

US EPA ARCHIVE DOCUMENT

### *Consultation and Coordination with Indian Tribal Governments*

This rule does not have tribal implications as defined by Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. Therefore, advance consultation with Tribes is not required.

### *Controlling Paperwork Burdens on the Public*

This rule does not require any record keeping or reporting requirements or other information collection requirements as defined in 5 CFR part 1320 not already approved for use and, therefore, imposes no additional paperwork burden on the public. Accordingly, the review provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, *et seq.*) and implementing regulations at 5 CFR part 1320 do not apply.

### **List of Subjects in 36 CFR Part 223**

Administrative practice and procedures, Forests and forest products, Exports, Government contracts, National forests, Reporting and record keeping requirements.

■ For the reasons set forth in the preamble, the Forest Service is amending part 223 of title 36 of the Code of Federal Regulations as follows:

### **PART 223—SALE AND DISPOSAL OF NATIONAL FOREST SYSTEM TIMBER**

■ 1. The authority citation for part 223 continues to read as follows:

**Authority:** 90 Stat. 2958, 16 U.S.C. 472a; 98 Stat. 2213, 16 U.S.C. 618, 104 Stat. 714–726, 16 U.S.C. 620–620j, unless otherwise noted.

### **Subpart B—Timber Sale Contracts**

■ 2. Revise § 223.85(c) to read as follows:

#### **§ 223.85 Noncompetitive sale of timber.**

\* \* \* \* \*

(c) Extraordinary conditions, as provided for in 16 U.S.C. 472a(d), includes those conditions under which contracts for the sale or exchange of timber or other forest products must be suspended, modified, or terminated under the terms of such contracts to prevent environmental degradation or resource damage, or as the result of administrative appeals, litigation, or court orders. Notwithstanding the provisions of paragraph (a) of this section or any other regulation in this part, when such extraordinary conditions exist on sales not addressed in paragraph (b) of this section, the Secretary of Agriculture may allow forest officers to, without advertisement,

modify those contracts by substituting timber or other forest products from outside the contract area specified in the contract for timber or forest products within the area specified in the contract. When such extraordinary conditions exist, the Forest Service and the purchaser shall make good faith efforts to identify replacement timber or forest products of similar volume, quality, value, access, and topography. When replacement timber or forest products agreeable to both parties is identified, the contract will be modified to reflect the changes associated with the substitution, including a rate redetermination. Concurrently, both parties will sign an agreement waiving any future claims for damages associated with the deleted timber or forest products, except those specifically provided for under the contract up to the time of the modification. If the Forest Service and the purchaser cannot reach agreement on satisfactory replacement timber or forest products, or the proper value of such material, either party may opt to end the search. Replacement timber or forest products must come from the same National Forest as the original contract. The term National Forest in this paragraph refers to an administrative unit headed by a single Forest Supervisor. Only timber or forest products for which a decision authorizing its harvest has been made and for which any applicable appeals or objection process has been completed may be considered for replacement pursuant to this paragraph. The value of replacement timber or forest products may not exceed the value of the material it is replacing by more than \$10,000, as determined by standard Forest Service appraisal methods.

Dated: October 12, 2007.

**Mark Rey,**

*Under Secretary, Natural Resources and Environment.*

[FR Doc. E7–20625 Filed 10–18–07; 8:45 am]

**BILLING CODE 3410–11–P**

### **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Parts 51, 60, 72, 78, 96, and 97**

[EPA–HQ–OAR–2007–0012; FRL–8483–7]

RIN 2060–A033

### **Revisions to Definition of Cogeneration Unit in Clean Air Interstate Rule (CAIR), CAIR Federal Implementation Plans, Clean Air Mercury Rule (CAMR); and Technical Corrections to CAIR, CAIR FIPs, CAMR, and Acid Rain Program Rules**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The Clean Air Interstate Rule (CAIR), CAIR Federal Implementation Plans (FIPs), and Clean Air Mercury Rule (CAMR) each include an exemption for cogeneration units that meet certain criteria. In light of information concerning biomass-fired cogeneration units that may not qualify for the exemption due to their particular combination of fuel and technical design characteristics, EPA is changing the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR, and the CAMR model cap-and-trade rule. Specifically, EPA is revising the calculation methodology for the efficiency standard in the cogeneration unit definition to exclude energy input from biomass making it more likely that units co-firing biomass will be able to meet the efficiency standard and qualify for exemption. Because this change will only affect a small number of relatively low emitting units, it will have little effect on the projected emissions reductions and the environmental benefits of these rules. If EPA finalizes the proposed CAMR Federal Plan, it intends to make the definitions in that rule conform to the CAMR model cap-and-trade rule and thus, with today's action. This action also clarifies the term "total energy input" used in the efficiency calculation and makes minor technical corrections to CAIR, the CAIR FIPs, CAMR, and the Acid Rain Program rules.

**DATES:** The final rule is effective on November 19, 2007.

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2007–0012. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) Web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose

disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the EPA Docket Center, EPA West, Room 3334, 1301 Constitution Avenue, NW., Washington, DC. The 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 Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** For information concerning today's action, 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](mailto:Steiner.elyse@epa.gov).

**SUPPLEMENTARY INFORMATION:** *Regulated Entities.* Categories and entities potentially regulated by this action include the following, which were previously identified by EPA as potentially regulated or affected by CAIR, the CAIR FIPs, or CAMR:

| Category                            | NAICS code <sup>1</sup> | Examples of potentially regulated entities                                                 |
|-------------------------------------|-------------------------|--------------------------------------------------------------------------------------------|
| Industry .....                      | 221112                  | Fossil fuel-fired electric utility steam generating units.                                 |
| Federal government .....            | <sup>2</sup> 221122     | Fossil fuel-fired electric utility steam generating units owned by the Federal government. |
| State/local/Tribal government ..... | <sup>2</sup> 221122     | Fossil fuel-fired electric utility steam generating units owned by municipalities.         |
|                                     | 921150                  | Fossil fuel-fired electric utility steam generating units in Indian country.               |

<sup>1</sup> North American Industry Classification System.

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

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 table lists 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 is regulated, carefully examine the

applicability provisions and definitions in CAIR, the CAIR FIPs, CAMR, and the proposed CAMR Federal Plan.<sup>1</sup> 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 action to avoid unnecessary repetition.

As discussed below, EPA believes that the vast majority of biomass

cogeneration units are operated by the pulp and paper industry. 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.

| Category       | NAICS code <sup>1</sup> | Examples of potentially regulated entities |
|----------------|-------------------------|--------------------------------------------|
| Industry ..... | 22                      | Utilities.                                 |
|                | 322                     | Paper Manufacturing Facilities.            |
|                | 32213                   | Paperboard Mills.                          |
|                | 322122                  | Newsprint Mills.                           |

<sup>1</sup> North American Industry Classification System.

If you have questions regarding the applicability of this action to a particular entity, consult 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> and <http://www.epa.gov/camr>.

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

#### I. Background

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

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

I. National Technology Transfer and Advancement Act

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

K. Congressional Review Act

L. Judicial Review

<sup>1</sup> All applicability provisions and definitions can be found in the CFR or FR in the following locations: for CAIR and the CAIR model cap-and-trade rules, 40 CFR 51.123, 51.124, 96.102, 96.104,

96.202, 96.204, 96.302, and 96.304; for the CAIR FIP, 40 CFR 97.102, 97.104, 97.202, 97.204, 97.302, and 97.304; for CAMR and the CAMR 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.

## I. Background

### A. Summary of This Action

In this rule, EPA is revising the definition of the term “cogeneration unit” in CAIR, the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR, and the CAMR Hg model cap-and-trade rule, and announcing its intention to use this revised definition in the CAMR Federal Plan if it is finalized. The CAIR model cap-and-trade rules and the CAIR FIPs apply to large fossil-fuel fired electric generating units with certain exceptions. The CAMR, CAMR Hg model cap-and-trade rule, and proposed CAMR Federal Plan address large coal-fired electric generating units with certain exceptions. The CAIR model cap-and-trade rules, CAIR FIPs, CAMR and CAMR Hg model cap-and-trade rule, and proposed CAMR Federal Plan all provide an exemption for cogeneration units meeting certain requirements. All four rules provide that in order to qualify for this exemption, a unit must, among other things, meet the definition of cogeneration unit in the rule. As finalized in all three rules and as proposed in the CAMR Federal Plan, a unit cannot meet the definition unless it meets 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 a cogeneration unit including the efficiency standard, then the unit may qualify for the exemption in these rules depending on whether it meets additional criteria. The efficiency standard, as originally written, was 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<sub>x</sub> Annual and NO<sub>x</sub> Ozone Season Allocations for the Clean Air Interstate Rule Federal Implementation Plans Trading Programs (CAIR FIPs NODA) and accepted objections to the data through an electronic docket (71 FR 44283). During the period for submitting objections concerning the CAIR FIPs NODA, EPA received information concerning the application of the efficiency standard in the cogeneration unit definition (as defined in the CAIR FIPs) 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 June 1, 2007 (72 FR 7654).

EPA treated 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, proposed to revise the efficiency standard in the cogeneration unit definition in the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR, and the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan, so that, for boilers, energy input from only fossil fuel would be included in the efficiency calculation. EPA also took comments on excluding biomass fuel from the efficiency standard specifically, rather than only including fossil fuel input (72 FR 20471). The newly revised cogeneration unit definition is discussed in more detail in section II of today’s preamble, below.

This action also makes technical corrections to CAIR, CAIR Federal Implementation Plan, CAMR, and the Acid Rain Program rules.

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

#### CAIR and the CAIR FIPs

On May 12, 2005, EPA published CAIR as a final rule entitled, “Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to NO<sub>x</sub> SIP Call” (70 FR 25162). CAIR requires reductions of NO<sub>x</sub> and/or SO<sub>2</sub> 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<sub>2.5</sub>) 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<sub>x</sub> reductions starts in 2009 (covering 2009–2014) and the first phase of SO<sub>2</sub> reductions starts in 2010 (covering 2010–2014); the second phase of reductions for both NO<sub>x</sub> and SO<sub>2</sub> starts in 2015 (covering 2015 and thereafter).

States must develop State Implementation Plans (SIPs) to achieve the emission reductions required by CAIR. Each State may 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<sub>2</sub> and

NO<sub>x</sub> 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 FIPs 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; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program” (71 FR 25328). The CAIR FIPs were 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 FIPs, EPA adopted the model SO<sub>2</sub> and NO<sub>x</sub> 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. Following approval of a full SIP revision that meets with the requirements of CAIR, EPA intends to withdraw the FIPs for that State.

#### 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 jurisdictions 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. EPA will not adopt the Federal Plan for any State for which EPA has approved a State Plan that meets the CAMR requirements before EPA promulgates the final Federal Plan. If EPA finalizes the Federal Plan, it will withdraw the Federal Plan promulgated for any State after the Agency approves a State Plan that meets the CAMR requirements for that State. EPA will similarly withdraw the Federal Plan upon its approval of a Tribal Plan.

#### *C. Applicability Provisions for Cogeneration Units*

Applicability determinations under the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR, the CAMR Hg model cap-and-trade rule, and the proposed CAMR Federal Plan all turn, essentially, on whether a unit is an electric generating unit. The CAIR model cap-and-trade rules and the CAIR FIPs have applicability provisions that cover certain fossil-fuel-fired units while CAMR, the CAMR Hg model cap-and-trade rule, and the proposed CAMR Federal Plan use a similar definition that covers certain coal-fired units.

The CAIR model cap-and-trade rules and the CAIR FIPs apply to large fossil-fuel fired electric generating units with certain exceptions. The CAMR, the CAMR Hg model cap-and-trade rule, 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 FIPs, CAMR, the CAMR Hg model cap-and-trade rule, 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," or from the applicability provisions of the trading programs, and therefore may be exempt from the requirements of the rules

(These rule provisions are commonly referred to as the cogeneration unit exemption). The cogeneration unit exemption is essentially the same under all of these rules. 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  $\frac{1}{3}$  of its potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. In order to be a cogeneration unit, a unit must have equipment used to produce electricity and useful thermal energy through sequential use of energy and 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. As originally written in these rules, the efficiency standard in the cogeneration unit definition applied to all energy input to the unit regardless of fuel type. That part of the cogeneration unit definition has been revised by today's action. If EPA finalizes the proposed CAMR Federal Plan, it intends to make the same revision in that rule.

#### *CAIR and the CAIR FIPs*

As originally issued, CAIR, the CAIR model cap-and-trade rules, and the CAIR FIPs defined "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,

(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, useful power not less than 45 percent of total energy input.<sup>2</sup>

Today's action modifies this definition of "cogeneration unit" to exclude energy input from biomass for existing and future boilers and provides a more specific definition of "total energy input" to be used in calculating thermal efficiency.

#### *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.

The definition of "cogeneration unit" in CAMR, the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan, as originally issued, was identical to the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, and the CAIR FIPs, except that the definition in the CAMR and related rules referred 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, and as a result, excluded from the applicability provisions of the trading programs, and thus excluded from the regulatory requirements of the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR and the CAMR model cap-and-trade rule, and the proposed CAMR Federal Plan. In order to qualify for this

<sup>2</sup> Topping-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Bottoming-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

exemption under these rules, the cogeneration unit must meet certain additional criteria. 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 Changing Definition for Cogeneration Units*

As noted above, the definition of "cogeneration unit" in CAIR, the CAIR model rules, the CAIR FIPs, CAMR and the CAMR model rule, contains an efficiency standard. The purpose of this 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 qualify for the cogeneration unit exemption discussed above.

During the period for submitting objections concerning the CAIR FIPs NODA, EPA received information from commenters that suggested to EPA that the efficiency standard in the definition of cogeneration unit should be revised with regard to units co-firing biomass. The commenters also submitted information concerning the application of the efficiency standard to biomass-fired cogeneration units and stated that the existing rule "unfairly penalizes cogeneration 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 \* \* \* biomass to meet the efficiency standard" (see Technical Support Document (TSD) for CAIR on Cogeneration Unit Efficiency Calculations).<sup>3</sup> The Agency believed at the time that most biomass cogeneration units would meet the efficiency standard, and thus would be potentially exempt cogeneration units. EPA has since re-examined 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.<sup>4</sup> The biomass fuels typically fired by pulp and paper units are wood-based biomass and black liquor.<sup>5</sup> 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 can range 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. EPA believes that, as compared to large electric power plants that are optimized for power generation, many of the existing process-optimized units in the pulp and paper industry use significantly lower design steam pressure and temperature conditions at the steam turbine inlet. For example, a large power plant turbine might be designed to use steam at 2,400 psig and 1,000 °F, whereas a steam 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, some steam turbine generators in the pulp and paper industry 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 steam 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 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 FIPs, CAMR, the CAMR Hg model cap-and-trade rule 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—rather than from all fuels except biomass—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 to achieve efficiency gains over non-cogeneration units. Under these circumstances, application of the original efficiency standard to existing biomass cogeneration units does not seem to promote the purposes

<sup>3</sup> Cogeneration Unit Efficiencies Calculation, March 2005. OAR-2003-0053-2087 [http://epa.gov/cair/pdfs/tsd\\_cogen.pdf](http://epa.gov/cair/pdfs/tsd_cogen.pdf).

<sup>4</sup> The pulp and paper industry raised concerns regarding biomass cogeneration units during the period for objections to the CAIR FIPs NODA.

<sup>5</sup> Black liquor is spent pulping liquor, a byproduct of a pulping process used to separate the wood fibers used in papermaking from lignin and other wood solids.

of the standard. In addition, application of this standard as originally written had the paradoxical result that existing biomass cogeneration units burning greater amounts of fossil fuels (therefore likely having greater emissions) were 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) were less likely to meet the requirement and qualify for the exemption.

For these reasons, EPA is revising the efficiency standard in the cogeneration unit definition such that energy input from biomass fuels only may be excluded from the total energy input used to calculate efficiency for cogeneration units. The final change is discussed in more detail below.

## II. EPA's Final Action and Its Impacts

### A. Final Change for Cogeneration Units

EPA is revising the efficiency standard in the cogeneration unit definition in CAIR, the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR and the CAMR model cap-and-trade rule to permit boilers to exclude energy input from biomass fuels in the efficiency calculation rather than include energy input from all fuels. EPA also intends to use this revised definition if it finalizes the CAMR Federal Plan. This revised definition will make it more likely that units burning biomass and cogenerating electricity and useful thermal energy will meet the efficiency standard and qualify as exempt cogeneration units under these rules.

EPA has decided to revise the efficiency standard in the cogeneration unit definition to specifically exclude heat input from biomass fuel, rather than exclude all non-fossil fuel input. This approach was offered as an alternative from the main approach EPA proposed, which would have excluded heat input from any non-fossil fuel in the efficiency calculation. EPA explicitly requested comment on this alternative and, after considering the comments, decided that it was preferable to exclude only heat input from biomass fuels. This preferred approach more narrowly limits the exclusion of heat input from the non-fossil fuel (i.e., biomass) whose relatively high moisture content, combined with the other factors of biomass cogeneration discussed above (e.g., relatively low pressure and

temperature unit design conditions and relatively small boilers and steam turbines) are the basis for EPA's revisions. Although EPA specifically requested comment concerning cogeneration units burning other identifiable types of non-fossil fuels and their characteristics, little additional information was received. The comments that were received provided neither adequate information about the composition and moisture content of other non-fossil fuels nor data on what type or how many units combust these other fuels. Information in the record provides no basis for determining that combustion of any non-fossil fuel other than biomass involves the particular combination of characteristics upon which the exclusion of biomass heat input in boilers is based or any other characteristics on which an expansion of the exclusion of heat input to other non-fossil fuels could be based. For these reasons, EPA is limiting the exclusion for boilers to heat input from biomass fuel only. This approach avoids expanding the change to the cogeneration unit exemption to units that cogenerate but combust other non-fossil fuels for which there is no basis in the record for excluding the heat input of such fuels from the efficiency calculation.

With today's rule change, the efficiency calculation will be based on total energy input excluding input from biomass fuel. EPA requested comment on the definition of the term "biomass" that would be used solely for the purpose of identifying fuels excluded from heat input calculations covered by this rulemaking. Commenters provided a number of alternative suggestions to define the term "biomass" in response to EPA's request for input. EPA considered the various definitions and has determined that the following definition of "biomass" derived largely from the "biomass" definition in Section 932 of the Energy Policy Act of 2005 is appropriate for this action. The definition of "biomass" adapted in today's action depicts biomass as an energy source and an important renewable fuel supply. EPA notes that it is adopting this biomass definition only for purposes of the cogeneration definition in CAIR, CAMR and other related rules addressed in this rulemaking. It may not be the appropriate definition in other contexts or other rules. For the purposes of the cogeneration unit definition addressed in this rulemaking, the term "biomass" means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy;

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from nonmerchutable material, and that is:

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchutable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

EPA received a few comments

expressing the view that EPA should not change the existing cogeneration unit definition for any units in order to more effectively protect the environment and human health. These comments asserted that the revision of the definition would have adverse impacts on the environment or human health.

However, the commenters did not provide any support for these assertions. Commenters did not dispute EPA's reasons for making the change based on technical differences, fuel characteristics, and equipment design decisions. EPA examined the potential impacts of the revision and, as discussed below, determined that the estimated change in SO<sub>2</sub>, NO<sub>x</sub>, and Hg emissions due to this rule change is very small compared to the overall emission cap levels. For these reasons, EPA believes that the change in the cogeneration unit definition adopted in this rule is reasonable.

The change to the efficiency standard made in today's rule will apply both to existing units and to new units that are constructed in the future. In the Notice of Proposed Rulemaking, EPA proposed to apply the revised standard only to existing units, but it also solicited comments on whether the efficiency standard should be applied to all units regardless of when construction on the unit commenced. After considering comments received, EPA has determined that it is appropriate to apply the revised efficiency standard to both existing and new units.

EPA received several comments in support of revising the cogeneration unit definition for all units that co-fire biomass regardless of the date that they commenced construction based on the assertion that new units will face the same difficulties meeting the original efficiency standard as existing units. EPA notes that existing biomass-fired boilers do not generally operate as stand-alone units, but rather are

generally part of an integrated facility that may include several boilers, common headers, and several steam turbine generators. Similarly, new biomass boilers are likely to be constructed to fit into an existing configuration of boilers and stream turbine generators. Consequently, even if new, stand-alone biomass boilers might theoretically be able to meet the original efficient standard, they are likely to be integrated with existing equipment, rather than operate as stand-alone equipment that can be designed without the limitations on efficiency that apply to existing boilers.

EPA's previous analysis did not take this into account. Moreover, the combustion technology used in existing and new boilers is essentially the same. Therefore, many of the same factors (i.e., high moisture fuel, low pressure and temperature conditions, and small boilers and steam turbines) that make it difficult for existing biomass boilers to meet the original efficiency standard may well apply to new biomass boilers, whose design is limited by the need to be integrated into an existing facility. Because of the absence of information in the record about the design attributes of new biomass units that would support distinguishing between existing and new biomass boilers, EPA has decided to adopt the revised cogeneration unit definition for all boilers, regardless of their construction date. Further, this approach eliminates the need for a clear-cut distinction between new and existing units, which commenters noted could be complex and problematic, and may avoid discouraging the construction of new biomass cogeneration units and the increased use of biomass fuel for cogeneration. However, today's revision to the definition for all cogeneration units in CAIR and CAMR does not in any way change the meaning of the term "cogeneration" or any other provisions in the NSPS (See 40 CFR 60.41Da).

Under the revised cogeneration unit definition, "cogeneration unit" is defined, with regard to boilers, as a stationary, fossil-fuel-fired boiler (for the CAIR model rules and the CAIR FIPs) or stationary, coal-fired boiler (for CAMR, the CAMR Hg model cap-and-trade rule, and the proposed CAMR Federal Plan if it is finalized):

(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,

(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 all fuel other than biomass, 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 all fuel other than biomass, 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 all fuel other than biomass.

The revised definition does not apply to combustion turbines which combust gaseous fuel. For combustion turbines, the cogeneration unit definition—and the efficiency standard in particular—would remain as finalized in the CAIR model rules, the CAIR FIPs, CAMR, and the CAMR Hg model cap-and-trade rule and will not be revised in the CAMR Federal Plan, if finalized. Although EPA received some comments suggesting that the revised cogeneration unit definition should be extended to combustion turbines, EPA maintains that these comments are beyond the scope of this rulemaking. In the Notice of Proposed Rulemaking, EPA stated that it was proposing to apply the revised definition only to boilers, not to combustion turbines (See 72 FR 20471). Moreover, consistent with this, the record for the proposal did not include any information about combustion turbines burning biomass. EPA notes that, in order to be burned in a combustion turbine, the biomass first must be gasified, and the integration of biomass gasification with electric and steam generation by combustion turbines involves significantly different technology than that used in biomass-fired boilers. Consequently, the information concerning biomass boilers is not necessarily relevant to biomass combustion turbines. Under these circumstances, the comments supporting extension of the revised definition to combustion turbines are beyond the scope of the rulemaking.

In addition, the commenters provided little or no information indicating whether biomass combustion turbines would have problems in meeting the efficiency standard and, if so, what would be the nature and extent of the problems and whether the problems would be the same as those for biomass

boilers. In fact, EPA believes that there are currently no combustion turbines of this type in commercial use to serve as a basis for analysis of the likely characteristics and thermal efficiency of this type of unit. EPA, therefore, is not extending the revised cogeneration unit definition to turbines both because the comments are beyond the scope of the rulemaking and because there is essentially no record evidence concerning whether this type of unit would have difficulty meeting the original efficiency standard. Consistent with the proposal, EPA is finalizing this rule with the revised cogeneration unit definition applying only to boilers, not combustion turbines. The issue of revising the definition with regard to combustion turbines may be raised in the future if biomass combustion turbines are developed and built in the future and are shown to have difficulty meeting the efficiency standard.

#### *B. Emissions Impact of This Action*

During development of the proposal, EPA analyzed the emissions impact of the proposed action using the methodology explained below. For this analysis, EPA used Energy Information Administration (EIA) data because detailed EPA data was not available. For the CAIR model rules and the CAIR FIPs, EPA generated an inventory of biomass cogeneration units that serve generators with nameplate capacity greater than 25 MW in CAIR states and then looked for units that would potentially be affected by a change in the efficiency standard and estimated the SO<sub>2</sub> and NO<sub>x</sub> emissions. For CAMR and the proposed CAMR Federal Plan, using EIA data EPA generated an inventory of cogeneration units burning both coal and biomass that serve a generator with nameplate capacity greater than 25 MW in CAMR states nationwide, and tried to identify units that might be affected and estimated the Hg emissions.<sup>6</sup>

After publishing its biomass cogeneration unit inventories which identified units potentially affected by the proposed rule change, EPA received additional information from commenters about some of the units already on the list and about four additional units that have since been included in the list. EPA updated its inventory based on the input from American Forest and Paper Association's (AF&PA) member survey, and the results are summarized below in

<sup>6</sup> Technical Support Document: Methodology for Thermal Efficiency and Energy Input Calculations and Analysis of Biomass Cogeneration Unit Characteristics. EPA-HQ-OAR-2007-0012-0004.1

Table II-1.<sup>7</sup> For more information about how EPA identified biomass cogeneration units for the initial proposal analysis, refer to the proposal and its Technical Support Document (TSD), "Methodology for Thermal Efficiency and Energy Input Calculations and Analysis of Biomass Cogeneration Unit Characteristics" (April 2007).

As shown in Table II-1, emissions from units whose status under the CAIR model rules or the CAIR FIPs may be affected by the rule change are estimated to be on the order of 15,000 and 20,000 tons per year for SO<sub>2</sub> and NO<sub>x</sub>, respectively. These emissions are quite small compared to the size of the region-wide emission caps under CAIR, which are 1.5 and 1.3 million tons of NO<sub>x</sub> for the first and second phases of the annual NO<sub>x</sub> program, respectively, and 3.7 and 2.6 million tons of SO<sub>2</sub> for the first and second phases of the SO<sub>2</sub> program, respectively (i.e., for NO<sub>x</sub>, about 1.3 percent of the phase I cap and 1.5 percent of the phase II cap, and for SO<sub>2</sub> about 0.4 percent of the phase I cap and 0.6 percent of the phase II cap).<sup>8</sup>

Emissions from units whose status under CAMR, the CAMR Hg model cap-

and-trade rule, or the proposed CAMR Federal Plan may be affected by the rule change are estimated to be on the order of 0.02 tons of Hg per year. These emissions are very small compared to the size of the nationwide emission caps under CAMR which are 38 and 15 tons of Hg for the first and second phases, respectively (i.e., less than 0.1 percent of the phase I cap and about 0.1 percent of the phase II cap).

Another way to look at the magnitude of emissions represented by units that may be affected by today's rule change is to compare emissions from this group of units to emissions from biomass cogeneration units that we assumed were already exempt because they could meet the efficiency standard as previously written. Table II-2 shows estimated annual NO<sub>x</sub>, SO<sub>2</sub>, and Hg emissions for this group of units. (Note that this group excludes units that reported to EIA that they do not have the ability to sell power to the grid and units that reported the ability to sell power and whose historic sales exceed the electricity sales threshold for the exemption.) As shown in the table, the emissions from the group of units whose

regulatory status we believe may change under today's rule change are considerably less than emissions from the group of biomass cogeneration units which we believe were already exempt from these rules because they meet the efficiency standard as previously written.

EPA's analysis also suggests that, on average, the estimated emissions per unit are lower from the group whose regulatory status we believe may change compared to the group of units we believe were already exempt from these rules because they can meet the efficiency standard as previously written. It is expected that emission rates at units burning proportionally more biomass—which is the group whose regulatory status we believe will 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 combination of EPA estimates and AF&PA member survey data concerning units that EPA anticipates may be affected by the rule change.

TABLE II-1.—ESTIMATE OF BIOMASS COGENERATION UNITS POTENTIALLY EXCLUDED FROM CAIR AND CAMR BY THE RULE CHANGE AND ESTIMATE OF THEIR EMISSIONS

|                                                                                            | CAIR NO <sub>x</sub> | CAIR SO <sub>2</sub> | CAMR Hg          |
|--------------------------------------------------------------------------------------------|----------------------|----------------------|------------------|
| Estimated number of units potentially affected by the rule change .....                    | 39                   | 39                   | 5                |
| Estimated annual emissions from units potentially affected by the rule change (tons) ..... | 19,800               | 14,900               | 0.02<br>(40 lbs) |

TABLE II-2.—ESTIMATE OF BIOMASS COGENERATION UNITS ASSUMED EXCLUDED FROM ORIGINAL CAIR AND CAMR AND ESTIMATE OF THEIR EMISSIONS

|                                                                                                       | CAIR NO <sub>x</sub> | CAIR SO <sub>2</sub> | CAMR Hg           |
|-------------------------------------------------------------------------------------------------------|----------------------|----------------------|-------------------|
| Estimated number of units assumed to meet efficiency standard as written .....                        | 54                   | 42                   | 30                |
| Estimated annual emissions from units assumed to meet the efficiency standard as written (tons) ..... | 29,700               | 59,800               | 0.24<br>(480 lbs) |

Finally, units that might become exempt cogeneration units as a result of today's rule changes may be required to make emission reductions under programs other than CAIR or CAMR. These units will need to work with permitting authorities to determine whether they must comply with other regulatory rules.

### C. State Emissions Budgets

EPA did not propose to change the NO<sub>x</sub>, SO<sub>2</sub>, or Hg State emission budgets

under CAIR and CAMR, and is not changing those budgets in this final action. As discussed above, the estimated amount of emissions from units potentially affected by today's action is minimal compared to the size of the applicable region-wide (CAIR) and nationwide (CAMR) caps. Further, none of the units that EPA has identified as potentially affected by the rule change were included in the state budget calculations, as explained below.

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. 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).

<sup>7</sup> Comment attachment submitted by Timothy G. Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association (AF&PA). EPA-HQ-OAR-2007-0012-0014.1

<sup>8</sup> Arkansas is included in CAIR for the ozone-season NO<sub>x</sub> program only, not for the annual NO<sub>x</sub> and SO<sub>2</sub> programs. Because these NO<sub>x</sub> emission estimates include annual NO<sub>x</sub> emissions for units

in Arkansas, the estimates slightly overstate the potential impact of the final rule change for units in Arkansas.

Discussion of development of the CAIR and CAMR State emission budgets are in 70 FR 25162 and 70 FR 28606, respectively.

Although EPA did not propose to change any state budgets in this action, the Agency did request comment on changing the budgets to reflect the proposed changes in the definition of cogeneration unit. EPA received some comments arguing that the state budgets should be reduced because more units may qualify for the cogeneration unit exemption. These comments did not provide specific suggestions regarding how the budgets should be reduced. Presumably, they would advocate eliminating any units from the budgets that were covered under the original rules but that qualify for exemption under this revision to those rules. However, upon closer inspection, none of the units expected to be affected by this change to the efficiency standard are among the CAIR and CAMR units included in the heat input inventories that were used to develop state budgets.<sup>9</sup> All of the biomass cogeneration units in the heat input inventories either (1) meet the original efficiency standard already based on EPA's analysis, (2) do not sell power to the grid based on available data, or (3) do not qualify for the cogeneration unit exemption because they exceed the limitation on electricity sales. In other words, since none of the units that EPA has identified as potentially affected by the rule change were even included in the state budget calculations to begin with, EPA has determined that it is not appropriate or necessary to recalculate the budgets. Therefore, and for the reasons discussed above in this section, EPA concludes that state budgets should not be recalculated. Finally, EPA will not be decreasing or increasing overall emissions cap levels or state budgets in response to any units (biomass or otherwise) that qualify or do not qualify for the cogeneration unit exemption at this late stage in the implementation of CAIR and CAMR.

#### *D. Impact of This Action on CAIR and CAMR Implementation*

In the proposal, the Agency recognized that finalizing this change in the cogeneration unit definition and in the applicability provisions of the CAIR model rules and CAMR and the CAMR Hg model cap-and-trade rule would require States to change CAIR SIPs and

CAMR State Plans and that States have already made significant progress in developing these plans. In that context, the Agency has carefully considered the timing of the regulatory action in relation to the implementation timeline. The Agency understands that there may be implementation concerns regarding this action and requested comments on implementation concerns from the States.

After considering comments received, EPA is finalizing a change to the cogeneration unit definition in the model trading rules and is setting a time frame within which States wanting to participate in the EPA-administered trading programs must revise their existing cogeneration unit definition to be the same as in the revised EPA rules. EPA will change the cogeneration unit definition in the CAIR model cap-and-trade rule, CAIR FIPs, and CAMR model cap-and-trade rule to reflect today's changes, and intends to change it if the Agency finalizes the CAMR Federal Plan.

In the proposal, EPA requested comments on an alternative option whereby the Agency would modify CAIR to allow States intending to join the EPA-administered CAIR trading programs to choose which cogeneration unit definition to use. After considering the comments received, EPA has decided to require all CAIR states to change their rules so that definitions remain consistent across the CAIR region and consistent with CAMR regardless of whether they have existing biomass cogeneration units affected by this action. Whether or not a State has existing units affected by the revised definition, new units may be constructed in the future that may be affected. Therefore, EPA concludes that having uniform applicability provisions (including the definition of cogeneration unit) makes the CAIR trading program easier to administer and has the equitable result that the same types of facilities are covered in all States in the trading programs.

In addition, EPA does not believe this will impose an undue burden on States because under this final action, all States will already have to go through the rulemaking process to incorporate other technical revisions related to the thermal efficiency standard (i.e., revisions to the definition of "total energy input") for all cogeneration units (discussed below in Section III) and to make the necessary efficiency standard changes to CAMR for biomass cogeneration units. With regard to CAMR, EPA does not permit States to decide which definition of cogeneration unit to use for State Plans under CAMR.

Because CAMR specifies the category of units from which States must obtain emission reductions (i.e., coal-fired electric generating units as defined in the rule), CAMR, all State Plans, and the CAMR Federal Plan, if finalized, must have the same cogeneration unit definition.

EPA realizes that some States may have allocated allowances to cogeneration units that might not be required to hold allowances as a result of today's final action. 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 these units to surrender their allocations for inclusion in the State's new unit set-aside. If the State requires 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 to adopt this rule change but not to require the units to surrender allowances even though the units are no longer covered by the rule.

EPA will continue to review SIPs and State Plans submitted with the original cogeneration unit definition and efficiency standard and, at this time, will not disapprove any plan based solely on the absence of the changes in today's rule. As explained above, States are still required to complete the rulemaking process to revise their SIPs and State Plans to incorporate the clarifying change to the thermal efficiency standard and total energy input calculations for all cogeneration units in addition to making the necessary cogeneration unit definition changes as they apply to units that co-fire biomass. Specifically, with regard to CAIR SIPs, EPA is taking the approach of setting a deadline for States to adopt the revisions to the cogeneration unit definition and the efficiency standard finalized in today's rule. In order to give States time to adopt these revisions, EPA is not requiring that CAIR SIPs providing for participation in the appropriate EPA-administered trading programs to include the revisions until January 1, 2009. This means that, for purposes of reviewing and approving such a CAIR SIP before January 1, 2009, EPA will not disapprove any plan based solely on the absence of the changes in today's rule. However, any CAIR SIP providing for participation in an EPA-administered trading program that is not approved before January 1, 2009 must include the revisions in order to be subsequently approved and any such CAIR SIP that is approved before

<sup>9</sup>Data for EGU NO<sub>x</sub> Annual and NO<sub>x</sub> Ozone Season Allocations for the Clean Air Interstate Rule Federal Implementation Plan Trading Programs. EPA-HQ-OAR-2004-0076-0230 CAMR Unit Hg Allocations ([http://www.epa.gov/ttn/atw/utility/final\\_camr\\_unithgallo\\_oar-2002-0056-6155.xls](http://www.epa.gov/ttn/atw/utility/final_camr_unithgallo_oar-2002-0056-6155.xls))

January 1, 2009 without the revisions must be revised by January 1, 2009 to include the revisions.

With regard to CAMR State Plans, EPA is taking the approach set forth in 40 CFR 60.23(a), which includes general procedures for incorporation in State Plans of revisions of EPA requirements for such plans. Under 40 CFR 60.23(a), when the requirements for State Plans are revised, a State must adopt and submit a revised State Plan consistent with the revised requirements within nine months after the revised requirements are published or within such other period specified by the Administrator. In order to give States time to adopt the revisions to the cogeneration unit definition and the efficiency standard finalized in today's rule, EPA is setting a deadline under 40 CFR 60.23(a) of January 1, 2010 for adoption and submission of revised CAMR State Plans (whether or not they involve participation in the EPA-administered Hg trading program) that include these revisions.

### III. Calculating Thermal Efficiency and Total Energy Input

Today's action also adopts revisions to the definition of "total energy input," a term which is used in calculating thermal efficiency of a unit. These minor technical revisions will help regulatory authorities, owners, and operators determine whether the unit qualifies for the cogeneration unit exemption in CAIR, the CAIR model cap-and-trade rules, the CAIR FIPs, CAMR, the CAMR Hg model cap-and-trade rule, and the proposed CAMR Federal Plan.

In the proposal, EPA requested comments on revising the efficiency standard, or the definition of "total energy input," to specify the formula for calculating a unit's total energy input (i.e., fuel heat input). The approach that EPA is adopting in today's rule applies to all efficiency calculations made to determine if a unit satisfies the efficiency standard in the cogeneration unit definition regardless of whether or not the unit excludes from its calculation the heat input from biomass fuels. However, consistent with this final action, the thermal efficiency calculation shall include in "total energy input" the energy input from all fuels combusted by the boiler, other than biomass.

A critical value used in calculating a unit's efficiency under the thermal efficiency standard in the cogeneration unit definition is "total energy input." As discussed above under the efficiency standard, a unit's useful power plus one-half of useful thermal energy output

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. One of the first steps in determining a unit's total energy input is identifying the unit's fuel mix and the heat content or heating value of the fuel or fuels combusted by the unit. Heating value, commonly expressed in Btu, can be measured in several ways, but the most common are to use gross heat content (referred to as "higher heating value" or "HHV") or to use net heat content (referred to as "lower heating value" or "LHV"). According to the Energy Information Administration (EIA) of U.S. Department of Energy, higher heating value includes, while low heating value excludes, "the energy used to vaporize water (contained in the original energy form or created during the combustion process)".<sup>10</sup>

The thermal efficiency standard originally adopted by EPA was based on the thermal efficiency standard adopted by the Federal Energy Regulatory Commission (FERC) in determining whether a unit is a qualifying cogeneration unit under section (3)(18)(B) of the Federal Power Act (as amended by the Public Utility Regulatory Policy Act (PURPA)). However, EPA originally decided to make the thermal efficiency standard cover all fuels combusted by a unit, while the FERC limited application of the standard to natural gas and oil (See 70 FR 25277 and 18 CFR 292.205(a)(2) and (b)(1)). In today's action, of course, the thermal efficiency standard is being revised to exclude, for boilers, heat input from biomass.

FERC's regulations that included the thermal efficiency standard stated that "energy input" in the form of natural gas and oil "is to be measured by the lower heating value of the natural gas or oil." 18 CFR 292.202(m). As explained by FERC when it adopted these regulations in 1980 (45 FR 17959, 17962 (1980)):

Lower heating values were specified in the proposed rules in recognition of the act that practical cogeneration systems cannot recover and use the latent heat of water vapor formed in the combustion of hydrocarbon fuels. By specifying that energy input to a facility excludes energy that could not be recovered, the Commission hoped that the proposed energy efficiency standards would be easier to understand and apply.

Because the thermal efficiency standard on which EPA's thermal

efficiency standard was based is premised on using lower heating value to determine total energy input, EPA interprets the thermal efficiency standard in the existing CAIR, CAIR model cap-and-trade rules, CAIR FIPs, CAMR, CAMR Hg model cap-and-trade rule, and the CAMR Federal Plan, if finalized, as similarly requiring the use of lower heating value of all fuels combusted at the unit in calculating a unit's total energy input.

Further, although FERC regulations use lower heating value to measure a unit's energy input from natural gas and oil, the regulations do not specify a formula for calculating lower heating value. EPA proposed, and is adopting as final in today's action, a revision to the total energy input definition to add a specific formula for calculating lower heating value. Under this formula, the relationship between the lower heating value of a fuel and the higher heating value of that fuel is:

$$\text{LHV} = \text{HHV} - 10.55(W + 9H)$$

Where:

LHV = lower heating value of fuel in Btu/lb

HHV = higher heating value of fuel in Btu/lb

W = Weight % of moisture in fuel

H = Weight % of hydrogen in fuel

EPA maintains that, while FERC regulations do not include a formula for lower heating value, the above-described formula is consistent with the FERC's approach of calculating lower heating value of fuels by excluding from the higher heating value of such fuels "the latent heat of water vapor formed in the combustion of hydrocarbon fuels." (See 45 FR 17962). As discussed above, EPA's efficiency standard is based on the efficiency standard in FERC regulations.

Consequently, EPA interprets the existing CAIR, CAIR model cap-and-trade rules, CAIR FIPs, CAMR, CAMR Hg model cap-and-trade rule, and the CAMR Federal Plan, if finalized, to require use of this formula for calculating lower heating value for purposes of determining total energy input. EPA notes that this formula is consistent not only with the description of "lower heating value" by FERC, but also with EIA's above-discussed description of the term. EPA also notes that the formula reflects a standard approach to calculating lower heating value (See IFRF Combustion Handbook, <http://www.handbook.ifrf.net> (IFRF 1999–2000)).

In order to clarify that total energy input must be based on the lower heating value and that lower heating value must be calculated using the above-described formula EPA proposed

<sup>10</sup> [http://www.eia.doe.gov/glossary/glossary\\_h.htm](http://www.eia.doe.gov/glossary/glossary_h.htm).

and is today finalizing, a revision to the total energy heat input definition to make explicit the requirement to use lower heating value calculated using this formula. The revised total energy heat input definition applies to the CAIR, CAIR model cap-and-trade rules, CAIR FIPs, CAMR (including the CAMR Hg model cap-and-trade rule), and, if finalized, the CAMR Federal Plan. These minor technical revisions to the definition clarify for regulatory authorities and unit owners and operators, the application of the cogeneration unit exemption.

EPA maintains that this formula, along with the change to the efficiency standard for units burning biomass, should be more than sufficient to address the concern that the original efficiency standard unfairly penalized units firing biomass.

#### IV. Minor Corrections to CAIR and the Acid Rain Program Regulations

In addition to the above-described rule revisions, EPA is finalizing 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". In today's action, EPA is implementing these conforming changes in the definitions for these terms in § 51.123(cc) and (q) and § 51.124(q) for the reasons explained in the April 28, 2006 final action (See 71 FR 25328).

With regard to the CAIR model cap-and-trade rules, EPA finalizing 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 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—corrects this technical problem.

With regard to the Acid Rain Program regulations, EPA is today making final minor corrections to two parts of the regulations. In Part 72, EPA is making a non-substantive correction in wording in the Certificate of Representation requirements so that the provision will have the same wording as comparable provisions in the CAIR model cap-and-trade rules. This will facilitate using a single Certificate of Representation form for all of these trading programs. In Part 78, EPA is instituting corrections that will 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.

At this time, EPA is not finalizing the change to the boiler MACT that explicitly excludes from that rule "mercury budget units covered by 40 CFR part 60, subpart HHHH" (40 CFR 63.7491(c)) that was included in the proposal. Since the proposal was published, the boiler MACT has been vacated by the court (See *Natural Resources Defense Counsel v. EPA*, June 8, 2007), and EPA is in the process of re-developing a new regulation in response to the court decision.

#### V. 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 makes relatively minor revisions to the definition of "cogeneration unit" in the CAIR model cap-and-trade rules, CAIR FIPs, CAMR, including the CAMR Hg model cap-and-

trade rule. If EPA finalizes the proposed CAMR Federal Plan, it intends to make the same revisions in the final rule. It also makes some other minor, technical rule revisions to the CAIR, CAIR FIPs, CAMR, and the Acid Rain Program. For today's action, EPA is relying on the economic analysis conducted for CAIR and CAMR 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 makes relatively minor revisions to the definition of "cogeneration unit" in the CAIR model cap-and-trade rules, CAIR FIPs, CAMR, including the model cap-and-trade rule, and announces its intent to make the same revisions if it finalizes the proposed CAMR Federal Plan. It also makes some other minor, technical rule revisions to the CAIR, CAIR FIPs, CAMR, and the Acid Rain Program. 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 and CAMR.

The OMB has previously approved the information collection requirements contained in the existing CAIR, and CAMR regulations (70 FR 25313, May 12, 2005, 70 FR 28643, May 18, 2005 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). 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, 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 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 small 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 final 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 economic impact on a substantial number of 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 revising the thermal efficiency standard in the cogeneration unit definition, which exists in the CAIR model trading rules, CAIR FIPs, CAMR, including the CAMR Hg model trading rule, and proposed CAMR Federal Plan. As a result, some additional cogeneration units will likely be exempt

from the CAIR FIPs, CAMR and the proposed CAMR Federal Plan. We have therefore concluded that the changes to the CAIR FIPs, CAMR, including the CAMR model trading rule, and the proposed CAMR Federal Plan in today's 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 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 other rule revisions would not make any substantive changes in the requirements of the existing rules and, therefore, would not have any potential significant impacts on small entities.

For these reasons, the Administrator certifies that the rule will not have a significant economic impact on a substantial number of small entities.

### *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 \* \* \* in any one year." 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)(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 rulemaking processes. Most of the changes 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 FIPs, CAMR, including the CAMR model trading rule, and the proposed CAMR Federal Plan that will not significantly alter the impacts of these rules. The other rule changes would make no significant, substantive changes in the requirements of the existing rules. Thus, the analyses already prepared for CAIR and CAMR 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 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 final rule.

#### *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 final action 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 health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must 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 final 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 final 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 rule would be to exempt a small number of units with a very small amount of emissions compared to the overall emissions caps. The health and safety risks are essentially unchanged from those analyzed in CAIR, the CAIR FIPs, CAMR, and the proposed CAMR Federal Plan.

#### *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 22, 2001), because it is not a significant regulatory action under Executive Order 12866.

#### *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 final action does not use any additional technical standards beyond those cited in the final CAIR and CAMR. 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 (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal

executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

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

#### *K. Congressional Review Act*

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective November 19, 2007.

#### *L. Judicial Review*

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This Section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if (i) the agency action consists of "nationally applicable regulations promulgated, or final action taken, by the Administrator," or (ii) such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

Any final action related to CAIR and/or CAMR is "nationally applicable" within the meaning of section 307(b)(1). As an initial matter, through this rule, EPA interprets section 110 of the CAA, a provision which has nationwide applicability. In additions, CAIR applies to 28 States and the District of Columbia; and CAMR applies to all 50

States and the District of Columbia. CAIR and CAMR are also based on a common core of factual findings and analyses concerning the transport of pollutants between different States subject to CAIR and CAMR. Finally, EPA has established uniform approvability criteria that would be applied to all States subject to CAIR and CAMR. For these reasons, the Administrator also is determining that any final action regarding CAIR and/or CAMR is of nationwide scope and effect for purposes of section 307(b)(1). Thus, any petitions for review of final actions regarding this action must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date final actions is published in the **Federal Register**.

#### 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 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.

Dated: October 11, 2007.

**Stephen L. Johnson,**  
*Administrator.*

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

#### PART 51—[AMENDED]

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

**Authority:** 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

■ 2. Section 51.123 is amended as follows:

■ a. By adding a sentence at the end of paragraph (o)(1);

■ b. By adding a sentence at the end of paragraph (aa)(1);

■ c. In paragraph (cc):

i. In the definition of “Allocate or allocation”, by removing the word “source” and adding in its place the words “source or other entity”;

ii. By adding in alphabetical order a new definition of “Biomass”;

iii. In the definition of “Cogeneration unit”, by removing, in paragraph (2) introductory text, the words “year after which” and adding in their place the words “year after the calendar year in which”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place, and by adding a new paragraph (3);

iv. In paragraph (2) of the definition of “Combustion turbine”, by removing the words “any associated heat recovery steam generator” and adding in their place the words “any associated duct burner, heat recovery steam generator,”;

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

vi. In the definition of “Nameplate capacity”, by removing the words “other deratings) as specified” and adding in their place the words “other deratings) as of such installation as specified” and by removing the words “maximum amount as specified” and adding in their place the words “maximum amount as of such completion as specified”; and

vii. By adding a sentence at the end of the definition of “Total energy input”; and

■ d. In paragraph (ee)(1), by removing the words “State adopt” and adding in their place the words “State may adopt” and by adding a sentence at the end of paragraph 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.

\* \* \* \* \*

(o)(1) \* \* \* Before January 1, 2009, a State’s regulations shall be considered to be substantively identical to subparts AA through II of part 96 of this chapter, or differing substantively only as set forth in paragraph (o)(2) of this section, regardless of whether the State’s regulations include the definition of “Biomass”, paragraph (3) of the definition of “Cogeneration unit”, and the second sentence of the definition of “Total energy input” in § 96.102 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State’s regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State’s regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.

\* \* \* \* \*

(aa)(1) \* \* \* Before January 1, 2009, a State’s regulations shall be considered to be substantively identical to subparts AAAA through IIII of part 96 of the chapter, or differing substantively only as set forth in paragraph (o)(2) of this section, regardless of whether the State’s regulations include the definition of “Biomass”, paragraph (3) of the definition of “Cogeneration unit”, and the second sentence of the definition of “Total energy input” in § 96.302 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State’s regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State’s regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.

\* \* \* \* \*

(cc) \* \* \*

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from other nonmerchutable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchutable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*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 the initial installation of the unit as specified by the manufacturer of the unit.

\* \* \* \* \*

*Total energy input* means \* \* \* Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

(ee) \* \* \*

(1) \* \* \* Before January 1, 2009, a State's applicability provisions shall be considered to be substantively identical to § 96.304 of this chapter (with the expansion allowed under this paragraph) regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in § 97.102 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State's regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.

\* \* \* \* \*

■ 3. Section 51.124 is amended as follows:

■ a. By adding a sentence at the end of paragraph (o)(1); and

■ b. In paragraph (q):

i. In the definition of "Allocate or allocation", by removing the word "source" and adding in its place the words "source or other entity";

ii. By adding in alphabetical order a new definition of "Biomass";

iii. In the definition of "Cogeneration unit", by removing, in paragraph (2) introductory text, the words "year after which" and adding in their place the words "year after the calendar year in which", by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place, and by adding a new paragraph (3);

iv. In paragraph (2) of the definition of "Combustion turbine", by removing the words "any associated heat recovery steam generator" and adding in their place the words "any associated duct burner, heat recovery steam generator,";

v. By revising the definition of "Maximum design heat input";

vi. In the definition of "Nameplate capacity", by removing the words "other deratings) as specified" and adding in their place the words "other deratings as of such installation as specified" and by removing the words "maximum amount as specified" and adding in their place the words "maximum amount as of such completion as specified"; and

vii. By adding a sentence at the end of the definition of "Total energy input" to read as follows:

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

\* \* \* \* \*

(o)(1) \* \* \* Before January 1, 2009, a State's regulations shall be considered to be substantively identical to subparts AAA through III of part 96 of the chapter, or differing substantively only as set forth in paragraph (o)(2) of this section, regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in § 96.202 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a SIP revision that revises the State's regulations to include such provisions. Submission to the Administrator of a SIP revision that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1, 2009.

\* \* \* \* \*

(q) \* \* \*

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from other nonmerchutable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchutable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*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 the initial installation of the unit as specified by the manufacturer of the unit.

\* \* \* \* \*

*Total energy input* means \* \* \* Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

**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) is amended as follows:

■ a. By adding a sentence at the end of paragraph (6)(1); and

■ b. In paragraph (8):

i. By adding in alphabetical order a new definition of "Biomass";

ii. In the definition of "Cogeneration unit", by removing the period at the end of paragraph (2)(ii) and replacing it with a semicolon and by adding a new paragraph (3); and

iii. By adding a sentence at the end of the definition of "Total energy input" to read as follows:

**§ 60.24 Emission standards and compliance schedules.**

\* \* \* \* \*

(h) \* \* \*  
(6)(i) \* \* \* Before January 1, 2009, a State's regulations shall be considered to be substantively identical to subpart HHHH of this part, or differing substantively only as set forth in paragraph (h)(6)(ii) of this section, regardless of whether the State's regulations include the definition of "Biomass", paragraph (3) of the definition of "Cogeneration unit", and the second sentence of the definition of "Total energy input" in § 60.4102 of this chapter promulgated on October 19, 2007, provided that the State timely submits to the Administrator a State plan that revises the State's regulations to include such provisions. Submission to the Administrator of a State plan that revises the State's regulations to include such provisions shall be considered timely if the submission is made by January 1, 2010.

\* \* \* \* \*

(8) \* \* \* \* \*

*Biomass means—*

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from other nonmerchutable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*Total energy input means \* \* \** Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

■ 6. Section 60.4102 is amended as follows:

■ a. By adding in alphabetical order a new definition of "Biomass";

■ b. In the definition of "Cogeneration unit", by removing the period at the end of paragraph (2)(ii) and adding in its place a semicolon and by adding a new paragraph (3); and

■ c. By adding a sentence at the end of the definition of "Total energy input" to read as follows:

**§ 60.4102 Definitions.**

\* \* \* \* \*

*Biomass means—*

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchutable for other purposes, that is segregated from other nonmerchutable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*Total energy input means \* \* \** Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

**PART 72—PERMITS REGULATION**

■ 7. The authority citation for Part 72 is revised to read as follows:

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

**§ 72.24 [Amended]**

■ 8. Section 72.24 is amended, in paragraph (a)(9) introductory text, by removing the words "life-of-the-unit, firm power contractual arrangements" and adding in their place the words "a life-of-the-unit, firm power contractual arrangement".

**PART 78—APPEAL PROCEDURES**

■ 9. 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.*

■ 10. 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, 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(o)(1) or (2) of this chapter, subparts AAA through III of part 96 of this chapter or State regulations approved under § 51.124(o)(1) or (2) of this chapter, subparts AAAA 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 to subpart HHHH of part 60 of this chapter, 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]**

■ 11. The authority citation for Part 96 continues to read as follows:

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

■ 12. Section 96.102 is amended as follows:

■ a. By adding in alphabetical order a new definition of "Biomass";

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

#### § 96.102 Definitions.

\* \* \* \* \*

*Biomass means—*

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchtable for other purposes, that is segregated from other nonmerchtable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*Total energy input means \* \* \** Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

■ 13. Section 96.202 is amended as follows:

■ a. By adding in alphabetical order a new definition of “Biomass”;

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in

accordance with subpart CCC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

#### § 96.202 Definitions.

\* \* \* \* \*

*Biomass means—*

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchtable for other purposes, that is segregated from other nonmerchtable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*Total energy input means \* \* \** Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

■ 14. Section 96.302 is amended as follows:

■ a. By adding in alphabetical order a new definition of “Biomass”;

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CCCC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

#### § 96.302 Definitions.

\* \* \* \* \*

*Biomass means—*

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchtable for other purposes, that is segregated from other nonmerchtable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \* \*

*Total energy input means \* \* \** Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

Where:

LHV = lower heating value of fuel in Btu/lb,  
HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and  
H = Weight % of hydrogen in fuel.

\* \* \* \* \*

#### PART 97—[AMENDED]

■ 15. 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.*

■ 16. Section 97.102 is amended as follows:

■ a. By adding in alphabetical order a new definition of “Biomass”;

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

**§ 97.102 Definitions.**

\* \* \* \*

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \*

*Total energy input* means \* \* \* Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

LHV = HHV – 10.55(W + 9H)

Where:

LHV = lower heating value of fuel in Btu/lb, HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and H = Weight % of hydrogen in fuel.

\* \* \* \*

■ 17. Section 97.202 is amended as follows:

■ a. By adding in alphabetical order a new definition of “Biomass”;

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CCC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

**§ 97.202 Definitions.**

\* \* \* \*

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \*

*Total energy input* means \* \* \* Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

LHV = HHV – 10.55(W + 9H)

Where:

LHV = lower heating value of fuel in Btu/lb, HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and H = Weight % of hydrogen in fuel.

\* \* \* \*

■ 18. Section 97.302 is amended as follows:

■ a. By adding in alphabetical order a new definition of “Biomass”;

■ b. In the definition of “Cogeneration unit”, by removing the period at the end of paragraph (2)(ii) and adding a semicolon in its place and by adding a new paragraph (3);

■ c. In the definition of “Permitting authority”, by removing the words “in accordance with subpart CCCC of this part”; and

■ d. By adding a sentence at the end of the definition of “Total energy input” to read as follows:

**§ 97.302 Definitions.**

\* \* \* \*

*Biomass* means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from

other nonmerchantable material, and that is;

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

\* \* \* \*

*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 from all fuel except biomass if the unit is a boiler.

\* \* \* \*

*Total energy input* means \* \* \* Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

LHV = HHV – 10.55(W + 9H)

Where:

LHV = lower heating value of fuel in Btu/lb, HHV = higher heating value of fuel in Btu/lb,

W = Weight % of moisture in fuel, and H = Weight % of hydrogen in fuel.

\* \* \* \*

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**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 52**

[EPA–R03–OAR–2005–VA–0011; FRL–8484–5]

**Approval and Promulgation of Air Quality Implementation Plans; Commonwealth of Virginia; Control of Particulate Matter From Pulp and Paper Mills****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.**SUMMARY:** EPA is approving a State Implementation Plan (SIP) revision submitted by the Commonwealth of Virginia. The revision pertains to amendments to an existing regulation to control particulate matter from pulp and paper mills. EPA is approving this SIP revision in accordance with the Clean Air Act (CAA).**DATES:** *Effective Date:* This final rule is effective on November 19, 2007.**ADDRESSES:** EPA has established a docket for this action under Docket ID