally binding on the owners, operators, and designated representative of a source until the actual permit is issued. Affected sources may rely on the permit for information on the requirements with which they must comply. Because permit applications and permits are public documents, they may be used by the public to examine activities undertaken by affected sources.

Data from emissions monitoring is indispensable to successful implementation of the trading programs for two reasons:

- The primary purpose of the trading programs is to assist States in the attainment of the ozone and fine particulate matter national ambient air quality standards (NAAQS) by reducing the adverse effects of the transport of ozone, ozone precursors and fine particles from upwind States by reducing annual emissions of sulfur dioxide and nitrogen oxides; and
- EPA can only enforce the program by comparing, for each affected unit, emissions data and the number of allowances held.

Information collected on allowance transfers is used by EPA or its designated agent to track allowances for the purpose of determining compliance with the  $NO_X$  and  $SO_2$  Trading Programs. Information on allowance transfers is also used by participants in the allowance market and the public to evaluate the activities of affected sources, and by EPA for program evaluation.

Together, the allowance trading system, operating permits, and emissions data helps to provide the accountability to allow the  $NO_X$  and  $SO_2$  Trading Programs to function without more stringent command and control approaches.

# 3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

#### 3(a) Nonduplication

# **Emission Reporting Requirements**

The EPA will allow the direct reporting of point source data from sources to EPA to satisfy

this requirement if the sources are subject to the monitoring and reporting requirements of 40 CFR Part 75. The direct reporting of data from sources to EPA will minimize the reporting burden on States. Also, direct reporting will avoid duplication of effort for sources subject to the Part 75 requirements.

# **Emission Trading Requirements**

Reporting requirements for affected sources for the CAIR  $NO_X$  and  $SO_2$  Trading Programs are integrated with existing Part 75 reporting formats. The reporting formats are currently used by Acid Rain Program units under Title IV of the Act and units subject to the  $NO_X$  SIP Call Trading Program implemented under Title I of the Act. Thus, for units subject to Acid Rain or the CAIR quarterly reporting requirements, or both, only one submission will need to be made on a quarterly basis. ( $NO_X$  SIP Call trading program reporting will be replaced with CAIR reporting.)

# 3(b) Public Notice Required Prior to ICR Submission to OMB

Not required. This is a rule related ICR.

#### **3(c) Consultations**

# **Emission Reporting Requirements**

Because the emission reporting requirements for CAIR were developed after the NPR was published on January 30, 2004 (69 FR 4566), consultations with the stakeholder community were necessarily limited. Since the publication of the SNPR on June 10, 2004 (69 FR 32684), discussions have been held with STAPPA/ALAPCO to clarify EPA's logic in developing the rule and to answer questions.

#### **Emission Trading Requirements**

The requirements for the CAIR Trading Programs have been developed using both the methodology found in existing trading programs as well as consultations with interested parties. EPA built on the cap and trade strategy used in the Acid Rain Program, Ozone Transport Commission's NO<sub>X</sub> Budget Program, and the NO<sub>X</sub> SIP Call.

EPA held two workshops with states in the  $NO_X$  SIP Call or OTC programs to discuss lessons learned in those programs. Additionally, EPA has frequent interaction with affected sources and states in the course of implementing the Acid Rain and  $NO_X$  SIP Call Trading Programs. EPA has received comments following the workshops and through these less formal interactions and considered and incorporated those comments into the final rule and ICR.

Finally, as part of updating the ICR for the Acid Rain Program (Part 75) monitoring requirements, EPA contacted various affected parties to gather information on CEM capital

costs, CEM operation and maintenance costs, fuel meter capital costs, and CEM/fuelmeter testing costs. That information has been used in this ICR where appropriate.

# **3(d) Effects of Less Frequent Collection**

# **Emission Reporting Requirements**

The submittal dates required for reporting of emissions data to EPA have been established to minimize the burden on State and local agencies, but also to ensure that State and local agencies are collecting timely and sufficient emissions inventory data to support their air pollution control efforts. A statewide inventory compiled at least every 3 years for all point, nonpoint, and mobile sources is considered important to assist States in meeting various CAA requirements.

If the information collection were not carried out every 3 years for all sources and annually for major point sources, the EPA would not be able to maintain a central, national repository of emissions data from which to extract updated information needed to fulfill EPA mandates.

If this information collection were not carried out annually for sources being controlled to meet the  $SO_2$  and  $NO_X$  budgets, EPA would not be able to verify that emission reductions necessary to meet each State's  $SO_2$  and  $NO_X$  emission budgets were being achieved.

In addition, a triennial report of all NO<sub>X</sub> sources statewide is vital in enabling EPA to track States' progress towards meeting the NO<sub>X</sub> budgets. Because the SO<sub>2</sub> and NO<sub>X</sub> budgets prescribed have been deemed essential in order for downwind States to attain the NAAQS in a timely manner, data collected less frequently would be of little or no use.

# **Emission Trading Requirements**

Submittal of allowance trading information and emissions information on an annual basis provides necessary feedback on the requirements of the program, especially whether the program caps have been maintained. If this information collection were not carried out annually for sources being controlled to meet the SO<sub>2</sub> and NO<sub>x</sub> budgets, EPA would not be able to verify that emission reductions necessary to meet each State's SO<sub>2</sub> and NO<sub>x</sub> emission budgets were being achieved. Because the SO<sub>2</sub> and NO<sub>x</sub> budgets prescribed have been deemed essential in order to aid downwind States in attaining the NAAQS in a timely manner, data collected less frequently would be of little or no use.

Quarterly collections of emissions data allows the opportunity to check data for errors and provide rapid feedback on needed adjustments to data collection systems, and thereby promotes accurate and reliable emissions data. For this same reason, existing federal and state emission monitoring programs often require quarterly reporting, or in some cases, monthly. Less frequent collection, such as semi-annually or annually, would increase the amount of preparation and review time at the end of the reporting period both for regulated sources and for EPA. This would slow down the process for the verification of compliance.

#### 3(e) General Guidelines

This ICR does not violate any of OMB's guidelines for information collections.

# **3(f) Confidentiality**

Any data that is submitted to EPA under this rule will be considered in the public domain and cannot be treated as confidential.

As required by Section 114 of the Clean Air Act, estimates or measurements of emissions must be treated as nonconfidential. Under Agency procedures, data items relating to the computation of emissions may be identified as sensitive by a State and are then treated as "Statesensitive" by EPA. The potentially State-sensitive items include the following: Process rate, boiler design capacity, emission estimation codes, percent space heat, operating rate, and maximum operation rate/hour. Where Federal and State requirements are inconsistent, EPA Regional Office should be consulted for final reconciliation.

# **3(g) Sensitive Questions**

This information collection does not ask any questions concerning sexual behavior or attitudes, religious beliefs, or other matters usually considered private.

# 4. THE RESPONDENTS AND THE INFORMATION REQUESTED

# 4(a) Respondents/Standard Industrial Classification (SIC) Codes

The emissions data required by the rule will generally be submitted by State air pollution control agencies. Under the CERR, there are 55 State and Territorial air pollution control agencies, as well as 49 local air agencies that will be subject to the national reporting requirements and will be required to compile and report emissions information for large stationary point sources on an annual basis, and for smaller point sources, stationary nonpoint and mobile sources on a 3-year basis. The NO<sub>x</sub> SIP Call required 21 States to report NO<sub>x</sub> emission related data on an annual and triennial basis. Six states, Arkansas, Florida, Iowa, Louisiana, Mississippi and Wisconsin have been added to the 21 States subject to the NO<sub>x</sub> SIP Call. For these six states, the required emissions reporting will be expanded to include the reporting of ozone season emissions. In addition, the 23 States and the District of Columbia subject to the CAIR for reasons of PM2.5 must report to EPA each year a set of specified data elements for all sources subject to new controls adopted specifically to meet the CAIR requirements related to PM2.5, unless the sources participate in an EPA-administered emissions trading program. The affected SIC code would be 9511 - Air and Water Resource and Solid Waste Management, which includes governmental environmental protection and control agencies, and pollution control agencies.

This ICR also estimates a burden for affected industry sources to monitor  $SO_2$  and  $NO_X$  mass emissions and demonstrate compliance with  $SO_2$  and  $NO_X$  control measures. Sources may report data directly to EPA if a source is required to meet the monitoring and reporting requirements of Part 75. It is expected that States will choose to control large electric utility sources to comply with their  $SO_2$  and  $NO_X$  emissions budgets. Electric utility combustion sources are generally classified as either SIC 4911 - *Electric Services*, or 4931 - *Electric and Other Services Combined* [NAICS 221112 Electric Power Distribution].

# **4(b) Information Requested**

# **Emission Reporting Requirements**

The CERR and  $NO_X$  SIP Call established the basic emission reporting requirements. The CAIR changes some of these requirements such that the previously accounted for reporting burden would also change. Only the changes to the CERR and  $NO_X$  SIP Call reporting requirements that would change reporting burden are discussed here.

# Respondent activities

For the emission inventory reporting requirements of the CAIR, respondent activities are very similar to what has been required to satisfy reporting under CERR and the NO<sub>x</sub> SIP Call. The specific State respondent activities associated with the CAIR that are changes from the existing CERR and NO<sub>x</sub> SIP Call requirements are outlined below.

The one-time State burden items include:

- Read the reporting requirements of the rule;
- Elimination of the requirement in the NO<sub>X</sub> SIP Call for a special all-sources report for the year 2007.

#### **Emission Trading Requirements**

This section describes the data items requested from affected sources for the collections described in this ICR. This section also defines the activities in which respondents must engage to assemble, submit, or store these data items.

- (i) Data Items, Including Recordkeeping Requirements
  - (a) Allowance Tracking

There are several data items required for allowance tracking activities. First, the affected source must submit account certificates of representation for the CAIR designated representative and (if desired) alternate CAIR designated representative. This documentation, the requirement

for which is found in 40 CFR §§ 96.113, .213 and .313, must include:

- Identification of the source and unit,
- Dates on which the unit commenced operation and commenced commercial operation,
- Name and contact information for the CAIR designated representative and alternate,
- A list of the owners and operators of each source and unit, and
- A certification statement and signature of the CAIR designated representative and alternate.

Certification applications are to be kept for a period of 5 years pursuant to the general requirements imposed for Title V permitted facilities.

# (b) Permitting

The basic requirement for permitting is an application for a permit revision to a source's operating permit issued under Title V of the Act. Although there is some possibility that a non-Title V source could be affected under the CAIR Trading Program, all affected sources are assumed to be Title V sources for purposes of this ICR. Except for the permit revision application, all of the other monitoring, reporting or recordkeeping requirements associated with Title V permitting are either part of the baseline Title V requirements or are covered separately under section 4(c). Title V permit applications must be kept for 5 years pursuant to Title V recordkeeping requirements. In addition, coal-fired units that are not part of the Acid Rain Program are expected to have to apply for a permit to construct under Title I of the Act.

#### (c) Monitoring and Reporting

Affected trading program sources are required to monitor  $SO_2$  and  $NO_X$  mass emissions, and record and report emissions data using the requirements of 40 CFR Part 75. The emissions monitoring requirements specify that affected sources must (1) submit a monitoring plan for each affected unit at a source, (2) submit data for certification of each monitor, and (3) record hourly operational, pollutant monitor, and flow monitor data for each affected unit and submit quarterly reports of their emissions data to EPA.

Respondents are required by 40 CFR 75.64 to submit the quarterly  $SO_2$  and  $NO_X$  mass emissions data electronically, by direct electronic submission to EPA, and must also include a certification statement by the designated representative of the unit. All monitoring records are to be kept for three years, with one possible exception under a voluntary option for fuel flowmeter calibration testing.

#### (ii) Respondent Activities

The primary tasks that will be performed by trading program respondents to meet the emissions monitoring requirements are (1) completing and submitting appropriate monitoring plan forms for each affected source and each affected unit at a source; (2) conducting tests to

certify the operation of monitors, and submitting test results to EPA; (3) recording hourly emissions data (this activity generally is performed electronically); (4) operation and maintenance activities associated with the monitoring, including quality assurance activities; (5) assuring data quality, preparing quarterly reports of emissions data and submitting these reports to EPA; and (6) responding to error messages generated by EPA. In addition, respondents will have to purchase the necessary monitoring hardware and purchase the electronic data reporting software (or software upgrades).

# 5. THE INFORMATION COLLECTED-AGENCY ACTIVITIES, COLLECTION METHODS, AND INFORMATION MANAGEMENT

# 5(a) Agency Activities

# **Emission Reporting Requirements**

The EPA activities associated with the rule include:

- Receiving, reviewing, and storing emission inventory data submitted by each State;
- Processing and updating data submitted by States, including performing quality assurance of data, and coordination of efforts to resolve errors and anomalies; and
- Fulfilling information requests.

# **Emission Trading Requirements**

The major EPA activities related to the CAIR Trading Program include (1) maintenance and administration of the  $SO_2$  and  $NO_X$  allowance tracking systems, (2) reviewing permit applications, (3) reviewing monitoring plans and certification applications, (4) processing, reviewing and evaluating reports of quarterly emissions data from affected units, (5) calculating/reviewing annual emissions from affected sources, and (6) reviewing total annual emissions data submitted to track each State's progress toward meeting its budgets and creating a summary report of emissions. EPA will use a computer system to track and maintain monitoring and emissions information. EPA will also answer respondent questions and conduct audits of data submissions.

# **5(b)** Collection Methodology and Management Emission Reporting Requirements

The EPA has establishing a central repository of inventory data for all States termed the National Emissions Inventory (NEI) database. Emissions inventory data reported electronically will be stored in the NEI database and used by the EPA and by other States for air modeling, tracking progress in meeting CAA requirements, setting policy and answering questions from the

public.

The EPA has created and maintains the NEI database as a central repository of inventory data for all States, but the data must be supplied by the States in electronic form. The EPA currently requires that States use the NEI Input Format (NIF) for electronic data reporting (EDR).

# **Emission Trading Requirements**

To ensure consistency regionwide and to expedite data entry, EPA requires that standard formats used for Part 75 reporting be used to submit the information collected for the CAIR Trading Programs.

Several computer systems and associated databases have been developed to (1) track allowances, (2) record quarterly emissions monitoring data, and (3) calculate the number of allowances to be deducted each year. The systems and databases are designed to coordinate the information for easy access and use by the Agency, states, regulated community, and the public.

The EPA also has established a Clean Air Markets Page on the Internet, which includes detailed information collected from emissions reports. Those without access to the Internet may use the Clean Air Markets Hotline to request information, including summary reports. The Agency expects to rely on these electronic means to disseminate information about the CAIR Trading Program as the program is implemented.

# 5(c) Small Entity Flexibility

#### **Emission Reporting Requirements**

State and Territorial control agencies are not considered to be small entities. According to EPA's ICR Handbook, OMB's definition for a small entity includes small governmental jurisdictions with populations of less than 50,000. According to 1999 population data from the U.S. Census Bureau, no State or Territory has a population below this threshold. However, certain local air pollution agencies may be in charge of individual counties or multi-county areas whose population is less than 50,000.

These local agencies have had experience compiling their 2002 inventories that were submitted to EPA in June 2004 as required by the CERR. The emission reporting requirements in CAIR are estimated to result in a net burden reduction for the reporting agencies.

#### **Emission Trading Requirements**

The CAIR Trading Program includes fossil fuel-fired units (stationary boilers, combustion turbines, and combined cycle systems) that serve an electrical generator of capacity greater than 25 MWe. Units with a lower capacity are not included because of the high cost of monitoring

emissions from these sources and the *de minimis* nature of their emissions.

There is one small unit provision applicable to the CAIR Trading Program which provides for reduced monitoring. The low mass emissions provisions (40 CFR 75.19) allows optional reduced monitoring, quality assurance, and reporting requirements for units that combust natural gas and/or fuel oil and that emit no more than 100 tons of  $NO_X$  annually provided that no more than 50 tons of  $NO_X$  is emitted in the ozone season (May 1 – September 30) and no more than 25 tons of  $SO_2$  annually and that calculate no more than the same amount based on specified procedures for calculating and reporting emissions. Utilities that qualify are not required to keep monitoring equipment installed on (or conduct fuel sampling for) low mass emissions units, nor are they required to perform quality assurance or quality control tests. Moreover, emissions reporting requirements are significantly simplified for these units.

Even if a gas- or oil-fired unit does not qualify for the "low mass emissions unit" provisions, the monitoring provisions of Part 75 do allow for the use of alternative methods to determine emissions. As discussed in the Regulatory Impact Analysis (RIA) of the final Acid Rain Implementation Regulations (October 19, 1992), smaller utilities are more likely to be dependent on these oil- and gas-fired units, especially very small utilities (see p. 5-14 of that RIA document). This analysis remains relevant to this rulemaking.

#### **5(d) Collection Schedule**

There is one requirement in the CAIR that will impact the reporting schedule for the States. EPA is deleteing the requirement under the  $NO_x$  SIP Call that affected States must report an emission inventory for 2007 which would have been due on December 31, 2008.

# 6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

#### 6(a) Estimating Respondent Burden

#### **Emission Reporting Requirements**

The respondent burden for complying with the reporting requirements of the rule is estimated incremental to the burden associated with existing annual inventory and periodic inventory reporting requirements.

In general, States already have mechanisms in place for reporting emissions data to EPA under the existing CERR and  $NO_x$  SIP Call inventory requirements. The changes to the existing reporting requirements are specified in Section 4(b)(i) of this supporting statement.

Other ongoing State activities that support existing inventory reporting requirements include:

- Collecting emissions data and other associated information;
- Training staff in coding and submissions techniques;
- Quality-assuring emissions data and resolution of errors and anomalies identified by EPA;
- Maintaining records associated with data submitted by sources; and
- Preparing and submitting required inventory data items in approvable format.

The following sections discuss the assumptions used to develop burden hour estimates for one-time only activities and triennial activities. Table 6-1 lists the burden items included under these categories, and presents their associated burden hours for 1 year. In general, managerial time was estimated to be 5 percent of technical staff time. Burden hours and associated costs were estimated for the first 3-year period that the affected States would have to start reporting emissions data to EPA. In this case, that period corresponds to the years 2006, 2007, and 2008. Table 6-2 shows the required activities that a State must perform each year, beginning in the year 2006 through 2008. Table 6-3 presents the State and local respondent annual burden hours and costs by activity.

#### One-time activities

The time for States, Territorial, and local agencies to read and interpret the reporting requirements of the rule was estimated to be 1 hour for technical staff and 1 hour for managerial staff.

The remaining one-time activity is the elimination of the requirement in the  $NO_X$  SIP Call for a special all-sources report for the year 2007. This supporting statement estimates burden using methods similar to the ones used for the CERR and the  $NO_X$  SIP Call. Thus for the  $NO_X$  SIP Call there are 22 respondents (21 states plus the District of Columbia). This decrease in burden was estimated by first estimating the burden for each respondent, then multiplying by the number of respondents. The burden per respondent was estimated in the  $NO_X$  SIP Call ICR supporting statement to be 8 hours of technical staff time, and 0.4 hour of managerial staff time.

#### Triennial activities

The CAIR adds six additional states (AR, FL, IO, LA, MS, and WI) that would be subject to the  $NO_X$  SIP Call reporting requirements. These States would have the additional burden of having to estimate and report  $NO_X$  emissions for the five month ozone season in addition to the existing requirement for reporting emissions of all pollutants for the full year. This requirement is to be effective for the 2008 inventory year. For these States, EPA estimates that each respondent would spend 24 hours of technical staff time and 1 hour of managerial staff time.

There is an additional CAIR change that would only impact triennial burden. The CAIR changes the requirement for the reporting of summer day emissions. CAIR requires the reporting of summer day emissions only from States that have ozone nonattainment areas, or which can be shown to make a significant contribution to ozone formation in another State,

instead of from all States. This will result in a small reduction in burden which was not estimated.

# **Emission Trading Requirements**

This section estimates the paperwork burden and cost of submitting permit applications, allowance tracking and transfer materials (including applications for early reduction credits), year-end compliance certifications, submittal of monitoring plans, obtaining certification of each monitoring system, conducting monitor quality assurance activities, and recording and reporting data from CEM systems (or approved alternatives).

To estimate the burden and/or cost of each incidence of the various rule revisions, EPA had available prior estimates of the costs of various activities, estimates provided by affected utilities in comments to the Agency, and estimates based on the Agency's experience in implementing the existing trading programs.

For the purposes of this analysis, the trading sources are grouped into the following categories:

- Trading units located in a PM/O<sub>3</sub> State in the NO<sub>X</sub> SIP Call Region (AL, IL, IN, KY, MD, MI, MO, NY, NC, OH, PA, SC, TN, VA, WV and DC)
- Trading units located in a PM/ O<sub>3</sub> State not in the NO<sub>x</sub> SIP Call Region (FL, IO, LA, MS, and WI)
- Trading units located in a PM State not in the NO<sub>x</sub> SIP Call Region (TX, MN, and GA)
- Trading units located in an O<sub>3</sub> State in the NO<sub>x</sub> SIP Call Region (CT, MA, DE, and NJ)
- Trading units located in an O<sub>3</sub> State not in the NO<sub>X</sub> SIP Call Region (AR)

Each of these categories has sources that are subject to the Acid Rain Program, which requires monitoring of  $SO_2$  and  $NO_X$ . (Note: There are not any  $NO_X$  SIP Call States that are PM-only States for CAIR.)

The CAIR Trading Program requires all affected sources to monitor a  $NO_X$  emission rate,  $SO_2$  emission rate and heat input in order to determine  $NO_X$  mass emissions and  $SO_2$  mass emissions. Affected gas- and oil-fired units may elect to use a  $SO_2$  emissions rate CEM and a fuel flowmeter. In addition, peaking units that burn natural gas and/or fuel oil may use an alternative method for calculating  $NO_X$  emission rates. EPA will also allow certain low mass emissions units to use assumed emissions factors together with operational data to calculate emissions.

For purposes of this ICR, it is important that the burdens and costs be calculated only in terms of incremental impacts for units located in  $NO_X$  SIP Call States or subject to the Acid Rain Program. The  $NO_X$  SIP Call Program is a regionwide cap-and-trade program that targets utility and large industrial combustion sources to facilitate  $NO_X$  emissions reductions in the  $NO_X$  SIP Call region. The  $NO_X$  SIP Call States in the CAIR region include Alabama, Connecticut,

Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia and the District of Columbia. Similarly, States not in the NO<sub>X</sub> SIP Call region have existing requirements for CEMS in some cases that a unit will already be subject to. Thus, it should be noted that the labor hour and cost estimates per unit identified in this document, represent the weighted average burden and cost for all units and do not represent the actual burden and cost for a particular unit.

The following discussion highlights some of the basic differences for the categories of units. Included in this discussion is the consideration of monitoring and reporting that is done by many of these sources under the Acid Rain Program.

Trading units in PM/  $O_3$  States in the  $NO_X$  SIP Call region will have the smallest overall impact with regard to monitoring and reporting. Acid Rain-affected units are already monitoring and reporting both  $SO_2$  and  $NO_X$  emissions on a year round basis and will not incur additional burdens (or capital and operating and maintenance costs) as a result of the CAIR since they have already installed and are operating a CEMS (or approved alternative) and meet Part 75 requirements for both  $SO_2$  and  $NO_X$ . Sources that are not affected by the Acid Rain Program are already monitoring and reporting  $NO_X$  emissions during the  $O_3$  season. These sources will need extend their monitoring and reporting throughout the year and add  $SO_2$  monitoring for CAIR. Additionally, these units will have a small additional burden associated with permit applications and certain allowance transactions.

Trading units in PM/  $O_3$  States not in the  $NO_X$  SIP Call region and trading units in PM States not in the SIP Call are similarly impacted by CAIR reporting requirements. These States have Acid Rain sources that are already monitoring and reporting  $SO_2$  emissions and  $NO_X$  rates on a year round basis and in accordance with Part 75. These sources will need to report  $NO_X$  emissions year round and for the PM/  $O_3$  States also include an ozone season  $NO_X$  total. Because these sources are measuring and reporting  $SO_2$  mass emissions, which requires heat input measurement that can be used with the  $NO_X$  emission rate information to calculate  $NO_X$  mass emissions. Therefore, these sources would need to make minor modifications to their reporting practices in order to report  $NO_X$  mass emissions for this program, but would not likely need to purchase additional monitoring equipment. The non-Acid Rain sources in these categories will incur the largest impact with regard to monitoring since these are the sources that currently are not required to monitor according to Part 75. Monitoring will depend on the type of fuel and the amount of time the unit is operated. Therefore, the costs will vary depending on what monitoring alternative is appropriate for the unit and what monitoring requirements apply to the unit under other regulatory programs.

Trading units in  $O_3$  States that are in the  $NO_X$  SIP Call region will have no additional monitoring and reporting burden since they are already complying with the  $NO_X$  monitoring requirements in Part 75 in the ozone season.

Trading units in O<sub>3</sub> States that are not in the NO<sub>x</sub> SIP Call region will need to install NO<sub>x</sub>

monitoring systems to comply with Part 75 in the ozone season.

Sources will be subject to the CAIR Trading Programs  $NO_X$  monitoring and reporting requirements in 2008 and the  $SO_2$  monitoring and reporting requirements in 2009. Compliance with the emissions caps—with allowance holding requirements--begins in 2009 for  $NO_X$  and 2010 for  $SO_2$ . Table 6-4 shows the burden associated with monitoring  $SO_2$  and  $NO_X$  under CAIR trading programs at the various types of sources.

The primary tasks performed by owners and operators of affected units are (1) permitting, (2) monitoring, recording, and reporting emissions data, (3) allowance trading activities and (4) submittal of the year end compliance certification.

# (i) Permitting.

Each affected entity will have to submit a permit revision application to include in the source's Title V permit the necessary conditions related to compliance with the CAIR Trading Programs. The Agency believes that this application should be relatively routine, and that a standard method of incorporating the requirements by reference or a standard set of permit conditions will be available. The Agency estimates that, on a per unit basis, about 4 managerial hours will be required to revise the Title V permit.

Some sources will also be required to construct additional facilities, and therefore will need to complete a permit to construct application. The Agency estimates that this requirement will be necessary for all coal-fired units that are not in the Acid Rain Program and that the task will take 20 hours of managerial and 20 hours of technician time, per permit.

#### (ii) Monitoring.

For monitoring, the burdens differ greatly based on the amount and type of monitoring the unit is already subject to and the particular subtask of monitoring being conducted. The specific elements of burden are:

Start-up Activities. A large part of start-up activities involves capital and test contractor costs. However, the owner or operator will incur some labor burden for these activities, as applicable. For Acid Rain units in  $NO_x$  SIP Call States, CAIR imposes no start-up burdens beyond existing programs. For Acid Rain units in other States, the owner or operator will incur some small amount of burden associated with DAHS upgrades. For the non-Acid Rain units in PM/ $O_3$  States that are in the  $NO_x$  SIP Call region, the burdens reflect arranging for  $SO_2$  CEMS purchase (as required) and oversight of the certification process. The non-Acid Rain units in  $O_3$  States not in the  $NO_x$  SIP Call region would need to purchase and certify  $NO_x$  monitoring systems and the non-Acid Rain and the non-Acid Rain units in PM States that are not part of the  $NO_x$  SIP Call region, burdens reflect purchase and certification of  $NO_x$  and  $SO_2$  monitoring systems.

Regulatory Review. The ICR includes an allocation of time for the managerial and technical staff to review the regulatory requirements and the EDR formats and instructions. The units not in the Acid Rain Program or part of the  $NO_X$  SIP Call will have a burden similar to that estimated for Acid Rain Program units in the Acid Rain Program ICR -- 24 hours of managerial time and 24 hours of technician time in year one of the program and 4 hours each for managerial and technician time, per year, after year one. The burden estimates for all Acid Rain units and units in the  $NO_X$  SIP Call is reduced because of the similar Acid Rain and  $NO_X$  SIP Call requirements. The estimates for these units are 5 hours of managerial time and 5 hours of technician time in year one and 1 hour each per year after year one.

Response to Error Messages. The Agency provides feedback to affected sources for errors that are found in monitoring plans or other reports. The Agency estimates that for each unit not in either the Acid Rain or NO<sub>X</sub> SIP Call, an owner or operator will spend approximately 4 hours of managerial time and 8 hours of technician time responding to these error messages each year. (The time for the other sources is accounted for in other ICRs.)

DAHS Debugging. Based on experience with the Acid Rain Program, some effort will be involved to fix problems with the DAHS software used to report in the Part 75 formats. This burden is assumed to fall primarily on units that are not affected under either the Acid Rain or NO<sub>X</sub> SIP Call programs. Consistent with the existing Part 75 ICR, the Agency estimates that about 16 managerial and 88 technician hours will be spent on this task in the first year of implementation, and then 1 managerial and 4 technician hours will be required in the second and subsequent years of implementation.

Monitoring Plans. The regulations require submittal of monitoring plans. Because most of the monitoring plan elements are now part of the EDR format, the effort involved in developing and maintaining the plans are incorporated into the overall reporting burden estimate.

Monitor Certification/Recertification. Initial certification burdens and costs for new monitoring equipment are addressed above under start-up activities since these costs are often part of the overall purchase expense for the equipment. For some non Acid Rain units, however, there will be burdens associated with certifying existing monitors used under other programs for this program, as well as burdens for recertification to the extent a change in a monitoring system requires recertification. EPA estimates that approximately 10% of all units will have to recertify each year following the year in which the initial certification occurs. The ICR incorporates a labor burden estimate generally consistent with existing Agency models for the labor burdens associated with certification. However, note that the ICR reduces the labor hours for this activity to avoid double counting hours that are already accounted for in the quality assurance activity area (see the following subsection). The double counting would occur because a portion of the labor incurred for the certification or recertification event replaces the labor burden that is generally allocated to the annual relative accuracy test audit (RATA) in the year in which the certification event occurs.

Quality Assurance. Quality assurance (QA) activities and other routine maintenance

for monitoring systems is the largest burden item under the CAIR Trading Programs. These requirements generally include daily, quarterly and annual QA requirements, depending on the monitoring approach being used. For reporting units that use a CEMS, the Agency has assumed a per unit labor burden based on a variety of sources, including the existing Acid Rain Program ICR, the existing NO<sub>x</sub> SIP Call ICR, information provided by Acid Rain Program sources, a CEM cost model developed by EPA, and comments submitted in response to the section 110 SIP Call for ozone transport. For units that rely on alternative methodologies, reduced labor burden estimates apply because the quality assurance activities for the excepted methods are less than for a CEMS. Consistent with the existing Acid Rain Program ICR, the labor burden is expected to be almost entirely technician labor.

Quarterly Reports. Tasks performed by utilities in preparing quarterly reports include: (1) assuring the quality of the data, (2) preparing the quarterly report, (3) revising the monitoring plan, if necessary, (4) preparation of hard copy documentation accompanying the quarterly reports, and managerial review. The existing Acid Rain program ICR was used as the basis for these estimates.

Fuel Sampling. To calculate heat input where the source is using the fuel flowmeter option for an oil or gas-fired unit, the source must obtain gross calorific value data from sampling in accordance with Appendix D of Part 75. For purposes of this ICR, it is assumed that the GCV data would be collected as part of standard business operating procedures to assure compliance with contractual specifications. Thus no additional fuel sampling burdens or costs should be incurred.

#### (iii) Allowance transaction activities.

The Agency anticipates the average number of additional allowance transactions will be approximately 2,500 per year beginning in 2008. A portion of all units will likely conduct transactions in each year solely as a result of this program. The Agency believes that each transaction will involve about 1 hour each of managerial and technician time.

# **6(b) Estimating Respondent Costs**

Table 6-3 presents state and local respondent annualized hours and costs for each information collection activity. To estimate annualized hours and costs for one-time and triennial activities, the burden estimate is divided by 3 to estimate the burden over a 3-year period. Table 6-4 summarizes the annual industry respondent costs. The following discussion describes how the costs were derived.

#### (i) Estimating Labor Costs

For this ICR, the labor rate used for technical staff at State agencies is \$34.36 per hour, and the labor rate for managerial employees at State agencies is \$41.63. These labor rates include benefits and overhead. These labor rates are derived from data shown on the U. S. Department of Labor, Bureau of Labor Statistics, web site at http://stats.bls.gov/news.release/ecec.toc.htm. Wage and salary rates are given in Employee Costs for Employee Compensation "Table 3. State and local government, by major occupation and industry group (March 2004)." The wage and salary rates from this table account for benefits provided to workers. When considering both technical and managerial hours, labor costs for State and Territorial agencies are estimated to be \$46,000 per year per respondent, and labor costs for local agencies are estimated to be \$30,000 per year per respondent for the emissions reporting requirements.

In estimating labor costs, EPA used the following amounts: \$73.42 per hour for managers and \$50.44 per hour for technicians. These rates were used in the existing Acid Rain Program ICR using the Bureau of Labor Statistics Employment Cost Index.

Federal Agency labor rates were assumed to be \$43.44 per hour. This labor rate was derived from the federal government's 2004 General Schedule published by the U.S. Office of Personnel Management using the factors in the following table.

<b>Determination of Federal Wage Rates</b>		
Annual Salary of Technical Staff, GS 11 Step 3		\$47,078
Annual Cost of Supervisory Staff, GS 13, step 3	\$67,099	
Factor (1/11)	0.09	
		\$6,039
Annual Cost of Support Staff, GS 6, step 6	\$31,311	
Factor (1/8)	0.13	
		\$4,070
Annual Applicable Salary of Permit Staff		\$57,187
Benefits (at 16%)		\$9,150
Sick Leave/ Vacation (at 10%)		\$5,719
General Overhead (at 32%)		\$18,300
Total Cost per FTE		\$90,366
Total Hourly Cost (total per FTE dividend divided by 2,080 hours per year)		\$43.44

# (ii) Estimating Capital and Operations and Maintenance Costs

# **Emission Reporting Requirements**

EPA has concluded that the Capital and Operations and Maintenance Costs estimated under the CERR and the NO<sub>x</sub> SIP Call are sufficient to accommodate the modest changes in reporting burden for the CAIR. Therefore, no estimate of Capital and Operations and Maintenance Costs were made for this ICR.

# **Emission Trading Requirements**

Capital/start-up costs include the cost of installing required CEMS or alternatives. Operation and maintenance costs (exclusive of labor costs) reflect ongoing costs to a unit and include both contractor costs for the required recertification, diagnostic, and quality assurance (QA) testing, and other direct maintenance-related expenses (e.g., spare parts and calibration gases). These cost estimates have been derived from EPA CEM cost models, existing ICRs, Agency staff experience under the Acid Rain and NO<sub>x</sub> SIP Call programs, and supplemental estimates provided by affected utilities and others related to the various cost items.

Acid Rain affected units are not expected to incur any non-labor costs associated with this program. The total non-labor cost for capital/start-up items is estimated at \$4,000 per unit for most Acid Rain units that are not in the NO<sub>x</sub> SIP Call region (to account for a DAHS upgrade). For non Acid Rain units in the NO<sub>x</sub> SIP Call region, most units will require a DAHS upgrade, estimated at \$4,000 per unit and an SO<sub>2</sub> analyzer for \$42,525. For non Acid Rain units not in the NO<sub>x</sub> SIP Call region, the units using fuel flowmeters are expected to incur DAHS and SO<sub>2</sub> analyzer costs, while the other units will require some combination of a NO<sub>x</sub>, diluent, SO<sub>2</sub> and/or flow CEMS. The costs for these units ranges from \$15,000 to \$192,000. The variance is due to the monitoring methodology used and what monitoring equipment may already be in place at the unit.

Note that testing contractor costs for certification, recertification and annual relative accuracy test audits (RATAs) are presented as other direct costs and are not converted to equivalent source labor hours. This approach is consistent with the common business practice for obtaining outside contractors to conduct certification/recertification tests and annual RATAs. For initial certification, the certification test costs are commonly bundled with equipment purchase contracts, according to information provided by a range of CEMS equipment vendors. For RATAs that are conducted either as part of the annual quality assurance requirements or as part of recertification, industry contacts have indicated that RATA testing is usually performed under a fixed price contract basis, except for travel costs that may be billed on an hourly basis beyond the basic contract cost.

The Agency also notes that this ICR does not include a cost for the purchase of monitoring equipment for all affected units. Many sources covered by the CAIR Trading Programs are

already required to have CEMS under other regulatory programs. Therefore, to the extent that no new equipment is needed by these sources, capital costs are not included because those costs were included in the ICRs of those other programs. Thus, the capital and other costs included in Table 6-4 represent weighted average costs for each respondent, not the total individual cost for any particular respondent.

# (iii) Capital/Start-up vs. Operating and Maintenance (O & M) Costs

Capital costs for emissions trading reflect one-time costs for purchase of equipment which will be used over a period of years. Conversely, operating and maintenance costs are those costs which are incurred on an annual or other scheduled basis. For instance, costs associated with quality assurance activities, such as spare parts or contractor costs for work, will be incurred on an annual basis.

# (iv) Annualizing Capital Costs

The relevant capital costs for the emissions trading portion of this ICR were annualized at a rate of 7%, (i.e., the annualized capital cost was calculated assuming money to purchase the capital equipment was borrowed at a 7% annual interest rate). The cost of the loan was amortized over the life of the loan to repay original borrowed amount plus interest. The result is the annualized capital cost reported.) The annualized cost of the necessary capital purchases varies from \$2,250 to \$22,500, per year, per unit, depending on the type of monitoring methodology. Table 6-4 contains a breakdown of annual costs by monitoring methodology.

#### 6(d) Estimating the Respondent Universe and Total Burden and Costs

#### **Emission Reporting Requirements**

The number of respondents is estimated to be 51 States (including DC), 4 Territories and 49 local agencies, resulting in 104 total respondents. Most of the activities detailed in Table 6-1 apply to a subset of the 104 potential respondents. The total hourly burden for all respondents is estimated to be an increase of 49 hours per year from the approved ICRs for the CERR and the  $NO_X$  SIP Call. During the first 3-year period that the rule is in effect, the respondents costs should increase by \$1914 per year.

#### **Emission Trading Requirements**

The number of industry respondents varies depending on the activity in question. Activities such as title V permit application or processing allowance transfers can involve nearly two thousand sources. The number of units which will be required to install a particular type of monitoring equipment will be less since many already have monitoring equipment especially if they are in the  $NO_X$  SIP Call region. Tables 6-1, 6-2, and 6-3 give estimates of State burden. These burdens include preparation of the SIP revision in response to the CAIR, activities associated with participating in an emissions trading programs, and reporting information to

EPA under §51.123 and .124. Table 6-4 gives estimates of industry burden beginning with the first expected monitoring year, 2008. This burden includes monitoring, reporting and other activities involved in participating in an emissions trading programs. The total number of respondents is estimated to be approximately 1,700 facilities.

#### 6(e) Bottom Line Burden Hours and Cost Tables

# **Emission Reporting Requirements**

# Total Estimated Respondent Burden and Cost Summary

	Number of	Number of	Total Hours	Total Labor
	Respondents	Activities <sup>1</sup>	Per Year	Costs Per Year
State Respondents	Varies from 6 to 104	131	52	\$2,011

<sup>&</sup>lt;sup>1</sup>On average, each State respondent is assumed to perform 5 discrete activities associated with the CAIR emission reporting requirements, as indicated in Table 6-3. This total is the sum of the "Number of Respondents" column in Table 6-3.

# **Emission Trading Requirements**

# **Total Estimated Respondent Burden and Cost Summary**

	Number of Respondents		Total Costs Per Year		
State Respondents	29	440	\$138,683		
Industry Respondents	1,750	607,216	\$42,017,534		

# **6(f)** Reasons for Change in Burden

# **Emission Reporting Requirements**

The net change in emission reporting burden as compared with the approved ICRs for the CERR and  $NO_X$  SIP Call is an increase of 52 hours. The elimination of the  $NO_X$  SIP Call 2007 report has resulted in a decrease of 59 hours; the addition of AR, FL, IO, LA MS and WI to the  $NO_X$  SIP Call reporting requirements has added 50 hours; 69 hours were estimated to read the rule requirements.

# **Emission Trading Requirements**

The large burden associated with this rule is a result of the costs of monitoring, certifying, quality assuring and reporting emissions data from large electric generating units regulated under CAIR. This burden is tempered however by the integration of these monitoring and reporting requirements with those already required under the Acid Rain and  $NO_X$  SIP Call trading programs. Otherwise, the burden would be significantly higher and the number of sources would be greater.

# **6(g) Burden Statement**

Reporting of emissions data required by the CAIR is estimated to involve an average reduction of 6 hours per year for each State, Territorial and local air pollution control agency. Monitoring and reporting emissions under the CAIR Trading Programs is estimated to involve up to 500 hours per year for affected sources. This estimate considers the most hours expected for a source. With acceptable variations in monitoring methodologies, many sources will spend much less time each year meeting these requirements.

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 respondents 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., S.W., Washington, DC 20460; and to Paperwork Reduction Project (OMB# 2060-0088), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, Attention: Desk Officer for EPA. Include the EPA ICR number and OMB control number in any correspondence.

Table 6-1. Emission Reporting Requirements - State Respondent Burden Hours by Activity

	Hours Per Respondent					
Information Collection Activity	Managerial Hours	Technical Hours	Total			
One-time						
Read the reporting requirements of the rule	1	1	2			
Elimination of the $NO_x$ SIP Call requirement for a special all-sources report for the year 2007 (DECREASE)	0	8	8			
Triennial						
Add AR, FL, IO, LA, MS, and WI to the $NO_X$ SIP Call reporting requirements	1	24	25			

Table 6-2. Emission Reporting Requirements - Activities Required by States Every Year During the Period 2006 through 2008

Information Collection Acitivity	2006	2007	2008
One-time (Annualized)			
Read the reporting requirements of the rule	✓		
Triennial			
Add AR, FL, IO, LA, MS and WI to the $\mathrm{NO}_{\mathrm{X}}$ SIP Call reporting requirements			✓

Table 6-3. Annual State Respondent Burden and Cost by Activity

	Но	urs and Costs	Per Responde	Total Hours and Costs				
Information Collection or Trading Rule Activity	Mgr. \$41.63/Hr <sup>1</sup>	Tech. \$34.36/Hr <sup>1</sup>	Respondent Hours/Year	Labor Cost/Year	Number of Respond ents	Total Hours/Year <sup>2</sup>	Total Cost/Year <sup>3</sup>	
One-time (Annualized)								
Read the reporting requirements of the rule	0.33	0.33	0.66	25.08	104	69	2608	
Elimination of the NOX SIP Call requirement for a special all-sources report for the year 2007 (DECREASE)	-0.13	-2.67	-2.80	-97.15	22	-62	-2137	
Revise SIP if necessary to obtain required reductions	50	250	300	10671.50	9	2700	96,044	
Annual								
Trading Program related (monitoring certifications, audits)	40	400	440.00	15,409	9	3960	138,683	
Triennial								
Add AR, FL, IO, LA, MS, and WI to the $NO_x$ SIP Call reporting requirements	0.33	8.00	8.33	288.62	6	50	1732	
Total	91	656	746	26,297	varies	6,717	236,930	

<sup>&</sup>lt;sup>1</sup> See Section 6 (b) (i) for labor and overhead rates.

<sup>&</sup>lt;sup>2</sup> Hours per year are rounded to the nearest hour.

<sup>&</sup>lt;sup>3</sup> Costs per year are rounded to the nearest dollar.

Table 6-4. Annual Industry Respondent Burden and Cost by Activity, 2008 and subsequent years

Information Collection Activity	Mgr. \$73.42 /Hour 2008	Tech. \$50.44 /Hour 2008	Respondent Hours/Year 2008	Respondent Labor Cost/Year 2008	Ann	ual Capital Startup Costs 2008		O & M Cost 2008	Number of Respondents 2008	Total Hours/ Year 2008	Cos	otal st/Year 2008
Title V permit application	4	0	4	\$293.68		-	\$	-	3029	12116	\$	889,556.72
Permit to Construct	20	20	40	\$2,477.20	\$	=	\$	-	67	2680	\$	165,972.40
Startup/ Capital Items  ~ AR Sources in PM States not in SIP Call region												
<ul> <li>a. DAHS modification</li> <li>nonAR Sources in PM States in SIP Call region</li> </ul>	2	4	6	\$348.60	\$	600.00	\$	-	502	3012	\$	476,197.20
a. add SO2 monitoring	13	3	16	\$1,105.78	\$	6,379.00		-	56	896	\$	419,147.68
<ul> <li>b. DAHS modification</li> <li>nonAR Sources in PM States not in SIP Call region</li> </ul>	2	4	6	\$348.60	\$	600.00	\$	-	805	4830	\$	763,623.00
a. add SO2 monitoring	10	20	30	\$1,743.00	\$	6,379.00	\$	-	11	330	\$	89,342.00
b. NOx and flow CEMS	24	3	27	\$1,913.40	\$	22,500.00	\$	-	260	7020	\$	6,347,484.00
c. NOx CEMS and fuel flowmeter	64	10	74	\$5,203.28	\$	18,750.00	\$	_	249	18426	\$	5,964,366.72
d. App E and fuelmeter	20	10	30	\$1,972.80	\$	2,250.00		-	125	3750	\$	527,850.00
~ AR Source in O3 State not in SIP Call region	2	4	6	<b>\$2.40.00</b>	œ	600.00	¢.		10	444	¢	40.000.40
<ul> <li>a. DAHS modification</li> <li>nonAR Sources in O3 State not in SIP Call region</li> </ul>	2	4	6	\$348.60	\$	600.00	Ф	-	19	114	\$	18,023.40
a. NOx and flow CEMS	24	3	27	\$1,913.40	\$	22,500.00		-	10	270	\$	244,134.00
b. NOx CEMS and fuel flowmeter	64	10	74	\$5,203.28	\$	18,750.00		-	9	666	\$	215,579.52
c. App E and fuelmeter	20	10	30	\$1,972.80	\$	2,250.00	\$	-	5	150	\$	21,114.00
Review Instructions and Requirements												
~ AR Sources in PM States in SIP Call region	1	1	2	\$123.86	\$		\$	-	826	1652	\$	102,308.36
~ AR Sources in PM States not in SIP Call region	1	1	2	\$123.86	\$	_	\$	-	502	1004	\$	62,177.72
~ nonAR Sources in PM States in SIP Call region	1	1	2	\$123.86	\$	_	\$	-	805	1610	\$	99,707.30
~ nonAR Sources in PM States not in SIP Call region	24	24	48	\$2,972.64	\$	_	\$	-	634	30432	\$	1,884,653.76
~ AR Source in O3 State in SIP Call region	1	1	2	\$123.86	\$	_	\$	-	74	148	\$	9,165.64
~ nonAR Source in O3 State in SIP Call region	1	1	2	\$123.86	\$	_	\$	-	145	290	\$	17,959.70
~ AR Source in O3 State not in SIP Call region	1	1	2	\$123.86	\$	_	\$	-	19	38	\$	2,353.34
~ nonAR Sources in O3 State not in SIP Call region	24	24	48	\$2,972.64	\$	-	\$	-	24	1152	\$	71,343.36
Respond to EPA Generated Error Messages												
~ nonAR Sources in PM States not in SIP Call region	4	8	12	\$697.20	\$	_	\$	-	634	7608	\$	442,024.80
~ nonAR Sources in O3 State not in SIP Call region	4	8	12	\$697.20	\$	<u>-</u>	\$	-	24	288	\$	16,732.80
Debug Computer Software												
~ nonAR Sources in PM States not in SIP Call region	16	88	104	\$5,613.44	\$	_	\$	-	634	65936	\$	3,558,920.96
~ nonAR Sources in PM States in SIP Call region	1	4	5	\$275.18	\$	_	\$	-	805	4025	\$	221,519.90
~ nonAR Source in O3 State in SIP Call region	1	4	5	\$275.18	\$		\$	-	145	725	\$	39,901.10

~ nonAR Sources in PM States in SIP Call region								
~ nonAR Sources in O3 State not in SIP Call region	16	88	104	\$5,613.44	\$ - \$ -	24	2496	\$ 134,722.56
Certify Monitors  ~ nonAR Sources in PM States in SIP Call region a. SO2 monitor	5	16	21	\$1,174.14	\$ \$ 2,800.00	56	1176	\$ 222,551.84
~ nonAR Sources in PM States not in SIP Call region a. SO2 monitor	5	16	21	\$1,174.14	\$ \$ 2,800.00	9	189	\$ 35,767.26
b. NOx and flow CEMS	10	32	42	\$2,348.28	\$ \$ 2,800.00	142	5964	\$ 731,055.76
c. NOx CEMS and fuel flowmeter	10	32	42	\$2,348.28	\$ \$ 2,800.00	133	5586	\$ 684,721.24
d. App E and fuelmeter	8	24	32	\$1,797.92	\$ \$ 10,000.00	66	2112	\$ 778,662.72
~ nonAR Sources in O3 State not in SIP Call region a. NOx and flow CEMS	10	32	42	\$2,348.28	\$ \$ 2,800.00	10	420	\$ 51,482.80
b. NOx CEMS and fuel flowmeter	10	32	42	\$2,348.28	\$ \$ 2,800.00	9	378	\$ 46,334.52
c. App E and fuelmeter	8	24	32	\$1,797.92	\$ \$ 10,000.00	5	160	\$ 58,989.60
Perform QA Testing and Maintenance ~ nonAR Sources in PM States in SIP Call region a. SO2 monitor	10	200	210	\$10,822.20	\$ \$ 10,400.00 -	56	11760	\$ 1,188,443.20
<ul> <li>nonAR Sources in PM States not in SIP Call region a. SO2 monitor</li> </ul>	10	200	210	\$10,822.20	\$ \$ 10,400.00	9	1890	\$ 190,999.80
b. NOx and flow CEMS	40	400	440	\$23,112.80	\$ \$ 20,800.00	142	62480	\$ 6,235,617.60
c. NOx CEMS and fuel flowmeter	20	375	395	\$20,383.40	\$ \$ 17,400.00	133	52535	\$ 5,025,192.20
d. App E and fuelmeter	5	30	35	\$1,880.30	\$ \$ 1,800.00	66	2310	\$ 242,899.80
~ nonAR Sources in O3 State not in SIP Call region a. NOx and flow CEMS	40	400	440	\$23,112.80	\$ \$ 20,800.00	10	4400	\$ 439,128.00
b. NOx CEMS and fuel flowmeter	20	375	395	\$20,383.40	\$ \$ 17,400.00	9	3555	\$ 340,050.60
c. App E and fuelmeter	5	30	35	\$1,880.30	\$ \$ 1,800.00	5	175	\$ 18,401.50
Assure Data Quality, Prepare Reports, Submit Reports ~ non AR, non SIP Call sources	16	42	58	\$3,293.20	\$ \$ - -	658	38164	\$ 2,166,925.60
~ Year end compliance activities	2	0	2	\$146.84	\$ \$ -	3029	6058	\$ 444,778.36
~ Allowance Transfers	1	1	2	\$123.86	\$ \$ -	2500	5000	\$ 309,650.00

**TOTAL** 375976 \$ 42,017,534.34