

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**Standards of Performance for Greenhouse Gas Emissions from Modified and  
Reconstructed Stationary Sources: Electric Utility Generating Units  
(40 CFR part 60, subpart TTTT)  
June 2014**

**Part A of the Supporting Statement**

**1. Identification of the Information Collection**

*(a) Title and Number of the Information Collection*

“Recordkeeping and Reporting Requirements for Standards of Performance for Greenhouse Gas Emissions from Modified and Reconstructed Electric Utility Generating Units (40 CFR Part 60, Subpart TTTT).” The proposed standards would establish standards of performance for carbon dioxide (CO<sub>2</sub>) emissions from electric utility generating units (EGUs) currently in the 40 CFR part 60, Da and KKKK source categories under a new subpart TTTT. Subpart Da currently regulates utility boilers and integrated gasification combined cycle (IGCC) units, and subpart KKKK currently regulates stationary combustion turbines. An information collection request (ICR) has been prepared in support of the standards being proposed. The Environmental Protection Agency (EPA) ICR tracking number is 2506.01. The EPA is co-proposing amending subparts Da and KKKK as an alternative to creating a new subpart, subpart TTTT. Since both approaches would have the same burden, this ICR burden estimate is intended to cover whatever approach is finalized. This ICR estimates burden associated with proposed standards to limit CO<sub>2</sub> emissions from modified and reconstructed EGUs. These proposed standards will be included in new subpart TTTT, which also will include standards for new EGUs (proposed on 01/08/2014) and for which burden was previously estimated (ICR tracking number 2465.02).

*(b) Short Characterization*

On June 25, 2013, President Obama announced the Climate Action Plan (CAP), directing federal agencies to undertake a series of executive actions to reduce carbon pollution, prepare the United States (U.S.) for the impacts of climate change and lead international efforts to address global climate change. In tandem with the CAP, President Obama issued a Presidential Memorandum directing the EPA to work expeditiously to complete carbon pollution standards for the power sector.

Consistent with the CAP and the Presidential Memorandum, the EPA, on September 20, 2013, signed proposed carbon pollution standards for new fossil fuel-fired power plants built in the future (79 FR 1430, January 8, 2014) (January 2014 proposal). Specifically, under the authority of Clean Air Act (CAA) section 111(b), the EPA proposed new source performance standards (NSPS) to limit emissions of CO<sub>2</sub> from new fossil fuel-fired electric steam generating units (utility boilers and IGCC units) and new natural gas-fired stationary combustion turbines.

Under the authority of CAA section 111(b), the EPA is now proposing standards of performance to limit emissions of CO<sub>2</sub> from modified and reconstructed fossil fuel-fired electric steam generating units and from modified and reconstructed natural gas-fired stationary combustion turbines. The CAA and EPA's regulations define an NSPS "modification" as a physical or operational change that increases the source's maximum achievable hourly rate of emissions, with certain exceptions.<sup>1</sup> Under the EPA's CAA section 111 standards of performance for new stationary sources, reconstructed sources are defined, in general, as existing sources (i) that replace components to such an extent that the capital costs of the new components exceed 50 percent of the capital costs of an entirely new facility, and (ii) for which compliance with standards of performance for new sources is technologically and economically feasible.<sup>2</sup> The EPA is proposing in this action generally similar applicability requirements that the EPA proposed in the January 2014 action for newly constructed fossil fuel-fired power plants. Affected fossil fuel-fired electric steam generating units include utility boilers and IGCC units that are:

- Capable of combusting more than 250 million British thermal units per hour (MMBtu/h) heat input of fossil fuel;
- Constructed for the purpose of supplying more than one-third of its potential net-electric output capacity to any utility power distribution system for sale (that is, to the grid); and
- Constructed for the purpose of supplying more than 219,000 megawatt hours (MWh) net-electrical output to the grid.

Affected natural gas-fired stationary combustion turbines are:

- Capable of combusting more than 250 MMBtu/h heat input of fossil fuel;
- Constructed for the purpose of supplying more than one-third of its potential net-electric output capacity to any utility power distribution system for sale (that is, to the grid);
- Constructed for the purpose of supplying more than 219,000 MWh net-electrical output to the grid; and
- Combust over 90 percent natural gas on a heat input basis on a 3-year rolling average basis.

Among stationary sources in the U.S., fossil fuel-fired EGUs are by far the largest emitters of greenhouse gas (GHG) pollution, primarily in the form of CO<sub>2</sub>. The EPA in 2009 found that by causing or contributing to climate change, GHGs endanger both the public health and the public welfare of current and future generations.

Consistent with the requirements of CAA section 111(b), these proposed standards reflect the degree of emission limitation achievable through the application of the best system of emission reduction (BSER) which the EPA has determined has been adequately demonstrated for each type of unit.

The EPA proposes that the BSER for modified fossil fuel-fired boilers and IGCC units is each unit's own best potential performance based on a combination of best operating practices

---

<sup>1</sup> CAA §111(a)(4); 40 CFR 60.2, 60.14.

<sup>2</sup> 40 CFR 60.15.

and equipment upgrades. Specifically, the EPA is proposing unit-specific emission standards consistent with this BSER determination and is co-proposing two alternative standards for modified utility steam generating units. In the first co-proposed alternative, modified utility boilers and IGCC units would be subject to a single emission standard. Specifically, under the first co-proposed alternative, a modified source would be required to meet a unit-specific emission limit determined by the affected source’s best demonstrated historical performance (in the years from 2002 to the time of the modification) with an additional two percent emission reduction. The EPA has determined that this standard can be met through a combination of best operating practices and equipment upgrades. To account for facilities that have already implemented best practices and equipment upgrades, the proposal also specifies that modified facilities would not have to meet an emission standard more stringent than the corresponding standard for reconstructed EGUs. An existing source would continue to be subject to 111(d) requirements after it becomes a modified source, whether the modification occurs before or after the promulgation of a 111(d) plan. Therefore, the EPA is co-proposing that modified sources would be required to meet unit-specific emission standards that would depend on the timing of the modification. Sources that modify prior to becoming subject to a CAA section 111(d) plan would be required to meet the same standard described in the first co-proposal – that is, the modified source would be required to meet a unit-specific emission limit determined by the affected source’s best demonstrated historical performance (in the years from 2002 to the time of the modification) with an additional two percent emission reduction (based on equipment upgrades). Sources that modify after becoming subject to a CAA section 111(d) plan would be required to meet a unit-specific emission limit that would be determined by the 111(b) implementing authority and would be based on the source’s expected performance after implementation of identified unit-specific energy efficiency improvement opportunities. For modified natural gas-fired stationary combustion turbines, the EPA is proposing standards of performance based on efficient natural gas combined cycle (NGCC) technology as the BSER.

For reconstructed utility boilers and IGCC units, the EPA is proposing a standard of performance with BSER based on the most efficient generating technology for these types of units (i.e., reconstructing the boiler to use higher steam, temperature and pressure, even if the boiler was not originally designed to do so). The difference in the proposed standards for larger and smaller units is based on greater availability of higher pressure/temperature steam turbines (e.g. supercritical steam turbines) for larger units. The standards could also be met through other technology options such as natural gas co-firing or capture of a small quantity of CO<sub>2</sub> via partial carbon capture and storage (CCS). The EPA is proposing to find efficient NGCC technology to be the BSER for reconstructed stationary combustion turbines.

The proposed standards for the affected modified and reconstructed sources are summarized below in Table 1.

**Table 1. Summary of BSER and Proposed Standards for Affected Sources**

Affected Source	BSER	Standard
Modified Utility Boilers and IGCC Units	Most efficient generation at the affected source achievable	<p><b>Co-proposed Alternative #1</b></p> <p>1. Source would be required to meet a unit-specific emission limit determined by the unit’s best historical annual CO<sub>2</sub> emission rate (from 2002</p>

	through a combination of best operating practices and equipment upgrades	to the date of the modification) plus an additional two percent emission reduction; the emission limit will be no lower than: a. 1,900 lb CO <sub>2</sub> /MWh-net for sources with heat input > 2,000 MMBtu/h. <b>OR</b> b. 2,100 lb CO <sub>2</sub> /MWh-net for sources with heat input ≤ 2,000 MMBtu/h.
Modified Utility Boilers and IGCC Units	Most efficient generation at the affected source achievable through a combination of best operating practices and equipment upgrades	<b>Co-proposed Alternative #2</b> Source would be required to meet a unit-specific emission limit dependent upon when the modification occurs. 1. Sources that modify <b>prior to</b> becoming subject to a CAA 111(d) plan would be required to meet a unit-specific emission limit determined by the unit's best historical annual CO <sub>2</sub> emission rate (from 2002 to date of the modification) plus an additional two percent emission reduction; the emission limit will be no lower than: a. 1,900 lb CO <sub>2</sub> /MWh-net for sources with heat input > 2,000 MMBtu/h. <b>OR</b> b. 2,100 lb CO <sub>2</sub> /MWh-net for sources with heat input ≤ 2,000 MMBtu/h. 2. Sources that modify <b>after</b> becoming subject to a CAA 111(d) plan would be required to meet a unit-specific emission limit determined by the 111(b) implementing authority from the results of an energy efficiency improvement audit.
Modified Natural Gas-Fired Stationary Combustion Turbines	Efficient NGCC technology	1. Sources with heat input > 850 MMBtu/h would be required to meet an emission limit of 1,000 lb CO <sub>2</sub> /MWh-gross. 2. Sources with heat input ≤ 850 MMBtu/h would be required to meet an emission limit of 1,100 lb CO <sub>2</sub> /MWh-gross.
Reconstructed Utility Boilers and IGCC Units	Most efficient generating technology at the affected source	1. Sources with heat input > 2,000 MMBtu/h would be required to meet an emission limit of 1,900 lb CO <sub>2</sub> /MWh-net. 2. Sources with heat input ≤ 2,000 MMBtu/h would be required to meet an emission limit of 2,100 lb CO <sub>2</sub> /MWh-net.
Reconstructed Natural Gas-Fired	Efficient NGCC technology	1. Sources with heat input > 850 MMBtu/h would be required to meet an emission limit of 1,000 lb

Stationary Combustion Turbines		CO <sub>2</sub> /MWh-gross. 2. Sources with heat input ≤ 850 MMBtu/h would be required to meet an emission limit of 1,100 lb CO <sub>2</sub> /MWh-gross.
--------------------------------	--	---

In general, all CAA section 111 standards require notifications, reports, and records that are essential in determining compliance, and are required of all sources subject to the standards. The EPA is proposing in this action the same notifications, reports, and records that the EPA proposed in the January 2014 action for new fossil fuel-fired power plants. Accordingly, this proposed action would impose minimal new information collection burden on affected sources beyond what those sources would already be subject to under the authorities of CAA parts 75 and 98. OMB has previously approved the information collection requirements contained in the existing part 75 and 98 regulations (40 CFR part 75 and 40 CFR part 98) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and has assigned OMB control numbers 2060-0626 and 2060-0629, respectively. Apart from potential energy metering modifications to comply with net energy output based emission limits proposed in this action and certain reporting costs based on requirements in the NSPS General Provisions (40 CFR part 60, subpart A), which are mandatory for all owners/operators subject to CAA section 111 national emission standards, there are no new information collection costs, as the information required by this proposed rule is already collected and reported by other regulatory programs.

Potential respondents are owners and operators of modified and reconstructed fossil fuel-fired EGUs meeting the applicability requirements specified above. The proposed rule would regulate emissions of CO<sub>2</sub> and would require CO<sub>2</sub> mass rate CEMS and the associated automatic data acquisition system. The initial performance test would consist of collection of hourly CO<sub>2</sub> average concentration, mass flow rate recorded with the certified CO<sub>2</sub> concentration and flow rate CEMS and the corresponding electrical power generation data for all of the hours of operation for the first calendar year beginning on the first day of the first month following completion of the CEMS installation and certification. The proposed rule would allow owners or operators of EGUs that burn exclusively gaseous or liquid fuels to install fuel flow meters as an alternative to CEMS. Compliance with the applicable average CO<sub>2</sub> mass emissions rate (lb/MWh) would be calculated as a 12-month rolling average, updated monthly, using the reported hourly CO<sub>2</sub> average concentration and flow rate values from the certified CEMS data collected for the previous month's process operating days along with generation data tracked by the facility for the unit. In this rulemaking, the EPA proposes that the owner or operator of a modified or reconstructed unit would be required to comply with the notification and recordkeeping requirements in the section 111 regulatory general provisions, 40 CFR part 60, subpart A, and would need to report results of performance testing and excess emissions; as well as record and maintain hourly average CO<sub>2</sub> emissions concentration, hourly average flow rate, and hourly useful electrical generation. As part of an Agency-wide effort to facilitate reporting of environmental data and reports, the proposal would require that owners and operators subject to this regulation must electronically submit excess emissions, continuous monitoring systems performance and-or summary reports. Any owner or operator subject to the provisions of this proposed subpart would be required to keep each record for 5 years.

Over the history of the NSPS program, the EPA has only received notice that a few EGUs have triggered the modification provisions of CAA section 111. In addition, over the lengthy history of the NSPS program, the EPA is only aware of one EGU that has triggered the reconstruction provisions of CAA section 111. Based on this information, the EPA expects few EGUs will take actions that would constitute modifications or reconstructions as defined under the EPA's NSPS regulations. Although not anticipated, if an EGU were to modify or reconstruct during the 3-year period covered by this ICR, it is likely that the unit's energy metering equipment would need to be modified to comply with proposed net energy output based CO<sub>2</sub> emission limits and the unit's data acquisition system would need to be upgraded to accommodate reporting of net energy output rate based emissions. A modified or reconstructed EGU would be required to prepare a quarterly summary report, which includes reporting of emissions and downtime, every 3 months.

## **2. Need for and Use of the Collection**

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

The EPA is charged under section 111 of the CAA to establish standards of performance for modified and reconstructed stationary sources that reflect:

... application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(1).

In addition, CAA 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.

As previously stated, the EPA in 2009 found that by causing or contributing to climate change, GHGs endanger both the public health and the public welfare of current and future generations. Fossil fuel-fired power plants are the country's largest stationary source emitters of GHGs. Therefore, NSPS for emissions of CO<sub>2</sub> are being proposed for this category of sources at 40 CFR part 60, subpart TTTT.

Certain records and reports are necessary for the Administrator to: 1) identify modified and reconstructed EGUs subject to the standards, 2) ensure that the NSPS is being properly applied; 3) identify those facilities that should be inspected; 4) identify those facilities that may benefit from compliance assistance activities; and 5) ensure that process and emissions control/monitoring equipment are being properly operated and maintained on a continuous basis.

*(b) Use/Users of the Data*

The required information would 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*

As previously stated, this proposed action would impose minimal new information collection burden on affected sources beyond what those sources would already be subject to under the authorities of CAA parts 75 and 98. Apart from potential energy metering modifications to comply with net energy output based emission limits proposed in this action and certain reporting requirements which are mandatory for all owners/operators subject to CAA section 111 national emission standards, there are no new information collection costs, as the information required by this proposed rule is already collected and reported by other regulatory programs. The proposed rule would require that affected owners or operators follow the applicable reporting requirements and submit reports as required by the other regulatory programs. Therefore, no duplication exists.

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

Public notice was provided in the preamble to the proposed rule.

*(c) Consultations*

The EPA has engaged extensively with a broad range of stakeholders and the general public regarding climate change, carbon pollution from power plants, and carbon pollution reduction opportunities. These stakeholders included industry and electric utility representatives, state and local officials, tribal officials, labor unions and non-governmental organizations.

Early in the process of developing carbon pollution standards for new power plants, the EPA held five listening sessions in February and March 2011 to obtain information and input from key stakeholders and the public. Each of the five sessions had a particular target audience; these were the electric power industry, environmental and environmental justice organizations, states and Tribes, coalition groups and the petroleum refinery industry.

The EPA has conducted subsequent outreach sessions – the vast majority of which occurred between September 2013 and November 2013. The agency held 11 public listening sessions; one national listening session in Washington, DC and 10 listening sessions in locations across the country. In addition to the 11 public listening sessions, direct engagement has included hundreds of meetings with individual stakeholder groups, and meetings that brought together a

variety of stakeholders to discuss a wide range of issues related to the electricity sector and regulation of GHGs under the CAA. The agency provided and encouraged multiple opportunities to engage with each one of the 50 states. The agency met with electric utility associations and electricity grid operators. Agency officials have engaged with labor unions and with leaders representing large and small industries. Because of the focus of the standard on the electricity sector, many of the EPA's meetings with industry have been with utilities and industry representatives directly related to the electricity sector. The agency has also met with energy industries such as coal and natural gas interests. In addition, the agency has met with companies that offer new technology to prevent or reduce carbon pollution, including companies that represent renewable energy and energy efficiency interests. The EPA has also met with representatives of energy intensive industries such as the iron and steel, and aluminum industry to help understand the issues related to large industrial purchasers of electricity. Agency officials engaged with representatives of environmental justice organizations, environmental groups and religious organizations.

In light of the interest among governmental entities, the EPA initiated consultations with governmental entities while formulating the provisions of the proposed standards for new EGUs. Although only new EGUs would be affected by those proposed standards, the outreach regarded planned actions for new, reconstructed, modified and existing sources. On April 12, 2011, the EPA engaged with the following 10 national organizations representing state and local elected officials: (1) National Governors Association; (2) National Conference of State Legislatures, (3) Council of State Governments, (4) National League of Cities, (5) U.S. Conference of Mayors, (6) National Association of Counties, (7) International City/County Management Association, (8) National Association of Towns and Townships, (9) County Executives of America, and (10) Environmental Council of States. On February 26, 2014, the EPA re-engaged with those governmental entities to provide a pre-proposal update on the emission guidelines for existing EGUs and emission standards for modified and reconstructed EGUs.

In light of the interest among tribal entities, the EPA conducted outreach to tribal environmental staff and offered consultation with tribal officials in developing these proposed standards. Because the EPA is aware of tribal interest in carbon pollution standards for the power sector, prior to proposal of GHG standards for new power plants, the EPA offered consultation with tribal officials early in the process of developing the proposed regulation to permit them to have meaningful and timely input into its development. The EPA's consultation regarded planned actions for new, reconstructed, modified, and existing sources. A consultation/outreach meeting was held on May 23, 2011. In this meeting, the EPA provided background information on the GHG emission standards to be developed and a summary of issues being explored by the Agency. The EPA also held a series of listening sessions prior to proposal of GHG standards for new power plants. Tribes participated in a session on February 17, 2011, with the state agencies, as well as in a separate session with tribes on April 20, 2011.

During development of this proposed regulation, consultation letters were sent to 584 tribal leaders. The letters provided information regarding the EPA's development of both the NSPS for modified and reconstructed EGUs and emission guidelines for existing EGUs and offered consultation. None have requested consultation. Tribes were invited to participate in the national informational webinar held August 27, 2013. In addition, a consultation/outreach



meeting was held on September 9, 2013, with tribal representatives from some of the 584 tribes. The EPA also met with tribal environmental staff with the National Tribal Air Association, by teleconference, on July 25, 2013, and December 19, 2013. In those teleconferences, the EPA provided background information on the GHG emission guidelines to be developed and a summary of issues being explored by the agency.

*(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*

Respondents are owners or operators of modified and reconstructed fossil fuel-fired EGUs. All respondents would be subject to the monitoring, recordkeeping, and reporting requirements. The applicable NAICS codes are 221112, Fossil fuel electric power generating units (covers owners/operators of industry or federal, state or local government establishments), and 921150, Fossil fuel electric power generating units in Indian Country.

*(b) Information Requested*

*(i) Data Items, Including Recordkeeping Requirements.*

Apart from potential energy metering modifications to comply with net energy output based emission limits proposed in this action and certain reporting costs based on requirements in the NSPS General Provisions (40 CFR part 60, subpart A), which are mandatory for all owners/operators subject to CAA section 111 national emission standards, there are no new information collection costs, as the information required by this proposed rule is already collected and reported by other regulatory programs (CAA parts 75 and 98). Although not anticipated, if an EGU were to modify or reconstruct during the 3-year period covered by this ICR, it is likely that the EGU's energy metering equipment would need to be modified to comply with proposed net energy output based CO<sub>2</sub> emission limits. In addition, after modifications are made that enable a facility to measure net energy output, the EGU's data acquisition system

would need to be upgraded to accommodate reporting of net energy output rate based emissions. A modified or reconstructed EGU would be required to prepare a quarterly summary report, which includes reporting of emissions and downtime, every 3 months.

*(ii) Respondent Activities.*

The EPA expects few modified or reconstructed EGUs over the 3-year period covered by this ICR. Although not anticipated, if an EGU were to modify or reconstruct during that time period, the respondent activities that would be required by the proposed NSPS are introduced in section 6(a).

*(iii) Electronic Reporting.*

If an EGU were to modify or reconstruct, the proposal would require that owners and operators subject to this regulation must electronically submit quarterly reports of emissions and continuous monitoring systems performance. Owners and operators would need to submit these reports to the EPA using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the EPA Office of Atmospheric Programs.

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

*(a) Agency Activities*

There would be no EPA burden associated with the reporting requirements of the proposed standards. As a result of this proposal, if an EGU were to modify or reconstruct, the owner or operator of the affected EGU would be required to electronically submit a quarterly summary report, which includes reporting emissions and downtime. The fees for upkeep of this electronic database are already funded through other rules. Thus, there would be no burden to the agency associated with these reporting requirements.

*(b) Collection Methodology and Management*

Following notification of startup, the reviewing authority might inspect the source to determine whether the CO<sub>2</sub> CEMS and the associated automatic data acquisition system 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 used in compliance and enforcement programs. The quarterly 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 Air 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.

Any owner or operator subject to the provisions of this proposed subpart would be required to keep each record for 5 years following the date of each occurrence, measurement,

maintenance, corrective action, report, or record. Each record must be kept on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept off site for the remaining years. All electronic reports are sent to the EPA using the ECMPS Client Tool. All non-electronic 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. EPA regional office.

(c) *Small Entity Flexibility*

The EPA is aware that there is substantial interest in the proposed rule among small entities (municipal and rural electric cooperatives). The EPA has conducted an unprecedented amount of stakeholder outreach. As part of that outreach, agency officials participated in many meetings with individual utilities as well as meetings with electric utility associations. Specifically, the EPA Administrator, Gina McCarthy, participated in separate meetings with both the National Rural Electric Cooperative Association (NRECA) and the American Public Power Association (APPA). The meetings brought together leaders of the rural cooperatives and public power utilities from across the country. The Administrator discussed and exchanged information on the unique challenges, in particular the financial structure, of NRECA and APPA member utilities.

In addition, the EPA conducted outreach to representatives of small entities while formulating the provisions of the proposed standards of performance for new EGUs. Although only new EGUs would be affected by those proposed standards, the outreach regarded planned actions for new, reconstructed, modified and existing sources. The EPA conducted outreach with representatives from 20 various small entities that potentially would be affected by GHG standards. The representatives included small entity municipalities, cooperatives, and private investors. We met with eight of the small entity representatives, as well as three participants from organizations representing power producers, on June 17, 2011, to discuss the outreach materials (background, an overview of affected sources and GHG emissions from the power sector, an overview of CAA section 111, an assessment of CO<sub>2</sub> emissions control technologies, and potential impacts on small entities), potential requirements of the rule, and regulatory areas where the EPA has discretion and could potentially provide flexibility.

A second outreach meeting was conducted on July 13, 2011. We met with nine of the small entity representatives, as well as three participants from organizations representing power producers. During the second outreach meeting, various small entity representatives and participants from organizations representing power producers presented information regarding issues of concern with respect to development of standards for GHG emissions.

(d) *Collection Schedule*

Each information collection activity within this request (Summary Report including excess emissions and downtime reporting) occurs on a quarterly basis.

## **6. Estimating the Burden and Cost of the Collection**

Although not anticipated, if an EGU were to modify or reconstruct over the 3-year period covered by this ICR, Exhibits 1a and 1b document the computation of individual burdens for the

reporting requirements applicable to one modified or reconstructed EGU for the subpart included in this ICR for each of the first 3 years. Table 2 contains a summary of the respondent burden hours and costs detailed in Exhibit 1c.

**Table 2. Summary of Respondent Burden and Costs**

<b>Year</b>	<b>Total Annual Labor Burden (hours)</b>	<b>Total Annual Labor Costs (\$)</b>
1	549	46,150
2	33	2,750
3	33	2,750
Total	615	51,650
Annual Average	205	17,217

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 3-year period of this ICR from these reporting requirements is estimated to be 205 hours per year (detailed in Exhibit 1c). These hours are based on agency studies and background documents from the development of the regulation, agency knowledge, and experience with the NSPS program.

*(b) Estimating Respondent Costs*

Respondent costs are typically divided into three categories. These categories include labor costs, operations and maintenance (O&M) costs, and annualized capital costs. Labor costs and O&M costs are the only respondent costs associated with this ICR.

*(i) Estimating Labor Costs*

The average annual labor costs to industry over the 3-year period of this ICR from these reporting requirements is estimated to be \$17,217 per year (detailed in Exhibit 1c). Labor rates and associated costs are based on Bureau of Labor Statistics (BLS) data. Technical, managerial, and clerical average hourly rates for private industry workers were based on the BLS, Occupational Employment Statistics, May 2013 National Industry-Specific Occupational Employment and Wage Estimates for NAICS 221100 - Electric Power Generation, Transmission and Distribution (part of NAICS 221000 – Utilities). The approximate labor rates are \$40.03 per hour for technical (architecture and engineering occupations), \$59.44 per hour for managerial (management occupations), and \$22.49 per hour for clerical (office and administrative support occupations). The labor rates from BLS were multiplied by an overhead multiplier of 110 percent to estimate loaded labor rates of \$84.06 per hour for technical, \$124.82 per hour for managerial, and \$47.23 per hour for clerical.

(ii) *Estimating Annualized Capital Costs*

There are no annualized capital costs associated with this ICR.

(iii) *Estimating O&M Costs*

The annual O&M costs associated with this ICR are the costs associated with the data acquisition system upgrade to accommodate reporting of net energy output rate based emissions. Exhibit 1a presents this one-time cost and Exhibit 1c presents the nationwide 3-year average annual O&M cost.

(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 part 60 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 the EPA's overall compliance and enforcement program, and, therefore, is not attributable to the ICR. The only costs that the Federal government could incur are user costs associated with the analysis of the reported information. The Federal government would not incur those costs as a result of these proposed standards.

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

Although not anticipated, if an EGU were to modify or reconstruct over the 3-year period of the ICR, it would become subject to the proposed regulation. For one modified or reconstructed EGU, the total annual number of responses for the new monitoring, recordkeeping, and reporting requirements in proposed subpart TTTT over the 3-year ICR period is estimated to be 13. The average number of annual responses over the 3-year ICR period is 4.33 per year.

The overall annual public reporting and recordkeeping burden for this collection of information is estimated to average 47.3 hours per response. This average reflects 8.25 hours per response for preparation and submittal of each quarterly summary report and 516 hours for the one-time development of a monitoring system for net energy output. The total annual labor burden over the 3-year ICR period is estimated to be 615 person hours. The average annual labor burden for the rule is estimated to be 205 person hours per year.

The total annual labor costs over the 3-year ICR period are estimated at \$51,650. The average annual labor costs to industry over the 3-year period of this ICR are estimated to be \$17,217 per year.

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

There are no annualized capital costs associated with this ICR. The one-time O&M cost of the data acquisition system upgrade to accommodate reporting of net energy output rate based emissions is approximately \$500. The average annual O&M cost associated with this ICR is, therefore, approximately \$167. The bottom line labor hours and costs burden for the 3-year ICR

period appear in Exhibits 1a and 1b, with the average annual labor hours and costs presented in Exhibit 1c.

*(f) Reasons for Change in Burden.*

The increase in burden is due to this being a new ICR that estimates burden associated with proposed standards for modified and reconstructed EGUs.

*(g) Burden Statement*

The average annual labor-hour burden for the rule is estimated to be 205 person hours per year and the average annual labor costs are estimated to be \$17,217 per year. There are no annualized capital costs associated with this ICR. The average annual O&M costs associated with this ICR are estimated to be approximately \$167. 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 60 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-2013-0603, which is available for online viewing at [www.regulations.gov](http://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](http://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 the EPA Docket ID Number EPA-HQ-OAR-2013-0603 in any correspondence.

**PART B**

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

**Exhibit 1a. Year 1 Respondent Burden and Cost of Reporting and Recordkeeping Requirements, NSPS for GHG Emissions for Modified and Reconstructed EGUs (40 CFR part 60, subpart TTTT)**

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 x .79)	(F) Managerial Hours/Year (C x D x .09)	(G) Clerical Hours/Year (C x D x .12)	(H) Cost/ Year
<b>REPORTING REQUIREMENTS</b>								
Develop monitoring system for net energy output <sup>a,b</sup>	516	1	516	1	516			\$43,400
Prepare/Submit Summary Report Includes reporting of excess emissions & downtime	8.25	4	33	1	26	3	4	\$2,750
TOTAL ANNUAL LABOR BURDEN AND COST		4		1	542	3	4	\$46,150
						549	Hours	
<b>AVERAGE ANNUALIZED COSTS (O&amp;M)</b>								
Data acquisition system upgrade <sup>c</sup>								\$500

<sup>a</sup> Includes the one-time development of a monitoring system (including metering hardware and software engineering) to monitor, calculate, and report hourly net energy output into the ECMPS; incurred in Year 1.

<sup>b</sup> Burden hours based on 1 FTE per facility per month for 3 months to develop the monitoring system; with a wage rate of \$84.06 per hour, the cost is estimated to be \$43,400 per facility. No managerial or clerical labor is involved (assume 100 percent Technical labor).

<sup>c</sup> One-time cost; incurred in Year 1.

**Exhibit 1b. Years 2 and 3 Respondent Burden and Cost of Reporting and Recordkeeping Requirements, NSPS for GHG Emissions for Modified and Reconstructed EGUs (40 CFR part 60, subpart TTTT)**

Years 2 and 3	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year	(E) Technical Hours/Yea r (C x D x .79)	(F) Managerial Hours/Year (C x D x .09)	(G) Clerical Hours/Yea r (C x D x .12)	(H) Cost/ Year
REPORT REQUIREMENTS								
Prepare/Submit Summary Report Includes reporting of excess emissions & downtime	8.25	4	33	1	26	3	4	\$2,750
TOTAL ANNUAL LABOR BURDEN AND COST		4		1	26	3	4	\$2,750
						33	Hours	

**Exhibit 1c. Summary of Respondent Burden and Cost of Reporting and Recordkeeping Requirements, NSPS Emission Guidelines for GHG Emissions for Modified and Reconstructed EGUs (40 CFR part 60, subpart TTTT)**

Totals	Annual Labor Burden (Hours)	Annual Labor Costs	Annualized Capital Costs	Annual O&M Costs	Annualized Costs
3-Year Total	615	\$51,650	\$0	\$500	\$500
Average Annual	205	\$17,217	\$0	\$167	\$167
Average Annual per Respondent	205	\$17,217	\$0	\$167	\$167