Environmental Protection Agency

40 CFR Parts 51, 60, 62, 63, 72, 78, 96, and 97

[7710–7817 Filed 4–24–07; 8:45 am]

Revisions to Definition of Cogeneration Unit in Clean Air Interstate Rule (CAIR), CAIR Federal Implementation Plan, Clean Air Mercury Rule (CAMR), and CAMR Proposed Federal Plan; Revision to National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; and Technical Corrections to CAIR and Acid Rain Program Rules

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: In 2005, EPA finalized the Clean Air Interstate Rule (CAIR) to address emissions of nitrogen oxides (NOx) and sulfur dioxide (SO2) and the Clean Air Mercury Rule (CAMR) to establish standards of performance for mercury (Hg) for coal-fired electric utility steam generating units. Both CAIR and CAMR include model cap-and-trade rules that states may adopt to meet the applicable requirements. In 2006, EPA finalized the Federal Implementation Plan (FIP) for CAIR and also proposed a Federal Plan for CAMR. All four rules include an exemption for certain cogeneration units. To qualify for this exemption, a unit must, among other things, meet an efficiency standard included in the cogeneration unit definition. Today, in light of information concerning existing biomass-fired cogeneration units that may not qualify for the exemption, EPA is proposing a change in the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, the CAIR FIP, CAMR, and the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan. Specifically, EPA is proposing to revise the efficiency standard in the cogeneration unit definition so that the standard would apply, with regard to certain units, only to the fossil fuel portion of a unit’s energy input. This change to the CAIR model cap-and-trade rules, CAIR FIP, CAMR, and proposed CAMR Federal Plan would likely make it possible for some additional units to qualify for the cogeneration unit exemption in these rules. Because it would only affect a small number of relatively low emitting units, this would have little effect on the projected emissions reductions and the environmental benefits of these rules. EPA is also considering revisions to the definition of “total energy input,” a term used in the efficiency standard. This action also proposes minor technical corrections to CAIR and the Acid Rain Program rules. Finally, this action proposes minor revisions to National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (“boiler MACT”).

DATES: Comments. Comments must be received on or before June 11, 2007. If requested by May 7, 2007, a public hearing will be held on May 10, 2007 in Washington, DC. For additional information on a public hearing, see the SUPPLEMENTARY INFORMATION section of this preamble.

ADDRESSES: Submit your comments, identified by Docket ID Number EPA–HQ–OAR–2007–0012, by one of the following methods:


B. E-mail: A-AND-R-Docket@epa.gov


D. Hand Delivery: EPA Docket Center, 1301 Constitution Avenue, NW., Room 3334, 1301 Constitution Avenue, NW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: For information concerning the proposed changes, contact Elyse Steiner, Program Development Branch, Clean Air Markets Division (MC 6204J), EPA, Washington, DC 20460; telephone number (202) 343–9141; fax number (202) 343–2359; electronic mail address: Steiner.elyse@epa.gov.

SUPPLEMENTARY INFORMATION: Regulated Entities. Categories and entities potentially regulated by this action include the following:
This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This list contains examples of the types of entities EPA is now aware could potentially be regulated by this action. Other types of entities not listed could also be affected. To determine whether a facility that is regulated, carefully examine the applicability provisions and definitions in CAIR, the CAIR FIP, CAMR, and the proposed CAMR Federal Plan. All references related to applicability and definitions for these rules have been provided in a single list only once and will not be referenced again in this proposal to avoid unnecessary repetition.

As discussed below, the pulp and paper industry raised concerns regarding whether biomass-fired cogeneration units could meet the definition of “cogeneration unit”. The following table identifies NAICS codes for entities in the pulp and paper industry. This table is not intended to be exhaustive, but rather the table may help identify entities potentially affected by today’s action, although today’s action may affect entities in other industries in addition to pulp and paper.

### Examples of potentially regulated entities

<table>
<thead>
<tr>
<th>Category</th>
<th>NAICS code</th>
<th>Examples of potentially regulated entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal government</td>
<td>221112</td>
<td>Fossil fuel-fired electric utility steam generating units.</td>
</tr>
<tr>
<td>Federal government</td>
<td>221122</td>
<td>Fossil fuel-fired electric utility steam generating units owned by the Federal government.</td>
</tr>
<tr>
<td>State/local/Local government</td>
<td>221122</td>
<td>Fossil fuel-fired electric utility steam generating units owned by municipalities.</td>
</tr>
<tr>
<td></td>
<td>221150</td>
<td>Fossil fuel-fired electric utility steam generating units in Indian country.</td>
</tr>
</tbody>
</table>

1 North American Industry Classification System.

2 Federal, State, or local government-owned and operated establishments are classified according to the activity in which they are engaged.

If you have questions regarding the applicability of this action to a particular entity, contact your EPA Regional Office or EPA’s Clean Air Markets Division.

Worldwide Web. In addition to being available in the docket, an electronic copy of this action will also be available on the Worldwide Web through EPA’s Office of Air and Radiation. Following signature by the Administrator, a copy of this action will be posted on the CAIR and CAMR pages at [http://www.epa.gov/cair or http://www.epa.gov/camr](http://www.epa.gov/cair or http://www.epa.gov/camr).

Public Hearing. If requested, EPA will hold a public hearing on today’s proposed rule. EPA will hold a hearing only if a party notifies EPA by May 7, 2007, expressing its interest in presenting oral testimony on issues addressed in today’s proposed rule. Any person may request a hearing by contacting Elyse Steiner at (202) 343–9141 before 5 p.m. on May 7, 2007. If a public hearing is held on today’s notice, it will be held on May 10, 2007. Any person who plans to attend the hearing should visit the EPA’s Web site at [http://www.epa.gov/cair or http://www.epa.gov/camr](http://www.epa.gov/cair or http://www.epa.gov/camr) to learn if a hearing will be held, the location, and time that the hearing is scheduled to take place. Because the hearing will be held at a U.S. Government facility, everyone planning to attend should be prepared to show valid picture identification to the security staff in order to gain access to the meeting room.

The hearing, if held, will be limited to the subject matter of this document. Each commenter’s oral testimony will be limited to 5 minutes. EPA encourages commenters to provide written versions of their oral testimonies either electronically (on computer disk or CD ROM) or in paper copy. The public hearing schedule, including the list of speakers, will be posted on EPA’s Web site at [http://www.epa.gov/cair or http://www.epa.gov/camr](http://www.epa.gov/cair or http://www.epa.gov/camr). Verbatim transcripts and written statements will be included in the rulemaking docket.

A public hearing would provide interested parties the opportunity to present data, views, or arguments concerning issues addressed in today’s notice. EPA may ask clarifying questions during the oral presentations, but would not respond to the presentations or comments at that time.

Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at a public hearing.

Outline. The information presented in this preamble is organized as follows:

I. Background
   A. Summary of This Proposed Action
   B. Background on CAIR, the CAIR FIP, CAMR, and the Proposed CAMR Federal Plan
   C. Applicability to Cogeneration Units
   D. Reason for Proposing a Change for Cogeneration Units

II. EPA’s Proposed Action and Its Impacts
   A. Proposed Change for Cogeneration Units
   B. Emissions Impact of Proposed Action
   C. State Emissions Budgets
   D. Impact of Proposed Action on CAIR and CAMR Implementation

III. Minor Corrections to CAIR and the Acid Rain Program Regulations and Minor Revisions to the Boiler MACT
   A. CAIR and the Acid Rain Program Regulations
   B. Boiler MACT

IV. Statutory and Executive Order Reviews
   A. Executive Order 12866: Regulatory Planning and Review
   B. Paperwork Reduction Act
   C. Regulatory Flexibility Act
   D. Unfunded Mandates Reform Act
   E. Executive Order 13132: Federalism
   F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

60.202, 60.204, 60.302, and 60.304; for the CAIR FIP, 40 CFR 97.102, 97.104, 97.202, 97.204, 97.302, and 97.304; for CAMR, and the CAIR model cap-and-trade rule, 40 CFR 60.24(h)(8), 60.4102, and 60.4104; and for the proposed CAMR Federal Plan, Proposed §62.15902 and §62.15904.

60.4104; and for the proposed CAMR Federal Plan, Proposed §62.15902 and §62.15904.
power plus one-half of useful thermal energy output of the unit must equal no less than a certain percentage of the total energy input or, in some cases, useful power must be no less than a certain percentage of total energy input. If a unit meets the definition of cogeneration unit including the efficiency standard, then the unit may qualify for the exemption in these rules depending on whether it meets additional criteria concerning the amount of electricity sales from the unit. The efficiency standard is applied to all energy input to the unit regardless of fuel type. The criteria for qualifying as a cogeneration unit are discussed in more detail below.

On August 4, 2006 EPA published a Notice of Data Availability for EGU NO\textsubscript{x} Annual and NO\textsubscript{x} Ozone Season Allocations for the Clean Air Interstate Rule Federal Implementation Plan Trading Programs (CAIR FIP NODA) (71 FR 44283). During the period for submitting objections concerning the CAIR FIP NODA, EPA received information concerning the application of the efficiency standard in the cogeneration unit definition (as defined in the CAIR FIP) to biomass-fired cogeneration units and a request to extend the period for objections. Subsequently, EPA extended the period for objections—only for objections related to biomass cogeneration units—to February 20, 2007 (72 FR 9695). The period had previously been extended to October 5, 2006 for all objections and further extended to January 3, 2007 for objections concerning existing biomass cogeneration units. Certain biomass cogeneration unit owners and operators requested additional time to submit objections because of difficulties collecting information relating to the application of efficiency standards for cogeneration units (as defined in the CAIR FIP) to biomass cogeneration units. EPA is treating the information that the Agency received concerning the application of the efficiency standard in the cogeneration unit definition to biomass-fired cogeneration units as a request for rulemaking to change the efficiency standard in the cogeneration unit definition and, in light of that information, is proposing today to revise the efficiency standard in the cogeneration unit definition in the CAIR model cap-and-trade rules, the CAIR FIP, CAMR, and the CAMR model trading rules, so that, in some cases, energy input from only fossil fuel would be included in the efficiency calculation. The proposed revised cogeneration unit definition is discussed in more detail in section II of today’s preamble, below.

The category of units addressed by today’s proposal (existing biomass cogeneration units, as discussed further below) was brought to our attention by the pulp and paper industry. EPA requests comment on whether existing biomass cogeneration units in other identifiable industries, or cogeneration units burning other identifiable types of non-fossil fuels besides biomass, may have characteristics similar to those of existing biomass cogeneration units in the pulp and paper industry and would also be impacted by the proposed rule change.

As discussed below, in today’s action, EPA is requesting comment only on the efficiency standard in the cogeneration unit definition as applied to biomass cogeneration units and related definitions, on the definition of “total energy input” related to the efficiency standard as applied to all cogeneration units, on the minor technical corrections to CAIR and the Acid Rain Program Regulations, and on the minor revisions to the boiler MACT. We are not requesting or accepting comments on other parts of CAIR, the CAIR model trading rules, the CAIR FIP, CAMR, the CAMR model trading rule, or the CAMR Federal Plan proposal or reopening any issues decided in those actions for reconsideration or comment.

As discussed further in section II of today’s preamble, EPA estimated the total amount of NO\textsubscript{x}, SO\textsubscript{2}, and Hg emitted from units that might be affected by the proposed change to the cogeneration unit definition (i.e., units that may not be able to meet the efficiency standard as written and that are likely to be able to meet the standard if changed as proposed) and found that the estimated emissions for this group of units to be very small compared to the size of the overall emission caps in CAIR and CAMR.

This action also proposes minor technical corrections to CAIR and the Acid Rain Program rules. Finally, this action proposes minor revisions to National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (“boiler MACT”).

B. Background on CAIR, the CAIR FIP, CAMR, and the Proposed CAMR Federal Plan

CAIR and the CAIR FIP

On May 12, 2005, EPA published CAIR as a final rule entitled, “Rules to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain
Program; Revisions to NO\textsubscript{2} SIP Call” (70 FR 25162). CAIR requires reductions of NO\textsubscript{X} and/or SO\textsubscript{2} emissions that contribute significantly to nonattainment and maintenance problems in downwind States with respect to the national ambient air quality standards for fine particulate matter (PM\textsubscript{2.5}) and 8-hour ozone to be made across 28 eastern States and the District of Columbia. The reductions are required in two phases. The first phase of NO\textsubscript{X} reductions starts in 2009 (covering 2009–2014) and the first phase of SO\textsubscript{2} reductions starts in 2010 (covering 2010–2014); the second phase of reductions for both NO\textsubscript{X} and SO\textsubscript{2} starts in 2015 (covering 2015 and thereafter).

States must develop State Implementation Plans (SIPs) to achieve the emission reductions required by CAIR and have flexibility to determine what measures to adopt to achieve the necessary reductions and which sources to control. One option is to control certain electric generating units. In CAIR, EPA provided model SO\textsubscript{2} and NO\textsubscript{X} cap-and-trade programs, covering fossil-fuel-fired electric generating units that States can choose to adopt to meet the emission reduction requirements in a flexible and highly cost-effective manner.

On April 28, 2006, EPA published the FIP for CAIR as part of a final rule entitled, “Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plan To Reduce Interstate Transport of Fine Particulate Matter and Ozone: Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program” (71 FR 25328). The CAIR FIP was promulgated for all 28 States and the District of Columbia covered by CAIR and will ensure that the required emission reductions are achieved on schedule. As the control strategy for the FIP, EPA adopted the model SO\textsubscript{2} and NO\textsubscript{X} cap-and-trade programs for electric generating units that EPA provided in CAIR as a control option for States, with minor changes to account for Federal, rather than State, implementation. EPA intends to withdraw the FIP for any State in coordination with approval of that State’s SIP that meets the CAIR requirements.

CAMR and the Proposed CAMR Federal Plan

On May 18, 2005, EPA published the CAMR as a final rule entitled, “Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units; Final Rule” (70 FR 28606). CAMR established standards of performance for mercury for new and existing coal-fired electric generating units and requires mercury reductions nationwide. The reductions are required in two phases. The first phase starts in 2010 (covering 2010–2017); the second phase starts in 2018 (covering 2018 and thereafter).

States must develop State Plans to achieve the mercury emission reductions required by CAMR and have flexibility to determine what measures to adopt to achieve the necessary reductions. Unlike CAIR, under which States may choose which sources to control, CAMR requires that States control mercury emissions from coal-fired electric generating units. In CAMR, EPA provided a model Hg cap-and-trade program covering coal-fired electric generating units that States can choose to adopt to meet the emission reduction requirements.

On December 22, 2006, EPA published a proposed Federal Plan for CAMR in a proposed rule entitled, “Revisions of Standards of Performance for New and Existing Stationary Sources; Electric Utility Steam Generating Units; Federal Plan Requirements for Clean Air Mercury Rule; and Revisions of Acid Rain Program Rules” (71 FR 77100). The CAMR Federal Plan was proposed to implement the standards of performance for coal-fired electric generating units located in all States, the District of Columbia, and Indian Country covered by CAMR (see 40 CFR 60.24(h)(1) listing the jurisdiction covered by CAMR) to ensure that the required emission reductions are achieved on schedule. As the control strategy for the Federal Plan, EPA proposed to adopt the model Hg cap-and-trade program for coal-fired electric generating units that EPA provided in CAMR as a control option for States, with minor changes to account for Federal, rather than State, implementation.

With certain exceptions, the CAIR model cap-and-trade rules and the CAIR FIP apply to large fossil-fuel fired electric generating units with certain exceptions. The CAMR and the proposed CAMR Federal Plan apply to large coal-fired electric generating units with certain exceptions. The CAIR model cap-and-trade rules, CAIR FIP, CAMR and proposed CAMR Federal Plan all provide that certain units meeting the definition of a “cogeneration unit” may be excluded from the definition of “electric generating unit” and therefore exempt from the requirements of the rule (These rule provisions are commonly referred to as the cogeneration unit exemption). The cogeneration unit exemption is effectively the same under all of these rules. In order to fall within the definition of cogeneration unit under these rules, a unit must meet a specified efficiency standard, i.e., the useful power plus one-half of useful thermal energy output of the unit must equal no less than a certain percentage of the total energy input or, in some cases, useful power must be no less than a certain percentage of total energy input.

If a unit meets the definition of cogeneration unit including the efficiency standard, then it may qualify for the cogeneration unit exemption in these rules depending on whether it meets additional criteria concerning the amount of electricity sales from the unit. The efficiency standard in the cogeneration unit definition is applied to all energy input to the unit regardless of fuel type.

In order to qualify for the cogeneration unit exemption in these rules, the cogeneration unit must meet the following electricity sales criteria: A cogeneration unit qualifies for the exemption if the unit supplies in any calendar year no more than ½ of its potential electric output capacity of 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

CAIR and the CAIR FIP

With certain exceptions, the CAIR model cap-and-trade rules and the CAIR FIP cover any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit’s combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
Similarly, CAIR refers to such units as electric generating units.

CAIR, the CAIR model cap-and-trade rules, and the CAIR FIP define “cogeneration unit” as a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

1. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

2. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity—

(i) For a topping-cycle cogeneration unit,\(^4\)

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle cogeneration unit,\(^5\) useful power not less than 45 percent of total energy input.

CAMR and the Proposed CAMR Federal Plan

With certain exceptions, CAMR defines electric generating unit (EGU) as a stationary, coal-fired boiler or stationary, coal-fired combustion turbine in the State serving at any time, since the later of November 15, 1990 or the start-up of a unit’s combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale. An Hg Budget unit is an EGU that is subject to the requirements of the CAMR Hg Budget Trading Program under a State Plan approved by the Administrator as consistent with EPA’s model Hg trading rule or under the proposed CAMR Federal Plan.

The definition of “cogeneration unit” in CAMR, the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan is identical to the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, and the CAIR FIP, except that the definition in the CAMR and related rules refers to stationary, coal-fired boilers or stationary, coal-fired combustion turbines where the definition in the CAIR-related rules refers to stationary, fossil-fuel-fired boilers or stationary, fossil-fuel-fired combustion turbines.

If a unit meets the criteria concerning service of a generator (and so would otherwise be an electric generating unit) but qualifies as a cogeneration unit, then the unit may be excluded from the definition of electric generating unit in CAIR, or excluded from that definition and the regulatory requirements of the CAIR model cap-and-trade rules, the CAIR FIP, CAMR and the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan. In order to qualify for this exemption under these rules, the cogeneration unit must meet certain criteria concerning electricity sales from the unit. Specifically, as discussed above, a cogeneration unit qualifies for the exemption if the unit supplies in any calendar year no more than \(\frac{1}{3}\) of its potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

D. Reason for Proposing a Change for Cogeneration Units

The purpose of the efficiency standard in the cogeneration unit definition is to prevent a potential loophole where a unit might send only a nominal or insignificant amount of thermal energy to a process and not achieve significant efficiency gains through cogeneration, but still qualify as a cogeneration unit and potentially be excluded from the EGU definition, or from the applicability provisions, under the CAIR and CAMR and related rules.

During the period for submitting objections concerning the CAIR FIP NODA, EPA received information that suggested to EPA that the efficiency standard in the definition of cogeneration unit should be revised. The information concerns the application of the efficiency standard to biomass-fired cogeneration units and says that the existing rule “unfairly penalizes co-generation units that burn significant amounts of biomass.” The information indicates that many biomass cogeneration units may be unable to meet the efficiency standard because “biomass, when burned as a fuel, has a lower thermal efficiency for conversion to steam than fossil fuels, such as coal, oil and natural gas.”

Previously, in developing CAIR, EPA indicated that it expected “most back pressure units burning \(\ast\ast\ast\) biomass to meet the efficiency standard” (see Technical Support Document (TSD) for CAIR on Cogeneration Unit Efficiency Calculations). The Agency believed at the time that most existing biomass cogeneration units would meet the efficiency standard, and thus would be potentially exempt cogeneration units. EPA now is re-examining whether the efficiency standard is appropriate for all biomass-fired cogeneration units.

EPA believes that the vast majority of existing biomass cogeneration units are operated by the pulp and paper industry.\(^6\) The biomass fuels typically fired by pulp and paper units are wood-based biomass and black liquor.\(^7\) Both biomass fuels have relatively high moisture content that prevents them from burning as efficiently as coal and other fossil fuels. The moisture content of these biomass fuels ranges from approximately 40 to over 60 percent. In comparison, the moisture content of bituminous coal is relatively low, less than 10 percent. Higher moisture content requires that more of the heating value of the fuel goes into evaporating that moisture during combustion. The evaporated moisture (and the heat used to evaporate it) escapes up the stack—subtracting from the efficiency of the unit. Therefore, the higher the moisture content in the biomass and the higher the proportion of biomass fuel used, the more difficult it will be for a unit to meet the efficiency standard in the cogeneration unit definition.

Conversely, the greater the amount of heat input from fossil fuels, the easier it is for a unit to meet the efficiency standard because of the reduced need for energy to heat and vaporize the moisture in the fuel.

Certain additional factors may also contribute to lower efficiencies for existing biomass cogeneration units in the pulp and paper industry.

\(\ast\ast\) The pulp and paper industry raised concerns regarding biomass cogeneration units during the period for objections to the CAIR FIP NODA.

\(\ast\) Black liquor is a byproduct of a pulpling process used to separate the wood fibers used in papermaking from lignin and other wood solids.
designed to use steam at 2,400 psig and 1,000 °F, whereas a turbine-generator in a pulp and paper plant might be using steam at conditions below 900 psig and 800 °F. These lower steam conditions reduce the efficiency of the overall cogeneration cycle, which was optimized for process needs, not for electric power generation. Moreover, many steam-turbine generators in the pulp and paper industry may have been installed by retrofit—a circumstance that may have exacerbated the problem because the boiler was designed before cogeneration by the unit was contemplated and thus before the impact of the design on thermal efficiency became a consideration.

In addition, existing biomass cogeneration units (boilers and steam turbines) in the pulp and paper industry generally are relatively small, and smaller units are typically less efficient than larger units. The existing smaller units generally do not incorporate high-efficiency design practices and their energy losses (such as radiation loss for a boiler and mechanical loss for a turbine-generator set) per unit of energy input are inherently higher. The combination of relatively high fuel moisture content and small boiler size results in efficiencies as low as 60 percent for the biomass boiler itself, compared to typical large fossil fuel-fired boiler efficiencies ranging to above 85 percent.

In summary, EPA believes that existing biomass cogeneration units as a group have a particular set of characteristics that together may make it difficult for many units to meet the efficiency standard in the cogeneration unit definition unless the units co-fire significant amounts of fossil fuel, such as coal. These characteristics are: Fuels with relatively high moisture content, units designed for relatively low pressure and temperature conditions for industrial processes, and relatively small boilers and steam turbines that are inherently less efficient due to their size. EPA recognizes that there are some existing biomass cogeneration units (e.g., those that co-fire coal, natural gas, or oil for a large portion of their heat input) that might be able to meet the efficiency standard, as discussed in the following section.

The cogeneration unit definition finalized in the CAIR model cap-and-trade rules, the CAIR FIP, CAMR, and in the proposed CAMR Federal Plan, includes all energy input in the efficiency calculation. EPA believes that the inclusion of energy input from all fuels—other than from fossil fuels only—has the unanticipated and unintended consequence of making it very difficult for existing biomass cogeneration units to qualify as cogeneration units unless they co-fire significant amounts of fossil fuel, such as coal. Preventing these existing units from qualifying as cogeneration units is not consistent with the purposes of the efficiency standard. These units were originally designed to and still do produce significant amounts of useful thermal energy (relative to their total energy output) and achieve efficiency gains over non-cogeneration units. Under these circumstances, application of the currently written efficiency standard to existing biomass cogeneration units does not seem to promote the purposes of the standard. In addition, application of this standard as written has the paradoxical result that existing biomass cogeneration units burning greater amounts of coal (therefore likely having greater emissions) are much more likely to meet the efficiency requirement and thus qualify as cogeneration units exempt from emission limits under the CAIR model cap-and-trade programs and CAMR model cap-and-trade rule, while existing biomass cogeneration units burning less coal (therefore likely having lower emissions) are less likely to meet the requirement and qualify for the exemption.

For these reasons, EPA is proposing to revise the efficiency standard in the cogeneration unit definition such that energy input from only the fossil fuel portion of the input would be included in the efficiency calculation for existing units. The proposed change is discussed in more detail below.

II. EPA’s Proposed Action and Its Impacts
A. Proposed Change for Cogeneration Units

EPA is proposing today to revise the efficiency standard in the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, the CAIR FIP, CAMR, and the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan, to permit existing boilers to include only energy input from fossil fuel in the efficiency calculation rather than energy input from all fuels. This change would make it more likely that existing units burning biomass and cogenerating electricity and useful thermal energy could meet the efficiency standard and qualify as exempt cogeneration units under these rules. EPA proposes to change the cogeneration unit efficiency standard for boilers but not for combustion turbines because combustion turbines generally do not fire biomass. The proposed methodology for determining thermal efficiency of a cogeneration unit under a revised efficiency standard is set forth in detail in the Technical Support Document (TSD) that accompanies this notice.

Further, EPA requests comment on whether the efficiency standard in the cogeneration unit definition should be revised to include language explaining how to calculate a unit’s “total energy input” or alternatively, whether the definition of “total energy input” itself should be revised. As discussed in the TSD, EPA recognizes that there may be alternative formulas for calculating a unit’s total energy input, which is a critical value in determining its efficiency under either the existing or any revised efficiency standard. EPA requests comment on the TSD, including the methodology for determining efficiency and the formula for calculating total energy input. EPA also asks for comments on whether to revise the efficiency standard or revise the definition of “total energy input” currently in CAIR, the CAIR model cap-and-trade rules, the CAIR FIP, CAMR, and CAMR Hg model cap-and-trade rule, and the proposed CAMR Federal Plan in order to specify the formula that should be used to calculate a unit’s total energy input.

EPA proposes to change the efficiency standard only for existing units because the Agency believes that units built in the future to cogenerate electricity and useful thermal energy (regardless of the percentage of heat input from biomass) can be designed to meet the efficiency standard as currently written. EPA proposes to change the efficiency standard only for units whose construction commenced on or before April 25, 2007 and units with equipment used in cogenerating where construction of such equipment commenced on or before April 25, 2007. If a unit that commenced construction on or before April 25, 2007 was not designed for cogeneration but is retrofitted for and commences cogeneration after that date, EPA proposes that such a unit be treated the same as a new cogeneration unit and so would be covered by the existing efficiency standard. EPA believes that with the proper planning and design decisions, these units are capable of operating more efficiently than those built before the efficiency standard became a consideration (i.e., on or before April 25, 2007). Retrofits can make use of available technology such as back pressure turbines that allow the unit to operate at higher efficiency, install equipment upgrades, and select adequate steam and temperature
conditions. Further, these units are likely to have higher utilization after they commence cogeneration because they will get higher returns on investments by running the units more to make electricity for use on site, purchasing less electricity and/or selling some electricity to the grid. The increased utilization likely will result in greater emissions. Therefore, they should either be covered by the requirements of the cap-and-trade programs or operate efficiently enough to qualify for the cogeneration unit exemption.

The Agency proposes a new definition of the term “construction commenced” (see proposed regulatory text at end of preamble). The proposed definition is based on, and essentially combines, the definitions of “commenced” and “construction” in 40 CFR 60.2 (Standards of Performance for New Stationary Sources). As an alternative, EPA requests comment on using, as a basis for the new definition, the definition of “commence” in 40 CFR 52.21(b)(10) (Prevention of Significant Deterioration of Air Quality) and the definition of “construction” in 40 CFR 60.2. While the definition of “commenced” in 40 CFR 60.2 requires that the owner or operator start or be contractually obligated to start and complete within a reasonable time a continuous program of construction, the definition of “commence” in 40 CFR 52.21 is narrower and, for example, requires either the start of on-site (e.g., not just off-site construction of equipment) or a contractual obligation that cannot be cancelled or modified without substantial loss to the owner or operator.

The proposed revision to the cogeneration unit definition would apply only to boilers where construction of the unit and of its cogeneration equipment commenced on or before the above-referenced cut-off date and would have the effect of applying the following definition to such boilers (see also proposed regulatory text): Cogeneration unit means a stationary, fossil-fuel-fired boiler (for the CAIR model rules and the CAIR FIP) or stationary, coal-fired boiler (for CAMR and the proposed CAMR Federal Plan):

(1) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
(2) Producing during the 12-month period starting on the date the unit first produces electricity in which the unit first produces electricity—

(i) For a topping-cycle cogeneration unit:

(A) Useful thermal energy not less than 5 percent of total energy output; and
(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input from fossil fuel, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input from fossil fuel, if useful thermal energy produced is less than 15 percent of total energy output.

(ii) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input from fossil fuel.

This revised definition would not apply to boilers failing to meet the commence construction requirements. For such units the cogeneration unit definition—and the efficiency standard in particular—would remain as finalized in the CAIR model rules, the CAIR FIP and CAMR, and in the proposed CAMR Federal Plan.

Nor would the revised definition apply to combustion turbines. For combustion turbines (regardless of their commence construction dates) the cogeneration unit definition—and the efficiency standard in particular—would remain as finalized in the CAIR model rules, the CAIR FIP and CAMR, and in the proposed CAMR Federal Plan.

However, as discussed above, EPA is also requesting comment on revising the efficiency standard, or the definition of “total energy input,” to specify the formula for calculating a unit’s total energy input. Any such revision would be applicable in determining the efficiency of all units under the cogeneration unit definition whether or not the units are biomass cogeneration units that would be covered by a limitation on the categories of fuel included in determining energy input. Although EPA proposes to revise the cogeneration unit definition only for boilers where construction of the units and their cogeneration equipment commenced on or before April 25, 2007, the Agency requests comment on the choice of the cut-off date for the revised cogeneration unit definition, whether any specific, different cut-off date should be used, and whether the cogeneration unit definition should be revised for all units regardless of their commence construction dates.

Additionally, EPA requests comment on not changing the cogeneration unit definition at all.

EPA also requests comment on an alternative proposal that would revise the efficiency standard in the cogeneration unit definition to specifically exclude heat input from biomass fuel, rather than revising the standard to include heat input from fossil fuel only. This alternative proposal would narrowly limit the exclusion of heat input to the non-fossil fuel (i.e., biomass) whose high moisture content, combined with the other factors discussed above (e.g., relatively low pressure and temperature unit design conditions and relatively small boilers and steam turbines), would be the basis for EPA’s proposed exemption. The heat input from other non-fossil fuels (e.g., non-fossil-fuel process gases) that lack the same level of moisture and that may not be predominantly used in these types of units would not be excluded from the efficiency calculation. This would avoid expanding the cogeneration unit exemption to units that cogenerate but lack the unique combination of characteristics on which EPA proposes to base the exemption.

The efficiency calculation would be based on total energy input excluding input from biomass fuel. EPA requests comment on using the following definition of the term “biomass” in 26 U.S.C. 48B(c)(4), which was added to the Internal Revenue Code by Section 1307 of the Energy Policy Act of 2005 (Pub. L. 109–58), for purposes of the alternative proposed revision to the efficiency standard:

Biomass means:

(1) Any agricultural or plant waste;
(2) Any byproduct of wood or paper mill operations, including lignin in spent pulping liquors; and
(3) Any other products of forestry maintenance.

Provided that the term ‘Biomass’ does not include paper that is commonly recycled.

The Agency also requests comment on whether a different definition of biomass should be used for this alternative proposal.

B. Emissions Impact of Proposed Action

EPA analyzed the emissions impact of this proposed action using the methodology explained below. For this analysis, EPA used Energy Information Administration (EIA) data because detailed EPA data was not available. Most units potentially affected by today’s proposed rule change have not been required to report to EPA in the past under existing programs such as the Acid Rain Program or the NOX SIP Call. While EPA has data about many of these sources as part of the National Emission Inventory (NEI), the NEI does not provide information at the unit level necessary to determine if units are
cogenerating or selling electricity to the grid. Therefore, NEI data is not sufficient to make estimates regarding which units might be affected by today’s proposed rule change. We used EIA data to determine which units would potentially be affected and to estimate the potential impacts of the proposed change.

For the CAIR model rules and the CAIR FIP, we generated a list of biomass cogeneration units that serve generators with nameplate capacity greater than 25 MW in CAIR states. We assumed that all of these units could potentially be included in the CAIR and CAIR FIP trading programs because any biomass unit might use fossil fuel for start-up, combustion stabilization, or enhancement of electricity and steam production. From this list we removed units that reported to EIA that they do not have the ability to sell power to the grid; we assumed that these units would not be affected by the proposed revision to the cogeneration unit definition because they are not producing electricity for sale and would not be potentially included in the CAIR and CAIR FIP trading programs. We also removed from the list some units that reported having the ability to sell power to the grid; because their historical electricity sales data reported to EIA indicated sales above the threshold in the cogeneration unit definition (i.e., more than 1/3 potential electric output capacity or 219,000 MWh supplied to a utility power generation system for sale), we assumed these units would not qualify for the cogeneration unit exemption even with the proposed revision of the cogeneration unit definition. For the remaining units on the list, based on fuel use data from EIA and assumed performance of the units with various fuels, we analyzed whether these units are likely to meet the efficiency standard in the cogeneration unit definition as currently written. We removed from the list any units that our analysis indicated are likely to meet the efficiency standard as written because their status under the CAIR model cap-and-trade rules or the CAIR FIP would not be affected by the proposed change.

After taking the above steps, the remaining units on the list are ones that may be affected by the proposed rule change, i.e., units that we assumed would not be exempt from state rules incorporating the CAIR model trading rules or the CAIR FIP trading programs as written, but that could become exempt if the proposed rule change is finalized as proposed. We estimated annual NOX and SO2 emissions from this remaining group of units. See Table II–1.

For CAMR and the proposed CAMR Federal Plan, using EIA data we generated a list of cogeneration units burning both coal and biomass that serve a generator with nameplate capacity greater than 25 MW in CAMR states, i.e., nationwide. Then we took the same steps as described above for the CAIR analysis, with the remaining units being ones that may be affected by the proposed rule change, i.e., units that we assumed would not be exempt from CAMR or the CAMR Federal Plan as written but may become exempt with the proposed rule change. We estimated annual NOX emissions from this remaining group of units. See Table II–1.

As shown in the table, emissions from units whose status under the CAIR model rules or the CAIR FIP may be affected by the proposed rule change are estimated to be on the order of 25,000 tons per year for both NOX and SO2. These emissions are quite small compared to the size of the regionwide emission caps under CAIR, which are 1.5 and 1.3 million tons of NOX for the first and second phases of the annual NOX program, respectively, and 3.7 and 2.6 million tons of SO2 for the first and second phases of the SO2 program, respectively (i.e., for NOX, about 1.6 percent of the phase I cap and 1.9 percent of the phase II cap, and for SO2 about 0.6 percent of the phase I cap and 0.9 percent of the phase II cap). As shown in the table, emissions from the group of units whose regulatory status we assumed would change under this proposed rule change are less than emissions from the group of biomass cogeneration units who we assumed are already exempt from these rules because they can meet the efficiency standard as currently written.

EPA’s analysis also suggests that, on average, the estimated emissions per unit are lower from the group whose regulatory status we assumed would change compared to the group we assumed are already exempt from these rules because they can meet the efficiency standard. It is expected that emission rates at units burning proportionally more biomass—which is the group whose regulatory status we assumed would change—will generally be lower than emission rates at units burning less biomass.

It is important to note that EPA emissions estimates in Tables II–1 and II–2 are based on a rough estimate of the universe of units that might be affected by the proposed rule change. More detailed information for each unit is necessary in order to make a definitive determination as to whether the particular unit would be able to meet the efficiency standard as written or as proposed to be modified.

---

8 Analysis of electricity sales data was based on two years of data, 1999 and 2000.
Finally, units that might become exempt cogeneration units if today’s proposed rule changes are finalized may be required to make emission reductions under programs other than CAIR or CAMR. Federal requirements exist to protect areas of most concern, including Best Available Retrofit Technology (BART) requirements for sources in proximity to specially protected Class 1 areas. A review of available information indicates that the majority (about two-thirds) of the cogeneration units that may be affected by the proposed rule change may be required to install NOx and SO2 controls in response to BART requirements. It is also likely that biomass cogeneration units that co-fire coal that may become exempt units under today’s proposed rule change will be required to comply with the boiler MACT requirements, which include mercury emission limits.

C. State Emissions Budgets

EPA does not propose to change the NOx, SO2, or Hg State emission budgets under CAIR and CAMR. As discussed above, the estimated amount of emissions from units potentially affected by today’s proposed action is minimal compared to the size of the applicable regionwide (CAIR) and nationwide (CAMR) caps.

In addition, States have made significant progress toward the implementation of CAIR and CAMR based on the emission budgets that were established in those rules. Proposing and finalizing revised State emission budgets would take substantial effort by many States and EPA and considerably delay CAIR and CAMR implementation in order to make slight reductions in emissions caps. The CAIR emission budgets are in 40 CFR 51.123(e)(2) and (q)(2) and 51.124(e)(2) and CAMR emission budgets are in 40 CFR 60.24(h)(3). Discussion of development of the CAIR and CAMR State emission budgets are in 70 FR 25162 and 70 FR 28606, respectively.

The Agency also seeks comment on changing the budgets to reflect this change in the definition of cogeneration unit.

D. Impact of Proposed Action on CAIR and CAMR Implementation

The Agency recognizes that States have made significant progress toward the implementation of CAIR and CAMR and that finalizing this proposed change in the cogeneration unit definition and in the applicability provisions of the CAIR model rules and CAMR would require States to change CAIR SIPs and CAMR State Plans. If EPA finalizes today’s proposed rule change, we will carefully consider the timing of the regulatory action in relation to the implementation timeline. The Agency understands that there may be implementation concerns regarding today’s proposal and seeks comments on what those implementation concerns are. The Agency is particularly interested in comments regarding timing of this action in relation to implementation activities.

EPA realizes that some States may allocate allowances to cogeneration units that might be affected by today’s proposal before the proposal is finalized. If the proposal is finalized, some such units may no longer be required to hold allowances. The Agency believes that this could be addressed by the State’s SIP revision or State Plan. For example, the SIP revision or State Plan adopting revisions making some units exempt from the allowance-holding requirement could require the affected units to surrender their allocations for inclusion in the State’s new unit set-aside. If the State would require the unit to surrender their allocations, the SIP revision or State Plan should indicate how allowances would be handled. Note that a State could also choose not to require the units to surrender allowances even though the units were no longer covered by the rule. A State has flexibility to choose how it allocates allowances, although the allocations must be consistent with the State’s approved allocation methodology. EPA seeks comment on the potential impact of the revision of the cogeneration unit definition and the applicability provisions on the allowance allocation process.

EPA is also seeking comment on an alternative proposal whereby the Agency would modify the CAIR to allow States intending to join the EPA-administered CAIR trading programs to choose which cogeneration unit definition to use. The CAIR currently allows States to join the EPA-administered trading programs only if they adopt the model rules with limited modifications. Under this alternative proposal, EPA would change the cogeneration unit definition in the model trading rules, but allow States to join the EPA-administered trading programs even if they continued to use the existing cogeneration unit definition in the model trading rules. Thus, States could participate in the EPA-administered trading programs regardless of whether they choose to use the definition as currently written or any revised definition that may be finalized in this rulemaking. In the CAIR SIP, EPA would change the cogeneration unit definition as proposed today.

Under this alternative, a State that chose to use the cogeneration unit definition as currently written would not need to revise the definition in the State’s CAIR SIP. This could lead to slightly different applicability provisions among the States. EPA recognizes that some States may have laws that prohibit the State from having...
more stringent requirements than the requirements mandated by EPA (as discussed above, EPA believes that the proposed change would have only a slight impact on emissions). EPA seeks comment on whether this alternative would ease any implementation concerns. Although this alternative would provide an additional area of flexibility for States in the CAIR model cap-and-trade rules, EPA does not contemplate adding this flexibility to the abbreviated SIP revision option that was finalized in the CAIR FIP. If EPA changes the cogeneration unit definition in the CAIR FIP as proposed, States that chose to use an abbreviated SIP revision to allocate allowances under a FIP could modify their allocation method to accommodate the revised FIP cogeneration unit definition if they chose to do so.

EPA does not propose under this alternative that States could decide which definition of cogeneration unit to use for State Plans under CAMR, however, because CAMR specifies the category of units from which States must obtain emission reductions (coal-fired electric generating units as defined in the rule) in contrast to CAIR where States have flexibility in the choice of sources to control. The Agency seeks comment on whether this flexibility could or should be an alternative for CAMR State Plans. (In any case, EPA does not contemplate this alternative as an added flexibility for States to implement under the proposed CAMR Federal Plan.) Similar to States under the CAIR FIP, States may choose their allocation method for allowances under the CAMR proposed Federal Plan using a State allocation methodology.

III. Minor Corrections to CAIR and the Acid Rain Program Regulations and Minor Revisions to the Boiler MACT

A. CAIR and the Acid Rain Program Regulations

In addition to the above-described rule revisions, EPA is proposing certain minor corrections to CAIR, the CAIR model cap-and-trade rules, and the Acid Rain Program regulations. On April 28, 2006, EPA promulgated a final rule revising several definitions used in both the CAIR and in the CAIR model cap-and-trade rules. While the rule text in the April 28, 2006 final rule incorporated the revisions to the definitions in the CAIR model cap-and-trade rules, the final rule mistakenly did not also include rule text reflecting conforming changes to the definitions of the same terms in the CAIR. i.e., to the definitions for “Allocation or allocation”, “Combustion turbine”, “Nameplate capacity”, and “Maximum design heat input". EPA proposes in today’s action to implement these conforming changes in the definitions for these terms in §51.123(cc) and (q) and §51.124(q) for the reasons explained in that final action.

With regard to the CAIR model cap-and-trade rules, EPA is proposing a minor correction of the definition of “Permitting authority”, For all States subject to CAIR, this term is intended to include the agencies authorized to issue CAIR permits under the regulations approved by the Administrator for the EPA-administered CAIR cap-and-trade programs. Some States have incorporated by reference, or intend to incorporate by reference, the permitting provisions of the CAIR model cap-and-trade rules. However, many other States have promulgated, or intend to promulgate, their own permitting provisions concerning the processing and issuing of CAIR permits under the EPA-administered cap-and-trade programs. The existing definition refers only to permitting authorities issuing CAIR permits under the permitting provisions of the CAIR model cap-and-trade rules and not to permitting authorities governed by States’ own permitting provisions that may be approved into SIPs by the Administrator under CAIR. Today’s proposed correction—i.e., the elimination of the references, in the current “Permitting authority” definition, to subparts CC, CCC, and CCCC of the CAIR model cap-and-trade rules—would correct this technical problem.

With regard to the Acid Rain Program regulations, EPA is today proposing minor corrections to two parts of the regulations. In Part 72, EPA is proposing a non-substantive correction in wording in the Certificate of Representation requirements so that the provision would have the same wording as comparable provisions in the CAIR model cap-and-trade rules. This would facilitate using a single Certificate of Representation form for all of these trading programs. In Part 78, EPA is proposing corrections that would make it clear that the administrative appeals procedures apply to all final actions of the Administrator under the EPA-administered cap-and-trade programs whether the programs are governed by the CAIR model cap-and-trade rule provisions that many States are incorporating by reference or whether the programs are governed by the State’s own cap-and-trade rules approved by the Administrator.

B. Boiler MACT

EPA is also proposing in today’s action a change to clarify the provision in the boiler MACT that explicitly excludes from that rule “mercury budget units covered by 40 CFR part 60, subpart HH” (40 CFR 63.7491(c)). EPA intended to exclude from the boiler MACT all units subject to CAMR (i.e., all electric generating units (EGU’s) as defined in CAMR) and not just those units (i.e., Hg Budget units) that become subject to the EPA-administered Hg Budget Trading Program under 40 CFR part 60, subpart HHHH (see 71 FR 77109 explaining that EPA had amended the boiler MACT to exclude “units subject to CAMR”). All EGUs under CAMR, whether covered by a State Plan that adopts the Hg Budget Trading Program or that adopts other controls that meet CAMR requirements, are subject to the State EGU Hg budgets established by CAMR. In excluding EGUs from the boiler MACT, EPA did not intend to distinguish among EGUs based on whether the State in which an EGU is located is participating in the Hg Budget Trading Program.

Under today’s proposal, EGUs (i.e., Hg Budget units) in States participating in that program would continue to be excluded from the boiler MACT, and the regulatory language would be revised to include, in the exclusion, all EGUs covered by CAMR. In order to properly characterize all of the units that EPA originally intended to exclude, EPA proposes essentially to replace, in 40 CFR 63.7491(c), the term “Mercury Budget Unit” by the broader term “Electric Generating Unit”.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is not a “significant regulatory action” and is therefore not subject to review under the EO.

This action proposes relatively minor revisions to the definition of “cogeneration unit” in the CAIR model cap-and-trade rules, CAIR FIP, CAMR, including the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan. It also proposes some other minor, technical rule revisions to the CAIR, the Acid Rain Program, and the boiler MACT. For today’s action, EPA is relying on the economic analysis conducted for CAIR, CAMR, and the boiler MACT that are presented in the Regulatory Impact Analyses for those actions.
B. Paperwork Reduction Act

This action does not impose any new information collection burden. This action proposes relatively minor revisions to the definition of “cogeneration unit” in the CAIR model cap-and-trade rules, CAIR FIP, CAMR, including the model cap-and-trade rule, and the proposed CAMR Federal Plan. It also proposes some other minor technical rule revisions to the CAIR, the Acid Rain Program, and the boiler MACT. The paperwork reduction requirements for this action are satisfied through the Information Collection Requests (ICRs) submitted to OMB for review and approval as part of CAIR, CAMR and the boiler MACT.

The OMB has previously approved the information collection requirements contained in the existing CAIR, CAMR, and boiler MACT regulations (70 FR 25313, May 12, 2005, 70 FR 28643, May 18, 2005, and 70 FR 55248 September 13, 2004, respectively) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. For the CAIR and CAMR ICRs, OMB has assigned control numbers 2060–0570 and 2060–0567, respectively (EPA No. 2152.02 and 2137.02). OMB also has previously approved the information collection requirements contained in the existing boiler MACT regulations and has assigned OMB control number 2060–0551 (EPA No. 2028.02). A copy of the OMB approved ICRs may be obtained from Susan Auby, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, DC 20460 or by calling (202) 566–1672.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, 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 are listed in 40 CFR Part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today’s rule on small entities, small entity is defined as: (1) A business as defined by the Small Business Administration’s (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today’s proposed rule on small entities, EPA has determined that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant adverse economic impact on small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives “which minimize any significant economic impact of the rule on small entities.” 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if, among other possibilities, the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

EPA is proposing to revise the thermal efficiency standard in the cogeneration unit definition, which exists in the CAIR model trading rules, CAIR FIP, CAMR, including the CAMR model trading rule, and proposed CAMR Federal Plan. As a result, some additional cogeneration units will likely be exempt from the CAIR FIP, CAMR and the proposed CAMR Federal Plan. We have concluded that the changes to the CAIR FIP, CAMR, including the CAMR model trading rule, and the proposed CAMR Federal Plan in today’s proposed rule will not have any significant adverse impact on small entities and may relieve regulatory burden on some small entities that would have been subject to these programs in the absence of today’s proposed rule change.

CAIR and the CAIR model trading rules do not establish requirements applicable to small entities and thus a regulatory flexibility analysis is not required for the revisions to the CAIR model trading rules. CAIR requires States to submit SIP revisions to achieve the necessary emission reductions and provides model trading rules that the States may adopt to achieve these reductions. However, because States have the discretion under CAIR to choose the sources to regulate and the emissions reductions to be achieved by the regulated sources, EPA cannot predict the effect of the change to the definition in the CAIR model rules on small entities. In States that choose to adopt the model rules with the modified definition of cogeneration unit, the likely result would be the exemption of some additional cogeneration units from the EPA-administered CAIR cap-and-trade programs.

With regard to CAMR, the change to the cogeneration definition is likely to result in some additional cogeneration units becoming exempt from CAMR, as well as from the EPA-administered CAMR cap-and-trade program, including potentially some small entities. Because the change is likely to relieve regulatory burden, the change will not have a significant economic impact on a substantial number of small entities.

The proposed technical changes to the boiler MACT clarify that any EGU subject to CAMR (whether or not the EGU is in a State that is participating in the EPA-administered Hg cap-and-trade program) is excluded from the boiler MACT. This change will not have any significant adverse impact on small entities and may relieve regulatory burden on some small entities that would have been subject to the boiler MACT in the absence of today’s proposed rule change.

The other proposed rule revisions would not make any substantive changes in the requirements of the existing rules and, therefore, would not have any potential impacts on small entities. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.
D. Unfunded Mandates Reform Act

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

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

EPA prepared a written statement meeting the requirements of section 202 of UMRA for the final CAIR and CAMR and boiler MACT rulemaking processes. Most of the changes proposed in today’s action relate to the definition of cogeneration unit, which results in a minor change in the applicability criteria for the CAIR model trading rules, CAIR FIP, CAMR, including the CAMR model trading rule, and the proposed CAMR Federal Plan that will not significantly alter the impacts of these rules. The technical change proposed for the boiler MACT in today’s action relates to the exclusion of EGUs and makes that exclusion consistent with the intended scope of the boiler MACT. The other proposed rule changes would make no substantive changes in the requirements of the existing rules. Thus, the analyses already prepared for CAIR, CAMR, and the boiler MACT are applicable to today’s action.

In summary, today’s rule contains no Federal mandates for State, local, or tribal governments or the private sector because this action is likely to actually relieve regulatory burden by making more units eligible for the cogeneration unit exemption. Furthermore, as EPA stated in the final CAIR and CAMR, EPA is not directly establishing any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments. Thus, EPA is not obligated to develop under UMRA section 203 a small government agency plan. Furthermore, in a manner consistent with the intergovernmental consultation provisions of UMRA section 204, EPA carried out consultations with the governmental entities affected by this rule.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the EO to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This proposed rule does not have Federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, EO 13132 does not apply to this proposed rule. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local officials, EPA specifically solicits comment on this proposed rule from State and local officials.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by Tribal officials in the development of regulatory policies that have Tribal implications.” This proposal does not have “Tribal implications” as specified in EO 13175. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

Executive Order 13045, entitled “Protection of Children from Environmental Health and Safety Risks” (62 FR 19885, April 23, 1997), applies to any rule that (1) is determined to be economically significant as defined under EO 12866 and (2) concerns an environmental or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, Section 5–501 of the EO directs the Agency to evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This proposed rule would result in little change in emissions levels and the environmental benefits projected in the final CAIR and CAMR because the likely effect of the proposed rule would be to exempt a small number of units with a very small amount of emissions compared to the overall emissions caps. Similarly, the proposed change to the boiler MACT would result in little change in emissions levels and projected environmental benefits. The health and safety risks are essentially unchanged from those analyzed in CAIR, the CAIR FIP, CAMR, the proposed CAMR Federal Plan, and the boiler MACT.

The public is invited to submit or identify peer-reviewed studies and data, of which EPA may not be aware, that assessed results of early life exposure to SO₂, NOₓ or Hg.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 23, 2001).
I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 104–113; 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impracticable. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA requires EPA to provide Congress, through OMB, with explanations when EPA decides not to use available and applicable voluntary consensus standards.

This proposed action does not propose the use of any additional technical standards beyond those cited in the final CAIR, CAMR and boiler MACT. Therefore, EPA is not considering the use of any additional voluntary consensus standards for this action.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires Federal agencies to consider the impact of programs, policies, and activities on minority populations and low-income populations. According to EPA guidance,10 agencies are to assess whether minority or low-income populations face risks or a rate of exposure to hazards that are significant and that “appreciably exceed or is likely to appreciably exceed the risk or rate to the general population or to the appropriate comparison group.” (EPA, 1998)

In accordance with Executive Order 12898, EPA expects this proposal to have no disproportionate negative impacts on minority or low income populations because the emissions reduced by CAIR and CAMR remain essentially the same.


List of Subjects
40 CFR Part 51
Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 60
Environmental protection, Administrative practice and procedure, Air pollution control, Coal, Electric power plants, Intergovernmental relations, Metals, Natural gas, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 62
Environmental protection, Air pollution control, Hazardous Substances, Reporting and recordkeeping requirements.

40 CFR Part 63
Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

40 CFR Part 72
Acid rain, Air pollution control, Carbon dioxide, Electric utilities, Incorporation by reference, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 78
Environmental protection, Acid rain, Administrative practice and procedure, Air pollution control, Electric utilities, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 96
Environmental protection, Administrative practice and procedure, Intergovernmental relations, Air pollution control, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 97
Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen oxides, Sulfur dioxide, Reporting and recordkeeping requirements.


Stephen L. Johnson,
Administrator.

For the reasons set forth in the preamble, parts 51, 60, 62, 63, 72, 78, 96, and 97 of chapter 1 of title 40 of the Code of Federal Regulations are proposed to be amended as follows:

PART 51—[AMENDED]

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


2. Section 51.123(cc) is amended as follows:

a. In the definition of “Allocate or allocation”, by revising the word “source” to read “source or other entity”;

b. In the definition of “Cogeneration unit”, by revising, in paragraph (2), the words “calendar year after which” to read “calendar year after the calendar year in which” and by adding a new paragraph (3);

c. In paragraph (2) of the definition of “Combustion turbine”, by revising the words “any associated heat recovery steam generator” to read “any associated duct burner, heat recovery steam generator,”;

d. By revising the definition of “Maximum design heat input”;

e. In the definition of “Nameplate capacity”, by revising the words “other deratings as specified” to read “other deratings as of such installation as specified” and by revising the words “maximum amount as specified” to read “maximum amount as of such completion as specified”;

f. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§ 51.123 Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule.

* * * *

(cc) * * *

Cogeneration unit means * * *

Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—

(i) For which construction commenced on or before April 25, 2007; and

(ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.

* * * *

Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this paragraph, that the owner or operator has undertaken, or entered into a contractual obligation
to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.

Section 51.124(q) is amended as follows:

a. In the definition of “Allocate or allocation”, by revising the words “source” to read “source or other entity”;

b. In the definition of “Cogeneration unit”, by revising, in paragraph (2), the words “calendar year after which” to read “calendar year after the calendar year in which” and by adding a new paragraph (3);

c. In paragraph (2) of the definition of “Combustion turbine”, by revising the words “any associated heat recovery steam generator” to read “any associated duct burner, heat recovery steam generator”; and

d. By revising the definition of “Maximum design heat input”;

e. In the definition of “Nameplate capacity”, by revising the words “other deratings” as specified” to read “other deratings as of such installation as specified” and by revising the words “maximum amount as specified” to read “maximum amount as of such completion as specified”;

f. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§ 51.124 Definitions and requirements for submission of State implementation plan revisions relating to emissions of sulfur dioxide pursuant to the Clean Air Interstate Rule.

3. Maximum design heat input means the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady state basis as of

4. Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this paragraph, that.

b. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§ 60.4102 Definitions.

5. The authority citation for part 60 is revised to read as follows:

Authority: 42 U.S.C. 7401 et seq.

6. Section 60.24(h)(8) is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3); and

b. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

PART 60—[AMENDED]

4. The authority citation for part 60 is revised to read as follows:

Authority: 42 U.S.C. 7401 et seq.

5. Section 60.24(h)(8) is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3); and

b. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§ 60.24 Emission standards and compliance schedules.

5. Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this section, that the owner or operator has undertaken, or entered into a contractual obligation to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.

PART 62—[AMENDED]

7. The authority citation for Part 62 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

8. Section 62.15902 as proposed on December 22, 2006 (71 FR 77110) is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3); and

b. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§ 62.15902 Definitions.

6. Section 60.4102 is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3); and

b. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:
Cogeneration unit in this section, that the owner or operator has undertaken, or entered into a contractual obligation to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

9. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

10. Section 63.7491 is amended by revising paragraph (c) to read as follows:

§ 63.7491 Are any boilers or process heaters not subject to this subpart?

(c) An electric utility steam generating unit (including a unit covered by 40 CFR part 60, subpart Da) or an electric generating unit as defined in 40 CFR 60.24(h)(8) (including a Hg Budget unit covered by the provisions of a State Plan approved under 40 CFR 60.24(h)(6)).

PART 72—PERMITS REGULATION

11. The authority citation for part 72 is revised to read as follows:

Authority: 42 U.S.C. 7601 and 7651 et seq.

12. Section 72.24 is amended, in paragraph (a)(9) introductory text, by revising the words “life-of-the-unit, firm power contractual arrangements” to read “a life-of-the-unit, firm power contractual arrangement”.

PART 78—APPEAL PROCEDURES

13. The authority citation for part 78 is revised to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7411, 7426, 7601, and 7651, et seq.

14. Section 78.1 is amended by revising paragraph (a)(1) to read as follows:

§ 78.1 Purpose and scope.

(a)(1) This part shall govern appeals of any final decision of the Administrator under subpart HHHH of part 60 of this chapter or State regulations approved under § 60.24(h)(6)(i) or (ii) of this chapter, subpart LLL of part 62 of this chapter, part 72, 73, 74, 75, 76, or 77 of this chapter, subparts AA through II of part 96 of this chapter or State regulations approved under § 51.123(aa)(1) or (2) of this chapter, subparts AAA through IIII of part 96 of this chapter or State regulations approved under § 51.123(aa)(1) or (2) of this chapter, or part 97 of this chapter; provided that matters listed in § 78.3(d) and preliminary, procedural, or intermediate decisions, such as draft Acid Rain permits, may not be appealed. All references in paragraph (b) of this section and in § 78.3 subpart HHHH of part 60 of this chapter, to subparts AA through II of part 96 of this chapter, subparts AAA through III of part 96 of this chapter, and subparts AAAA through IIII of part 96 of this chapter shall be read to include the comparable provisions in State regulations approved under § 60.24(h)(6)(i) or (ii) of this chapter, § 51.123(o)(1) or (2) of this chapter, § 51.124(o)(1) or (2) of this chapter, and § 51.123(aa)(1) or (2) of this chapter, respectively.

PART 96—[AMENDED]

15. The authority citation for part 96 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7411, and 7651, et seq.

16. Section 96.102 is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3):

Cogeneration unit means * * *

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—

(i) For which construction commenced on or before April 25, 2007 and

(ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.

*b* * * * * * * * *

17. Section 96.202 is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3):

Cogeneration unit means * * *

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—

(i) For which construction commenced on or before April 25, 2007 and

(ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.

*b* * * * * * * * *

18. Section 96.302 is amended as follows:

a. In the definition of “Cogeneration unit”, a new paragraph (3):

Cogeneration unit means * * *

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—

(i) For which construction commenced on or before April 25, 2007 and

(ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.

*b* * * * * * * * * *
energy through sequential use of energy, for which construction commenced on or before April 25, 2007.

Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this section, that the owner or operator has undertaken, or entered into a contractual obligation to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.

19. The authority citation for part 97 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7426, 7601, and 7651, et seq.

20. Section 97.102 is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3):
   b. In the definition of Permitting authority”, by removing the words “in accordance with subpart CC of this part”; and
   c. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§97.102 Definitions.

* * * * *

Cogeneration unit means * * *

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—
   (i) For which construction commenced on or before April 25, 2007; and
   (ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.
* * * * *

Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this section, that the owner or operator has undertaken, or entered into a contractual obligation to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.

21. Section 97.202 is amended as follows:

a. In the definition of “Cogeneration unit”, by adding a new paragraph (3):
   b. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CCC of this part”; and
   c. By adding in alphabetical order a new definition of “Construction commenced” to read as follows:

§97.202 Definitions.

* * * * *

Cogeneration unit means * * *

(3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input only from fossil fuel if the unit is a boiler—
   (i) For which construction commenced on or before April 25, 2007; and
   (ii) Having equipment used to produce electricity and useful thermal energy through sequential use of energy, for which construction commenced on or before April 25, 2007.
* * * * *

Construction commenced means, with regard to a boiler or equipment under paragraph (3) of the definition of Cogeneration unit in this section, that the owner or operator has undertaken, or entered into a contractual obligation to undertake and complete within a reasonable time, a continuous program of fabrication, erection, or installation of the boiler or equipment.