# SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

# NESHAP for Coal- and Oil-fired Electric Utility Steam Generating Units (40 CFR part 63, subpart UUUUU) (Final Rule)

# **Part A of the Supporting Statement**

#### 1. Identification of the Information Collection

# (a) Title and Number of the Information Collection

"NESHAP for Coal- and Oil-fired Electric Utility Steam Generating Units (40 CFR Part 63, Subpart UUUUU)." The Office of Management and Budget (OMB) previously approved the information collection requirements for the Clean Air Mercury Rule (CAMR) in 2005 under OMB Control Number 2060-0567. However, the ICR was discontinued because CAMR was vacated by the United States (U.S.) Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) on February 8, 2008. Because that information collection was developed explicitly to determine compliance with CAMR, it was no longer needed. Thus, a new information collection request (ICR) was prepared in support of the national emission standards for hazardous air pollutants from coal- and oil-fired EGUs that were proposed earlier in 2011 (76 FR 24976, May 3, 2011). This ICR is in support of the standards being promulgated. The OMB control number is 2060-0567. The EPA ICR tracking number is 2137.06.

#### *(b) Short Characterization*

On May 3, 2011, under authority of Clean Air Act (CAA) section 112, the EPA proposed national emission standards for hazardous air pollutants (NESHAP) from coal- and oil-fired electric utility steam generating units (EGUs) (76 FR 24976). After consideration of public comments, the EPA is finalizing the rule in this action.

Pursuant to CAA section 112, the EPA is establishing NESHAP that will require coaland oil-fired EGUs to meet hazardous air pollutant (HAP) standards reflecting the application of the maximum achievable control technology. This rule protects air quality and promotes public health by reducing emissions of the HAP listed in CAA section 112(b)(1).

In general, all NESHAP standards require initial notifications, performance tests, and periodic reports. These notifications, reports, and records are essential in determining compliance, and are required of all sources subject to the NESHAP.

Any owner or operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least 5 years following the date of such measurements, maintenance reports, and records. All reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

Potential respondents are owners and operators of coal- and oil-fired EGUs. The final rule regulates HCl, filterable PM, Hg, and organic HAP from coal-fired EGUs. For oil-fired EGUs, the final rule regulates HCl, HF, filterable PM, and organic HAP. Following initial

performance tests, owners/operators of EGUs will be required to demonstrate compliance with emission limits through continuously monitoring PM, Hg, HCl, and HF (oil-fired EGUs) emissions. The final rule includes a work practice standard for organic HAP; the work practice standard requires the implementation of periodic burner tune-up procedures. Respondents will be required to notify the EPA of performance tests and CEMS demonstrations, and to maintain records demonstrating compliance with each emission limit and work practice standard. These requirements are listed in Table 1.

Approximately 1,244 electric generating units are currently subject to the regulation, and it is estimated that 2 new electric generating units will be built each year.

# 2. Need for and Use of the Collection

#### (a) Need/Authority for the Collection

Section 112 of the CAA requires that the EPA establish MACT standards for new or existing major or area sources according to the requirements in section 112(d). Certain records and reports are necessary for the Administrator to: (1) confirm the compliance status of major sources, identify any non-major sources not subject to the standards, and identify new or reconstructed sources subject to the standards; and (2) ensure that the MACT standards are being achieved on a continuous basis. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414) and set out in the General Provisions for NESHAP in 40 CFR part 63, subpart A.

# (b) Use/Users of the Data

The additional information will be used by agency enforcement personnel to ensure that the emission limitations are being achieved. Based on review of the recorded information at the site and the reported information, the EPA can identify facilities that may not be in compliance and decide which plants, records, or processes should be inspected.

#### 3. Nonduplication, Consultations, and Other Collection Criteria

# (a) Nonduplication

No other regulation currently requires the same information requested under this ICR from owners/operators of coal- and oil-fired EGUs. In the event that certain reports required by state or local agencies may duplicate information required by the proposed requirements, a copy of the report submitted to the state or local agency can be provided to the Administrator in lieu of the information that would be required in the semi-annual compliance report. Therefore, no duplication exists.

(b) Public Notice Required Prior to ICR Submission to OMB The final rule will provide public notice of the ICR.

#### (c) Consultations

The EPA met with 10 national organizations representing state and local elected officials to provide general background on the proposal, answer questions, and solicit input from state/local governments. The EPA also consulted with Tribal officials early in the process of developing the proposed rule to permit them to have meaningful and timely input into its

development. Consultation letters were sent to 584 Tribal leaders. The letters provided information regarding the EPA's development of NESHAP for EGUs and offered consultation. Three consultation meetings were requested and held. We conducted outreach and information sharing with tribal environmental staff through the monthly National Tribal Air Association calls, at the National Tribal Forum, and a webinar targeting tribal environmental professionals on the content of the proposal. Because of concerns raised by several tribes, and in order to help us better understand their concerns, we also participated in a face-to-face meeting with tribes in Arizona who were concerned about the potential impact of this rule on their income and water rights. Following that meeting, we held an additional technical meeting on how the EPA's integrated planning model (IPM) is used in the regulatory impact analysis (RIA) and provided one-on-one consultation with the Navajo Nation, Gila River Indian Community and the Ak-Chin Indian Community.

# (d) Effects of Less Frequent Collection

If the relevant information were collected less frequently, the EPA would not be reasonably assured that a plant is in compliance with the standards.

# (e) General Guidelines

None of the guidelines in 5 CFR 1320.5 are being exceeded.

# (f) Confidentiality

All information submitted to the agency for which a claim of confidentiality is made will be safeguarded according to the agency policies set forth in Title 40, Chapter 1, part 2, subpart B–Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 01, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

#### *(g) Sensitive Questions*

This section is not applicable because this ICR does not involve matters of a sensitive nature.

#### 4. The Respondents and the Information Requested

#### (a) Respondents/NAICS Codes

In the amendments, respondents are 1,244 owners or operators of existing electric generating units. It is estimated that 2 new electric generating units will be built each year. All respondents will be subject to the monitoring, recordkeeping, and reporting requirements. The NAICS code for this industry is 221100, Electric Power Generation, Transmission and Distribution.

#### (b) Information Requested

# (i) Data Items, Including Recordkeeping Requirements.

Table 1 summarizes the final recordkeeping and reporting requirements.

The EPA is including in Exhibit 1a, Exhibit 1b, and Exhibit 1c, an estimate of the burden associated with performing an affirmative defense. The EPA is providing this as an illustrative

example of the potential additional administrative burden a source may incur to assert in an Affirmative Defense in response to an action to enforce the standards set forth in the applicable subpart.

This illustrative estimate is not considered a duplicate estimate of cost under the General Duty to Minimize Emissions clause under 63.6(e)(1)(i), which states: "At all times, the owner and operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determining whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

To provide the public with an estimate of the relative magnitude of the burden associated with an assertion of the affirmative defense position adopted by a source, the EPA provides an administrative adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. The EPA's estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals approximately \$3,141 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to the EPA. The EPA provides this illustrative estimate of this burden because these costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

Of the number of excess emission events reported by source operators, only a small number would be expected to result from a malfunction, and only a subset of excess emissions caused by malfunctions would result in the source choosing to assert the affirmative defense. Thus we believe the number of instances in which source operators might be expected to avail themselves of the affirmative defense will be extremely small. For this reason, we estimate no more than 2 or 3 such occurrences for all sources within a given category over the 3-year period covered by this ICR. For the purpose of this estimate, we are adding two (2) instances of affirmative defense. We expect to gather information on such events in the future and will revise this estimate as better information becomes available.

**Table 1. Source Data and Information Requirements** 

Requirement	Regulation Citation
Notifications	
Notification of Demonstration of CEMS	63.10030
Notification of Initial Performance Test	63.10030
Quality Assurance Program Notification	63.10030
Notification of Compliance Status	63.10030
Request to use alternative monitoring procedure	63.10030
Initial notification	63.10030
Reports	
Report of Performance Test	63.10031
Startup, shutdown, and malfunction Report	63.10031

Semi-Annual Compliance Report	63.10031
Site-specific performance evaluation test plan	63.10031
Recordkeeping	
Existing Sources - Records of CEMS malfunctions	63.10032
Existing Sources - Records of Startups,	63.10032
Shutdowns, malfunctions, etc	
Existing Sources - Records of monthly fuel use	63.10032

# (ii) Respondent Activities.

The respondent activities required by the final NESHAP are introduced in section 6(a).

While multiple coal-fired EGUs have recently commenced operation and several are presently under construction, no new coal-fired power plants have commenced construction in either 2009 or 2010. In addition, forecasts of new generation capacity from both the Energy Information Administration and the Edison Electric Institute do not project any new coal-fired power plants will be constructed in the short term. This is an indication that in the near term few new coal-fired EGUs will be subject to the NESHAP. For the electric utility sector, the EPA used the IPM to project the number of new coal-fired power plants that will be installed in the next decade. The current version of IPM used for the Cross-State Air Pollution Rule (CSAPR) and the EGU NESHAP rules predicts 2,000 MW of new near term (i.e., by 2015) coal-fired capacity additions. All of this capacity is assumed to include carbon capture and storage that is funded by some government mechanism. Although none of this capacity is specifically identified, to be consistent with the various regulations impacting the utility sector we project that two new 500 MW coal-fired facilities will be subject to the standards for new EGUs.. We used engineering judgment to predict that these new units are likely to be one pulverized coal bituminous coalfired unit and one pulverized coal subbituminous coal-fired unit. Because of fuel supply availability and cost considerations, we assumed that no new oil-fired electric utility steam generating units will be built during the next 5 years.

# (iii) Electronic Reporting.

Utility units have the option of submitting to an EPA electronic database an electronic copy of their required stack test. This electronic database should become available as of December 31, 2011. Currently, sources are using monitoring equipment that provides automated parameter data (e.g., continuous opacity monitoring). Although personnel at the affected facility must evaluate these data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping. In addition, some regulatory agencies are setting up electronic reporting systems to allow sources to report such data electronically which also reduces the reporting burden. It is estimated that approximately 10 percent of the respondents currently use electronic reporting.

# 5. The Information Collected: Agency Activities, Collection Methodology, and Information Management

#### (a) Agency Activities

The EPA conducts the activities in Table 2 in connection with the acquisition, analysis, storage, and distribution of the required information.

#### **Table 2. Agency Activities**

Observe initial performance tests and repeat performance tests, if necessary.

Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.

Audit plant records.

Input, analyze, and maintain data in the AIRS Facility Subsystem (AFS) database.

# (b) Collection Methodology and Management

Following notification of startup, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the agency to discern a source's initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semi-annual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

The information obtained is then entered into the AIRS Facility Subsystem (AFS) which is operated and maintained by the EPA's Office of Compliance. AFS is the EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 125,000 industrial and government owned facilities. The EPA uses the AFS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. The EPA and its delegated Authorities can edit, store, retrieve, and analyze the data.

The records required by this regulation must be retained by the owner or operator for five years.

# (c) Small Entity Flexibility

During this rulemaking, we conducted outreach to small entities and convened a Small Business Advocacy Review (SBAR) Panel to obtain advice and recommendations from representatives of the small entities that potentially would be subject to the requirements of this rule. As part of the SBAR Panel process we conducted outreach with representatives from various small entities that would be affected by this proposed rule. We met with these small entity representatives (SERs) to discuss the potential rulemaking approaches and potential options to decrease the impact of the rulemaking on their industries/sectors. We distributed outreach materials to the SERs; these materials included background, project history, CAA section 112 overview, constraints on rulemaking, affected facilities, data, rulemaking options under consideration, potential control technologies and estimated costs, applicable small entity definitions, small entities potentially subject to regulation, and questions for SERs. We met with SERs that will be impacted directly by this proposed rule to discuss the outreach materials and receive feedback on the approaches and alternatives detailed in the outreach packet. The SBAR Panel received written comments from the SERs in response to discussions at the meeting and the questions posed to the SERs by the Agency. The SERs were specifically asked to provide comment on regulatory alternatives that could help to minimize the rule's impact on small businesses.

#### (d) Collection Schedule

The specific frequencies for each information collection activity within this request are shown in Exhibit 1a, Exhibit 1b, and Exhibit 1c: Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Coal- and Oil-fired Electric Utility Steam Generating Units (40 CFR Part 63, Subpart UUUUU) for the first 3 years after promulgation, respectively.

# 6. Estimating the Burden and Cost of the Collection

Exhibit 1a, Exhibit 1b, and Exhibit 1c document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR for each of the first 3 years. Table 3 contains a summary of the respondent burden hours and costs detailed in Exhibit 1a, Exhibit 1b, and Exhibit 1c.

**Table 3.** Summary of Respondent Burden

Year	Total Annual Labor Burden (hours)	Total Annual Labor Costs (\$)
1	699,511	49,063,227
2	700,296	49,118,248
3	701,080	49,173,269
Total	2,100,887	147,354,744
3-Year Average	700,296	49,118,248

The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified; responses to this information collection are mandatory.

The 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.

#### (a) Estimating Respondent Burden

The average annual burden to industry over the next 3 years from these recordkeeping and reporting requirements is estimated to be 700,296 hours per year (detailed in Exhibit 1a, Exhibit 1b, and Exhibit 1c). These hours are based on agency studies and background documents from the development of the regulation, agency knowledge, and experience with the NESHAP program, the previously approved ICR, and any comments received.

# (b) Estimating Respondent Costs

Respondent costs are divided into three categories. These categories include labor costs, operations and maintenance costs, and annualized capital costs. The total respondent costs of \$207,563,774 were calculated as the sum of the annualized capital costs of \$81,906,079 (including startup and the capitol recovery factor costs), the average annual labor costs of \$49,118,248 and the annual operation and maintenance costs of \$76,539,446.

# (i) Estimating Labor Costs

Labor rates and associated costs are based on Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers were based on the Bureau of Labor Statistics, Occupational Employment Statistics, May 2007 National Industry-Specific Occupational Employment and Wage Estimates. The approximate labor rates are \$34.31 per hour for technical, \$48.14 per hour for managerial, and \$16.91 per hour for clerical. These rates represent salaries plus fringe benefits and do not include the cost of overhead. An overhead rate of 110 percent is used to account for these costs. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at \$72.05, management at \$101.09, and clerical at \$35.51.

# (ii) Estimating Annualized Capital Costs

The annualized capital costs associated with the information collection requirements will include the costs to conduct performance tests and startup costs for CEMS. The rule will require an initial performance test for each electric generating unit. Table 4 shows the methods used for performance tests and the CEMS that are expected to be installed.

Table 4. Performance Test Methods and CEMS Equipment by Pollutant

Pollutant	Performance Test Method	CEMS
PM	EPA Method 5	
	EPA Method 202	
	Method 29	New beta gauge PM CEMS
HCl	Method 320	New FTIR CEMS
Hg	Method 30B	New Hg CEMS

The costs related to PM and HCl CEMS were estimated using the CEMS Cost Model, which is located here: <a href="http://www.epa.gov/ttn/emc/cem/cems.xls">http://www.epa.gov/ttn/emc/cem/cems.xls</a>. The costs related to Hg CEMS were estimated using a report developed by Northeast States for Coordinated Air Use Management The document is titled "Technologies for Control and Measurement of Mercury .(NESCAUM) Emissions from Coal-Fired Power Plants in the United States: A 2010 Status Report" and is .located in the docket for this rulemaking

The annualized total capital (including startup) costs for CEMS that will be used to monitor PM, Hg, and HCl is \$81,906,079 per year. The costs will be incurred for each year of the three-year period. Note that these costs are considered "annualized" as they include the cost recovery factor costs in their individual CEMs costs. The specific costs are shown in Table 5 and Table 6.

**Table 5. Annual Capital Costs for Performance Testing** 

<b>EPA Test Method</b>	Cost per test	Number of Tests	Total
Method 29	\$ 16,800	1,244	\$ 20,899,200
Method 320	\$ 20,444	255	\$ 5,213,287
Method 5 and 202	\$ 15,522	1,244	\$ 19,309,376

Method 30B	\$ 20,006	1,095	\$ 21,906,570
	Total (for 3-y	ear period of ICR)	\$ 67,328,433
		Totals Per Year	\$ 22,442,811

Table 6. Other Capital Costs of Installing CEMS (Other Direct Costs and Labor)

CEMS Type	Cost per technology	Number of installations	Total
PM	\$ 65,388	1,244	81,342,762
HCI	\$ 111,045	255	28,316,375
Hg	\$ 174,002	395	68,730,668
	Total (for 3	-year period of ICR)	\$178,389,805
		Totals Per Year	59,463,268

The continuous monitoring costs that are included in this section consist only of those capital costs that a source incurs as a result of the standard. Some continuous monitoring costs may not be included in this section. For instance, if a particular industry typically utilizes a control device that must have a continuous monitor (e.g., temperature, pressure drop, etc.) to function properly, and the recordation of additional measurements beyond the minimum are required by the standard, then there is no capital cost; but, there is a labor cost to record the additional readings. Such a cost would not appear in this section, but in the industry burden Section 6(d) below.

Performance testing is usually conducted by a contractor such that the cost of the emissions testing is a capital cost. It is anticipated that existing electric generating units will use continuous emission monitoring systems (CEMS) for compliance with the proposed PM, Hg, and HCl emission limits. Initial CEMS testing is usually conducted by an installation contractor such that the cost of the emissions testing is a capital cost. The total costs for performance testing were calculated for this industry sector. The number of existing and new sources in this sector combined with the number of tests required for each type of model plant resulted in a total annualized capital cost of approximately \$81,906,079 per year for CEMS testing over the next three years.

# (iii) Estimating Operations and Maintenance (O&M) Costs

The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage. The total annual operations and maintenance costs for CEMS that will be used to monitor PM, Hg, and HCl is \$84,182,920 per year.

The continuous monitoring costs that are included in this section consist only of those O&M costs that a source incurs as a result of the standard. Some continuous monitoring costs

may not be included in this section. For instance, if a particular industry typically utilizes a control device that must have a continuous monitor (e.g., temperature, pressure drop, etc.) to function properly, and the recordation of additional measurements beyond the minimum are required by the standard, then there is O&M cost, but there is a labor cost to record the additional readings. Such a cost would not appear in this section, but in the industry burden Section 6(d) below.

**Table 7. Operation and Maintenance Costs** 

CEMS	Ca <sub>l</sub>	pital Cost	s per mon	itor	Total Annual Costs (w/capital recovery) for all installations			
	Labor	Testin	ODC's	Total	Labor	Testing	ODC's	Total
		g						
PM	\$13,90	\$24,16	\$51,48	\$89,55	\$5,766,6	\$10,019,93	\$21,347,	\$37,134,
	7	4	1	2	52	9	602	193
HCI	\$23,21	\$23,35	\$87,82	\$134,4	\$1,973,	\$1,985,220	\$7,465,23	\$11,424,
	8	6	6	00	559		3	011
Hg	\$25,57	\$38,51	\$148,4	\$212,5	\$3,366,8	\$5,071,019	\$19,543,4	\$27,981,
	1	4	31	16	18		05	242
	\$62,69	\$86,03	\$287,7	\$436,4	\$11,107,	\$17,076,17	\$48,356,2	\$76,539,
TOTALS	6	3	39	68	029	8	39	446

# (iv) Affirmative Defense/Root Cause Analysis/Malfunction Costs.

The EPA's estimate for an affirmative defense and root cause analysis in Table 8 is based on general experience to calculate the time and effort required of a source to review relevant data, interview plant employees, and reconstruct the events prior to a malfunction in order to determine primary and contributing causes. The level of effort also includes time to produce and retain the report in document form so that the source will have it available should EPA or state enforcement agencies ever request to review it.

The labor rates used for these costs are from the United States Department of Labor, Bureau of Labor Statistics, September 2009, Table 2. Civilian Workers, by occupational and industry group. The rates are from column 1, Total compensation. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

Table 8. Burden Associated with Performing an Affirmative Defense

Personnel	Number of Personnel	Time Requiremen t (hours)	Total Hours	Hourly Rate (\$/hr)	Total
Technical	2	6	10	97.59	ф 1757
Personnel Managerial	3	0	18		\$ 1,757
Personnel	2	6	12	114.77	\$ 1,377
Total	5		30		\$ 3,134

# (v) Annualizing Capital Costs

Under this memo, the annualized capital costs are included in the costs of the performance tests and CEMS (see explanation in Section 6(b)(ii)). The annualized capital costs total \$81,906,079.

# (c) Estimating Agency Burden and Cost

Because the information collection requirements were developed as an incidental part of standards development, no costs can be attributed to the development of the information collection requirements. Because reporting and recordkeeping requirements on the part of the respondents are required under the NESHAP General Provisions, no operational costs will be incurred by the Federal Government. Publication and distribution of the information are part of the Compliance Data System, with the result that no Federal costs can be directly attributed to the ICR. Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of EPA's overall compliance and enforcement program, and, therefore, is not attributable to the ICR. The only costs that the Federal government will incur are user costs associated with the analysis of the reported information, as presented in Exhibit 2a, Exhibit 2b, and Exhibit 2c. Table 8 contains a summary of the agency burden costs and hours detailed in Exhibit 2a, Exhibit 2b, and Exhibit 2c. The average annual agency costs during the 3 years of the ICR is estimated to be \$1,798,905.

**Table 8.** Summary of the Agency Burden

Year	Total Annual Labor Burden (Hours)	Total Annual Costs (\$)
1	36,987	\$1,798,905
2	36,987	\$1,798,905
3	36,987	\$1,798,905
Total	110,960	\$5,396,714
3-Year Average	36,987	\$1,798,905

The agency labor rates are from the Office of Personnel Management (OPM) 2003 General Schedule which excludes locality rates of pay. These rates can be obtained from Salary Table 2011-GS available on the OPM website (<a href="http://www.opm.gov/oca/11tables/html/gs\_h.asp">http://www.opm.gov/oca/11tables/html/gs\_h.asp</a>). The government employee labor rates are \$15.63/hour for clerical (GS-6, Step 3), \$28.88 for technical (GS-12, Step 1), and \$38.92/hr for management (GS-13, Step 5). These rates represent salaries plus fringe benefits and do not include the cost of overhead. An overhead rate of 60 percent is used to account for these costs. The fully-burdened wage rates used to represent Agency labor costs are: clerical at \$25.01; technical at \$46.21, and management at \$62.27.

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

Approximately 1,244 existing electric generating units are currently subject to the current regulation. It is estimated that an additional 2 new electric generating units per year will become subject to the regulation.

The total annual number of responses for the new monitoring, recordkeeping, and reporting requirements in subpart UUUUU is 3,768 for the existing 1,244 electric generating units that will follow the amendments and the additional 2 newly constructed electric generating units per year.

The total annual labor costs are \$49,118,248. Details appear in Exhibit 1a, Exhibit 1b, and Exhibit 1c.

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

The bottom line burden hours and cost tables for both the agency and the respondents are attached. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 186 hours per response. The total annual average burden for the rule will be 700,296 person hours with a total annualized capital/startup cost of \$81,906,079 and O&M costs of \$76,539,446.

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

The increase in burden is due to the performance testing, monitoring, recordkeeping, and reporting costs attributable to the new standards for EGUs.

The EPA also provides an adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. The EPA's estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals approximately \$3,141 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to the EPA. For the purpose of estimating the annual burden, the EPA is attributing a total of 2 instances of affirmative defense over a 3 year period across all sources in the category. The EPA is using this frequency of 2 events in 3 years, because of the number of excess emission events reported by source operators, only a small number would be expected to result from a malfunction, and only a subset of excess emissions caused by malfunctions would result in the source choosing to assert the affirmative defense. Thus we believe the number of instances in which source operators might be expected to avail themselves of the affirmative defense will be extremely small.

#### (g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 186 hours per response. 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 in 40 CFR part 63 are listed in 40 CFR part 9.

To comment on the agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2009-0234, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include EPA Docket ID Number EPA-HQ-OAR-2009-0234 and OMB Control Number 2060-0567 in any correspondence.

#### **PART B**

This section is not applicable because statistical methods are not used in data collection associated with the final amendments.

#### **ATTACHMENTS**

Exhibit 1a. Year 1 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 1b. Year 2 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 1c. Year 3 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 2a. Year 1 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 2b. Year 2 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 2c. Year 3 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Exhibit 1a Year 1 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Year 1	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS <sup>a</sup>	160.6	1	160.6	631	101,392.1	5,069.6	10,139.2	\$8,177,965
4. REPORT REQUIREMENTS								
A. Read Instructions								
Existing Sources	11_	1	1	865	865	43.2	86.5	\$69,741
New Sources	1	1	1	2	2.0	0.1	0.2	\$161
B. Required Activities								
Existing Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	415	11,527.7	576.4	1,152.8	\$929,790
Existing Sources- Initial Performance Test using M29	27.8	1	27.8	415	11,527.7	576.4	1,152.8	\$929,790
Existing Sources- Initial Performance Test using M320	26.4	1	26.4	85	2,244	112.2	224.4	\$180,994
Existing Sources- Initial Performance Test using M30B	27.8	1	27.8	365	10,147 .0	507.4	1,014.7	\$818,425
Existing Sources - Repeat M5 and M202 performance test every year	27.8	1	27.8	415	11,527.7	576.4	1,152.8	\$929,790
Existing Sources - Repeat M29 performance test every year	27.8	1	27.8	0	-	-	-	\$0
Existing Sources - Repeat M320 Performance Test every year	26.4	1	26.4	85	2,244	112.2	224.4	\$180,994
Existing Sources - Repeat M30B Performance Test every year	27.8	1	27.8	365	10,147	507.4	1,014.7	\$818,425
Existing Sources - CEMS Quarterly Inspections	2.5	4	10	865	8,646.7	432.3	864.7	\$697,412
Existing Sources - CEMS Daily Calibration Drift Tests	0.4	365	146	865	126,241	6,312.1	12,624.1	\$10,182,222

Year 1	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
Existing Sources - Daily monitoring (CEMS)	0.25	365	91.25	865	78,900.8	3,945	7,890.1	\$6,363,889
Existing Sources All CEMS must follow appropriate performance specifications	14	1	14	865	12,105.3	605.3	1,210.5	\$976,377
New Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	2	55.6	2.78	5.56	\$4,485
New Sources- Initial Performance Test using M29	27.8	1	27.8	2	55.6	2.78	5.56	\$4,485
New Sources- Initial Performance Test using M26A	26.4	1	26.4	2	52.8	2.6	5.3	\$4,259
New Sources- Initial Performance Test using M6A	27.8	1	27.8	0	-	-	-	\$0
New Sources - Repeat M5 and 202 performance test every year	27.8	1	27.8	0	_	_	-	\$0
New Sources - Repeat M29 performance test every year	27.8	1	27.8	0	-	-	-	\$0
New Sources - Repeat M26A Performance Test every year	26.4	1	26.4	0	-	-	-	\$0
New Sources - Repeat M6A Performance Test every year	27.8	0	0	0	-	-	-	\$0
New Sources - CEMS Monitoring	0	1	0	2	-		-	\$0
New Sources - CEMS Quarterly Inspections	2.46	4	9.84	2	19.7	1	2	\$1,587
New Sources - CEMS Daily Calibration Drift Tests	0.121	365	44.165	2	88.3	4.4	8.8	\$7,124
New Sources - Daily monitoring (CEMS)	0	365	0	2	-	-	-	\$0
New Sources All CEMS must follow appropriate performance specifications	7.3	365	2,664.5	2	5,329	266.5	532.9	\$429,820
C. Create Information (Included in 4B)					-	-	-	\$0
D. Gather Existing Information (Included in 4E)					-	-	_	\$0
E. Write Report								\$0

Year 1	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
Existing Sources - Notification of Demonstration of CEMS	5	1	5	865	4,323.3	216.2	432.3	\$348,706
Existing Sources - Report of Performance Test (included in 4B)					-	-	-	\$0
Existing Sources - Notification of Initial Performance Test	3	1	3	865	2,594	129.7	259.4	\$209,224
Existing Sources - Quality Assurance Program Notification	4	1	4	865	3,458.7	172.9	345.9	\$278,965
Existing Sources - Startup, shutdown, and malfunction Report <sup>b</sup>	10	1	10	86.5	864.7	43.2	86.5	\$69,741
Existing Sources - Semi-Annual Compliance Report	75	2	150	865	129,700	6,485	12,970	\$10,461,187
Existing Sources - Notification of Compliance Status	16.5	1	16.5	865	14,267	713.4	1,426.7	\$1,150,731
Existing Sources - site-specific performance evaluation test plan	20	1	20	865	17,293	864.7	1,729.3	\$1,394,825
Existing Sources - request to use alternative monitoring procedure	5	1	5	86.5	432.3	21.6	43.2	\$34,871
New Sources - Initial notification	3	1	3	2	6	0.3	0.6	\$484
New Sources - Notification of Demonstration of CEMS	5	1	5	2	10	0.5	1	\$807
New Sources - Quality Assurance Program Notification	3	1	3	2	6	0.3	0.6	\$484
New Sources - Notification of Initial Performance Test	4	1	4	2	8	0.4	0.8	\$645
New Sources - Report of Performance Test (included in 4B)					1	-	-	\$0
New Sources - Startup, shutdown, and malfunction Report <sup>b</sup>	10	1	10	0.2	2	0.1	0.2	\$161
New Sources - Semi-Annual Compliance Report	75	2	150	2	300	15	30	\$24,197
New Sources - Notification of Compliance Status	16.5	1	16.5	2	33	1.7	3.3	\$2,662

Year 1	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
New Sources - site-specific performance evaluation test plan	20	1	20	2	40	2	4	\$3,226
New Sources - request to use alternative monitoring procedure	5	1	5	0.2	1.0	0.1	0.1	\$81
Affirmative Defense	30	1	30	2.0	36	24	-	\$6,268
5. RECORDKEEPING REQUIREMENTS					-	-	-	\$0
A. Read Instructions (Included in 4A)					-	-	-	\$0
B. Plan Activities (Included in 4B)					-	-	-	\$0
C. Implement Activities (Included in 4B)					-	-	-	\$0
D. Record Data ( Not Applicable)					-	-	-	\$0
E. Time to Transmit or Disclose Information					-	-	-	\$0
Existing Sources - Records of CEMS malfunctions	1	12	12	865	10,376	518.8	1,037.6	\$836,895
Existing Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	865	10,376	518.8	1,037.6	\$836,895
Existing Sources - Records of monthly fuel use	2	12	24	865	20,752	1,037.6	2,075.2	\$1,673,790
New Sources - Records of CEMS malfunctions	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of monthly fuel use	2	12	24	2	48	2.4	4.8	\$3,872
F. Time to Train Personnel	80	1	80	2	160	8	16	\$12,905
G. Time for Audits (Not Applicable) TOTAL ANNUAL LABOR BURDEN AND COST								
TO THE THROTHE BY BOX BOXDEN AND COST		1,946		15,096	608,255	30,435	60,822 Hours	\$49,063,227

Year 1	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
						699,511		
ANNUALIZED CAPITAL COSTS								
Performance tests								\$ 22,442,811
Other Capital Costs of Installation (ODC and Labor)								\$59,463,268
Total annual capital								\$81,906,079
TOTAL ANNUAL COSTS (O&M)								\$76,539,446
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$158,445,526

<sup>&</sup>lt;sup>a</sup> There are 1,244 existing electric generating units. One third of those are assumed to be tested each year. <sup>b</sup> 10% of sources are assumed to submit SSM report each year.

Exhibit 1b Year 2 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Year 2	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS <sup>a</sup>	160.6	1	160.6	633	101,606	5,080	10,161	\$8,195,236
4. REPORT REQUIREMENTS								
A. Read Instructions								
Existing Sources	1	1	1	865	865	43	86.5	\$69,795
New Sources	1	1	1	2	2.0	0.1	0.2	\$161
B. Required Activities								
Existing Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	415	11,546	577.3	1,155	\$931,285
Existing Sources- Initial Performance Test using M29	27.8	1	27.8	415	11,546	577.3	1,155	\$931,285
Existing Sources- Initial Performance Test using M320	26.4	1	26.4	85	2,262	113.1	226	\$182,413
Existing Sources- Initial Performance Test using M30B	27.8	1	27.8	366	10,166	508.3	1,017	\$819,919
Existing Sources - Repeat M5 and M202 performance test every year	27.8	1	27.8	415	11,546	577.3	1,155	\$931,285
Existing Sources - Repeat M29 performance test every year	27.8	1	27.8	0	-	-	-	\$0
Existing Sources - Repeat M320 Performance Test every year	26.4	1	26.4	85	2,262	113.1	226	\$182,413
Existing Sources - Repeat M30B Performance Test every year	27.8	1	27.8	366	10,166	508.3	1,017	\$819,919
Existing Sources - CEMS Quarterly Inspections Existing Sources - CEMS Daily Calibration Drift	2.5	4 365	10	865 865	8,653	432.7	865	\$697,950
Existing Sources - CEMS Daily Calibration Drift Tests	0.4	365	146	865				\$10,190,073

Year 2	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
					126,339	6,317	12,634	
Existing Sources - Daily monitoring (CEMS)	0.25	365	91.25	865	78,962	3,948.1	7,896	\$6,368,795
Existing Sources All CEMS must follow appropriate performance specifications	14	1	14	865	12,115	606	1,212	\$977,130
New Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	2	55.6	2.78	5.56	\$4,485
New Sources- Initial Performance Test using M29	27.8	1	27.8	2	55.6	2.78	5.56	\$4,485
New Sources- Initial Performance Test using M26A	26.4	1	26.4	2	52.8	2.6	5.3	\$4,259
New Sources- Initial Performance Test using M6A	27.8	1	27.8	0	-	-	-	\$0
New Sources - Repeat M5 and 202 performance test every year	27.8	1	27.8	0	-		-	\$0
New Sources - Repeat M29 performance test every year	27.8	1	27.8	0	-		-	\$0
New Sources - Repeat M26A Performance Test every year	26.4	1	26.4	0	-	-	-	\$0
New Sources - Repeat M6A Performance Test every year	27.8	0	0	0	-	-	-	\$0
New Sources - CEMS Monitoring	0	1	0	2	-	-	-	\$0
New Sources - CEMS Quarterly Inspections	2.46	4	9.84	2	19.7	1	2	\$1,587
New Sources - CEMS Daily Calibration Drift Tests	0.121	365	44.165	2	88.3	4.4	8.8	\$7,124
New Sources - Daily monitoring (CEMS)	0	365	0	2	-	-	-	\$0
New Sources All CEMS must follow appropriate performance specifications	7.3	365	2,664.5	2	5,329	266.5	532.9	\$429,820
C. Create Information (Included in 4B)					-		-	\$0
D. Gather Existing Information (Included in 4E)					_	_	-	\$0

Year 2	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
E. Write Report					-	-	-	\$0
Existing Sources - Notification of Demonstration of CEMS	5	1	5	865	4,326	216	433	\$348,975
Existing Sources - Report of Performance Test (included in 4B)					-	_	-	\$0
Existing Sources - Notification of Initial Performance Test	3	1	3	865	2,596	130	260	\$209,385
Existing Sources - Quality Assurance Program Notification	4	1	4	865	3,461	173	346	\$279,180
Existing Sources - Startup, shutdown, and malfunction Report <sup>b</sup>	10	1	10	86.5	865	43	86.5	\$69,795
Existing Sources - Semi-Annual Compliance Report	75	2	150	865	129,800	6,490	12,980	\$10,469,253
Existing Sources - Notification of Compliance Status	16.5	1	16.5	865	14,278	714	1,428	\$1,151,618
Existing Sources - site-specific performance evaluation test plan	20	1	20	865	17,307	865	1,731	\$1,395,900
Existing Sources - request to use alternative monitoring procedure	5	1	5	86.5	433	21.6	43	\$34,898
New Sources - Initial notification	3	1	3	2	6	0.3	0.6	\$484
New Sources - Notification of Demonstration of CEMS	5	1	5	2	10	0.5	1	\$807
New Sources - Quality Assurance Program Notification	3	1	3	2	6	0.3	0.6	\$484
New Sources - Notification of Initial Performance Test	4	1	4	2	8	0.4	0.8	\$645
New Sources - Report of Performance Test (included in 4B)					-	-	-	\$0
New Sources - Startup, shutdown, and malfunction $Report^b$	10	1	10	0.2	2	0.1	0.2	\$161
New Sources - Semi-Annual Compliance Report	75	2	150	2	300	15	30	\$24,197
New Sources - Notification of Compliance Status	16.5	1	16.5	2				\$2,662

Year 2	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05) 1.7	(G) Clerical Hours/Year (E x 0.10) 3.3	(H) Cost/ Year
New Sources - site-specific performance evaluation test plan	20	1	20	2	40	2	3.3	\$3,226
New Sources - request to use alternative monitoring procedure	5	1	5	0.2	1.0	0.1	0.1	\$81
Affirmative Defense	30	1	30	2.0	36	24	-	\$6,268
5. RECORDKEEPING REQUIREMENTS					-	-	-	\$0
A. Read Instructions (Included in 4A)					-	-	-	\$0
B. Plan Activities (Included in 4B)					-	-	-	\$0
C. Implement Activities (Included in 4B)					-	-	-	\$0
D. Record Data ( Not Applicable)					-	-	-	\$0
E. Time to Transmit or Disclose Information					-	-	-	\$0
Existing Sources - Records of CEMS malfunctions	1	12	12	865	10,384	519	1,038	\$837,540
Existing Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	865	10,384	519	1,038	\$837,540
Existing Sources - Records of monthly fuel use	2	12	24	865	20,768	1,038	2,077	\$1,675,080
New Sources - Records of CEMS malfunctions	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of monthly fuel use	2	12	24	2	48	2.4	4.8	\$3,872
F. Time to Train Personnel	80	1	80	2	160	8	16	\$12,905
G. Time for Audits (Not Applicable) TOTAL ANNUAL LABOR BURDEN AND COST		1,946		15,111				\$49,118,248
					608,937	30,469	60,890	

Year 2	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
						700,296	Hours	
ANNUALIZED CAPITAL COSTS								
Performance tests								\$ 22,442,811
Other Capital Costs of Installation (ODC and Labor)								\$59,463,268
Total annual capital								\$81,906,079
TOTAL ANNUAL COSTS (O&M)								\$76,539,446
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$158,445,526

<sup>&</sup>lt;sup>a</sup> There are 1,244 existing electric generating units. One third of those are assumed to be tested each year. <sup>b</sup>There are 2 additional existing electric generating units that were new sources in Year 1. <sup>c</sup> 10% of sources are assumed to submit SSM report each year.

Exhibit 1c Year 3 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Year 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS <sup>a</sup>	160.6	1	160.6	634	101,820	5,091	10,182	\$8,212,508
4. REPORT REQUIREMENTS								
A. Read Instructions								
Existing Sources	1	1	1	866	866	43	87	\$69,849
New Sources	1	1	1	2	2.0	0.1	0.2	\$161
B. Required Activities								
Existing Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	416	11,565	578	1,157	\$932,780
Existing Sources- Initial Performance Test using M29	27.8	1	27.8	416	11,565	578	1,157	\$932,780
Existing Sources- Initial Performance Test using M320	26.4	1	26.4	86	2,279	114	228	\$183,833
Existing Sources- Initial Performance Test using M30B	27.8	1	27.8	366	10,184	509	1,018	\$821,414
Existing Sources - Repeat M5 and M202 performance test every year	27.8	1	27.8	416	11,565	578	1,157	\$932,780
Existing Sources - Repeat M29 performance test every year	27.8	1	27.8	0	-	-	-	\$0
Existing Sources - Repeat M320 Performance Test every year	26.4	1	26.4	86	2,279	114	228	\$183,833
Existing Sources - Repeat M30B Performance Test every year	27.8	1	27.8	366	10,184	509	1,018	\$821,414
Existing Sources - CEMS Quarterly Inspections	2.5	4	10	866	8,660	433	866	\$698,488
Existing Sources - CEMS Daily Calibration Drift Tests	0.4	365	146	866	126,436	6,322	12,644	\$10,197,923
Existing Sources - Daily monitoring (CEMS)	0.25	365	91.25	866				\$6,373,702

Year 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D) 79023	(F) Managerial Hours/Year (E x 0.05) 3,951	(G) Clerical Hours/Year (E x 0.10) 7,902	(H) Cost/ Year
Existing Sources All CEMS must follow appropriate performance specifications	14	1	14	866	12,124	606	1,212	\$977,883
New Sources- Initial Performance Test using M5 and M202	27.8	1	27.8	2	55.6	2.8	5.6	\$4,485
New Sources- Initial Performance Test using M29	27.8	1	27.8	2	55.6	2.8	5.6	\$4,485
New Sources- Initial Performance Test using M26A	26.4	1	26.4	2	52.8	2.6	5.3	\$4,259
New Sources- Initial Performance Test using M6A	27.8	1	27.8	0	-		-	\$0
New Sources - Repeat M5 and 202 performance test every year	27.8	1	27.8	0	-	-	-	\$0
New Sources - Repeat M29 performance test every year	27.8	1	27.8	0	1	-	-	\$0
New Sources - Repeat M26A Performance Test every year	26.4	1	26.4	0	-	-	-	\$0
New Sources - Repeat M6A Performance Test every year	27.8	0	0	0	-	-	-	\$0
New Sources - CEMS Monitoring	0	1	0	2	1		-	\$0
New Sources - CEMS Quarterly Inspections	2.46	4	9.84	2	19.7	1	2	\$1,587
New Sources - CEMS Daily Calibration Drift Tests	0.121	365	44.165	2	88.3	4.4	8.8	\$7,124
New Sources - Daily monitoring (CEMS)	0	365	0	2	-	-	-	\$0
New Sources All CEMS must follow appropriate performance specifications	7.3	365	2,664.5	2	5,329	266.5	532.9	\$429,820
C. Create Information (Included in 4B)					-	-	-	\$0
D. Gather Existing Information (Included in 4E)					-	-	-	\$0
E. Write Report					-	-	_	\$0

Year 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
Existing Sources - Notification of Demonstration of CEMS	5	1	5	866	4,330	217	433	\$349,244
Existing Sources - Report of Performance Test (included in 4B)					-	-	-	\$0
Existing Sources - Notification of Initial Performance Test	3	1	3	866	2,598	130	260	\$209,546
Existing Sources - Quality Assurance Program Notification	4	1	4	866	3,464	173	346	\$279,395
Existing Sources - Startup, shutdown, and malfunction Report $^{\rm b}$	10	1	10	86.6	866	43	86.6	\$69,849
Existing Sources - Semi-Annual Compliance Report	75	2	150	866	129,900	6,495	12,990	\$10,477,318
Existing Sources - Notification of Compliance Status	16.5	1	16.5	866	14,289	715	1,429	\$1,152,50
Existing Sources - site-specific performance evaluation test plan	20	1	20	866	17,320	866	1,732	\$1,396,97
Existing Sources - request to use alternative monitoring procedure	5	1	5	86.6	433	22	43	\$34,924
New Sources - Initial notification	3	1	3	2	6	0.3	0.6	\$48
New Sources - Notification of Demonstration of CEMS	5	1	5	2	10	0.5	1	\$80
New Sources - Quality Assurance Program Notification	3	1	3	2	6	0.3	0.6	\$48
New Sources - Notification of Initial Performance Test	4	1	4	2	8	0.4	0.8	\$64
New Sources - Report of Performance Test (included in 4B)					-	-	-	\$(
New Sources - Startup, shutdown, and malfunction Report <sup>b</sup>	10	1	10	0.2	2	0.1	0.2	\$16
New Sources - Semi-Annual Compliance Report	75	2	150	2	300	15	30	\$24,19
New Sources - Notification of Compliance Status  New Sources - site-specific performance evaluation test plan	16.5 20	1 1	16.5 20	2 2	33	1.7	3.3	\$2,663 \$3,220

Year 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
					40	2	4	
New Sources - request to use alternative monitoring procedure	5	1	5	0.2	1.0	0.1	0.1	\$81
Affirmative Defense	30	1	30	2.0	36	24	0.1	\$6,268
THIRMUTY Detense	50		50	2.0	50			ψ0,200
5. RECORDKEEPING REQUIREMENTS					-	-	-	\$0
A. Read Instructions (Included in 4A)					i	-	-	\$0
B. Plan Activities (Included in 4B)					-	-	-	\$0
C. Implement Activities (Included in 4B)					-	-	-	\$0
D. Record Data ( Not Applicable)					_	<u>-</u>	-	\$0
E. Time to Transmit or Disclose Information					ı		-	\$0
Existing Sources - Records of CEMS malfunctions	1	12	12	866	10,392	520	1,039	\$838,185
Existing Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	86	10,392	520	1,039	\$838,185
Existing Sources - Records of monthly fuel use	2	12	24	866	20,784	1,039	2,078	\$1,676,371
New Sources - Records of CEMS malfunctions	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of Startups, Shutdowns, malfunctions, etc	1	12	12	2	24	1.2	2.4	\$1,936
New Sources - Records of monthly fuel use	2	12	24	2	48	2.4	4.8	\$3,872
F. Time to Train Personnel	80	1	80	2	160	8	16	\$12,905
G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST		1,946		15,127	609,619	30,503	60,958	\$49,173,269
						701,080	Hours	

Year 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
ANNUALIZED CAPITAL COSTS								
Performance tests								\$ 22,442,811
Other Capital Costs of Installation (ODC and Labor)								\$59,463,268
Total annual capital								\$81,906,079
TOTAL ANNUAL COSTS (O&M)								\$76,539,446
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$158,445,526

<sup>&</sup>lt;sup>a</sup> There are 1,244 existing electric generating units. One third of those are assumed to be tested each year.

<sup>b</sup> There are 2 additional existing electric generating units that were new sources in Year 1.

<sup>c</sup> There are 2 additional existing electric generating units that were new sources in Year 2.

<sup>d</sup> 10% of sources are assumed to submit SSM report each year.

Exhibit 2a Year 1 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Activity Year 1	(A) EPA Hours/ Occurrence	(B) Occurrence s/ Plant/Year	(C) EPA Hours/ Plant/Year (A x B)	(D) Plants/ Year	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year	(H) Cost,\$
Observe Initial Performance Tests	24	1	24	173.2	4,156.8	207.84	41.57	\$ 206,060
Observe Repeat Performance Tests	24	0.2	4.8	173.2	831.36	41.57	8.31	\$ 41,212
Review Notification of Demonstration of CEMS	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Quality Assurance Program Notification	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Startup, shutdown, and malfunction Report	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review Notification of Compliance Status	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review requests to use alternative monitoring procedure	0.5	1	0.5	866	433	21.5	4.33	\$ 21,465
Review Initial Notifications	0.5	1	0.5	2.00	1	0.05	0.01	\$ 50
Review Notification of performance test	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Test/CEMS Results	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review site specific performance evaluation test plan	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review Semi-Annual reports	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Total Annual Hours					34,866	1,743	348	\$ 1,728,374
						36,958	Hours	
Travel Expenses								\$ 69,200
								\$ 1,797,574

EPA Officials are assumed to attend 20% of performance tests (0.20 \* 866 = 173.2)

Travel Expenses =  $(1 \text{ person } \times 173 \text{ plants/year } \times 3 \text{ days/plant } \times \$50 \text{ per diem}) + (\$250 \text{ round trip/plant } \times 173 \text{ plants/year}) = \$69,200/\text{year}$  Assume visit 173 plants per year

Exhibit 2b Year 2 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Activity Year 2	(A) EPA Hou rs/ Occ urre nce	(B) Occu rrenc es/ Plant /Year	(C) EPA Hou rs/ Pla nt/Y ear (A x B)	(D ) PI a nt s/ Y e ar	(E) EPA Techn ical Hours / Year (C x D)	(F) EPA Manage rial Hours/Y ear	(G) EPA Cleri cal Hou rs/Y ear	(H) Cost, \$
Observe Initial				84 .1			20.1	
Performance Tests	24	1	24	3	2019.2	100.96	92	\$ 100,095
Observe Repeat Performance Tests	24	0.2	4.8	84 .1 3	403.84	20.192	4.03 84	\$ 20,019
Review Notification of				86				1 2,2
Demonstration of CEMS	0.5	1	0.5	6	433	21.65	4.33	\$ 21,465
Review Quality Assurance Program Notification	0.5	1	0.5	86 6	433	21.65	4.33	\$ 21,465
Review Startup, shutdown, and malfunction Report	8	1	8	86 6	6,928	346.4	69.2 8	\$ 343,433
Review Notification of Compliance Status	0.5	1	0.5	86 6	433	21.65	4.33	\$ 21,465
Review requests to use alternative monitoring procedure	0.5	1	0.5	86 6	433	21.5	4.33	\$ 21,465
Review Initial Notifications	0.5	1	0.5	2. 00	1	0.05	0.01	\$ 50
Review Notification of performance test	0.5	1	0.5	86 6	433	21.65	4.33	\$ 21,465
Review Test/CEMS Results	8	1	8	86 6	6,928	346.4	69.2 8	\$ 343,433
Review site specific performance evaluation test plan	8	1	8	86 6	6,928	346.4	69.2 8	\$ 343,433
Review Semi-Annual reports	8	1	8	86 6	6,928	346.4	69.2 8	\$ 343,433
Total Annual Hours					32,301	1,615	323	\$ 1,601,217
						34,239.1	Hour s	

Travel Expenses				\$ 69,200
				\$ 1,670,417

EPA Officials are assumed to attend 20% of performance tests (0.20 \* 866 = 173.2)

Travel Expenses =  $(1 \text{ person } \times 173 \text{ plants/year } \times 3 \text{ days/plant } \times \$50 \text{ per diem}) + (\$250 \text{ round trip/plant } \times 173 \text{ plants/year}) = \$69,200/\text{year}$  Assume visit 173 plants per year

Exhibit 2c Year 3 Agency Burden and Cost, NESHAP for Electric Generating Units (40 CFR part 63, subpart UUUUU)

Activity Year 3	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year (A x B)	(D) Plants/ Year	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year	(H) Cost, \$
Observe Initial Performance Tests	24	1	24	84.13	2019.2	100.96	20.192	\$ 100,095
Observe Repeat Performance Tests	24	0.2	4.8	84.13	403.84	20.192	4.0384	\$ 20,019
Review Notification of Demonstration of CEMS	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Quality Assurance Program Notification	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Startup, shutdown, and malfunction Report	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review Notification of Compliance Status	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review requests to use alternative monitoring procedure	0.5	1	0.5	866	433	21.5	4.33	\$ 21,465
Review Initial Notifications	0.5	1	0.5	2.00	1	0.05	0.01	\$ 50
Review Notification of performance test	0.5	1	0.5	866	433	21.65	4.33	\$ 21,465
Review Test/CEMS Results	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review site specific performance evaluation test plan	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Review Semi-Annual reports	8	1	8	866	6,928	346.4	69.28	\$ 343,433
Total Annual Hours					32,301	1,615	323	\$ 1,601,217
						34,239.1	Hours	
Travel Expenses								\$ 69,200
								\$ 1,670,417

EPA Officials are assumed to attend 20% of performance tests (0.20 \* 866 = 173.2)

Travel Expenses =  $(1 \text{ person } \times 173 \text{ plants/year } \times 3 \text{ days/plant } \times \$50 \text{ per diem}) + (\$250 \text{ round trip/plant } \times 173 \text{ plants/year}) = \$69,200/\text{year}$  Assume visit 173 plants per year