SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

NSPS for Fossil Fuel Fired Steam Generating Units

1. Identification of the Information Collection

1(a) Title of the Information Collection

NSPS for Fossil-Fuel-Fired Steam Generating Units (40 CFR part 60, subpart D) (Renewal)

1(b) Short Characterization/Abstract

The New Source Performance Standards (NSPS) for Fossil-Fuel-Fired Steam Generating Units, 40 CFR part 60, subpart D, proposed on August 17, 1971, and promulgated on December 23, 1971, apply to emissions from each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 mmBtu/hr), which commenced construction, modification, or reconstruction after August 17, 1971. Subpart D regulations apply to both electric utility and industrial boilers. This regulation was supplanted by NSPS subpart Da for electric utility steam generating units in 1978, and for industrial-institutional-commercial boilers in 1986. Since then, no new subpart D units have been constructed. The United States Environmental Protection Agency (EPA) performs this information collection to assure compliance with 40 CFR part 60, subpart D.

In general, all NSPS standards require initial notifications, performance tests, and periodic reports. Owners or operators are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all sources subject to NSPS.

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 two years following the date of such measurements, maintenance reports, and records. All reports (one-time, and periodic reports such as excess emission reports required semiannually) 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 United States Environmental Protection Agency (EPA) regional office. The state or EPA offices use the reports to determine compliance with NSPS subpart D.

Approximately 660 sources are currently subject to the regulation. Because electric utility boilers constructed after September 1978 are subject to subpart Da, and industrial, commercial, and institutional boilers constructed after June 19, 1986, are subject to subpart Db, there have not been any new subpart D units since 1986 and there will be no new units in the future. The cost of this Information Collection Request (ICR) will be \$9,900,000. The Office of Management and Budget (OMB) approved the currently active ICR without any "Terms of Clearance".

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is charged under section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

... application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(l).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every four years.

In addition, section 114(a) states that the Administrator may require any owner or operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, sulfur dioxide (SO₂), particulate matter (PM), and nitrogen oxides (NOx) emissions from fossil-fuel-fired steam generating units cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR part 60, subpart D.

2(b) Practical Utility/Users of the Data

Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with the applicable regulations, as required by the Clean Air Act. The information collected from recordkeeping and reporting requirements is used for certifying compliance with the emission limits, monitoring, personnel training and other requirements, targeting inspections,

assessing compliance trends, evaluating the efficacy of the promulgated regulations, and as evidence in court.

Performance tests are required in order to determine an affected facility's ability to comply with the emission standards. The performance stack test usually requires three 1-hour test runs using the EPA reference test method to demonstrate compliance. Subpart D requires only one performance test (the initial compliance stack test). Continuous emission monitors are required to ensure compliance with the standards at all times.

The notifications required in the applicable regulations are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, and if the facility is in compliance with the standards and other requirements. Performance test reports are needed as these are the Agency's record of a source's initial capability to comply with the emission standards, and serve as a record of the operating conditions under which compliance was achieved. The semiannual excess emission reports are used to determine excess emissions, identify problems at the facility, check the source operation and maintenance, and for compliance determinations. The reported information is also used in enforcement actions against the violators.

3. Nonduplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under 40 CFR part 60, subpart D.

3(a) Nonduplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted their own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, no duplication exists.

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

An announcement of a public comment period for the renewal of this ICR was published in the <u>Federal Register</u> on June 21, 2006 (<u>FR</u> 71, 35652). No comments were received on the burden published in the <u>Federal Register</u>.

3(c) Consultations

The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the AFS (Air Facility System) which is operated and maintained by EPA's Office of Compliance. AFS is the Agency's database for the collection, maintenance, and retrieval of all compliance data. In consultation with the Agency's industry experts and the AFS database, we have determined that there has been no growth in the

number of respondents since the last ICR (no new boilers, and no shutdowns or modifications of the relatively recent boilers under subpart D).

It should be noted that electric utility boilers constructed after September 1978 are subject to NSPS subpart Da, and industrial, commercial, and institutional boilers constructed after June 19, 1986, are subject to NSPS subpart Db. Hence, there have not been any NSPS subpart D units constructed since June 19, 1986, and the number of sources reporting under this ICR is unchanged compared to the previous ICR. Therefore, approximately 660 respondents will be subject to the standard over the three year period covered by this ICR.

In determining the correct burden estimate associated with this ICR, industry trade associations and other interested parties have been provided an opportunity to comment on the burden associated with the standard as it was being developed and in subsequent renewals of the ICR. It is our policy to carefully review any comments received since the last ICR renewal including those submitted in response to the first federal register notice and respond appropriately. EPA published an announcement of a public comment period for the renewal of this ICR in the <u>Federal Register</u> on June 21, 2006. No comments were received on respondent burden associated with the reporting and recordkeeping requirements provided in this ICR.

3(d) Effects of Less Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and monitors and the possibility of detecting violations would be less likely.

3(e) General Guidelines

None of these reporting or recordkeeping requirements violate any of the regulations established by OMB at 5 CFR 1320.5.

3(f) Confidentiality

The required information has been determined not to be confidential. However, any 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 (CBI) (see 40 CFR 2; 41 <u>FR</u> 36902, September 1, 1976; amended by 43 <u>FR</u> 40000, September 8, 1978; 43 <u>FR</u> 42251, September 20, 1978; and 44 <u>FR</u> 17674, March 23, 1979).

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contain sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements are fossil-fuel-fired steam generating units that commenced construction, modification, or reconstruction after August 17, 1971, and that have a heat input capacity of greater than 73 MW (250 mmBtu/hr). The Standard Industrial Classification (SIC) codes and corresponding North American Industry Classification System (NAICS) are listed below.

Regulation	SIC Codes	NAICS Codes
40 CFR part 60, subpart D	1531	23332
	2033	311421
	Major Group 22	Major Group 313
	Major Group 24	Major Group 321
	2611	322110
	Major Group 28	Major Group 325
	2911	324110
	Major Group 30	Major Group 326
	Major Group 33	Major Group 331
	Major Group 34	Major Group 332
	Major Group 37	Major Group 336
	4911	221112
	7299	81299

4(b) Information Requested

(i) Data Items

All data in this ICR that is recorded and/or reported is required by NSPS, Standards of Performance for Fossil-Fuel-Fired Steam Generating Units, 40 CFR part 60, subpart D.

A source must make the following notifications/reports:

Reports for 40 CFR part 60, subpart D						
Construction/reconstruction date	60.7(a)(1)					
Actual startup date	60.7(a)(3)					
Initial performance test results	60.8 (a)					
Initial performance test	60.8(d)					
Demonstration of continuous monitoring system	60.7(a)(5)					
Opacity test notification	60.7(a)(6)					
Physical or operational change	60.7(a)(4)					
Excess emissions and monitoring system performance semiannual report	60.7(c), 60.45(g)					

 \boldsymbol{A} source must maintain the following records:

Recordkeeping for 40 CFR part 60, subpart D					
Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative.	60.7(b)				
Records are required to be retained for 2 years at the facility.	60.7(f)				

(ii) Respondent Activities

Respondent Activities
Read instructions.
Install, certify, maintain, and operate Continuous Monitoring System (CMS) for opacity, SO_2 , NO_x and either O_2 or CO_2 or a fuel sampling and analysis system
Perform initial performance test to demonstrate compliance.
Write the notifications and reports listed above.
Enter information required to be recorded above.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.

Respondent Activities

Develop, acquire, install, and utilize technology and systems for the purpose of 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.

Transmit, or otherwise disclose the information.

Subpart D requires hard copy reports.

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

5(a) Agency Activities

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

Agency Activities

Observe initial performance tests.

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

Audit facility records.

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

5(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 standards. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, for compliance determinations and, in enforcement actions.

Information contained in the reports is entered into AFS which is operated and maintained by EPA's Office of Air Quality Planning and Standards. AFS is EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 100,000 industrial and government-owned facilities. EPA uses AFS for tracking air

pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices, and EPA headquarters. 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 two years.

5(c) Small Entity Flexibility

There are no small businesses affected by this regulation.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Table 2: Annual Burden of Recordkeeping and Reporting Requirements as a Result of the Standards for Fossil Fuel Fired Steam Generating Units, NSPS subpart D.

6. Estimating the Burden and Cost of the Collection

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. 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.

6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 61,545 person hours (Total Labor Hours from Table 1). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NSPS program, the previously approved ICR, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses a technical labor rate of \$57.12 per hour. These rates are from the United States Department of Labor, Bureau of Labor Statistics, March 2001, Table 10: Private industry, by occupational and industry group. The rates are from column 1, "Total compensation." The wage rate of \$27.20 has been increased by 110 percent to account for the benefit packages available to those employed by private industry for a labor rate of \$57.12 per hour.

(ii) Estimating Capital/Startup and Operation and Maintenance Costs

The type of industry costs associated with the information collection activity in the regulations are for labor and continuous emission monitoring (CEM). The capital/startup costs are one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitor and other costs such as photocopying and postage.

(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs

Capital/Startup vs. Operation and Maintenance (O&M) Costs							
(A) Continuous Monitoring Device	(B) Startup Cost (\$) for One Affected Facility	(C) Number of New Affected Facilities to Startup	(D) Total Startup Costs (B X C)	(E) Annual O&M Costs (\$) for One Affected Facility	(F) Number of Affected Facilities with O&M	(G) Total O&M (E X F)	
SO ₂ , PM, and NOx	\$200,000	0	\$0	\$15,000	660	\$9,900,000	

There are no total capital/startup costs for this ICR, because electric utility boilers constructed after September 1978 are subject to subpart Da, and industrial/commercial/institutional boilers constructed after June 19, 1986, are subject to subpart Db, and no new steam generating units will become subject to subpart D. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR of \$9,900,000.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$9,900,000.

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. Publication and distribution of the information are part of the AFS program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of EPA's overall compliance and enforcement program.

The average annual Agency cost during the three years of the ICR is estimated to be \$125,702 [(See Table 2 in Section 6(e), attached]. This cost is based on the average hourly labor rate at a GS-12, Step 1 employee rate times 1.6 benefits multiplication factor to account for government overhead expenses for a total of \$38.30 (\$23.94 x 1.6).

These rates are from the Office of Personnel Management (OPM) "2002 General Schedule," which excludes locality rates of pay. Details upon which this estimate is based appear in Table 2: Average Annual EPA Resource Requirement for Fossil Fuel-Fired Steam

Generating Units/ NSPS subpart D.

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

Approximately 660 sources are currently subject to the regulation and no additional sources will become subject to the regulation in the next three years (See Section 1(b)).

Respondent Universe and Number of Responses Per Year								
Regulation Citation	(A) Average Number of New Respondents per Year	(B) Number of Reports for New Sources	(C) Number of Existing Respondents	(D) Number of Reports for Existing Sources	(E) Number of Respondents that keep records but do not submit reports	(F) Total Annual Responses = (AxB)+(CxD)+ E		
40 CFR 60, subpart D	0	0	660	2	0	1,320		

The number of total respondents is 660. This number is the sum of column A and column C of the Respondent Universe and Number of Responses Per Year table. This represents the number of existing sources plus the number of new sources averaged over the three-year period.

The number of Total Annual Responses is 1,320. This is the number in column E of the Respondent Universe and Number of Responses Per Year table.

The total annual labor costs are \$3,515,450. Details upon which this estimate is based appear in Table 1: Annual Burden of Reporting and Recordkeeping Requirements as a Result of the Standards for Fossil Fuel-Fired Steam Generating Units/NSPS subpart D (attached).

The total annual capital and O&M costs to the regulated entities are \$9,900,000. These costs are detailed in section 6(b)(iii), Capital/Startup vs. Operating and Maintenance (O&M) Costs.

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

The bottom line burden hours and cost tables for both the Agency and the respondents appear below. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 46.6 hours per response.

6(f) Reasons for Change in Burden

There is no change in burden. There is no change in the labor hours or cost in this ICR compared to the previous ICR. This is due to two considerations. First, the regulations have not changed over the past three years and are not anticipated to change over the next three years. Secondly, the growth rate for the industry is nonexistent, so there is no change in overall burden.

Since there are no changes in the regulatory requirements and there is no significant industry growth, the labor hours and cost figures in the previous ICR are used in this ICR and there is no change in burden to industry.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 46.6 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.

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, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OECA-2006-0426. An electronic version of the public docket is available at http://www.regulations.gov/ which may be used to obtain a copy of the draft collection of information, to submit or view public comments, to access the index listing of the contents of the 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 in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC. 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 docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2006-0426 and OMB Control Number 2060-0026 in any correspondence.

NOTE: The EPA Docket Center suffered damage due to flooding during he last week of June 2006. The Docket Center is continuing to operate. However, during the cleanup, there will be temporary changes to Docket Center telephone numbers, addresses, and hours of operation by people who wish to visit the Public Reading Room to view documents. Consult EPA's Federal Register notice at 71 <u>FR</u> 38147 (July 15, 2006) or the EPA website at www.epa.gov/epahome/dockets .htm for current information on docket status; locations and telephone numbers.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in collecting this information.

TABLE 1. ANNUAL BURDEN OF REPORTING AND RECORDKEEPING REQUIREMENTS AS A RESULT OF THE STANDARDS FOR FOSSIL FUEL-FIRED STEAM GENERATING UNITS/NSPS SUBPART D.

			1			
	A	В	С	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrence s per respondent	Annual person hours/respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x \$57.12)
1. APPLICATIONS	applicablenot					
2. SURVEYS AND STUDIES	applicablenot					
3. REPORTING REQUIREMENTS						
a. Read instructions	No new sources will become subject, therefore not applicable					
b. Required activites						
Initial Performance Test						
c. Create information						
d. Gather Existing Information	Included in 3E					
e. Write report						
Notification of const/reconstruction	No new sources will become subject, therefore not applicable					
Notification of ant/ act.startup						
Notify of emission test						
Report of initial emission test						
Excess emissions report	1	2	2	660	1320	\$75,398.40
4. RECORD KEEPING REQUIREMENTS						
a. Read instructions	Included in 3A					

b. Plan Activites	Included in 4C					
c. Implement Activities	Included in 3B					
d. Develop Record System	N/A					
e. Time to check computer system and calibrate continuous monitors	0.25	365	91.25	660	60,225	\$3,440,052
f. Time to Train Personnel	N/A				,	
g. Time For Audits	N/A					
TOTAL: ANNUAL BURDEN					61,545	\$3,515,450

a) Assume an hourly wage of \$57.12 (\$27.20 + 110% to account for the benefit packages available to those employed by private industry). This amount was multiplied by the hours per year in column E.

b) Assume operation 365 days per year.

TABLE 2. AVERAGE ANNUAL EPA RESOURCE REQUIREMENT FOR FOSSIL FUEL-FIRED STEAM GENERATING UNITS/NSPS SUBPART D.

	A	В	С	D	E	F
	EPA hours per occurrence	Occurrences per plant/yr	EPA hours/plant/yr (A x B)	Plants/year	EPA hours/year (C x D)	Total annual cost (E x \$38.30)
Report Review For Construction, Anticipated Startup, Actual Startup						
Review Notification of Initial Test:						
Sulfur Dioxide						
Particulate Matter						
Nitrogen Oxides						
Review Initial Test Results:						
Sulfur Dioxide						
Particulate Matter						
Nitrogen Oxides						
Review Notification of CMS Demonstration:						
Sulfur Dioxide						
Particulate Matter						
Nitrogen Oxides						
Review CMS Performance Demonstration:						
Sulfur Dioxide						
Particulate Matter						
Nitrogen Oxides						
Review Excess Emission Reports (d)	1	2	2	460	920	\$35,236
Review SO2 compliance Reports (d), (e)						

Coal-fired units	2	4	8	180	1,440	\$55,152
Oil-fired units	2	4	8	92	736	\$28,189
TOTAL:					3,096	\$118,577
Travel Expenses (d) (1 person x 15 plants/yr x 3						
days/plant x \$75 per diem) + (\$250 round trip/plant						
x 15 plants/yr) =						\$7,125
TOTAL ANNUAL COST						\$125,702

a) A X B = C

b) $C \times D = E$

- c) Assume an hourly wage of a GS12, Step 1 employee rate times a 1.6 benefits multiplication factor to account for government overhead expenses for a total of \$38.30. This amount was multiplied by the hours in each line of Column E to estimate the total annual cost per year.
- d) Assume approximately 70% of the sources monitor via CEM. Approximately 30% use fuel sampling and analysis.
- e) Units using fuel sampling and analysis submit these reports instead of excess emission reports based on CEM data. Figures used in this category are based on research performed during regulation revision.