

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for Proposed State Implementation Plan Revision**

AGENDA REQUESTED: May 21, 2008

DATE OF REQUEST: May 2, 2008

**NAME & NUMBER OF PERSON TO CONTACT REGARDING
CHANGES TO THIS REQUEST, IF NEEDED: Kerry Howard,
239-0556**

CAPTION: Docket No. 2008-0335-SIP. Consideration for publication of, and hearing on, proposed revisions to the state implementation plan to implement revisions to the Federal Clean Air Interstate Rule (CAIR) and Senate Bill 1672 of the 80th Texas Legislature, Regular Session in 2007. The proposed revisions incorporate Federal changes to the CAIR program; methodology for allocation of CAIR nitrogen oxides (NO_x) allowances as specified by Senate Bill 1672, 80th Texas Legislature, Regular Session; and non-substantive administrative changes. (Kim Herndon, Terry Salem) (Project No. 2007-051-SIP-NR)

D.C. Schambacher

Chief Engineer

Evana Neal

Division Director

Kerry Howard

Agenda Coordinator

Copy to CCC Secretary? NO X YES

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** May 2, 2008
Thru: LaDonna Castañuela, Chief Clerk
Glenn Shankle, Executive Director
From: David C. Schanbacher, P.E., Chief Engineer DCS
Chief Engineer's Office
Docket No.: 2008-0335-SIP
Subject: Commission Approval for the Proposed Clean Air Interstate Rule (CAIR) State
Implementation Plan (SIP) Revision
Project No. 2007-051-SIP-NR

Reasons for the SIP package:

To meet the requirements established by the United States Environmental Protection Agency (EPA) for the Clean Air Interstate Rule (CAIR) Phase II (2015 and thereafter) nitrogen oxides (NO_x) allocation submittal, Texas must submit a CAIR State Implementation Plan (SIP) revision to the EPA by early 2009. This will allow the EPA adequate time to review and approve the CAIR Phase II for Texas to use the NO_x allocation methodology specified in Senate Bill (SB) 1672¹, 80th Texas Legislature, Regular Session. In addition to the allocation issues relating to CAIR, the EPA has also revised the federal CAIR program five times since Texas adopted its initial CAIR SIP revision on July 12, 2006. This proposed CAIR SIP revision will also address proposed revisions to 30 Texas Administrative Code (TAC) Chapter 101 from the legislation.

For Texas to submit an approvable CAIR SIP revision, the state and federal requirements need to be consistent with each other. If Texas does not submit a CAIR SIP revision that incorporates the federal revisions, the EPA would require Texas to use the EPA's model CAIR rule NO_x allocation methodology. The model CAIR rule's NO_x allocation methodology is substantially different than the methodology prescribed in SB 1672. Texas' NO_x allocation methodology for Phase I was approved by the EPA on July 30, 2007, (72 FR 145).

In 2007, the 80th Texas Legislature passed SB 1672, allowing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision on July 12, 2006, as well as revisions to the NO_x allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_x allowance adjustments that were directed by House Bill (HB) 2481². HB 2481 revised the baseline of existing units every five years by using the three highest years heat input data from the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672 by shifting the allocation update from 2016 to 2018.

¹ Act of May 10, 2007, 80th Leg., R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

² Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

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Because of this legislative change in SB 1672, new³ electric generating units (EGUs) in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing⁴ EGU allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_x allowances will not fluctuate and will remain consistent for five years.

SB 1672 also omits the reference date of the federal CAIR program that was specified in HB 2481 from the 79th Texas legislative session. This change will enable the commission to make subsequent changes as dictated by federal rule change for CAIR.

This proposed CAIR SIP revision contains:

- Federal changes to the CAIR program, as specified below (specifics regarding these changes can be found in Chapter 1 – General);
- Methodology for allocation of CAIR NO_x allowances as specified in SB 1672; and
- Non-substantive administrative changes.

Under what authority are we proposing these changes?

The authority to propose and adopt the SIP is derived from Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.002, which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; and §382.0173, which authorizes the commission to adopt SIP and rule requirements relating to CAIR.

Is this SIP revision required by federal rule or state statute? Which ones?

Yes – The CAIR SIP revision is required by both federal rule and state statute.

Federal Changes to the CAIR Program:

Following are the federal changes to the CAIR program since May 12, 2005, that are being proposed for incorporation in this SIP revision. A brief description of each change is given from the most recent change as well as the *Federal Register* citation to provide additional information, if needed.

Federal Implementation Plans (FIPs) for the Clean Air Interstate Rule: Automatic Withdrawal Provisions – 40 CFR Part 52 – Direct Final Rule

November 2, 2007 *Federal Register*

The EPA took a direct final action to amend the FIPs for CAIR to provide for an automatic withdrawal of CAIR FIPs in a state upon the effective date of the EPA's approval of a full SIP revision meeting the CAIR requirements. All CAIR states are required to revise their SIPs to include control measures to reduce the emission of NO_x and/or SO₂. In this FIP rulemaking, the EPA stated it would withdraw the FIPs in a state in coordination with the full approval of the state's CAIR SIP. In this action, the EPA makes the FIP withdrawal for the state automatic upon approval of the full CAIR SIP revision. Note that the EPA has said that it will give partial approval if the SIP is approved after the EPA makes allowances under the FIP for the

³ New EGU - Units commencing operation on or after January 1, 2001.

⁴ Existing EGU - Units commencing operation before January 1, 2001.

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year; the SIP approval would be fully valid for the next year. The EPA believes that this will correct the deficiency that provided the basis for the EPA's promulgation of the FIPs. The direct final rule was effective on January 16, 2008.

Revisions to Definition of Cogeneration Unit (CAIR); CAIR Federal Implementation Plans (FIPs); Clean Air Mercury Rule (CAMR); and Technical Corrections to CAIR, CAIR FIPs, CAMR, and the Acid Rain Program Rules – 40 CFR Parts 51, 60, 72, 78, 96, and 97

October 19, 2007 *Federal Register*

The CAIR, CAIR FIP, and CAMR rule 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, the EPA changed 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, the EPA revised the calculation methodology for the efficiency standard in the cogeneration unit to exclude energy input from biomass making it more likely for units co-firing biomass to be able to meet the efficiency standard and qualify for an exemption. Because the EPA predicts that this change will only affect a small number of relatively low emitting units, the revision will have little effect on the projected emissions reductions and the environmental benefits of these rules. 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. This rule revision was effective on November 19, 2007.

(An opinion was issued on February 8, 2008, by the United States Court of Appeals, District of Columbia Circuit, to vacate CAMR. Therefore, CAMR will be the subject of future rulemaking.)

Clean Air Interstate Rule (CAIR) and CAIR Federal Implementation Plans; Corrections – 40 CFR Parts 51 and 97

***Federal Register* October 1, 2007**

The EPA made minor corrections to the CAIR to restore a phrase of regulatory text related to state annual emissions reporting requirements that was inadvertently deleted when the rule was amended in 2006. This rule also corrects typographical errors in the spellings of three states in the CAIR regulatory text and corrects a typographical error in a section citation in the CAIR FIP regulatory text. This rule revision was effective on October 1, 2007.

Clean Air Interstate Rule (CAIR) and Federal Implementation Plans for CAIR; Corrections – 40 CFR Parts 51, 96, and 97

***Federal Register* December 13, 2006**

The EPA made minor corrections to the CAIR and the FIPs for CAIR to clarify text that may potentially be misleading. This rule does not change any of CAIR or CAIR FIPs rule requirements or substantively change the rules in any way. This rule revision was effective on December 13, 2006.

Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program – CFR Parts 51, 52, 72, 73, 74, 78, 96, and 97

***Federal Register* April 28, 2006**

The EPA took action to address the interstate transport of emissions of NO_x and SO₂ that contribute significantly to nonattainment and maintenance problems with respect to the National Ambient Air Quality Standards (NAAQS) for PM_{2.5} and eight-hour ozone. As one part of this action, the EPA provided its final response to a petition submitted to the EPA by the State of North Carolina under Section 126 of the FCAA.

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The petitioner requested that the EPA find that SO₂ and/or NO_x emissions from EGUs in 13 states were significantly contributing to PM_{2.5} and/or eight-hour ozone nonattainment and maintenance problems in North Carolina and requested that the EPA establish control requirements to prohibit such significant contribution. The EPA denied the petition because, in this action, the EPA promulgated FIPs for all jurisdictions covered by the CAIR to address interstate transport.

The FIPs will regulate EGUs in the affected states and achieve the emissions reductions requirements established by the CAIR states that do not have approved SIPs to achieve the reductions. As the control requirements for the FIPs, the EPA adopted the model trading rules that the EPA provided in CAIR as a control option for states, with minor changes to account for federal rather than state implementation.

This action also revised the CAIR SIP model trading rules in order to address the interaction between the EPA-administered CAIR FIP trading programs being promulgated and the EPA-administered CAIR state trading programs that will be created by any state that elects to submit a SIP establishing such a trading program to meet the requirements of the CAIR. In addition, the EPA took final action on its reconsideration of the definition of "EGU" as it relates to solid waste incinerators.

This action also made revisions to the Acid Rain Program in order to make the administrative appeals procedures, which currently apply to final determinations by the Administrator under the EPA-administered CAIR state trading programs, also apply to the EPA-administered CAIR state trading programs, and also apply to the EPA-administered trading program under the FIP action. In addition, the EPA made certain minor revisions to the Acid Rain Program that will apply to all affected units.

The definition of CAIR EGU applicability has also been revised. CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit. This action became effective on June 27, 2006.

State Legislative Changes:

In 2007, the 80th Texas Legislature passed SB 1672, which directed the TCEQ to incorporate subsequent federal CAIR changes that the EPA has finalized since the initial adoption of the CAIR SIP revision on July 12, 2006, as well as revisions to the NO_x allocation methodology as prescribed by SB 1672. SB 1672 relates to correcting the number of minimum periods specified for NO_x allowance adjustments that were directed by HB 2481. HB 2481 adjusted the baseline of existing units every five years by using the three highest years of heat input data from the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 also shifted the allocation update from 2016 to 2018.

Because of the legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing allocation pool. This is consistent with how new

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units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_x allowances would not fluctuate and would remain consistent for five years.

Are there any legal deadlines by which this SIP revision must be proposed, adopted, or effective?

To meet the requirements established by the EPA for CAIR Phase II NO_x allocation submittal, Texas must submit a CAIR SIP revision to the EPA by early 2009. This will allow the EPA adequate time to review and approve the CAIR Phase II for Texas to use the NO_x allocation methodology specified in SB 1672. The Phase II NO_x allocations must be submitted to the EPA by October 31, 2011.

What issue(s) or problem(s) are we trying to solve?

The CAIR SIP revision will incorporate federal rule changes and state statute changes that will allow Phase II of the CAIR program for Texas to be approved by the EPA.

• **Why is it important that we do this SIP revision package?**

It is important for Texas to have an approved CAIR SIP revision because this will allow the TCEQ to distribute NO_x allowances to EGUs for CAIR Phase II (2015 through thereafter), as directed by the Texas Health and Safety Code 382.0173.

• **Other important background or historical information.**

Texas' NO_x allocation methodology for Phase I was approved by the EPA on July 30, 2007, (72 FR 145).

Scope of the SIP revision:

This CAIR SIP revision contains:

- Federal changes to the CAIR program;
- Methodology for allocation CAIR NO_x allowances as specified in SB 1672; and
- Non-substantive administrative changes.

Staff recommendations that are not expressly required by federal rule or state statute:

Because of the legislative change in SB 1672 that shifted the revision of the baseline from 2016 to 2018, staff is proposing that new units in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing allocation pool. This is consistent with how new units that become existing units with five or more consecutive years of operation are provided NO_x allowance allocations for the 2015 control period under the federal CAIR program.

Beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. Therefore, starting in 2018, new units during this five-year baseline readjustment, with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_x allowance allocations would not fluctuate and would remain consistent for five years. This consistency will provide stability to EGUs as they plan operations.

Impact on the regulated community:

Yes

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Who will be affected?

EGUs as defined by the EPA and the public will be affected by the rule revisions associated with the CAIR SIP revision.

Regulated community:

CAIR emission reductions are focused on new and existing EGUs statewide. The EPA defines EGUs for CAIR as: CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit will be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit.

- **Does this CAIR SIP revision create a group of affected persons who were not affected previously? How?**
No
- **Will there be a fiscal impact? If so, estimate.**
There is no specific fiscal impact associated with the CAIR SIP revision. The fiscal impact, if any will be tied to the proposed changes to Chapter 101.

Impact on the public:

Who will be affected?

The public would realize public health and environmental benefits based on the reductions in NO_x and SO₂ emissions. However, the public may experience increased electricity prices due to retail electric providers passing along incurred compliance costs. The EPA estimates retail electricity prices to increase 0.06 \$/kilowatt hour (kWh) in Texas by the year 2015 due to CAIR.

Does it create a group of affected persons who were not affected previously? How?

No – The CAIR SIP revision will not affect a new group of individuals from the CAIR SIP revision adoption in July 1006.

- **Will there be a fiscal impact? If so, estimate.**
No

Impact on agency programs:

The CAIR SIP will affect the following agency offices: the Chief Engineer's Office; the Office of Permitting, Remediation, and Registration; the Office of Compliance and Enforcement; and the Office of Legal Services.

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Stakeholder meetings:

- **Have any stakeholder meetings been held?**
Stakeholder meetings were not necessary to support the rulemaking required by the proposed CAIR SIP revision. Revisions to the SIP and changes to the rule have both been directed by the 80th Texas Legislature in SB 1672, Health and Safety Code 382.0173.
- **With whom?**
N/A
- **What were the general sentiments?**
N/A
- **Were any changes made in response to stakeholder concerns?**
N/A

Policy issues:

- **What policy issues are affected?**
The timing of moving new EGUs from new to existing EGUs in 2016, 2017, and every five years thereafter beginning in 2018 is an outstanding policy issue that is addressed in the CAIR SIP revision proposal. Additional information is provided in the next subsection.
- **Are any policies that are not currently based on rule being made into a rule?**
Because of the legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_x allowance allocations would not fluctuate and would remain consistent for five years.
- **What are the consequences if this SIP revision is not approved to go forward?**
If the CAIR SIP revision does not proceed through to the adoption process, Texas will not have an approved CAIR SIP for Phase II of CAIR that begins in 2015 and therefore will not be able to allocate NO_x allowances as directed by SB 1672. To meet the requirements established by the EPA for CAIR Phase II NO_x allocation submittal, Texas must submit a CAIR SIP revision to the EPA by early 2009. This will allow the EPA adequate time to review and approve the CAIR Phase II for Texas to use the NO_x allocation methodology specified in SB 1672. The Phase II NO_x allocations must be submitted to the EPA by October 31, 2011.
- **Are there alternatives?**
No – The CAIR SIP revision is needed because of federal rule changes and state statute.

Potentially controversial matters:

The TCEQ was directed by the 79th Texas Legislature in HB 2481 to take all reasonable and appropriate steps to exclude the West Texas Region and El Paso Region from CAIR. The TCEQ submitted a Petition for Reconsideration to the EPA on July 11, 2005, requesting the exclusion of the West Texas Region and El Paso Region from CAIR. The EPA denied the TCEQ's Petition for Reconsideration on March 15, 2006.

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Entergy Corporation filed a Petition for Reconsideration to challenge how the EPA allocated NO_x and SO₂ allowances to states on the basis that Texas, Louisiana, and Mississippi did not receive a fair allocation. The City of Amarillo, El Paso Electric Company, Occidental Permian Ltd., and Southwestern Public Service Company dba Xcel Energy also filed a Petition for Reconsideration primarily regarding the exclusion of West Texas. Their petition was also denied on March 15, 2006; however, they chose to appeal to the United States District Court in Washington D.C. To date the court has not made a decision. There are also additional pending court challenges that could impact the finality of CAIR.

Key points in proposed SIP revision schedule:

- **Anticipated proposal date:** May 21, 2008
- **Anticipated *Texas Register* hearing notice date:** June 6, 2008
- **Public hearing date (if any):** June 30, 2008, Fort Worth; July 1, 2008, Austin; and July 2, 2008, Houston
- **Public comment period:** May 27 – July 3, 2008
- **Anticipated adoption date:** October 2008

Agency contacts:

Kim Herndon, Project Manager, 239-1421, Air Quality Division
Terry Salem, Staff Attorney, 239-0469
Amy Browning, Staff Attorney, 239-0891

Attachment

cc: Chief Clerk, 5 copies
Executive Director's Office
David C. Schanbacher, P.E.
Ashley K. Wadick
Daniel Womack
Zak Covar
Office of General Counsel
Kim Herndon

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Chapter 56

S.B. No. 1672

AN ACT

relating to nitrogen oxide allowance allocation adjustments and the incorporation of modifications to federal rules under the state implementation plan.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subsections (b), (c), and (e), Section 382.0173, Health and Safety Code, are amended to read as follows:

(b) The commission may require emissions reductions in conjunction with implementation of the rules adopted under Subsection (a) only for electric generating units. The commission shall make permanent allocations that are reflective of the allocation requirements of 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as applicable, at no cost to units as defined in 40 C.F.R. Sections [~~Section~~] 51.123 and 60.4102 using the United States Environmental Protection Agency's allocation method as specified by 40 C.F.R. Section 60.4142(a)(1)(1) [~~as issued by that agency on May 12, 2005,~~] or 40 C.F.R. Section 96.142(a)(1)(1) [~~as issued by that agency on May 18, 2005,~~], as applicable, with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c). The commission shall maintain a special reserve of allocations for new units commencing operation on or after January 1, 2001, as defined by 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and

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1 40 C.F.R. Subpart HHHH of Part 60, as applicable, with the exception
2 of nitrogen oxides which shall be allocated according to the
3 additional requirements of Subsection (c).

4 (c) Additional requirements regarding NOx allocations:

5 (1) The commission shall maintain a special reserve of
6 allocations for nitrogen oxide of 9.5 percent for new units.
7 Beginning with the 2015 control period, units shall be considered
8 new for each control period in which they do not have five years of
9 operating data reported to the commission prior to the date of
10 allocation for a given control period. Prior to the 2015 control
11 period, units that commenced operation on or after January 1, 2001,
12 will receive NOx allocations from the special reserve only.

13 (2) Nitrogen oxide allowances shall be established for
14 the 2009-2014 control periods for units commencing operation before
15 January 1, 2001, using the average of the three highest amounts of
16 the unit's adjusted control period heat input for 2000 through
17 2004, with the adjusted control period heat input for each year
18 calculated as follows:

19 (A) if the unit is coal-fired during the year,
20 the unit's control period heat input for such year is multiplied by
21 90 percent;

22 (B) if the unit is natural gas-fired during the
23 year, the unit's control period heat input for such year is
24 multiplied by 50 percent; and

25 (C) if the fossil fuel fired unit is not subject
26 to Paragraph [~~Subparagraph~~] (A) or (B) of this subdivision
27 [~~paragraph~~], the unit's control period heat input for such year is

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of
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1 multiplied by 30 percent.

2 (3) Before the allocation date specified by EPA for
3 the control period beginning January 1, 2018 [2016], and every five
4 years thereafter, the commission shall adjust the baseline for all
5 affected units using the average of the three highest amounts of the
6 unit's adjusted control period heat input for periods one through
7 five of the preceding nine [seven] control periods, with the
8 adjusted control period heat input for each year calculated as
9 follows:

10 (A) for units commencing operation before
11 January 1, 2001:

12 (1) if the unit is coal-fired during the
13 year, the unit's control period heat input for such year is
14 multiplied by 90 percent;

15 (11) if the unit is natural gas-fired
16 during the year, the unit's control period heat input for such year
17 is multiplied by 50 percent; and

18 (111) if the fossil fuel fired unit is not
19 subject to Subparagraph (1) or (11) [~~Subdivision (3)(A)(1) or~~
20 ~~(3)(A)(11)] of this paragraph [~~subparagraph~~], the unit's control
21 period heat input for such year is multiplied by 30 percent; and[-]~~

22 (B) for units commencing operation on or after
23 January 1, 2001, in accordance with the formulas set forth by USEPA
24 in 40 C.F.R. 96.142 with any corrections to this section that may be
25 issued by USEPA prior to the allocation date.

26 (e) In adopting rules under Subsection (a), the commission
27 shall incorporate any modifications to the federal rules cited in

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1 this section that result from:

2 (1) a request for rehearing regarding those rules that
3 is filed with the United States Environmental Protection Agency;

4 (2) [~~ex from~~] a petition for review of those rules that
5 is filed with a court; or

6 (3) a final rulemaking action of the United States
7 Environmental Protection Agency.

8 SECTION 2. This Act takes effect immediately if it receives
9 a vote of two-thirds of all the members elected to each house, as
10 provided by Section 39, Article III, Texas Constitution. If this
11 Act does not receive the vote necessary for immediate effect, this
12 Act takes effect September 1, 2007.

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2007

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David Newhurst
President of the Senate

Jim Cradick
Speaker of the House

I hereby certify that S.B. No. 1672 passed the Senate on April 12, 2007, by the following vote: Yeas 31, Nays 0.

Datsy Spaw
Secretary of the Senate

I hereby certify that S.B. No. 1672 passed the House on April 27, 2007, by the following vote: Yeas 133, Nays 0, two present not voting.

Robert Haney
Chief Clerk of the House

Approved:

10 MAY '07

Date

RICK PERCY
Governor

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
6:20 PM O'CLOCK

MAY 10 2007

Roger Winnie

REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP)
FOR ELECTRIC GENERATING UTILITIES STATEWIDE TO REDUCE
FINE PARTICULATE MATTER OF 2.5 MICRONS OR LESS (PM_{2.5})
TRANSPORT EMISSIONS

CLEAN AIR INTERSTATE RULE
(CAIR)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087

DOCKET No. 2008-0335-SIP

PROJECT No. 2007-051-SIP-NR

Chapter 101 - 2007-053-101-EN (CAIR)

Proposal

May 21, 2008

SECTION VI. CONTROL STRATEGY

- A. Introduction (No change.)
- B. Ozone (No change.)
- C. Particulate Matter (No change.)
- D. Carbon Monoxide (No change.)
- E. Lead (No change.)
- F. Oxides of Nitrogen (No change.)
- G. Sulfur Dioxide (No change.)
- H. Conformity with the National Ambient Air Quality Standards (No change.)
- I. Site Specific (No change.)
- J. Mobile Source Strategies (No change.)
- K. Clean Air Interstate Rule (Revised.)
- L. Transport (No change.)
- M. Regional Haze (Proposed December 2007.)

EXECUTIVE SUMMARY

This Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP) revision is proposed to incorporate five federal rule revisions that the United State Environmental Protection Agency (EPA) has promulgated since the Texas Commission on Environmental Quality (TCEQ) commission adopted the initial CAIR SIP revision on July 12, 2006. This proposed CAIR SIP revision will also address proposed revisions to 30 Texas Administrative Code (TAC) Chapter 101 resulting from legislation during the 80th Texas Legislature as prescribed by Senate Bill (SB) 1672¹. Additional information regarding each of these changes can be found in Chapter 1: General. Non-substantive administrative changes will also be addressed in this proposal.

In 2007, the 80th Texas Legislature passed SB 1672, directing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the nitrogen oxides (NO_x) allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_x allocation adjustments that were directed by House Bill 2481². HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by looking back at the three highest years of the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672 by shifting the allocation update from 2016 to 2018.

Because of this legislative change in SB 1672, new³ electric generating units (EGUs) in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing⁴ EGU allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_x allowance will not fluctuate and will remain consistent for five years.

SB 1672 also omits the reference date of the federal CAIR program that was specified in HB 2481 from the 79th Texas legislative session. This change will enable the commission to make subsequent changes as dictated by federal rule change for CAIR.

This proposed CAIR SIP revision contains:

- Federal changes to the CAIR program, as specified below (specifics regarding these changes can be found in Chapter 1 – General;
- Methodology for allocation of CAIR NO_x allowances as specified under SB 1672, 80th Texas

¹ Act of May 10, 2007, 80th Leg. R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix A.

² Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

³ New EGU - Units commencing operation on or after January 1, 2001.

⁴ Existing EGU - Units commencing operation before January 1, 2001.

- Legislature, 2007, Regular Session; and
• Non-substantive administrative changes.

Background

On May 12, 2005, CAIR was published in the *Federal Register*. The rule required 28 eastern states and the District of Columbia to reduce sulfur dioxide (SO₂) and/or NO_x emissions, which are precursors of PM_{2.5} and ozone. Twenty-five states⁵ and the District of Columbia must reduce annual SO₂ and NO_x emissions to attain the PM_{2.5} National Ambient Air Quality Standards (NAAQS). Under CAIR, twenty-five states⁶ and the District of Columbia, not including Texas, must reduce NO_x emissions for the purposes of attainment of the eight-hour ozone NAAQS. States were given the choice to use one of two compliance options from the EPA: meet the state's emission budget by requiring EGUs to participate in an EPA -administered interstate cap and trade program; or meet an individual state emissions budget through measures of the state's choosing. The 79th Texas Legislature in 2005 passed House Bill (HB) 2481 in its Regular Session requiring the TCEQ to adopt the EPA-administered interstate cap and trade program by reference and stipulating specifications for NO_x allowance allocations and set-asides for NO_x emissions, as well as only requiring reductions associated with CAIR from new and existing EGUs.

The EPA modeled 37 states, including Texas, for fine particulate matter of 2.5 microns and less (PM_{2.5}) contribution using the Community Multiscale Air Quality Model (CMAQ). State-by-state zero-out modeling was then used to quantify the state's contribution for SO₂ and NO_x. A criterion of 0.2 micrograms per cubic meter (µg/m³) was used for determining whether SO₂ and NO_x emissions in a state made a significant contribution to PM_{2.5} nonattainment in another state. The EPA's modeling demonstrated that Texas provided a contribution of 0.29µg/m³ with two downwind "linkages." The two downwind counties identified are Madison and Saint Clair in Illinois. For ozone contribution only, 31 states in the eastern United States were modeled. Since Texas was not included in the modeling exercise, the EPA did not determine that Texas contributed to ozone nonattainment in another state.

The control measures identified in the CAIR program to regulate EGUs through an interstate cap and trade program were approved by the EPA as an option under the program. Table ES-1: *CAIR NO_x Control Measures Reductions Within Texas* and Table ES-2: *CAIR SO₂ Control Measures Reductions Within Texas* provides an overview of projected emission reductions provided by the EPA⁷ for SO₂ and NO_x, respectively.

⁵ Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New York, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

⁶ Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin.

⁷ Web site information on projected NO_x and SO₂ emission reductions can be found at <http://www.epa.gov/CAIR/tx.html>

Table ES-1: CAIR NO_x Control Measures Reductions Within Texas

| NO_x Emissions (thousand tons per year) | 2003 | 2009 | 2015 |
|--|-------------|-------------|-------------|
| Texas NO_x Emissions without CAIR | 211 | 186 | 179 |
| Texas NO_x Emissions with CAIR | N/A | 167 | 159 |

(The EPA projects that by 2015, CAIR will help Texas sources reduce NO_x by 52,000 tons per year or 25 percent.)

Table ES-2: CAIR SO₂ Control Measures Reductions Within Texas

| SO₂ Emissions (thousand tons per year) | 2003 | 2010 | 2015 |
|--|-------------|-------------|-------------|
| Texas SO₂ Emissions without CAIR | 578 | 417 | 418 |
| Texas SO₂ Emissions with CAIR | N/A | 398 | 352 |

(The EPA projects that by 2015 CAIR will help Texas sources reduce SO₂ by 226,000 tons per year or 39 percent.)

CAIR consists of two phases for NO_x and SO₂ reductions with declining allocations. For Phase I, from 2009 through 2014, the Texas NO_x budget is 181,014 tons per year (tpy). For Phase II, from 2015 and thereafter, the Texas NO_x budget is 150,845 tpy. Allocations for NO_x and SO₂ are reflective of the budgets given in the EPA's May 12, 2005, CAIR rule (40 CFR Part 51.123(e)(2) - Annual NO_x Budgets; and 41 CFR Part 51.124 (e)(2)). EGUs will have the option to hold, transfer or sell allowances, but at the end of each year's reconciliation period, each EGU must have enough allowances in its compliance account to cover emissions during the control period.

SO₂ budgets are based on the existing Title IV program under the Federal Clean Air Act (FCAA). Title IV is also known as the Acid Rain program. Allowance allocations with annual state budgets for Phase I (2010 through 2014) are based on a 50 percent reduction of SO₂ emissions from all EGUs in the affected state. The initial Texas budget for Phase I is 320,946 tpy. In Phase II (2015 and beyond), emissions are based on a 65 percent reduction of Title IV allowances allocated to EGUs in the affected state for SO₂. The Texas budget for Phase II is 224,662 tpy. EGUs that are regulated by CAIR and were not regulated by the Acid Rain program will be required to obtain the needed SO₂ allowances to comply with their CAIR obligations through the trading system.

The EPA's model emission trading rule, 40 CFR Part 96, is a market-based system designed to reduce the costs of complying with the new NO_x and SO₂ emission limits. The trading system places a collective cap on both NO_x and SO₂ emissions from EGUs and provides for the trading of allowances similar to Title IV of the FCAA's SO₂ Allowance Trading program. Texas EGUs will be allowed to trade NO_x allowances only with other CAIR states⁸ that are participating in the annual NO_x trading program. SO₂

⁸ Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

allowances can still be traded within the realm of the Title IV/Acid Rain program as defined under 40 CFR Part 96 AAA. EGUs subject to Acid Rain program will be required to meet allowance requirements of that program in addition to CAIR's allowance requirements.

CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990⁹ or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit.

By October 31, 2006, and in accordance with the requirements given in 40 Code of Federal Regulation (CFR) Part 96.141 and incorporated in 30 TAC Chapter 101, Subchapter H, Division 7, the TCEQ provided the EPA with the initial NO_x allocations for 2009-2014 (Phase I of CAIR) to be distributed to the state's existing EGUs. The NO_x allocations were finalized by the EPA's Clean Air Markets Division in October 2007. For the 2015 control period of Phase II, Texas will submit to the EPA beginning October 31, 2009, the CAIR NO_x allocations for the control period in the sixth year after the year of the applicable deadline for submission under 40 CFR Part 96.153.

The CAIR NO_x trading budget for each CAIR NO_x unit is based on the specific direction provided under SB 1672 of the 80th Texas Legislature 2007, Regular Session. A total amount of CAIR NO_x allowances equal to 9.5 percent of the CAIR NO_x trading budget for Texas will be set-aside as a special reserve for distribution to new units commencing operation on or after January 1, 2001. The remaining 90.5 percent of the CAIR NO_x trading budget for Texas will be distributed to units having commenced operation before January 1, 2001, based on a three-year average of the unit's historical heat input adjusted for the type of fuel burned. In performing the fuel adjustment, a unit's historical heat input will be multiplied by the following: 90 percent for coal-fired, 50 percent for natural gas-fired, and 30 percent for all other fossil fuels. Requests for allocations from new units are due to the TCEQ's executive director by May 1, 2009.

In addition to the CAIR NO_x trading budget for Texas, the CAIR model trading rule provides an additional pool of allowances available for allocation in the 2009 control period to those CAIR NO_x units achieving early NO_x reductions in 2007 and 2008, or whose compliance with the CAIR NO_x reduction requirements for the 2009 control period would create undue risk to the reliability of electricity supply during the year 2009. This pool of NO_x allowances defined as the compliance supplement pool (CSP) equates to an additional 772 tons for Texas (40 CFR Part 96.143). Section 101.508 outlines the requirements for the request by CAIR NO_x sources of allowances from the CSP.

The CAIR rule included a provision that other units may opt-in to the CAIR cap and trade program under 40 CFR Part 96 Subpart II for NO_x or 40 CFR Part 96 Subpart III for SO₂.

⁹ The definition of EGU was revised to include November 15, 1990, on April 28, 2006, (71 FR 82).

Enforcement responsibilities and expectations include requirements for the TCEQ to conduct pretest meetings with EGUs and observe stack testing and quality assurance testing/certification of monitoring systems. The federal regulations, 40 CFR Part 96 Subpart HH for NO_x and 40 CFR Part 96 Subpart HHH for SO₂, require that the TCEQ review each monitoring system certification application and issue written notice of approval or disapproval of an application within 120 days after receipt of a complete application (initial or recertification). A default approval is enacted if the certification is not issued within 120 days; however, the rule provides for later decertification, if necessary. The TCEQ will also be responsible for handling any monitoring system decertification actions, conducting site inspections and audits, and being the lead on any enforcement actions.

Title V permits were revised to reflect EGU participation in CAIR. Submission of CAIR permit applications is dictated by 40 CFR Part 96.121 for NO_x and 40 CFR Part 96.221 for SO₂. The TCEQ incorporated requirements for revising Title V permits in 30 TAC Chapter 122.

The TCEQ is participating in the EPA-administered interstate cap and trade program. Therefore, recordkeeping and reporting requirements for EGUs participating in CAIR will be directed and administered by the EPA's Clean Air Markets Division.

Texas' NO_x allocation methodology for Phase I was approved by the EPA on July 30, 2007, (72 FR 145). NO_x allocations from Phase I have been posted on the EPA's Web site.

SECTION V: LEGAL AUTHORITY -

A. General

The Texas Commission on Environmental Quality (TCEQ) has the legal authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS).

The first air pollution control act, known as the Clean Air Act of Texas, was passed by the Texas legislature in 1965. In 1967, the Clean Air Act of Texas was superseded by a more comprehensive statute, the Texas Clean Air Act (TCAA), found in Article 4477-5, Vernon's Texas Civil Statutes. The Legislature amended the TCAA in 1969, 1971, 1973, 1979, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, and 2007. In 1989, the TCAA was codified as Chapter 382 of the Texas Health & Safety Code.

Originally, the TCAA stated that the Texas Air Control Board (TACB) is the state air pollution control agency and is the principal authority in the state on matters relating to the quality of air resources. In 1991, the legislature abolished the TACB effective September 1, 1993, and its powers, duties, responsibilities, and functions were transferred to the Texas Natural Resource Conservation Commission (TNRCC). With the creation of the TNRCC, the authority over air quality is found in both the Texas Water Code and the TCAA. Specifically, the authority of the TNRCC is found in Chapters 5 and 7. Chapter 5, Subchapters A - F, H - J, and L, include the general provisions, organization, and general powers and duties of the TNRCC, and the responsibilities and authority of the executive director. This chapter also authorizes the TNRCC to implement action when emergency conditions arise and to conduct hearings. Chapter 7 gives the TNRCC enforcement authority. In 2001, the 77th Texas Legislature continued the existence of the TNRCC until September 1, 2013, and changed the name of the TNRCC to the Texas Commission on Environmental Quality (TCEQ).

The TCAA specifically authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a general, comprehensive plan. The TCAA, Subchapters A - D, also authorize the TCEQ to collect information to enable the commission to develop an inventory of emissions; conduct research and investigations; enter property and examine records; prescribe monitoring requirements; institute enforcement proceedings; enter into contracts and execute instruments; formulate rules; issue orders taking into consideration factors bearing upon health, welfare, social and economic factors, and practicability and reasonableness; conduct hearings; establish air quality control regions; encourage cooperation with citizens' groups and other agencies and political subdivisions of the state as well as with industries and the federal government; and establish and operate a system of permits for construction or modification of facilities.

Local government authority is found in Subchapter E of the TCAA. Local governments have the same power as the TCEQ to enter property and make inspections. They also may make recommendations to the commission concerning any action of the TCEQ that affects their territorial jurisdiction, may bring enforcement actions, and may execute cooperative agreements with the TCEQ or other local governments. In addition, a city or town may enact and enforce ordinances for the control and abatement of air pollution not inconsistent with the provisions of the TCAA or the rules or orders of the commission.

Subchapters G and H of the TCAA authorize the TCEQ to establish vehicle inspection and maintenance programs in certain areas of the state, consistent with the requirements of the federal Clean Air Act; coordinate with federal, state and local transportation planning agencies to develop and implement transportation programs and measures necessary to attain and maintain the NAAQS; establish gasoline

volatility and low emission diesel standards; and fund and authorize participating counties to implement vehicle repair assistance, retrofit and accelerated vehicle retirement programs.

B. Applicable Law

The following statutes and rules provide necessary authority to adopt and implement the SIP. The rules listed below have previously been submitted as part of the SIP.

Statutes

TEXAS HEALTH & SAFETY CODE, Chapter 382

September 1, 2007

TEXAS WATER CODE

September 1, 2007

All sections of each subchapter are included, unless otherwise noted.

Chapter 5: Texas Natural Resource Conservation Commission

Subchapter A: General Provisions

Subchapter B: Organization of the Texas Natural Resource Conservation Commission

Subchapter C: Texas Natural Resource Conservation Commission

Subchapter D: General Powers and Duties of the Commission

Subchapter E: Administrative Provisions for Commission

Subchapter F: Executive Director (except §§ 5.225, 5.226, 5.227, 5.2275, 5.231, 5.232, and 5.236)

Subchapter H: Delegation of Hearings

Subchapter I: Judicial Review

Subchapter J: Consolidated Permit Processing

Subchapter L: Emergency and Temporary Orders (§§ 5.514, 5.5145 and 5.515 only)

Chapter 7: Enforcement

Subchapter A: General Provisions (§§ 7.001, 7.002, 7.00251, 7.0025, 7.004, 7.005 only)

Subchapter B: Corrective Action and Injunctive Relief (§ 7.032 only)

Subchapter C: Administrative Penalties

Subchapter D: Civil Penalties (except § 7.109)

Subchapter E: Criminal Offenses and Penalties: §§ 7.177, 7.179-7.183

Rules

All of the following rules are found in Title 30 Texas Administrative Code, as of the following effective dates:

Chapter 7, Memoranda of Understanding, §§ 7.110 and 7.119

May 2, 2002

Chapter 19, Electronic Reporting

March 1, 2007

Chapter 35, Subchapters A-C, K: Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions

July 20, 2006

Chapter 39, Public Notice, §§ 39.201; 39.401; 39.403(a) and (b)(8)-(10); 39.405(f)(1) and (g); 39.409; 39.411 (a), (b)(1)-(6) and (8)-(10) and (c)(1)-(6) and (d); 39.413(9), (11), (12) and (14); 39.418(a) and (b)(3) and (4); 39.419(a), (b),(d) and (e); 39.420(a), (b) and (c)(3) and (4); 39.423 (a) and (b); 39.601; 39.602; 39.603; 39.604; and 39.605

March 29, 2006

Chapter 101: General Air Quality Rules

August 16, 2007

| | |
|---|-------------------|
| Chapter 106: Permits by Rule, Subchapter A | June 30, 2004 |
| Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter | July 19, 2006 |
| Chapter 112: Control of Air Pollution from Sulfur Compounds | July 16, 1997 |
| Chapter 113: Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants | December 27, 2007 |
| Chapter 114: Control of Air Pollution from Motor Vehicles | January 6, 2008 |
| Chapter 115: Control of Air Pollution from Volatile Organic Compounds | July 19, 2007 |
| Chapter 116: Permits for New Construction or Modification | January 10, 2008 |
| Chapter 117: Control of Air Pollution from Nitrogen Compounds | June 14, 2007 |
| Chapter 118: Control of Air Pollution Episodes | March 5, 2000 |
| Chapter 122, § 122.122: Potential to Emit | December 11, 2002 |
| Chapter 122, § 122.215: Minor Permit Revisions | June 3, 2001 |
| Chapter 122, § 122.216: Applications for Minor Permit Revisions | June 3, 2001 |
| Chapter 122, § 122.217: Procedures for Minor Permit Revisions | December 11, 2002 |
| Chapter 122, § 122.218: Minor Permit Revision Procedures for Permit Revisions Involving the Use of Economic Incentives, Marketable Permits, and Emissions Trading | June 3, 2001 |

LIST OF ACRONYMS

Btu/KWh – British Thermal Unit per Kilowatt
CAIR - Clean Air Interstate Rule
CAMR - Clean Air Mercury Rule
CAMx - Comprehensive Air Model with Extensions
CFR - Code of Federal Regulations
CEMS - Continuous Emissions Monitoring System
CERR - Consolidated Emissions Reporting Rule
CMAQ - Community Multiscale Air Quality Modeling
CSP - Compliance Supplement Pool
EDMS – Emissions and Dispersion Modeling System
EGF - Electric Generating Facilities
EGU - Electric Generating Units
EI - Emissions Inventory
EIQ - Emissions Inventory Questionnaire
EPA – United State Environmental Protection Agency
EPN - Emission Point Number
FCAA - Federal Clean Air Act
FR - Federal Register
FTP - File Transfer Protocol
HB - House Bill
I/M – Inspection and Maintenance
MMBtu - Million British Thermal Unit
MWe - Megawatt Electrical
MWh - Megawatt Hour
MPO – Metropolitan Planning Organization
NAAQS - National Ambient Air Quality Standards
NEI - National Emissions Inventory
NSR - New Source Review
NO_x - Nitrogen Oxides or Oxides of Nitrogen
PM – Particulate Matter
PM₁₀ - Particulate Matter 10 microns and less
PM_{2.5} - Particulate Matter 2.5 microns and less
SB - Senate Bill
SIP - State Implementation Plan
SO₂ Sulfur Dioxide
STARS - State of Texas Air Reporting System
TAC - Texas Administrative Code
TACB - Texas Air Control Board
TCAA - Texas Clean Air Act
TCEQ - Texas Commission on Environmental Quality (commission)
TCM - Transportation Control Measure
TNRCC - Texas Natural Resource Conservation Commission
TPY - Tons Per Year
TTI - Texas Transportation Institute
TxDOT – Texas Department of Transportation

VOC - Volatile Organic Compound

**CLEAN AIR INTERSTATE RULE (CAIR)
STATE IMPLEMENTATION PLAN (SIP) REVISION**

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CHAPTER 1: GENERAL

1.1 BACKGROUND

“The History of the Texas State Implementation Plan (SIP),” a comprehensive overview of the SIP revisions submitted to the United States Environmental Protection Agency (EPA) by the State of Texas, is available at the following Web site: <http://www.tceq.state.tx.us/implementation/air/sip/siplans.html>.

1.2 INTRODUCTION

Due to the complexity of the Clean Air Interstate Rule (CAIR) program, history as well as information regarding the current proposed CAIR SIP revision is provided.

1.2.1 History

On May 12, 2005, the EPA promulgated CAIR thru revisions to 40 CFR Parts 51, 72, 73, 74, 77, 78, and 96. The EPA provided two options for CAIR-affected states to be in compliance: meet the state’s emission budget by requiring electric generating units (EGUs) to participate in an EPA-administered interstate cap and trade system that caps emissions in two stages; or meet an individual state emissions budget through measures of the state’s choosing.

The 79th Texas Legislature, 2005, Regular Session passed House Bill (HB) 2481 requiring the commission to adopt portions of the CAIR rule by reference and stipulating specifications for allowances and set-asides for nitrogen oxides (NO_x) emissions. Therefore, the Texas Commission on Environmental Quality (TCEQ) must participate in the EPA-administered interstate cap and trade program. The previous CAIR SIP revision contained information to participate in the EPA-administered cap and trade program. This fulfills the requirements of the 79th Texas Legislature, 2005, Regular Session. The legislature provided the TCEQ the allocation methodology for the allocation of NO_x allowances and direction to adopt CAIR by reference.

Federal rulemaking for CAIR set annual NO_x and sulfur dioxide (SO₂) emissions budgets for Texas electric generating units (EGUs) in two phases. Texas has a NO_x budget of 181,014 tons per year (tpy) for Phase I, 2009 through 2014, and 150,845 tpy for Phase II, 2015 and thereafter. The SO₂ budgets are based on Title IV allocations. Title IV is also known as the Acid Rain program. Annual SO₂ state budgets for the years 2010 through 2014, Phase I, are based on a 50 percent reduction from Title IV for all units in the affected state. The Texas SO₂ budget for Phase I is 320,946 tpy. Phase II budgets, in 2015 and beyond, are based on a 65 percent reduction of Title IV allowances allocated to units in the affected state for SO₂ controls. The Texas SO₂ budget for Phase II is 224,662 tpy. Texas is required to meet these budgets through the CAIR interstate trading program established under 40 Code of Federal Regulations (CFR) Part 51.123(e)(2), as incorporated in 30 TAC Chapter 101, Subchapter H. The Texas annual budgets for NO_x and SO₂ are noted in Table 1-1, *Texas CAIR Emissions Budgets in Tons Per Year*.

Table 1-1: Texas CAIR Emissions Budgets in Tons Per Year

| Pollutant | Phase I¹⁰ Budget | Phase II¹¹ Budget |
|------------------|------------------------------------|-------------------------------------|
| NO _x | 181,014 | 150,845 |
| SO ₂ | 320,946 | 224,662 |

The objective of CAIR is to reduce the effects of transport of ozone and fine particulate matter of 2.5 microns and less (PM_{2.5}) and their precursors. Ozone is the major component of smog and is formed in the atmosphere by the photochemical reaction of NO_x and reactive hydrocarbons (volatile organic compounds or VOC) in the presence of high temperatures and ultraviolet light.

Recognizing the potential health and welfare impacts of ozone and PM_{2.5}, the EPA established CAIR in the eastern portion of the United States, including Texas. Twenty-eight states and the District of Columbia are required to implement the two-phase CAIR rule. The EPA determined 25 states, including Texas, contribute to NO_x and SO₂ emissions that affect PM_{2.5} levels in downwind states, and 25 states and the District of Columbia contribute to unhealthy levels of eight-hour ozone in downwind states. Texas is only considered to significantly contribute to PM_{2.5} pollution in two Illinois counties: Madison and Saint Clair.

CAIR applies to any electric generating unit (EGU) that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day that the unit first no longer qualifies as a cogeneration unit.

The EPA's model emission trading rules, 40 CFR Part 96 Subpart AA for NO_x and 40 CFR Part 96 Subpart AAA for SO₂, are a market-based system designed to reduce the cost of complying with the NO_x and SO₂ emission limits. This trading system places a collective cap both on NO_x and SO₂ emissions from EGUs and provides for the trading of allowances similar to the Title IV of the Federal Clean Air Act's (FCAA) SO₂ Allowance Trading Program. The model emission trading rules to implement CAIR requirements in Texas are adopted in accordance with the requirements of Senate Bill (SB) 1672. The 80th Texas Legislature, 2007, Regular Session passed SB 1672, which requires the commission to adopt the EPA-administered interstate cap and trade program by reference, but directs the commission to use the NO_x allocation methodology specified in the bill. The previous Texas legislative session in 2005, adopted House Bill (HB) 2481 which required the commission to adopt the EPA-administered interstate cap and trade program by reference, but directed the commission to use the NO_x allocation methodology

¹⁰ Phase I for NO_x 2009 through 2014; Phase I for SO₂ 2010 through 2014.

¹¹ Phase II for NO_x 2015 and thereafter; Phase II SO₂ 2015 and thereafter.

specified in the bill.

For NO_x allocations, 9.5 percent of the initial NO_x budget will be set aside for new units. New units, in operation on or after January 1, 2001, will only be allowed to receive allocations from this set aside. In 2016, new units will be reevaluated and if they do not have five years of operating data prior to the allocation date they will still be considered new. However, if there are five years of operating data, the new EGU will be reclassified as an existing unit.

For existing units, those in operation prior to January 1, 2001, allowances will be calculated using the average of the three highest amounts of the unit's adjusted control period heat input for 2000 through 2004 with the adjusted control period calculations as follows: for coal-fired units, the unit's control period heat input for such years is multiplied by 90 percent; for natural-gas fired units, the unit's control period heat input for such years is multiplied by 50 percent; and for other fossil fuel type units, the unit's control period heat input for such years is multiplied by 30 percent. Because of the legislative change in SB 1672, new¹² electric generating units (EGUs) in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing¹³ EGU allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_x allowance would not fluctuate and would remain consistent for five years.

CAIR established a NO_x compliance supplement pool (CSP) for the annual NO_x program sources that contribute to PM_{2.5} pollution in the CAIR program area. Texas has been given a CSP of 772 tons of NO_x for EGUs that make any early reductions in 2007 and 2008 or that demonstrate a need for additional allowances to ensure reliability of electric supply. The executive director will determine the distribution of the CSP.

1.2.2 Current Proposed CAIR SIP Revision

This CAIR SIP revision proposal contains:

- Federal changes to the CAIR program, as specified below;
- Methodology for allocation of CAIR NO_x allowances as specified under SB 1672, 80th Texas Legislature, 2007, Regular Session; and
- Non- substantive administrative changes.

1.2.2.1 Federal Changes to the CAIR Program

Following are the federal changes to the CAIR program since May 12, 2005. A brief description of each change is given from the most recent change as well as the *Federal Register* citation to provide additional information, if needed.

¹²New EGU - Units commencing operation on or after January 1, 2001.

¹³Existing EGU - Units commencing operation before January 1, 2001.

Federal Implementation Plans for the Clean Air Interstate Rule: Automatic Withdrawal Provisions – 40 CFR Part 52 – Direct Final Rule

November 2, 2007 *Federal Register*

The EPA took a direct final action to amend the Federal Implementation Plans (FIPs) for CAIR to provide for an automatic withdrawal of CAIR FIPs in a state upon the effective date of the EPA's approval of a full SIP revision meeting the CAIR requirements. All CAIR states are required to revise their SIPs to include control measures to reduce the emission of NO_x and/or SO₂. The EPA issued CAIR FIPs on April 28, 2006, as a backstop to implement CAIR in each CAIR state until the state has an EPA-approved CAIR SIP in place to achieve the required reductions. In this FIP rulemaking, the EPA stated it would withdraw the FIPs in a state in coordination with the full approval of the state's CAIR SIP. In this action, the EPA makes the FIP withdrawal for the state automatic upon approval of the full CAIR SIP revision. Note that the EPA has said that it will give partial approval if the SIP is approved after the EPA makes allowances under the FIP for the year; the SIP approval would be fully valid for the next year. The EPA believes that this will correct the deficiency that provided the basis for the EPA's promulgation of the FIPs for a state. The direct final rule was effective on January 16, 2008.

Revisions to Definition of Cogeneration Unit (CAIR); CAIR Federal Implementation Plans; Clean Air Mercury Rule (CAMR); and Technical Corrections to CAIR, CAIR FIPs, CAMR, and the Acid Rain Program Rules – 40 CFR Parts 51, 60, 72, 78, 96, and 97

October 19, 2007 *Federal Register*

The CAIR, CAIR FIP, and CAMR rule 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, the EPA changed 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, the EPA revised the calculation methodology for the efficiency standard in the cogeneration unit to exclude energy input from biomass making it more likely for units co-firing biomass will be able to meet the efficiency standard and qualify for an exemption. Because the EPA predicts that this change will only affect a small number of relatively low emitting units, the revision will have little effect on the projected emissions reductions and the environmental benefits of these rules. 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. This rule revision was effective on November 19, 2007.

The revised definition of biomass, per 40 CFR § 51.124(q), means any organic material grown for the purpose of being converted to energy; any organic by-product of agriculture that can be converted to energy; or any material that can be converted into energy and is non-merchantable for other purposes, that is segregated from other non-merchantable material, and that is: a forest-related organic resource, including mill residues, pre-commercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or a wood material, including pallets, crates, dunnage, manufacturing and construction material (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

Additional provisions were added to the definition of cogeneration unit in 40 CFR § 51.124(q). The existing definition of a cogeneration unit definition under CAIR means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine: having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and producing during the 12-month period starting on the date the unit first produces

electricity and during any calendar year after which the unit first produces electricity – for a topping-cycle cogeneration unit, useful thermal energy not less than five percent of total energy output; and 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. For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

The additional provision that the EPA added includes that provided that the total energy input for a topping-cycle cogeneration unit, useful thermal energy not less than five percent of total energy output; and 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 and for a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

The new exemption restricted to boilers does not apply to combustion turbines burning gas. This revision should not affect anyone in Texas. We invite comment from anyone who believes they would be affected because they burn gas in biomass combustion turbines. It is also the TCEQ's opinion that currently no one in Texas would be affected by the new cogeneration exemption, and invite comment from anyone who believes that they would meet the requirements of the exemption, and would therefore be affected.

(An opinion was issued on February 8, 2008, by the United States Court of Appeals, District of Columbia Circuit, to vacate CAMR. Therefore, CAMR will be the subject of future rulemaking.)

Clean Air Interstate Rule (CAIR) and CAIR Federal Implementation Plans; Corrections – 40 CFR Parts 51 and 97

Federal Register October 1, 2007

The EPA made minor corrections to the CAIR to restore a phrase of regulatory text related to state annual emissions reporting requirements that was inadvertently deleted when the rule was amended in 2006. This rule also corrects typographical errors in the spellings of three states in the CAIR regulatory text and corrects a typographical error in a section citation in the CAIR FIPs regulatory text. This rule revision was effective on October 1, 2007.

Clean Air Interstate Rule (CAIR) and Federal Implementation Plans for CAIR; Corrections – 40 CFR Parts 51, 96, and 97

Federal Register December 13, 2006

The EPA made minor corrections to the CAIR and the FIPs for CAIR to clarify text that may potentially be misleading. These corrections do not change any of CAIR or CAIR FIPs rule requirements or substantively change the rules in any way. This rule revision was effective on December 13, 2006.

Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule (CAIR); Revisions to the Acid Rain Program – CFR Parts 51, 52, 72, 73, 74,78, 96, and 97

Federal Register April 28, 2006

The EPA took action to address the interstate transport of emissions of NO_x and SO₂ that contribute significantly to nonattainment and maintenance problems with respect to the National Ambient Air Quality Standards (NAAQS) for PM_{2.5} and eight-hour ozone. As one part of this action, the EPA provided its final response to a petition submitted to the EPA by the State of North Carolina under Section 126 of the FCAA. The petitioner requested that the EPA find that SO₂ and/or NO_x emissions from EGUs in 13 states were significantly contributing to PM_{2.5} and/or eight-hour ozone nonattainment and maintenance problems in North Carolina and requested that the EPA establish control requirements to prohibit such significant contribution. The EPA denied the petition because, in this action, the EPA promulgated FIPs for all jurisdictions covered by the CAIR to address interstate transport.

The FIPs will regulate EGUs in the affected states and achieve the emissions reductions requirements established by the CAIR states that do not have approved SIPs to achieve the reductions. As the control requirements for the FIPs, the EPA adopted the model trading rules that the EPA provided in CAIR as a control option for states, with minor changes to account for federal rather than state implementation.

This action also revised the CAIR SIP model trading rules in order to address the interaction between the EPA-administered CAIR FIP trading programs being promulgated and the EPA-administered CAIR state trading programs that will be created by any state that elects to submit a SIP establishing such a trading program to meet the requirements of the CAIR. In addition, the EPA took final action on its reconsideration of the definition of “EGU” as it relates to solid waste incinerators.

This action also made revisions to the Acid Rain program in order to make the administrative appeals procedures, which currently apply to final determinations by the Administrator under the EPA-administered CAIR state trading programs, also apply to the EPA-administered CAIR state trading programs, and also apply to the EPA-administered trading program under the FIP action. In addition, the EPA made certain minor revisions to the Acid Rain program that will apply to all affected units.

The definition of CAIR EGU applicability has also been revised. CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit’s combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit’s potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit. This action became effective on June 27, 2006.

1.2.2.2 Texas Legislative Changes

In 2007, the 80th Texas Legislature passed SB 1672,¹⁴ allowing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the NO_x allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_x allocation adjustments that were directed by HB 2481. HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by using the three highest years heat input data from the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 shifted the allocation update from 2016 to 2018.

Because of this legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_x allowance would not fluctuate and would remain consistent for five years.

1.3 HEALTH EFFECTS

Exposure to PM_{2.5} can cause acute and/or chronic health effects. Acute symptoms can include: lung irritation, coughing, wheezing, and difficulty taking deep breaths. Inflammation of the lungs can cause decreased lung function and aggravate existing respiratory diseases (e.g., asthma). Chronic exposure to some types of PM_{2.5}, such as diesel exhaust, may result in an increased risk of respiratory cancers such as lung cancer. The EPA has provided information in the CAIR preamble¹⁵ outlining the benefits of PM_{2.5} emission reductions through the CAIR program.

¹⁴ Act of May 10, 2007, 80th Leg. , § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

¹⁵ Section X - Statutory and Executive Order Reviews (c) Human Health Benefit Analysis

1.4 PUBLIC HEARING INFORMATION

The commission will hold public hearings at the following times and locations:

| CITY | DATE | TIME | LOCATION |
|-------------|---------------|-------------|--|
| Fort Worth | June 30, 2008 | 2:00 p.m. | Texas Commission on Environmental Quality 2309 Gravel Drive |
| Austin | July 1, 2008 | 2:00 p.m. | Texas Commission on Environmental Quality 12100 North I-35 Building F, Room 2210 |
| Houston | July 2, 2008 | 2:00 p.m. | Houston-Galveston Area Council (H-GAC) 3555 Timmons Lane, Number 120 Conference Room B |

The comment period will open on May 27, 2008, and close on July 3, 2008. Written comments will be accepted via mail, fax, or through the e-comment system. All comments should reference “the CAIR SIP revision” and Project Number 2007-051-SIP-NR. Comments may be submitted to Kim Herndon, MC 206, State Implementation Plan Team, Chief Engineer’s Office, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-5687. Electronic comments may be submitted at <http://www5.tceq.state.tx.us/rules/ecomments>. File size restrictions may apply to comments submitted through the eComments system. Comments must be received by July 3, 2008.

Copies of the proposed SIP revision and all appendices can be obtained from the TCEQ’s Web site at <http://www.tceq.state.tx.us/implementation/air/sip/siplans.html> or upon request to:

Texas Commission on Environmental Quality
Air Quality Planning and Implementation Division
P. O. Box 13087
Mail Code 206
Austin, Texas 78711-3087
Re: CAIR SIP Information

1.5 SOCIAL AND ECONOMIC CONSIDERATIONS

For a detailed explanation of the social and economic issues involved with any of the measures, please refer to the preambles that precede each proposed rule package accompanying this SIP and to the CAIR rule as proposed and promulgated by the EPA.

1.6 FISCAL AND MANPOWER RESOURCES

The TCEQ has determined that its fiscal and manpower resources are adequate and will not be adversely affected through the implementation of this plan. Specific information regarding the TCEQ budget is available upon request.

1.7 COORDINATION WITH LOCAL AGENCIES

The TCEQ has determined that there will be no assignment to local agencies under 40 CFR Part 51.232 to carry out allocations under the NO_x or SO₂ trading programs. However, pre-existing assignments to local agencies regarding various enforcement activities remain in effect and could be utilized if enforcement activities are delegated to the TCEQ from the EPA.

1.8 ORGANIZATIONS RESPONSIBLE FOR DEVELOPMENT, IMPLEMENTATION, AND ENFORCEMENT

The TCEQ is the agency delegated authority by the Texas Legislature regarding the protection of air quality in the State of Texas. Other local government entities also have limited authority regarding air quality matters in the State of Texas.

1.9 DATA AVAILABILITY

The TCEQ affirms that it will retain all data used in the preparation of this SIP revision. All supporting documentation and data are available from the TCEQ upon request or are publicly available via the TCEQ Web site at <http://www.tceq.state.tx.us/implementation/air/sip/siplans.html>, subject to confidentiality restrictions, if applicable.

CHAPTER 2: EMISSIONS INVENTORY

2.1 BACKGROUND

Minor changes have been made to three sections of this chapter (2.2 Point Source, 2.4 Non-Road Mobile Source, and 2.5 On-Road Mobile Source). The remaining text has been provided for convenience.

The Consolidated Emissions Reporting Rule (CERR) (67 FR 39602, June 10, 2002) requires states to submit emissions inventories (EIs) containing information regarding the emissions of criteria pollutants and their precursors (e.g., volatile organic compounds (VOC)). EIs are critical for the efforts of state, local, and federal agencies to attain and maintain the National Ambient Air Quality Standards (NAAQS) which the United States Environmental Protection Agency (EPA) has established for criteria pollutants such as ozone, particulate matter (PM), and carbon monoxide.

For areas that have failed to meet these federal air standards or are at risk of doing so, attainment of the NAAQS can be significantly impacted by interstate transport of pollutants. To address transport issues regarding ozone and fine particulate matter of 2.5 microns and less (PM_{2.5}), the EPA has promulgated the Clean Air Interstate Rule (CAIR). CAIR requires states that contribute significantly to nonattainment of the NAAQS for ozone and PM_{2.5} in downwind states to include control measures to reduce nitrogen oxides (NO_x) and sulfur dioxide emissions (SO₂) in their SIPs.

For transport SIP revisions, the upwind states must also submit SO₂ and NO_x emissions data per 40 Code of Federal Regulations (CFR) Part 51.125. As one of the upwind states specified by the EPA, Texas, through the Texas Commission on Environmental Quality (TCEQ), is required to submit annual emissions data for all SO₂ and NO_x sources for which control measures were specified in its transport SIP revisions. Additionally, per 40 CFR Part 51.125, the TCEQ must submit periodic emissions data every third year from all SO₂ and NO_x emissions sources in the state.

In order to comply with the CAIR reporting requirements, the commission will continue to submit to the EPA both an annual EI of all point sources within Texas, as well as a periodic emissions inventory (PEI), which will be submitted every three years. Generally, these EIs include source types present in an area, the amount of each pollutant emitted, and the types of processes and control devices employed at each plant or source category. To ensure triennial reporting of all SO₂ and NO_x emissions sources in the state, the PEI will include criteria pollutant emissions estimates from the five general categories of emissions sources described in this chapter. These categories will encompass the following emissions sources.

- Point sources will include, at a minimum, SO₂ and NO_x emissions from all stationary sources (including electric generating units (EGUs)) that meet the definition of major source as defined in 40 CFR Part 70.2.
- Area sources will include SO₂ and NO_x emissions from minor fuel combustion sources.
- On-road mobile sources will include SO₂ and NO_x emissions from motor vehicle sources.
- Non-road mobile sources will include, but not be limited to, SO₂ and NO_x emissions from a wide range of mass transportation, marine transportation, and construction equipment.
- Biogenic sources will include NO_x emissions from soils.

EIs provide data for a variety of air quality planning tasks, including establishing baseline emission levels, calculating reduction targets, control strategy development for achieving the required emission

reductions, emission inputs into air quality simulation models, and tracking actual emission reductions against the established emissions growth and control budgets.

2.2 POINT SOURCES

Point source emissions and industrial process operating data are collected annually from sites that meet the reporting requirements of 30 Texas Administrative Code (TAC) §101.10. To collect data, the TCEQ mails emissions inventory questionnaires (EIQs) to all sources identified as meeting the reporting requirements. Companies are required to report emissions data for all emissions-generating units and emissions points and to provide representative samples of calculations used to estimate the emissions. Information is also required on process equipment descriptions, operating schedules, emission control devices, abatement device control efficiencies, and emission point discharge parameters such as location, height, and exhaust gas flow rate. All data submitted in the EIQ are subjected to quality assurance procedures. The data are then stored in the State of Texas Air Reporting System (STARS) database. At the end of the annual reporting cycle, point source emissions data are reported each year to the EPA for inclusion in the National Emissions Inventory (NEI).

40 CFR Part 51.20(c)(2) allows states to establish lower emissions reporting thresholds for point sources than those specified in 40 CFR Part 51.20. 30 TAC §101.10 effectively establishes lower actual emissions reporting thresholds for NO_x than 40 CFR Part 51.20 by requiring all accounts located in **any** ozone nonattainment area that emit 25 tons per year (tpy) of NO_x to submit an annual emissions inventory. If the commission's EI reporting requirements correspond to the major source thresholds as defined in 40 CFR Part 70.2, sources emitting 25 tpy of NO_x that were located in marginal, moderate, or serious ozone nonattainment areas possibly would not be required to submit annual emissions inventories due to higher potential emissions reporting thresholds.

Similarly, the actual and potential emissions reporting thresholds in 30 TAC §101.10 for all other criteria pollutants meet or are more stringent than major source emissions thresholds. Therefore, with regard to CAIR, all sources of which annual emissions are required to be reported to the EPA under 40 CFR Part 51.125 are expected to meet the reporting requirements of §101.10 and submit annual EIs; these sources' emissions would therefore be included in the point source emissions inventory annually submitted to the EPA. However, if sources whose annual emissions are required to be reported to the EPA under 40 CFR Part 51.125 fall below the actual or potential emissions reporting thresholds in §101.10, the commission will conduct a special inventory of these sources as authorized by §101.10(b)(3) to ensure annual reporting of these sources' emissions.

2.3 AREA SOURCES

To capture information about emissions sources that fall below the point source reporting levels and are too numerous or too small to identify individually, emissions from these "area" sources are estimated on a source category or group basis. Area sources include commercial, small-scale industrial, and residential categories of sources that use materials or operate processes that can generate emissions. Area sources can be divided into two groups characterized by the emission mechanism: hydrocarbon evaporative emissions or fuel combustion emissions. Examples of sources of evaporative losses include printing, industrial coatings, degreasing solvents, house paints, leaking underground storage tanks, gasoline service station underground tank filling, and vehicle refueling operations. Fuel combustion sources include stationary source fossil fuel combustion at residences and businesses, as well as outdoor burning, structural fires, and wildfires. These emissions, with some exceptions, may be calculated by multiplication of an EPA-established emission factor (emissions per unit of activity) times the appropriate

activity or activity surrogate responsible for generating emissions. Population is the most commonly used activity surrogate for many area source categories while other activity data include amount of gasoline sold in an area, employment by industry type, and acres of crop land.

2.4 NON-ROAD MOBILE SOURCES

The non-road mobile source category includes aircraft operations, commercial marine vessels, railroad locomotives, and a very broad range of non-road equipment that includes 600-horsepower engines mounted on construction equipment to one-horsepower string trimmers. Calculation methods for emissions from non-road engine sources are based on information about equipment population, engine horsepower, load factor, emission factor, and annual usage. The EPA's NONROAD model is used to calculate emissions from all non-road mobile categories except aircraft, airport ground support equipment, commercial marine vessels, and locomotives. The Emissions and Dispersion Modeling System (EDMS) model is used to calculate aircraft emissions. Emissions data from airport ground support equipment and locomotives were developed by consultants conducting surveys of equipment populations and usage, as well as collecting other relevant activity data associated with these categories.

2.5 ON-ROAD MOBILE SOURCES

On-road mobile sources consist of automobiles, trucks, motorcycles, and other motor vehicles traveling on public roadways. Combustion-related emissions are estimated for vehicle engine exhaust, and evaporative hydrocarbon emissions are estimated for the fuel tank and other evaporative leak sources on the vehicle. In order to estimate emissions, on-road mobile emission factors are multiplied by the corresponding activity level. Emission factors have been developed using the newest version of the EPA's mobile emissions factor model, MOBILE6.2. Various inputs are provided to the model to simulate the vehicle fleet driving in each particular nonattainment area. Inputs used to develop localized emission factors include vehicle speeds, vehicle age distributions, local meteorological conditions, type of inspection and maintenance (I/M) program in place, and local fuel properties. To complete the emissions estimate, the emission factors calculated by the MOBILE6.2 model must be multiplied by the local vehicle activity and the vehicle miles traveled (VMT). The level of vehicle travel activity is developed using localized travel demand models run by the Texas Transportation Institute (TTI), Texas Department of Transportation (TxDOT), or regional Metropolitan Planning Organizations (MPOs). The travel demand models have been validated using a large number of ground counts from traffic counters placed in various locations throughout Texas. Estimates of VMT are often calibrated to outputs from the federal Highway Performance Monitor System, which is a model validated using a different set of traffic counters. Finally, roadway speeds are calculated by a post-processor to the travel demand model. The roadway speeds are needed to select the appropriate MOBILE6.2 emission factors.

2.6 BIOGENIC SOURCES

Biogenic sources are another subset of area sources that includes hydrocarbon emissions from crops, lawn grass, and forests, as well as a small amount of NO_x emissions from soils. Plants are sources of VOC such as isoprene, monoterpene, and alpha-pinene. Tools such as satellite imaging for mapping of vegetative types, field biomass surveys, and computer modeling of emissions estimates based on emission factors by plant species (PCBEIS-2) are used to provide the best estimates possible. Biogenic emissions are important in determining the overall emissions profile of an area and therefore are required for regional air quality dispersion modeling.

CHAPTER 3: PHOTOCHEMICAL MODELING

Minor changes have been made to this chapter. The complete text has been provided for convenience.

The Texas Commission on Environmental Quality (TCEQ) is not providing any modeling in support of this Clean Air Interstate Rule (CAIR) SIP revision. The United States Environmental Protection Agency (EPA) conducted air quality modeling using the Community Multi-Scale Air Quality (CMAQ) model in conjunction with 2001 meteorological data for simulating fine particulate matter of 2.5 microns and less (PM_{2.5}) concentrations and associated visibility effects, as well as using the Comprehensive Air Model with Extensions (CAMx) model with meteorological data for three episodes in 1995 to simulate eight-hour ozone concentrations. The CAIR air quality modeling information, modeling analysis techniques, model evaluation, and results for the PM_{2.5} and eight-hour ozone modeling are available in the United States Environmental Agency (EPA) docket for the CAIR, Docket ID No. OAR-2003-0053.

Senate Bill 1672 requires that the TCEQ adopt and implement the EPA model cap and trade program, and states have no authority to adjust the nitrogen oxides (NO_x) and sulfur dioxide (SO₂) emission budgets under the CAIR, no additional modeling is necessary to implement CAIR in Texas.

CHAPTER 4: DATA ANALYSIS

Minor changes have been made to Chapter 4. The complete text has been provided for convenience.

The Texas Commission on Environmental Quality (TCEQ) is not providing specific data analysis in support of this Clean Air Interstate Rule (CAIR) SIP revision. The United States Environmental Protection Agency (EPA) conducted air quality modeling using the Community Multi-Scale Air Quality (CMAQ) model in conjunction with 2001 meteorological data for simulating fine particulate matter of 2.5 microns and less (PM_{2.5}) concentrations and associated visibility effects, as well as using the Comprehensive Air Model with Extensions (CAMx) model with meteorological data for three episodes in 1995 for simulating eight-hour ozone concentrations. The CAIR air quality modeling information, modeling analysis techniques, model evaluation, and results for the PM_{2.5} and eight-hour ozone modeling are available in the United States Environmental Agency (EPA) docket for the CAIR, Docket ID No. OAR-2003-0053.

Texas Health & Safety Code, § 382.0173 requires that the TCEQ adopt and implement the EPA model cap and trade program, and states have no authority to adjust the nitrogen oxides (NO_x) and sulfur dioxide (SO₂) emission budgets under the CAIR, so no additional data analysis is necessary to implement CAIR in Texas.

CHAPTER 5: REQUIRED CONTROL STRATEGY ELEMENTS

5.1 BACKGROUND

On May 12, 2005, the Clean Air Interstate Rule (CAIR) was published in the *Federal Register*. The rule required 28 eastern states and the District of Columbia to reduce sulfur dioxide (SO₂) and/or nitrogen oxides (NO_x) emissions, which are precursors of particulate matter of 2.5 microns or less (PM_{2.5}) and ozone. Twenty-five states¹⁶ and the District of Columbia must reduce annual SO₂ and NO_x emissions to attain the PM_{2.5} National Ambient Air Quality Standards (NAAQS). Under CAIR, twenty-five states¹⁷ and the District of Columbia, not including Texas, must reduce NO_x emissions for the purposes of attainment of the eight-hour ozone NAAQS. States were given the choice to use one of two compliance options from the EPA: meet the state's emission budget by requiring EGUs to participate in an EPA - administered interstate cap and trade program; or meet an individual state emissions budget through measures of the state's choosing. The 79th Texas Legislature in 2005 passed House Bill (HB) 2481¹⁸ in its Regular Session requiring the TCEQ to adopt the EPA-administered interstate cap and trade program by reference and stipulating specifications for NO_x allowance allocations and set-asides for NO_x emissions, as well as only requiring reductions associated with CAIR from new¹⁹ and existing²⁰ EGUs.

The 80th Texas Legislature, 2007 Regular Session passed Senate Bill (SB) 1672²¹ that requires the commission to adopt portions of the Clean Air Interstate Rule (CAIR) by reference and stipulates specifications for allocations and set-asides for CAIR NO_x allowances. Therefore, the Texas Commission on Environmental Quality (TCEQ) must participate in the United States Environmental Protection Agency (EPA) administered interstate cap and trade program.

5.2 CONTROL STRATEGY - CAIR NO_x and SO₂ RULE CHANGES

The TCEQ elected to impose control measures on electric generating units (EGUs), and the commission imposed an annual NO_x mass emissions cap on all EGU sources in the state. As directed by HB 2481 and the subsequent SB 1672, the commission is, under 30 Texas Administrative Code (TAC) Chapter 101, Subchapter H, Division 7, incorporating 40 Code of Federal Regulations (CFR) Part 96, Subpart AA through Subpart II for NO_x and Subpart AAA through Subpart III for SO₂ by reference for the purpose of complying with the federal CAIR program.

In addition, the commission is specifying rules under Chapter 101, Subchapter H, Division 7 regarding the methodologies and procedures for determining each CAIR NO_x source's CAIR NO_x allocation in lieu of the CAIR NO_x allocation methodologies and procedures under 40 CFR Part 96, Subpart EE. The rules

¹⁶ Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New York, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

¹⁷ Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin.

¹⁸ Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

¹⁹ New EGU - Units commencing operation on or after January 1, 2001.

²⁰ Existing EGU - Units commencing operation before January 1, 2001.

²¹ Act of May 10, 2007, 80th Leg., R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

apply to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit.

5.2.1 Interstate Cap and Trade Program for NO_x and SO₂

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

The EPA's CAIR model trading rule, 40 CFR Part 96, is a market-based cap and trade system designed to reduce the costs of complying with the new NO_x and SO₂ reduction requirements. The CAIR model rule designates respective budgets for annual NO_x and SO₂ emissions within each state to be applied to all fossil fuel-fired boilers and turbines serving an electrical generator with a nameplate capacity greater than 25 MWe and producing electricity for sale. The model rule provides flexibility in complying with the NO_x and SO₂ reduction requirements through unrestricted banking of excess allowances and the trading of allowances between EGUs in Texas and other affected CAIR states under common caps. For example, EGUs in Texas will be allowed to trade NO_x allowances with other CAIR states participating in the CAIR annual NO_x trading program, while the trading of SO₂ allowances will be permissible with CAIR states participating in the CAIR SO₂ trading program or the Title IV SO₂ allowance trading program. Under the model rule, states are provided flexibility in the allocation methodology used to determine CAIR NO_x allocations for each CAIR NO_x unit. CAIR states are then responsible for submitting the CAIR NO_x allowance allocations to the EPA for recordation.

5.2.2 CAIR NO_x Annual Trading Budget

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

Section 101.503 specifies that the NO_x trading budget for annual allocations of CAIR NO_x allowances for each control period in 2009 through 2014, and for 2015 and thereafter, will be equivalent to the tons per year (tpy) of NO_x emissions listed for Texas in the state trading budget under 40 CFR Part 96.140. As promulgated on May 12, 2005, 40 CFR Part 96.140 provides Texas with an annual NO_x trading budget of 181,014 tpy for each control period in 2009 through 2014, and 150,845 tpy for each control period in 2015 and thereafter.

5.2.3 CAIR NO_x Allocation Methodology

In 2007, the 80th Texas Legislature passed SB 1672, allowing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the NO_x allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_x allocation adjustments that were directed by HB 2481. HB 2481 revised the baseline of existing units by reviewing

heat-input data every five years by looking back at the three highest years of the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 shifted the allocation update from 2016 to 2018.

Because of this legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_x allowance would not fluctuate and would remain consistent for five years.

The methodology described in 30 TAC §101.506 is used to allocate CAIR NO_x allowances for each CAIR NO_x unit. For units commencing operation before January 1, 2001, CAIR NO_x allowances will be allocated based on a three-year average historical heat input, in million British thermal units (MMBtu), adjusted for the type of fuel burned. For each control period in 2009 through 2015, the baseline heat input for units commencing operation before January 1, 2001, will be the average of the three highest amounts of the unit's historical heat input, adjusted for fuel type, from calendar years 2000 through 2004. Beginning with the 2018 control period in accordance SB 1672, and for the control period beginning every five years thereafter, the baseline heat input for units commencing operation prior to January 1, 2001, will be adjusted to reflect the average of the three highest amounts of the unit's control period heat input, adjusted for fuel type, from control periods one through five of the previous nine control periods. The fuel type adjustment will be performed by multiplying a unit's baseline heat input by the following: 90 percent for coal-fired, 50 percent for natural gas-fired, and 30 percent for all other fossil fuels.

For units commencing operation on or after January 1, 2001, CAIR NO_x allowances will be allocated for each control period in 2009 through 2014 from the 9.5 percent NO_x new unit set-aside identified under 30 TAC §101.503(b) and as prescribed by the Texas Legislature in HB 2481. Beginning with the 2015 control period, units commencing operation on or after January 1, 2001, and operating each calendar year for a period of five or more consecutive years will no longer be eligible for an allocation from the new unit set-aside and will receive their CAIR NO_x allocation from the general NO_x trading budget on a modified output basis. The baseline heat input will be the average of the three highest amounts of the unit's total converted control period heat input from the first five years of operation. Beginning with the 2018 control period and for the control period beginning every five years thereafter, the baseline heat input will be adjusted to reflect the average of the three highest amounts of the unit's total converted control period heat input from control periods one through five of the previous nine control periods. In calculating a unit's converted control period heat input on a modified output basis, the unit's gross electrical output will be multiplied by a heat rate conversion factor of 7,900 British thermal unit per kilowatt (Btu/kWh) for coal-fired units and 6,675 Btu/kWh for natural gas- and oil-fired units. For cogeneration units, the converted heat input will be calculated by converting the available thermal output, in British thermal units, of useable steam to an equivalent heat input by dividing the thermal output by a general boiler/heat exchanger efficiency of 80 percent. For combustion turbine cogeneration units, the converted heat input will be calculated by first converting the available thermal output of useable steam

from the heat recovery steam generator or heat exchanger to an equivalent heat input by dividing the thermal output by a general boiler/heat exchanger efficiency of 80 percent. Then the electrical generation from the combustion turbine must be added after conversion to an equivalent heat input by multiplying the electrical output by 3,413 Btu/kWh. The sum will yield the total equivalent heat input for the combustion turbine cogeneration unit.

The allocation methodology prescribed in SB 1672 distributes 90.5 percent of the Texas NO_x trading budget to each CAIR NO_x unit with a baseline heat input determined under § 101.506(a) or (b)(2) or (3) in proportion to each CAIR NO_x unit's share of baseline heat input to the total baseline heat input for all CAIR NO_x units with a baseline heat input determined under § 101.506(a) or (b)(2) or (3). For units that commence operation on or after January 1, 2001, and that have not established a historical baseline heat input in accordance with §101.506(b)(2) or (3), CAIR NO_x allowances are allocated from the new unit set-aside beginning with the later of the 2009 control period or the first control period after the control period in which the new unit commences commercial operation. The allocation methodology requires the executive director to distribute CAIR NO_x allowances from the new unit set-aside upon receipt of a request from the CAIR designated representative for the CAIR NO_x unit. Submittal of each request for a CAIR NO_x allocation from the new unit set-aside will be required on or before May 1 of the first control period for which the request is being made and after the date on which the CAIR NO_x unit commences commercial operation. CAIR NO_x allowances requested from the new unit set-aside will not be allocated in excess of the new unit's total tpy of NO_x emissions reported to the EPA for the previous control period.

On or after May 1 of each control period, the executive director will review each CAIR NO_x allocation request, determine the sum of all CAIR NO_x allocation requests, and allocate CAIR NO_x allowances from the new unit set-aside for the control period. If the amount of CAIR NO_x allowances in the new unit set-aside is greater than or equal to the sum of all CAIR NO_x allowances requested, the executive director will allocate the amount of CAIR NO_x allowances requested. If the amount of CAIR NO_x allowances in the new unit set-aside is less than the sum of all CAIR NO_x allowances requested, the executive director will allocate to each new CAIR NO_x unit an amount of CAIR NO_x allowances in proportion to the amount of CAIR NO_x allowances requested by a CAIR NO_x unit to the total amount of CAIR NO_x allowances requested by all CAIR NO_x units.

The allocation methodology will allow new units to begin receiving allowances from the set-aside for the control period immediately following the control period in which the new unit commences commercial operation based on the unit's emissions reported for the previous control period. Therefore, a CAIR NO_x source operating a new unit will be required to hold allowances covering the emissions from the new unit for the control period in which the new unit commences commercial operation but will not receive an allocation for that control period. CAIR NO_x allocations for a new unit in subsequent control periods will continue to be based on the unit's emissions from the previous control period until the unit establishes a baseline in accordance with §101.506(b)(2) or (3). All CAIR NO_x allocations under the allocation methodology will be rounded to the nearest whole allowance. Allowances are only distributed in one ton increments.

Any unallocated CAIR NO_x allowances remaining in the new unit set-aside for a given control period will be distributed to CAIR NO_x units with a historical baseline heat input receiving an allocation under §101.506(c). Each existing unit will receive an additional allocation proportional to the ratio of its original allocation to the state's existing unit allocation, 90.5 percent of the Texas NO_x trading budget.

The distribution is calculated by multiplying the amount of unallocated CAIR NO_x allowances remaining in the set-aside by each CAIR NO_x unit's allocation determined under §101.506(c), divided by 90.5 percent of the Texas NO_x trading budget, and rounded to the nearest whole allowance.

For the purposes of determining CAIR NO_x allocations, the following criteria are considered: a CAIR NO_x unit's control period heat input; fossil-fuel type status (coal-fired, natural gas-fired, or other type fossil fuel-fired); and the total tons of NO_x emissions during a calendar year to be determined in accordance with 40 CFR Part 75, to the extent the unit was otherwise subject to those requirements for the year will be used. If a CAIR NO_x unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year, the unit's control period heat input, status fossil-fuel type, and total tons of NO_x emissions during a calendar year will be based on the best available data reported to the executive director.

5.2.4 CAIR NO_x Budget Set-Aside

SB 1672 requires that an amount of CAIR NO_x allowances equivalent to 9.5 percent of the Texas NO_x trading budget be set aside for new units. This new unit set-aside will equate to 17,196 tpy of CAIR NO_x allowances for each control period in 2009 through 2014, and 14,330 tpy of CAIR NO_x allowances for each control period in 2015 and thereafter.

5.2.5 CAIR NO_x Allowance Compliance Supplement Pool (CSP)

30 TAC §101.508 outlines the requirements for the allocation of additional CAIR NO_x allowances for the 2009 control period from the CSP for Texas provided under 40 CFR Part 96.140. As promulgated on May 12, 2005, 40 CFR Part 96.140 provides Texas with an additional 772 CAIR NO_x allowances under the CSP. The rule language allows the CSP allowances to be distributed to those CAIR NO_x units that achieve early NO_x reductions in 2007 and 2008 beyond any applicable state or federal emission limitation during those years. CAIR NO_x units seeking an additional allocation from the CSP for early NO_x reductions in 2007 and 2008 will be required to monitor and report the unit's NO_x emission rate and heat input in accordance with the continuous emissions monitoring and reporting requirements under 40 CFR Part 96, Subpart HH for the entire control period in which the early reductions are being generated. The CAIR-designated representative is required to submit to the executive director by May 1, 2009, a request for an allocation of CAIR NO_x allowances from the CSP in an amount not to exceed the sum of the CAIR NO_x unit's emission reductions, in tpy, during 2007 and 2008 that were not necessary to comply with any state or federal emission limitation applicable during those years.

In addition, the CSP provides for the allocation of additional CAIR NO_x allowances from the CSP for CAIR NO_x units of which compliance with the CAIR NO_x annual trading program in the 2009 control period would create undue risk to the reliability of electricity supply during 2009. The CAIR designated representative is required to submit to the executive director by May 1, 2009, a request for an allocation of CAIR NO_x allowances from the CSP in an amount not to exceed the minimum amount of CAIR NO_x allowances necessary to remove the risk to the reliability of electricity supply. The CAIR designated representative will be required to demonstrate that in the absence of the additional allocation to the unit, the unit's compliance with the CAIR NO_x annual trading program during the 2009 control period would create an undue risk to electric reliability during 2009. This demonstration is required to show that it would not be feasible to obtain a sufficient amount of electricity from other electric generation facilities or obtain a sufficient amount of CAIR NO_x allowances from the CSP by making early NO_x reductions in 2007 and 2008.

The executive director will review each request for an additional allocation from the CSP and allocate

CAIR NO_x allowances for the 2009 control period to CAIR NO_x units regulated under a request. If the amount of CAIR NO_x allowances in the CSP is greater than or equal to the sum of all CAIR NO_x allowances requested, the executive director will allocate the amount of CAIR NO_x allowances requested. If the amount of CAIR NO_x allowances in the CSP is less than the sum of all CAIR NO_x allowances requested, the executive director will allocate to each CAIR NO_x unit regulated under a request an amount of CAIR NO_x allowances in proportion to the amount of CAIR NO_x allowances requested by a CAIR NO_x unit to the total amount of CAIR NO_x allowances requested by all CAIR NO_x units. The executive director will determine and submit to the EPA by November 30, 2009, the CAIR NO_x allocations from the CSP.

5.2.6 CAIR Annual SO₂ Budget

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

The commission has incorporated by reference in 30 TAC §101.502 the requirements of 40 CFR Part 96, Subparts AAA - III that contains the SO₂ budget limits for Texas. The Texas CAIR SO₂ emission budget is specified in 40 CFR Part 51.124 as 320,946 tpy for the 2010 through 2014 period; and 224,662 tpy for 2015 and thereafter.

5.2.7 CAIR SO₂ Allocations

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

CAIR SO₂ allocations will be distributed by the EPA based on the CAIR source's Title IV SO₂ allowance allocation. The EPA will establish CAIR compliance accounts for each CAIR source and maintain an allowance tracking system to record the deposit, transfer, and deduction for compliance of all CAIR allowances. The TCEQ incorporated by reference in §101.502 the requirements of 40 CFR Part 96, Subparts AAA-III, which relate to the CAIR SO₂ program.

5.2.8 Authorized Account Representatives for CAIR NO_x and SO₂ Program

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

Each CAIR NO_x source, including all CAIR NO_x units at the source, will have only one CAIR-designated representative, with regard to all matters under the CAIR NO_x Annual Trading program concerning the source or any CAIR NO_x unit at the source.

The CAIR-designated representative is authorized by the owners and operators of the source and all such units at the source in accordance with 40 CFR Part 97 Subparts BB and II, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Annual Trading program. If the CAIR NO_x source is also a CAIR SO₂ source, this person shall be the same person as the CAIR-designated representative under the CAIR SO₂ Trading program. If the CAIR NO_x source is also subject to the Acid Rain program, this person shall be the same person as the designated representative under the Acid Rain program.

5.2.9 CAIR NO_x and CAIR SO₂ Allowance Tracking System

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

The commission has incorporated by reference 40 CFR Part 96 Subparts FF and FFF regarding CAIR NO_x and SO₂ Allowance Tracking System are controlled and operated by the EPA. Compliance accounts for CAIR NO_x and SO₂ sources are required for the purpose of holding CAIR NO_x and SO₂ allowances.

5.2.10 CAIR NO_x and CAIR SO₂ Allowance Transfers

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

A CAIR-authorized account representative seeking recordation of CAIR NO_x or SO₂ allowance transfers shall submit the request to the EPA. The NO_x and SO₂ allowance transfer must include the following elements: the account numbers for both the transferor and transferee accounts; the serial number for each CAIR NO_x or SO₂ allowance in the transferor account that is to be transferred; and the name and signature of the CAIR-authorized account representative of the transferor account and the date signed. 40 CFR Part 96 subparts GG and GGG have been incorporated by reference in Chapter 101, Subchapter 7, to meet the requirements of NO_x and SO₂ allowance transfers, respectively.

5.2.11 CAIR NO_x and CAIR SO₂ Permits

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

All elements of the CAIR NO_x Annual Trading program and CAIR SO₂ Trading program are required to be federally enforceable through the issuance of a CAIR permit as a complete and separable portion of the CAIR source's Title V permit. Submission of CAIR permit applications are dictated by 40 CFR Part 96 Subpart CC for NO_x and 40 CFR Part 96 Subpart CCC for SO₂. The TCEQ has incorporated requirements for revising Title V permits in 30 TAC Chapter 122.

5.2.12 Opt-In Requirements for NO_x and SO₂ Annual Trading Programs

This sub-section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

The CAIR rule includes a provision that other units may opt-in to the CAIR program under 40 CFR 96 Subpart II for NO_x and Subpart III for SO₂. A CAIR NO_x opt-in unit must be a unit that is located in Texas; not considered a CAIR NO_x unit; is not covered by a retired unit exemption under 40 CFR Part 72.8; has or is required or qualified to have a Title V operating permit or other federally enforceable permit; and vents all of its emissions to a stack and meets the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96 subpart HH. Units electing to opt-in to the CAIR NO_x Annual Trading program will be required to monitor and report the NO_x emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of Subpart HH for the entire control period prior to the date on which the unit elects to enter the CAIR NO_x Annual Trading program. The baseline heat input and baseline emission rate for each CAIR NO_x opt-in unit will depend upon the number of control periods the unit has monitored and reported heat input and emission rate data in accordance with Subpart HH. If the unit has monitored and reported for only one control period, the baseline heat input and emission rate will be the unit's total heat input and NO_x emission rate for the control period

immediately preceding the date on which the unit elects to opt-in. For units that have monitored and reported for more than one control period, the baseline heat input and emission rate will be the average of the most recent three-year period. The opt-in provisions of Subpart II allow opt-in units to choose from two different allocation methods for receiving an allocation of CAIR NO_x allowances. The general approach will allocate CAIR NO_x allowances to opt-in units at 70 percent of their baseline NO_x emission rate with no additional reductions required after the 2009 control period. An alternative approach will allocate CAIR NO_x allowances at the baseline levels for the 2009 through 2014 control periods, but require additional reductions starting in 2015. The CAIR NO_x allowance allocation for each control period beginning in 2015, and thereafter, will be based on a NO_x emission rate equal to the lesser of 0.15 lb of NO_x/million British thermal unit (MMBtu), the unit's baseline emission rate, or the most stringent state or federal NO_x emission limit applicable for any time during the applicable control period. Units may elect to opt into the CAIR NO_x Annual Trading program without electing to opt-in to the CAIR SO₂ Trading program and may withdraw from participation in the CAIR NO_x Annual Trading program after five years of participation.

Subpart III describes the opt-in provisions for the CAIR SO₂ Trading program. The opt-in provisions apply to a unit that is not already a CAIR SO₂ unit under 40 CFR Part 96.204 or covered by a retired unit exemption; has or is qualified to have a Title V operating permit; vents all emissions to a stack; and can meet the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96, Subpart HHH. CAIR SO₂ opt-in units will be required to apply for and obtain a CAIR permit as prescribed under Subpart CCC. Units electing to opt-in to the CAIR SO₂ Trading program will be required to monitor and report the SO₂ emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of Subpart HHH for the entire control period prior to the date on which the unit elects to enter the CAIR SO₂ Trading program. The baseline heat input and baseline emission rate for each CAIR SO₂ opt-in unit will be dependent upon the number of control periods the unit has monitored and reported heat input and emission rate data in accordance with Subpart HHH. If the unit has monitored and reported for only one control period, the baseline heat input and emission rate will be the unit's total heat input and SO₂ emission rate for the control period immediately preceding the date on which the unit elects to opt in. For units that have monitored and reported for more than one control period, the baseline heat input and emission rate will be the average of the most recent three-year period. The opt-in provisions of Subpart III allow opt-in units to choose from two different allocation methods for receiving an allocation of CAIR SO₂ allowances. The general approach will allocate CAIR SO₂ allowances to opt-in units at 70 percent of their baseline SO₂ emission rate with no additional reductions required after the 2010 control period. An alternative approach would allocate CAIR SO₂ allowances at the baseline levels for the 2010 through 2014 control periods but require greater reductions starting in 2015. The CAIR SO₂ allowance allocation for each control period beginning in 2015, and thereafter, will be based on a SO₂ emission rate equal to the lesser of the unit's baseline emission rate multiplied by 10 percent or the most stringent state or federal SO₂ emission limit applicable for any time during the applicable control period. Units may elect to opt in to the CAIR SO₂ Trading program without electing to opt-in to the CAIR NO_x Annual Trading program and may withdraw from participation in the CAIR SO₂ Trading program after five years of participation.

5.3 ENFORCEMENT

This section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

Requirements for allowance tracking and deductions for excess emissions are discussed in Section 5.2.10

CAIR NO_x and CAIR SO₂ Allowance Transfers, and requirements relating to the monitoring, recordkeeping, and reporting certifications requirements are discussed below in Section 5.4 MONITORING AND REPORTING REQUIREMENTS. CAIR sources will be required, under the model rule, to demonstrate compliance through the installation and operation of continuous emissions monitoring systems as required under 40 CFR Part 75.

5.4 MONITORING AND REPORTING REQUIREMENTS

This section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.

Title 40 CFR Part 51.123(I) requires that the state provide for monitoring the status of compliance with any control measures. To satisfy this requirement, the commission has incorporated by reference in §101.502 the obligations in 40 CFR Part 96, Subparts HH and HHH that require CAIR NO_x and CAIR SO₂ sources to comply with the monitoring, recordkeeping, and reporting provisions of the model rule, as well as the applicable sections of 40 CFR Part 75, subpart H. All affected sources will be required to monitor and report their emissions in accordance with 40 CFR Part 75. In addition, the model rule and 40 CFR Part 75 provide for certification of the monitoring systems to ensure accurate representation of emissions. Sources with monitoring systems already certified under 40 CFR Part 75 will not be required to recertify those same monitoring systems. However, owners or operators of CAIR subject units that have previously approved alternative monitoring petitions under 40 CFR Part 75 will need to resubmit the petitions to the EPA in accordance with 40 CFR Parts 96.171(c) and 96.271(c). Source information management, emissions data reporting, and allowance trading will be accomplished using on-line systems similar to those currently used for the Title IV Acid Rain and NO_x SIP Call programs.

CHAPTER 6: FUTURE ATTAINMENT PLANS

There are currently no future plans to revise the Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP).

APPENDIX A

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AN ACT

relating to nitrogen oxide allowance allocation adjustments and the incorporation of modifications to federal rules under the state implementation plan.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subsections (b), (c), and (e), Section 382.0173, Health and Safety Code, are amended to read as follows:

(b) The commission may require emissions reductions in conjunction with implementation of the rules adopted under Subsection (a) only for electric generating units. The commission shall make permanent allocations that are reflective of the allocation requirements of 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as applicable, at no cost to units as defined in 40 C.F.R. Sections [~~Section~~] 51.123 and 60.4102 using the United States Environmental Protection Agency's allocation method as specified by 40 C.F.R. Section 60.4142(a)(1)(1) [~~as issued by that agency on May 12, 2005,~~] or 40 C.F.R. Section 96.142(a)(1)(1) [~~as issued by that agency on May 18, 2005,~~] as applicable, with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c). The commission shall maintain a special reserve of allocations for new units commencing operation on or after January 1, 2001, as defined by 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and

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1 40 C.F.R. Subpart HHHH of Part 60, as applicable, with the exception
2 of nitrogen oxides which shall be allocated according to the
3 additional requirements of Subsection (c).

4 (c) Additional requirements regarding NOx allocations:

5 (1) The commission shall maintain a special reserve of
6 allocations for nitrogen oxide of 9.5 percent for new units.
7 Beginning with the 2015 control period, units shall be considered
8 new for each control period in which they do not have five years of
9 operating data reported to the commission prior to the date of
10 allocation for a given control period. Prior to the 2015 control
11 period, units that commenced operation on or after January 1, 2001,
12 will receive NOx allocations from the special reserve only.

13 (2) Nitrogen oxide allowances shall be established for
14 the 2009-2014 control periods for units commencing operation before
15 January 1, 2001, using the average of the three highest amounts of
16 the unit's adjusted control period heat input for 2000 through
17 2004, with the adjusted control period heat input for each year
18 calculated as follows:

19 (A) if the unit is coal-fired during the year,
20 the unit's control period heat input for such year is multiplied by
21 90 percent;

22 (B) if the unit is natural gas-fired during the
23 year, the unit's control period heat input for such year is
24 multiplied by 50 percent; and

25 (C) if the fossil fuel fired unit is not subject
26 to Paragraph [~~Subparagraph~~] (A) or (B) of this subdivision
27 [~~paragraph~~], the unit's control period heat input for such year is

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FACE

1 multiplied by 30 percent.

2 (3) Before the allocation date specified by EPA for
3 the control period beginning January 1, 2018 [~~2016~~], and every five
4 years thereafter, the commission shall adjust the baseline for all
5 affected units using the average of the three highest amounts of the
6 unit's adjusted control period heat input for periods one through
7 five of the preceding nine [~~seven~~] control periods, with the
8 adjusted control period heat input for each year calculated as
9 follows:

10 (A) for units commencing operation before
11 January 1, 2001:

12 (1) if the unit is coal-fired during the
13 year, the unit's control period heat input for such year is
14 multiplied by 90 percent;

15 (11) if the unit is natural gas-fired
16 during the year, the unit's control period heat input for such year
17 is multiplied by 50 percent; and

18 (111) if the fossil fuel fired unit is not
19 subject to Subparagraph (1) or (11) [~~Subdivision (3)(A)(1) or~~
20 ~~(3)(A)(11)] of this paragraph [~~subparagraph~~], the unit's control
21 period heat input for such year is multiplied by 30 percent; and [-]~~

22 (B) for units commencing operation on or after
23 January 1, 2001, in accordance with the formulas set forth by USEPA
24 in 40 C.F.R. 96.142 with any corrections to this section that may be
25 issued by USEPA prior to the allocation date.

26 (e) In adopting rules under Subsection (a), the commission
27 shall incorporate any modifications to the federal rules cited in

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1 this section that result from:

2 (1) a request for rehearing regarding those rules that
3 is filed with the United States Environmental Protection Agency;

4 (2) [~~or from~~] a petition for review of those rules that
5 is filed with a court; or

6 (3) a final rulemaking action of the United States
7 Environmental Protection Agency.

8 SECTION 2. This Act takes effect immediately if it receives
9 a vote of two-thirds of all the members elected to each house, as
10 provided by Section 39, Article III, Texas Constitution. If this
11 Act does not receive the vote necessary for immediate effect, this
12 Act takes effect September 1, 2007.

See
see

S.B. No. 1672

David Newburt
President of the Senate

Jim Caddick
Speaker of the House

I hereby certify that S.B. No. 1672 passed the Senate on April 12, 2007, by the following vote: Yeas 31, Nays 0.

Datsy Spaw
Secretary of the Senate

I hereby certify that S.B. No. 1672 passed the House on April 27, 2007, by the following vote: Yeas 133, Nays 0, two present not voting.

Robert Haney
Chief Clerk of the House

Approved:

10 MAY '07
Date

RICK PERRY
Governor

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
6:20 PM O'CLOCK

MAY 10 2007

Roger Whinnis

APPENDIX B

1 AN ACT

2 relating to air contaminant emissions reductions, including the
3 continuation and provisions of the Texas emissions reduction plan
4 and the use of money currently dedicated to the Texas emissions
5 reduction plan fund.

6 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

7 SECTION 1. Section 382.0172(c), Health and Safety Code, is
8 amended to read as follows:

9 (c) The commission may authorize or allow substitution of
10 emissions reductions under Subsection (b) only if:

11 (1) reductions in emissions of one air contaminant for
12 which the area has been designated as nonattainment are substituted
13 for reductions in emissions of another air contaminant for which
14 the area has been designated as nonattainment; or [~~and~~]

15 (2) the commission finds that the substitution will
16 clearly result in greater health benefits for the community as a
17 whole than would reductions in emissions at the original facility.

18 SECTION 2. Subchapter B, Chapter 382, Health and Safety
19 Code, is amended by adding Section 382.0173 to read as follows:

20 Sec. 382.0173. ADOPTION OF RULES REGARDING CERTAIN STATE
21 IMPLEMENTATION PLAN REQUIREMENTS AND STANDARDS OF PERFORMANCE FOR
22 CERTAIN SOURCES. (a) The commission shall adopt rules to comply
23 with Sections 110(a)(2)(D) and 111(d) of the federal Clean Air Act
24 (42 U.S.C. Sections 7410 and 7411). In adopting the rules, at a

1 minimum the commission shall adopt and incorporate by reference 40
2 C.F.R. Subparts AA through II and Subparts AAA through III of Part
3 96 and 40 C.F.R. Subpart HHHH of Part 60. The commission shall
4 adopt a state implementation plan in accordance with the rules and
5 submit the plan to the United States Environmental Protection
6 Agency for approval according to the schedules adopted by that
7 agency.

8 (b) The commission may require emissions reductions in
9 conjunction with implementation of the rules adopted under
10 Subsection (a) only for electric generating units. The commission
11 shall make permanent allocations that are reflective of the
12 allocation requirements of 40 C.F.R. Subparts AA through HH and
13 Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of
14 Part 60, as applicable, at no cost to units as defined in 40 C.F.R.
15 Section 51.123 and 60.4102 using the United States Environmental
16 Protection Agency's allocation method as specified by Section
17 60.4142(a)(1)(i), as issued by that agency on May 12, 2005, or 40
18 C.F.R. Section 96.142(a)(1)(i), as issued by that agency on May 18,
19 2005, as applicable with the exception of nitrogen oxides which
20 shall be allocated according to the additional requirements of
21 Subsection (c). The commission shall maintain a special reserve of
22 allocations for new units commencing operation on or after January
23 1, 2001, as defined by 40 C.F.R. Subparts AA through HH and Subparts
24 AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as
25 applicable with the exception of nitrogen oxides which shall be
26 allocated according to the additional requirements of Subsection
27 (c).

1 (c) Additional requirements regarding NOx allocations:

2 (1) The commission shall maintain a special reserve of
3 allocations for nitrogen oxide of 9.5 percent for new units.
4 Beginning with the 2015 control period, units shall be considered
5 new for each control period in which they do not have five years of
6 operating data reported to the commission prior to the date of
7 allocation for a given control period. Prior to the 2015 control
8 period, units that commenced operation on or after January 1, 2001,
9 will receive NOx allocations from the special reserve only.

10 (2) Nitrogen oxide allowances shall be established for
11 the 2009-2014 control periods for units commencing operation before
12 January 1, 2001, using the average of the three highest amounts of
13 the unit's adjusted control period heat input for 2000 through
14 2004, with the adjusted control period heat input for each year
15 calculated as follows:

16 (A) if the unit is coal-fired during the year,
17 the unit's control period heat input for such year is multiplied by
18 90 percent;

19 (B) if the unit is natural gas-fired during the
20 year, the unit's control period heat input for such year is
21 multiplied by 50 percent; and

22 (C) if the fossil fuel fired unit is not subject
23 to Subparagraph (A) or (B) of this paragraph, the unit's control
24 period heat input for such year is multiplied by 30 percent.

25 (3) Before the allocation date specified by EPA for
26 the control period beginning January 1, 2016, and every five years
27 thereafter, the commission shall adjust the baseline for all

1 affected units using the average of the three highest amounts of the
2 unit's adjusted control period heat input for periods one through
3 five of the preceding seven control periods, with the adjusted
4 control period heat input for each year calculated as follows:

5 (A) for units commencing operation before
6 January 1, 2001:

7 (i) if the unit is coal-fired during the
8 year, the unit's control period heat input for such year is
9 multiplied by 90 percent;

10 (ii) if the unit is natural gas-fired
11 during the year, the unit's control period heat input for such year
12 is multiplied by 50 percent; and

13 (iii) if the fossil fuel fired unit is not
14 subject to Subdivision (3)(A)(i) or (3)(A)(ii) of this
15 subparagraph, the unit's control period heat input for such year is
16 multiplied by 30 percent.

17 (B) for units commencing operation on or after
18 January 1, 2001, in accordance with the formulas set forth by USEPA
19 in 40 C.F.R. 96.142 with any corrections to this section that may be
20 issued by USEPA prior to the allocation date.

21 (d) This section applies only while the federal rules cited
22 in this section are enforceable and does not limit the authority of
23 the commission to implement more stringent emissions control
24 requirements.

25 (e) In adopting rules under Subsection (a), the commission
26 shall incorporate any modifications to the federal rules cited in
27 this section that result from a request for rehearing regarding

1 those rules that is filed with the United States Environmental
2 Protection Agency or from a petition for review of those rules that
3 is filed with a court.

4 (f) The commission shall take all reasonable and
5 appropriate steps to exclude the West Texas Region and El Paso
6 Region, as defined by Section 39.264(g), Utilities Code, from any
7 requirement under, derived from, or associated with 40 C.F.R.
8 Sections 51.123, 51.124, and 51.125, including filing a petition
9 for reconsideration with the United States Environmental
10 Protection Agency requesting that it amend 40 C.F.R. Sections
11 51.123, 51.124, and 51.125 to exclude such regions. The commission
12 shall promptly amend the rules it adopts under Subsection (a) of
13 this section to incorporate any exclusions for such regions that
14 result from the petition required under this subsection.

15 (g) The commission shall study the availability of mercury
16 control technology. The commission shall also examine the timeline
17 for implementing the reductions required under the federal rules,
18 the cost of additional controls both to the plant owners and
19 consumers, and the fiscal impact on the state of higher levels of
20 mercury emissions between 2005 and 2018, and consider the impact of
21 trading on local communities. The commission shall report its
22 findings by September 1, 2006.

23 SECTION 3. Section 386.002, Health and Safety Code, is
24 amended to read as follows:

25 Sec. 386.002. EXPIRATION. This chapter expires August 31,
26 2010 [~~2008~~].

27 SECTION 4. Section 386.053(c), Health and Safety Code, is

1 amended to read as follows:

2 (c) The commission shall make draft guidelines and criteria
3 available to the public and the United States Environmental
4 Protection Agency before the 30th [~~45th~~] day preceding the date of
5 final adoption and shall hold at least one public meeting to
6 consider public comments on the draft guidelines and criteria
7 before final adoption. The public meeting shall be held in the
8 affected state implementation plan area, and if the guidelines
9 affect more than one state implementation plan area, a public
10 meeting shall be held in each affected state implementation plan
11 area affected by the guidelines.

12 SECTION 5. Sections 386.058(b) and (e), Health and Safety
13 Code, are amended to read as follows:

14 (b) The governor shall appoint to the advisory board:

- 15 (1) a representative of the trucking industry;
16 (2) a representative of the air conditioning
17 manufacturing industry;
18 (3) a representative of the electric utility industry;
19 (4) a representative of regional transportation; and
20 (5) a representative of the nonprofit organization
21 described by Section 386.252(a)(2) [~~the Texas Council on~~
22 ~~Environmental Technology~~].

23 (e) Appointed members of the advisory board serve staggered
24 four-year [~~two-year~~] terms, with the [~~The~~] terms of seven or
25 eight appointed members expiring [~~expire~~] February 1 of each
26 [~~even-numbered year. The terms of eight appointed members expire~~
27 ~~February 1 of each~~] odd-numbered year. An appointed member may be

1 reappointed to a subsequent term.

2 SECTION 6. Section 386.102, Health and Safety Code, is
3 amended by adding Subsection (e) to read as follows:

4 (e) To improve the success of the program the commission:

5 (1) shall establish cost-effective limits for grants
6 awarded under the program to an owner or operator of a locomotive or
7 marine vessel that are lower than the cost-effectiveness limits
8 applied to other emissions reductions grants;

9 (2) shall determine the maximum amount of reductions
10 available from the locomotive and marine sectors and develop
11 strategies to facilitate the maximum amount of reductions in these
12 sectors; and

13 (3) shall include in the report required by Section
14 386.057(b) that is due not later than December 1, 2006, an analysis
15 of the cost-effectiveness of the grants in these sectors.

16 SECTION 7. Section 386.111(a), Health and Safety Code, is
17 amended to read as follows:

18 (a) The commission shall review an application for a grant
19 for a project authorized under this subchapter, including an
20 application for a grant for an infrastructure project, immediately
21 on receipt of the application. If the commission determines that an
22 application is incomplete, the commission shall notify the
23 applicant [~~, not later than the 15th working day after the date on~~
24 ~~which the commission received the application,~~] with an explanation
25 of what is missing from the application. The commission shall
26 [~~record the date and time of receipt of each application the~~
27 ~~commission determines to be complete and shall]~~ evaluate the

1 completed application according to the appropriate project
2 criteria. Subject to available funding, the commission shall make
3 a final determination on an application as soon as possible [~~and not~~
4 ~~later than the 60th working day after the date the application is~~
5 ~~determined to be complete~~].

6 SECTION 8. Section 386.116(d), Health and Safety Code, is
7 amended to read as follows:

8 (d) The [~~On or before December 1 of each even-numbered year,~~
9 ~~the~~] commission shall include in the biennial plan report required
10 by Section 386.057(b) a report of commission actions and results
11 under this section [~~to the governor, lieutenant governor, and~~
12 ~~speaker of the house of representatives~~].

13 SECTION 9. Subchapter C, Chapter 386, Health and Safety
14 Code, is amended by adding Section 386.117 to read as follows:

15 Sec. 386.117. REBATE GRANTS. (a) The commission shall
16 adopt a process for awarding grants under this subchapter in the
17 form of rebates to streamline the grant application, contracting,
18 reimbursement, and reporting processes for certain projects. The
19 process adopted under this section must:

20 (1) designate certain types of projects, such as
21 repowers, replacements, and retrofits, as eligible for rebates;

22 (2) project standardized oxides of nitrogen emissions
23 reductions for each designated project type;

24 (3) assign a standardized rebate amount for each
25 designated project type;

26 (4) allow for processing rebates on an ongoing
27 first-come, first-served basis; and

1 (5) consolidate, simplify, and reduce the
2 administrative work for applicants and the commission associated
3 with grant application, contracting, reimbursement, and reporting
4 processes for designated project types.

5 (b) The commission may limit or expand the designated
6 project types as necessary to further the goals of the program.

7 (c) The commission may award rebate grants as a pilot
8 project for a specific region or may award the grants statewide.

9 (d) The commission may administer the rebate grants or may
10 designate another entity to administer the grants.

11 SECTION 10. Section 386.251(c), Health and Safety Code, is
12 amended to read as follows:

13 (c) The fund consists of:

14 (1) the amount of money deposited to the credit of the
15 fund [~~contributions, fees, and surcharges~~] under:

16 (A) Section 386.056;

17 (B) Sections 151.0515 and 152.0215, Tax Code; and

18 (C) Sections 501.138, 502.1675, and 548.5055
19 [~~and 548.256(c)~~], Transportation Code; and

20 (2) grant money recaptured under Section 386.111(d).

21 SECTION 11. Section 386.252(a), Health and Safety Code, is
22 amended to read as follows:

23 (a) Money in the fund may be used only to implement and
24 administer programs established under the plan and shall be
25 allocated as follows:

26 (1) for the diesel emissions reduction incentive
27 program, 87.5 percent of the money in the fund, of which not more

1 than 10 percent may be used for on-road diesel purchase or lease
2 incentives;

3 (2) for the new technology research and development
4 program, 9.5 percent of the money in the fund, of which up to
5 \$250,000 is allocated for administration, up to \$200,000 is
6 allocated for a health effects study, \$500,000 is to be deposited in
7 the state treasury to the credit of the clean air account created
8 under Section 382.0622 to supplement funding for air quality
9 planning activities in affected counties, ~~and~~ not less than 20
10 percent is to be allocated each year to support research related to
11 air quality for the Houston-Galveston-Brazoria and Dallas-Fort
12 Worth nonattainment areas by a nonprofit organization based in
13 Houston, and the balance is to be allocated each year to that
14 nonprofit organization based in Houston to be used to implement and
15 administer the new technology research and development program
16 under a contract with the commission for the purpose of
17 identifying, testing, and evaluating new emissions-reducing
18 technologies with potential for commercialization in this state and
19 to facilitate their certification or verification; and

20 (3) for administrative costs incurred by the
21 commission and the laboratory, three percent of the money in the
22 fund.

23 SECTION 12. Effective September 1, 2008, Section
24 386.252(a), Health and Safety Code, is amended to read as follows:

25 (a) Money in the fund may be used only to implement and
26 administer programs established under the plan and shall be
27 allocated as follows:

1 (1) for the diesel emissions reduction incentive
2 program, 64 [~~87.5~~] percent of the money in the fund, of which not
3 more than 10 percent may be used for on-road diesel purchase or
4 lease incentives;

5 (2) for the new technology research and development
6 program, 33 [~~9.5~~] percent of the money in the fund, of which up to
7 \$250,000 is allocated for administration, up to \$200,000 is
8 allocated for a health effects study, \$500,000 is to be deposited in
9 the state treasury to the credit of the clean air account created
10 under Section 382.0622 to supplement funding for air quality
11 planning activities in affected counties, [~~and~~] not less than 10
12 [~~20~~] percent is to be allocated each year to support research
13 related to air quality for the Houston-Galveston-Brazoria and
14 Dallas-Fort Worth nonattainment areas by a nonprofit organization
15 based in Houston, not less than 25.5 percent is to be allocated each
16 year to that nonprofit organization based in Houston to be used to
17 implement and administer the new technology research and
18 development program under a contract with the commission for the
19 purpose of identifying, testing, and evaluating new
20 emissions-reducing technologies with potential for
21 commercialization in this state and to facilitate their
22 certification or verification, not more than \$12,500,000 is to be
23 allocated each year from any excess funds to be administered by the
24 commission to fund a study of regional ozone formation in this
25 state, meteorological and chemical modeling, and issues related to
26 ozone formation by ozone precursors and fine particulate matter
27 formation in this state, and the balance is to be allocated each

1 year to the commission to fund promising new technologies as
2 identified through the new technology research and development
3 program and recommended by that nonprofit organization based in
4 Houston in order to permit obtaining the maximum credits for
5 emissions reductions under the state's air quality state
6 implementation plans; and

7 (3) for administrative costs incurred by the
8 commission and the laboratory, three percent of the money in the
9 fund.

10 SECTION 13. Section 387.003(a), Health and Safety Code, is
11 amended to read as follows:

12 (a) The nonprofit organization described by Section
13 386.252(a)(2), under a contract with the commission as described by
14 that section~~[, in consultation with the Texas Council on~~
15 ~~Environmental Technology]~~, shall establish and administer a new
16 technology research and development program as provided by this
17 chapter.

18 SECTION 14. Section 387.005(a), Health and Safety Code, is
19 amended to read as follows:

20 (a) Grants awarded under this chapter shall be directed
21 toward a balanced mix of:

22 (1) retrofit and add-on technologies to reduce
23 emissions from the existing stock of vehicles targeted by the Texas
24 emissions reduction plan;

25 (2) advanced technologies for new engines and vehicles
26 that produce very-low or zero emissions of oxides of nitrogen,
27 including stationary and mobile fuel cells;

1 (3) studies to improve air quality assessment and
2 modeling; and

3 (4) [~~advanced technologies that promote increased~~
4 ~~building and appliance energy performance, and~~

5 [(5)] advanced technologies that reduce emissions
6 from other significant sources.

7 SECTION 15. Section 388.003(e), Health and Safety Code, is
8 amended to read as follows:

9 (e) Local amendments may not result in less stringent energy
10 efficiency requirements in nonattainment areas and in affected
11 counties than the energy efficiency chapter of the International
12 Residential Code or International Energy Conservation Code. Local
13 amendments must comply with the National Appliance Energy
14 Conservation Act of 1987 (42 U.S.C. Sections 6291-6309), as
15 amended. The laboratory, at the request of a municipality or
16 county, shall determine the relative impact of proposed local
17 amendments to an energy code, including whether proposed amendments
18 are substantially equal to or less stringent than the unamended
19 code. For the purpose of establishing uniform requirements
20 throughout a region, and on request of a council of governments, a
21 county, or a municipality, the laboratory may recommend a
22 climatically appropriate modification or a climate zone
23 designation for a county or group of counties that is different from
24 the climate zone designation in the unamended code. The laboratory
25 shall:

26 (1) report its findings to the council, county, or
27 municipality, including an estimate of any energy savings potential

1 above the base code from local amendments; and

2 (2) annually submit a report to the commission:

3 (A) identifying the municipalities and counties
4 whose codes are more stringent than the unamended code, and whose
5 codes are equally stringent or less stringent than the unamended
6 code; and

7 (B) quantifying energy savings and emissions
8 reductions from this program.

9 SECTION 16. Section 389.003, Health and Safety Code, is
10 amended to read as follows:

11 Sec. 389.003. COMPUTING ENERGY EFFICIENCY EMISSIONS
12 REDUCTIONS AND ASSOCIATED CREDITS. (a) The commission shall
13 develop a method to use in computing emissions reductions obtained
14 through energy efficiency initiatives, including renewable energy
15 initiatives, and the credits associated with those reductions.

16 (b) The laboratory shall assist the commission and affected
17 political subdivisions in quantifying, as part of the state
18 implementation plan, credits for emissions reductions attributable
19 to energy efficiency programs, including renewable energy
20 programs.

21 SECTION 17. Section 151.0515(d), Tax Code, is amended to
22 read as follows:

23 (d) This section expires September 30, 2010 [~~2008~~].

24 SECTION 18. Section 152.0215(c), Tax Code, is amended to
25 read as follows:

26 (c) This section expires September 30, 2010 [~~2008~~].

27 SECTION 19. Section 501.138, Transportation Code, is

1 amended by amending Subsections (a) and (b) and adding Subsections
2 (b-1), (b-2), and (b-3) to read as follows:

3 (a) An applicant for a certificate of title, other than the
4 state or a political subdivision of the state, must pay the county
5 assessor-collector a fee of:

6 (1) \$33 if the applicant's residence is a county
7 located within a nonattainment area as defined under Section 107(d)
8 of the federal Clean Air Act (42 U.S.C. Section 7407), as amended,
9 or is an affected county, as defined by Section 386.001, Health and
10 Safety Code;

11 (2) \$28 if the applicant's residence is any other
12 county; or

13 (3) on or after September 1, 2010 [~~2008~~], \$28
14 regardless of the county in which the applicant resides.

15 (b) The county assessor-collector shall send:

16 (1) \$5 of the fee to the county treasurer for deposit
17 in the officers' salary fund;

18 (2) \$8 of the fee to the department:

19 (A) together with the application within the time
20 prescribed by Section 501.023; or

21 (B) if the fee is deposited in an
22 interest-bearing account or certificate in the county depository or
23 invested in an investment authorized by Subchapter A, Chapter 2256,
24 Government Code, not later than the 35th day after the date on which
25 the fee is received; and

26 (3) the following amount to the comptroller at the
27 time and in the manner prescribed by the comptroller:

1 (A) \$20 of the fee if the applicant's residence
2 is a county located within a nonattainment area as defined under
3 Section 107(d) of the federal Clean Air Act (42 U.S.C. Section
4 7407), as amended, or is an affected county, as defined by Section
5 386.001, Health and Safety Code;

6 (B) \$15 of the fee if the applicant's residence
7 is any other county; or

8 (C) on or after September 1, 2010, \$15 regardless
9 of the county in which the applicant resides.

10 (b-1) Fees collected under Subsection (b) [~~this subsection~~]
11 to be sent to the comptroller shall be deposited as follows:

12 (1) ~~[(i)]~~ before September 1, 2008, to the credit of
13 the Texas emissions reduction plan fund; and

14 (2) on or [(ii)] after September 1, 2008, to the credit
15 of the Texas Mobility Fund, except that \$5 of each fee imposed under
16 Subsection (a)(1) and deposited on or after September 1, 2008, and
17 before September 1, 2010, shall be deposited to the credit of the
18 Texas emissions reduction plan fund.

19 (b-2) The comptroller shall establish a record of the amount
20 of the fees deposited to the credit of the Texas Mobility Fund under
21 Subsection (b-1). On or before the fifth workday of each month, the
22 department shall remit to the comptroller for deposit to the credit
23 of the Texas emissions reduction plan fund an amount of money equal
24 to the amount of the fees deposited by the comptroller to the credit
25 of the Texas Mobility Fund under Subsection (b-1) in the preceding
26 month. The department shall use for remittance to the comptroller
27 as required by this subsection money in the state highway fund that

1 is not required to be used for a purpose specified by Section 7-a,
2 Article VIII, Texas Constitution, and may not use for that
3 remittance money received by this state under the congestion
4 mitigation and air quality improvement program established under 23
5 U.S.C. Section 149.

6 (b-3) This subsection and Subsection (b-2) expire September
7 1, 2010.

8 SECTION 20. Section 502.1675(c), Transportation Code, is
9 amended to read as follows:

10 (c) This section expires August 31, 2010 [~~2008~~].

11 SECTION 21. Section 548.5055(c), Transportation Code, is
12 amended to read as follows:

13 (c) This section expires August 31, 2010 [~~2008~~].

14 SECTION 22. Sections 386.001(4), 386.057(e), 387.002, and
15 387.010, Health and Safety Code, and Sections 548.256(c) and (d),
16 Transportation Code, are repealed.

17 SECTION 23. The Texas Commission on Environmental Quality
18 shall prepare guidance documents for the rebate grants required by
19 Section 386.117, Health and Safety Code, as added by this Act, not
20 later than January 1, 2006.

21 SECTION 24. (a) As soon as practicable on or after the
22 effective date of this Act, the governor shall appoint to the Texas
23 Emissions Reduction Plan Advisory Board a representative of the
24 nonprofit organization described by Section 386.252(a)(2), Health
25 and Safety Code, as required by Section 386.058(b), Health and
26 Safety Code, as amended by this Act, to replace the representative
27 of the Texas Council on Environmental Technology serving on that

1 board on the effective date of this Act.

2 (b) As soon as practicable on or after the effective date of
3 this Act, the governor, lieutenant governor, and speaker of the
4 house of representatives, by mutual agreement, shall designate the
5 terms of the appointed members of the Texas Emissions Reduction
6 Plan Advisory Board so that the terms of seven appointed members
7 expire on February 1, 2007, and the terms of eight appointed members
8 expire on February 1, 2009, as provided by Section 386.058(e),
9 Health and Safety Code, as amended by this Act.

10 SECTION 25. Except as otherwise provided by this Act, this
11 Act takes effect September 1, 2005.

David Newhurst

President of the Senate

Jim Caddell

Speaker of the House

I certify that H.B. No. 2481 was passed by the House on April 28, 2005, by a non-record vote; and that the House concurred in Senate amendments to H.B. No. 2481 on May 29, 2005, by a non-record vote; and that the House adopted H.C.R. No. 248 authorizing certain corrections in H.B. No. 2481 on May 30, 2005, by a non-record vote.

Robert Haney
Chief Clerk of the House

I certify that H.B. No. 2481 was passed by the Senate, with amendments, on May 20, 2005, by the following vote: Yeas 31, Nays 0; and that the Senate adopted H.C.R. No. 248 authorizing certain corrections in H.B. No. 2481 on May 30, 2005, by a viva-voce vote.

Lacey Spaw
Secretary of the Senate

APPROVED: 18 JUNE '05

Date

Rick Peary
Governor

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
12:20 PM O'CLOCK
JUN 18 2005
Roger Williams
Secretary of State

APPENDIX C

The Texas Commission on Environmental Quality (commission or TCEQ) proposes amendments to §§101.502, 101.504, 101.506, and 101.508.

The amended sections will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The purpose of this Clean Air Interstate Rule (CAIR) revision is to incorporate legislative changes made during the 80th Texas Legislature, 2007, as prescribed by Senate Bill (SB) 1672 and federal rule revisions that the EPA has promulgated since Texas adopted the states initial CAIR rules on July 12, 2006.

Additionally, grammatical and formatting changes are being proposed to conform with Texas Register and commission standards.

On May 12, 2005, the EPA promulgated CAIR to assist nonattainment areas in downwind states in achieving compliance with the national ambient air quality standards (NAAQS) for particulate matter less than or equal to 2.5 microns ($PM_{2.5}$) and eight-hour ozone. Twenty-eight eastern states and the District of Columbia were identified as upwind contributors to the nonattainment of the $PM_{2.5}$ and eight-hour ozone NAAQS prompting the requirement for the reduction in emissions of sulfur dioxide (SO_2) and/or oxides of nitrogen (NO_x). Twenty-three states, including Texas, and the District of Columbia were found to contribute to the downwind nonattainment of the $PM_{2.5}$ NAAQS and are required to make reductions in annual emissions of SO_2 and NO_x .

The 79th Texas Legislature, 2005, enacted House Bill (HB) 2481, §2 (codified at Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.0173), requiring Texas to participate in the EPA-administered interstate cap and trade program through the incorporation by reference of the CAIR model trading rule. HB 2481 also provided specific direction for the methodology to be used in allocating the NO_x trading budget provided to Texas, identified an amount of CAIR NO_x allowances to be set aside for new sources, and specified that reductions associated with CAIR would only be required from new and existing electric generating units (EGUs) and not from other sources of SO₂ and NO_x emissions.

In 2007, the 80th Texas Legislature passed SB 1672 that directs the TCEQ to incorporate federal CAIR changes that the EPA has finalized since the initial adoption of the CAIR rules on July 12, 2006, and revise the NO_x allocation methodology as prescribed by SB 1672. SB 1672 revises the number of minimum periods specified for NO_x allocation adjustments that was directed by HB 2481. HB 2481 revised the baseline heat input of existing units to reflect the average of the three highest amounts of the units total converted control period heat input from control periods one through five of the previous seven control periods. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance. SB 1672 changed the number of control periods from seven to nine and shifted the initial allocation update from 2016 to 2018. Therefore, beginning with the 2018 control period, and for the control period beginning every five-years after 2018, each existing unit's baseline heat input will be adjusted to reflect the average of the three highest amounts of the unit's total converted control period heat input from control periods one through five of the previous nine control periods.

Because of the change in control periods for adjusting baseline heat input, for the 2016 and 2017 control periods new units with five or more consecutive years of operation will be eligible to receive their CAIR NO_x allocation from the general NO_x trading budget on a modified output basis. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in the 2018 control period, new units with five or more years of operation will be eligible to receive their CAIR NO_x allowances allocation from the general NO_x trading budget on a modified output basis only during the baseline adjustment control periods.

SB 1672 also omits the reference dates of the federal CAIR adoption that were specified in HB 2481 from the 79th Texas legislative session. This change will enable the commission to make subsequent changes as dictated by federal rule change for CAIR.

The proposed rule revision also incorporates revisions to the federal CAIR model trading rules. The EPA adopted revisions to 40 Code of Federal Regulations (CFR) Part 96 Subpart AA - Subpart II and Subpart AAA - Subpart III on April 28, 2006. In the April 28, 2006, revisions, the EPA changed the compliance dates for companies to submit a request for allowances from the new unit set-aside from July 1 to May 1 of the control period. The EPA also revised the time to request allowances from the compliance pool from July 1, 2009, to May 1, 2009. For additional information regarding these revisions, please review the EPA final rule, published in the Federal Register at 71 Fed Reg. 82 on April 28, 2006, available online at www.epa.gov/fedrgstr/.

On January 24, 2008, the EPA adopted revisions to 40 CFR Parts 72 and 75 that modify existing requirements for sources affected by CAIR. The revisions include changes implemented by the EPA's

Clean Air Markets Division in its data system in order to utilize the latest modern technology for submittal of data by affected sources. The EPA also adopted revisions to require that individuals performing emissions testing or Continuous Emissions Monitoring System (CEMS) performance evaluations must comply with American Society for Testing and Materials (ASTM) D7036-04 "Standard Practice for Competence of Air Emission Testing Bodies." The ASTM standard sets minimum requirements for demonstrating that an air emission testing bodies is competent to perform testing. For additional information regarding these revisions, please review the EPA final rule, published in the Federal Register at 73 Fed Reg. 16 on January 24, 2008, available online at www.epa.gov/fedrgstr/.

SECTION BY SECTION DISCUSSION

SUBCHAPTER H, EMISSIONS BANKING AND TRADING

DIVISION 7, CLEAN AIR INTERSTATE RULE

Grammatical and formatting changes have been made throughout the proposal to conform to Texas Register and agency standards.

Section 101.502, Clean Air Interstate Rule Trading Program

The proposed revision to §101.502 updates the reference to the adoption date of October 19, 2007, effective November 19, 2007, for 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III.

Section 101.504 Timing Requirements for Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

The proposed revisions to §101.504 revise the deadlines the executive director must submit to the EPA the CAIR NO_x allowance allocations for each CAIR NO_x unit subject to this division in order to comply

with the minimum lead time of three years provided under 40 CFR 51.123(o)(2)(ii). The deadline to submit CAIR NO_x allocations for 2016 will be revised to October 31, 2012. Beginning in control period 2017 and each control period thereafter, the CAIR NO_x allowances allocations must be submitted to the EPA 38 months prior to the beginning of the applicable control period.

Section 101.506, Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations

The proposed revisions to §101.506 describe the methodology to be used in distributing CAIR NO_x allowances, in tons, for each CAIR NO_x unit subject to this division. Beginning with the 2018 control period, and for the control period beginning every five years thereafter, the baseline heat input for units commencing operation prior to January 1, 2001, will be adjusted to reflect the average of the three highest amounts of the unit's control period heat input, adjusted for fuel type, from control periods one through five of the previous nine control periods.

For units commencing operation on or after January 1, 2001, for control periods 2015, 2016, and 2017, units operating each calendar year for a period of five or more consecutive years will be eligible to receive their CAIR NO_x allowance allocation from the general NO_x trading budget on a modified output basis. The baseline heat input will be the average of the three highest amounts of the unit's total converted control period heat input from the first five years of operation.

The proposed revisions also require the CAIR designated representative for units that commence operation on or after January 1, 2001, and that have not established a historical baseline heat input in accordance with §101.506(b)(2) or (3), to submit a request for a CAIR NO_x allowance allocation from the

new unit set-aside on or before May 1 of the first control period for which the request is being made and after the date that the CAIR NO_x unit commences commercial operation.

The proposed revision also requires the gross electrical output of the generator or generators served by the unit and total heat energy of any steam produced by the unit to be submitted in writing to the executive director by the latter of May 1, 2011, or May 1 of the control period immediately following the unit's fifth consecutive year of commercial operation.

Section 101.508, Compliance Supplement Pool

Proposed revisions to §101.508 require the CAIR designated representative to submit to the executive director by May 1, 2009, a request for an allocation of CAIR NO_x allowances from the compliance supplement pool in an amount not to exceed the sum of the CAIR NO_x unit's emission reductions, in tons, during 2007 and 2008, that were not necessary to comply with any state or federal emission limitation applicable during those years.

Proposed revisions also require the CAIR designated representative to submit to the executive director by May 1, 2009, a request for an allocation of CAIR NO_x allowances from the compliance supplement pool in an amount not to exceed the minimum amount of CAIR NO_x allowances necessary to remove the risk to the reliability of electricity supply.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Nina Chamness, Analyst, Strategic Planning and Assessment, has determined that, for the first five-year period the proposed rules are in effect, no significant fiscal implications are anticipated for the agency or

other units of state or local governments as a result of administration or enforcement of the proposed rules. The agency will implement the proposed rules utilizing current resources. Local governments that own or operate EGUs may pay additional monitoring and testing costs, but these additional costs are not expected to be significant.

The proposed rules implement the provisions of SB 1672, which allow the agency to comply with changes made to the federal CAIR by the EPA. Specifically, SB 1672 expands the number of control periods that are used to calculate the baseline, which in turn is used to calculate the heat input of a unit from seven to nine years. The baseline would govern the amount of NO_x that would be permissible under CAIR. SB 1672 also requires the agency to implement other CAIR provisions that the EPA finalized after SB 1672 was passed. These provisions include: an extension of the deadline that companies must comply with for submitting their request for NO_x emission allowances; and additional testing and monitoring options that EGUs can use to measure and report these emissions. The EPA has also mandated that those performing CEMS evaluations and stack testing comply with ASTM D7036-04 requirements so that they can demonstrate competence in performing these monitoring tasks.

The proposed rules will apply to any stationary, fossil-fuel-fired boiler or combustion turbine serving at any time a generator with a nameplate capacity of more than 25 megawatts of electricity (MWe) that produces electricity for sale. It is estimated that there may be as many as 400 of these types of machines that fit the criteria governed by the proposed rule and the federal statute. Staff estimates that approximately 48 of these type boilers or combustion turbines are owned by local governments operating EGUs, and approximately 352 are thought to be owned by large businesses operating EGUs.

The proposed rules, which implement EPA requirements, will require that companies performing CEMS evaluations and stack testing comply with ASTM D7036-04 requirements. The EPA has estimated that compliance with ASTM D7036-04 requirements may require a company planning to test for CAIR compliance pay as much as \$100 per year to test its ability to comply with ASTM D7036-04 standards and a one-time cost of about \$4,000 to establish a quality CAIR monitoring program. A testing company is expected to spread these costs to all the EGUs that choose the company to perform the needed CEMS evaluations and stack testing, and no one EGU, including those owned by local governments, is expected to experience significant cost increases as a result of the proposed rules.

PUBLIC BENEFITS AND COSTS

Ms. Chamness also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be compliance with state and federal laws and increased environmental protection due to the reduction of NO_x and SO₂ emissions from stationary sources at affected EGUs.

Approximately 352 of the estimated 400 stationary sources governed by the proposed rule are thought to be owned by large businesses operating EGUs. An EGU will be able to contract a company meeting required technical standards from any of over 240 national and international testing companies, and as many as 19 of these companies may be located in Texas. Most testing companies are thought to be small businesses, and the EPA has estimated that the companies will incur some additional costs, although not anticipated to be significant, to comply with ASTM D7036-04 standards. These additional costs, which are found in the COSTS TO STATE AND LOCAL GOVERNMENT section of this preamble, are not

expected to have a significant fiscal implication for EGUs owned by large businesses because testing companies are expected to spread increased costs among several customers.

SMALL BUSINESS AND MICRO-BUSINESS ASSESMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rules. Although staff does not have the data needed to estimate how many of companies that might perform CEMS evaluations and stack testing for CAIR requirements, staff believes that many of them might be small or micro – businesses. EPA has estimated that compliance with ASTM D7036-04 requirements may require a company planning to test for CAIR compliance pay as much as \$100 per year to test its ability to comply with ASTM D7036-04 standards and a one time cost of about \$4,000 to establish a quality CAIR monitoring program. A testing company can choose whether or not it will incur these certification costs, and if it chooses to perform this service, the company is expected to recover these costs from their customers.

SMALL BUSINESS REGULATORY FLEXIBILITY ANALYSIS

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rules do not adversely affect a small or micro-business in a material way for the first five years that the proposed rules are in effect. In addition, the proposed rule is required by state and federal law in order to protect the environment and public health and safety.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the proposed rulemaking meets the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The proposed rulemaking does not, however, meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The proposed rules are an incorporation by reference of revisions to the federal CAIR. The commission previously adopted rules to incorporate the CAIR, as discussed elsewhere in this preamble. The CAIR

includes EPA-administered emissions trading programs that will be governed by model rules provided in the CAIR, which states may incorporate by reference. The EPA found that Texas is among several states that contribute significantly to nonattainment of the NAAQS for PM_{2.5} in downwind states. The EPA is requiring these upwind states to revise their SIPs to include control measures to reduce emissions of SO₂ and/or NO_x, which are precursors to PM_{2.5} formation. Reducing upwind precursor emissions will assist downwind PM_{2.5} nonattainment areas to achieve the NAAQS in a more equitable, cost-effective manner than if those areas implemented local emissions reductions alone. The EPA has specified the amount of each state's required reductions, but each state has flexibility to choose the measures by which it achieves them. If states choose to control EGUs, then they must establish a budget or cap for those sources. The CAIR defines the EGU budgets for the affected states if the states choose to control only EGUs or if they choose to control other sources to achieve some or all of their reductions. States may adopt the CAIR NO_x model allowance allocation methodology or choose an alternative method to allocate the state budget of NO_x emissions allowances to sources in the state.

Specifically, the proposed rulemaking would incorporate by reference revisions to the CAIR model emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II, and Subpart AAA - Subpart III. In addition, the rulemaking proposes revisions to an alternative NO_x allowance allocation methodology for Texas CAIR NO_x sources in lieu of the model rule methodology in 40 CFR Part 96, Subpart EE. The proposed rulemaking fulfills the requirements of SB 1672, enacted by the 80th Legislature, to incorporate CAIR by reference, including the five subsequent rule revisions that the EPA has promulgated to CAIR since Texas adopted the initial CAIR SIP revision on July 12, 2006, as well as revisions to the NO_x allocation methodology as prescribed by SB 1672. SB 1672 relates to correcting the number of minimum periods specified for NO_x allocation allowance adjustments that were directed by

HB 2481. HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by looking back at the three highest years of the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of the applicable period. Therefore, the number of control periods was changed from seven to nine in SB 1672, and the allocation update was shifted from 2016 to 2018. The incorporation of revisions to CAIR and the changes resulting from SB 1672 will allow the CAIR to continue to be implemented in Texas, in accord with the state statutory requirements. The proposed incorporation of the federal rule is intended to protect the environment and to reduce risks to human health and safety from environmental exposure by reducing NO_x and SO₂ emissions from upwind states so that downwind states may reach attainment of the NAAQS for PM_{2.5}. As discussed elsewhere in this preamble, the proposed revisions are not expected to impose significant costs on regulated entities. While continued implementation of the CAIR is intended to protect human health and the environment, it may adversely affect in a material way sources in the state that fall under the applicability requirements in the federal rule. Cost and benefits of the revisions to CAIR were analyzed by the EPA during the federal notice and comment rulemaking for the CAIR. CAIR is a required federal program, and the ability of states to modify its requirements is limited.

The proposed rulemaking would implement requirements of the federal Clean Air Act (FCAA). Under 42 United States Code (USC), §7410(a)(2)(D), each SIP must contain adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment of the NAAQS in any other state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance

as may be necessary or appropriate to meet the applicable requirements of this chapter," (42 USC, Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. Additionally, states have further obligations under 42 USC, §7410(a)(2)(D), to address interstate transport of pollutants that contribute significantly to nonattainment in, or interfere with maintenance by, another state. In the CAIR, the EPA found that 28 states and the District of Columbia contribute significantly to nonattainment of the PM_{2.5} or eight-hour ozone NAAQS in downwind areas. The EPA is requiring these upwind states to revise their SIPs to include control measures to reduce emissions of SO₂ and/or NO_x, with limited flexibility. Adoption of the federal CAIR, including revisions and participation in its emissions cap and trade approach for annual SO₂ and NO_x emissions to reduce downwind PM_{2.5} is the method the state has chosen to achieve those reductions in a flexible and cost-effective manner.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by SB 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of

the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ). Cf. *Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Dudney v. State Farm Mut. Auto Ins. Co.*, 9 S.W.3d 884, 893 (Tex. App. Austin 2000); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the proposed rulemaking is to protect the environment and to reduce risks to human health by adoption of the revisions to the federal CAIR by reference in addition to changes resulting from

SB 1672. The proposed rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this proposed rulemaking. Finally, this proposed rulemaking was not developed solely under the general powers of the agency, but is required by THSC, TCAA, §382.0173. Therefore, this proposed rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because although the proposed rulemaking meets the definition of a "major environmental rule," it does not meet any of the four applicability criteria for a major environmental rule.

The commission invites public comment regarding the draft regulatory impact analysis determination during the public comment period.

TAKINGS IMPACT ASSESSMENT

The commission evaluated the proposed rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. The specific purpose of the proposed rulemaking is to incorporate by reference revisions to the federal CAIR emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III, and to incorporate legislative changes during the 80th Texas Legislature as prescribed by Senate Bill (SB) 1672. In 2007, the 80th Texas Legislature passed Senate Bill (SB) 1672 that allows the TCEQ to incorporate federal CAIR changes that the EPA has finalized since the initial adoption of the CAIR rules on July 12, 2006, and revise the NO_x allocation methodology as prescribed by SB 1672. SB 1672 revises the number of minimum periods specified for NO_x allowance allocation adjustments that was directed by HB 2481, as discussed elsewhere in this preamble. Additionally, EPA promulgated several changes to the federal CAIR, as discussed elsewhere in this preamble. Texas Government Code, §2007.003(b)(4), provides that Texas Government Code,

Chapter 2007 does not apply to this proposed rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law and by state law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007 does not apply to these proposed rules because this is an action that is taken in response to a real and substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose.

Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). The EPA promulgated the CAIR rule, and revisions to the CAIR, to reduce SO₂ and NO_x emissions from upwind states so that downwind states may reach attainment of the NAAQS for PM_{2.5}. The proposed rules will enable Texas to implement the federal emissions budget and trading program and impose its requirements on new and existing fossil fuel-fired electric utility units, ultimately ensuring reductions of SO₂ and NO_x emissions. The action will specifically advance the health and safety purpose by reducing PM_{2.5} levels through an emissions cap and gradual reductions in emissions of SO₂ and NO_x. The rules specifically target a category of sources with significant SO₂ and NO_x emissions, and through the cap and trade program support cost-effective control strategies. Consequently, the proposed rulemaking meets the exemption criteria in Texas Government Code, §2007.003(b)(4) and (13). For these reasons, Texas Government Code, Chapter 2007 does not apply to this proposed rulemaking.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq.*), and the commission rules in 30 Texas

Administrative Code (TAC) Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by §281.45(a)(3) and 31 TAC §505.11(b)(2), concerning Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). No new sources of air contaminants are authorized and the proposed new rules will maintain at least the same level of or increase the level of emissions control as the existing rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.32). This rulemaking action complies with 40 CFR Part 51, concerning Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

The requirements of 42 USC, §7410 are applicable requirements of 30 TAC Chapter 122. Facilities that are subject to the Federal Operating Permit Program will be required to obtain, revise, reopen, and renew their federal operating permits as appropriate in order to include CAIR.

ANNOUNCEMENT OF HEARINGS

Public Hearings for this proposed rulemaking have been scheduled in Fort Worth on June 30, at 2:00 p.m. at the Texas Commission on Environmental Quality Regional Office, located at 2309 Gravel Drive; in Austin on July 1, 2008, at 2:00 p.m. in Building F, Room 2210 at the Texas Commission on Environmental Quality complex, located at 12100 Park 35 Circle; and in Houston on July 2, 2008 in Conference Room B at Houston-Galveston Area Council, located at 3555 Timmons Lane, Number 120. The hearings will be structured for the receipt of oral or written comments by interested persons.

Registration will begin 30 minutes prior to each hearing. Individuals may present oral statements when called upon in order of registration. A four-minute time limit may be established at each hearing to assure that enough time is allowed for every interested person to speak. There will be no open discussion during each hearing; however, commission staff members will be available to discuss the proposal 30 minutes before each hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Kristin Smith, Office of Legal Services at (512) 239-0177. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Kristin Smith, Texas Register Team, Office of Legal Services, Texas Commission on Environmental Quality, MC 205, P.O. Box 13087, Austin, Texas 78711 or faxed to (512) 239-4808. All comments should reference Rule Project Number 2007- 053-101-EN. Electronic comments may be submitted at: <http://www5.tceq.state.tx.us/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. Comments must be received by July 3, 2008. Copies of the proposed rules can be obtained from the commission's Web site at

http://www.tceq.state.tx.us/nav/rules/propose_adopt.html. For further information, please contact Jay

Tonne, Air Quality Planning Section, (512) 239-1453.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 7: CLEAN AIR INTERSTATE RULE

§§101.502, 101.504, 101.506, 101.508

STATUTORY AUTHORITY

The amendments are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.014, concerning emission inventory; §382.016, concerning Monitoring Requirements; §382.0173, concerning adoption of rules regarding certain state implementation plan requirements and standards of performance for certain sources; and §382.054, concerning federal operating permits; and FCAA, 42 USC, §§7401 *et seq.*, which requires states to include in their adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment, or interfere with maintenance of, the national ambient air quality standard in any other state.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.014, 382.016, §382.0173, and §382.054; and FCAA, 42 USC, §§7401 *et seq.*

§101.502. Clean Air Interstate Rule Trading Program.

(a) The commission incorporates by reference, except as specified in this division, the provisions of 40 Code of Federal Regulations (CFR) Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III (as amended through October 19, 2007 (72 FR 59190) [May 12, 2005 (70 FR 25162)]) for purposes of implementing the Clean Air Interstate Rule (CAIR) trading programs for annual emissions of oxides of nitrogen (NO_x) and sulfur dioxide to meet the requirements of Federal Clean Air Act, §110(a)(2)(D).

(b) Owners and operators of sources subject to 40 CFR Part 96, Subpart AA - Subpart II or Subpart AAA - Subpart III shall comply with those requirements.

(c) The methodologies and procedures for determining and recording each subject source's CAIR NO_x [Clean Air Interstate Rule oxides of nitrogen] allowance allocation in 40 CFR Part 96, Subpart EE are replaced by the requirements of this division.

§101.504. Clean Air Interstate Rule Trading Program.

(a) The executive director shall submit to the United States Environmental Protection Agency (EPA) the CAIR NO_x [Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x)] allowance allocations

determined in accordance with §101.506(c) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations) by the following dates:

(1) October 31, 2006, for the 2009 - 2014 control periods;

(2) October 31, 2011, for the 2015 control period;

(3) October 31, 2012, [2014,] for the 2016 control period; and

(4) 38 [14] months prior to the beginning of each applicable control period for the control period beginning in 2017 and for each control period thereafter.

(b) For the control period beginning in 2009, and for each control period thereafter, the executive director shall submit to EPA the CAIR NO_x allowance allocations determined in accordance with §101.506(d) and (e) of this title by October 31 of the applicable control period.

(c) If the executive director fails to submit to EPA the CAIR NO_x allowance allocations in accordance with subsection (a) of this section, EPA will assume that the allocations of CAIR NO_x allowances for the applicable control period are the same as for the control period that immediately precedes the applicable control period, except that, if the applicable control period is in 2015, EPA will assume that the allocations equal 83% of the allocations for the control period that immediately precedes the applicable control period.

(d) If the executive director fails to submit to EPA the CAIR NO_x allowance allocations in accordance with subsection (b) of this section, EPA will assume that no CAIR NO_x allowances are to be allocated, for the applicable control period, to any CAIR NO_x unit that would otherwise be allocated CAIR NO_x allowances under §101.506(d) and (e) of this title.

§101.506. Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

(a) For units commencing operation before January 1, 2001:

(1) for each control period in 2009 - 2015, the baseline heat input, in million British thermal units (MMBtu), is the average of the three highest amounts of the unit's adjusted control period heat input for 2000 - 2004 with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and

(C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.

(2) for the control period beginning January 1, 2018 [2016], and for the control period beginning every five years thereafter, the baseline heat input must be adjusted to reflect the average of the three highest amounts of the unit's adjusted control period heat input from control periods one through five of the preceding nine [seven] control periods with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and

(C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.

(b) For units commencing operation on or after January 1, 2001:

(1) for each control period in 2009 - 2014, Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances must be allocated from the new unit set-aside identified under §101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget) and determined in accordance with subsection (d) of this section;

(2) for the control periods [period] beginning January 1, 2015, January 1, 2016, and January 1, 2017, for units operating each calendar year during a period of five or more consecutive years, the baseline heat input is the average of the three highest amounts of the unit's total converted control period heat input over the first such five years. The converted control period heat input for each year is calculated as follows:

(A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 British thermal units per kilowatt-hour (Btu/kWh), if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu. If a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

(B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted heat input is the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu;
or

(C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the

sequential use of energy, the converted heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(2)(C) (no change)

$$HI = \frac{(O \times 3,414 \text{ Btu/kWh}) + \frac{HE}{0.8}}{1,000,000 \text{ Btu/MMBtu}}$$

Where:

- Btu = British thermal units.
- HI = the converted heat input, in MMBtu, of the combustion turbine cogeneration unit.
- HE = the total heat energy, in Btu, of the steam produced by any associated heat recovery steam generator during the control period.
- MMBtu= million British thermal units
- kWh = kilowatt-hour.
- O = the gross electrical output during the control period of the enclosed device comprising the compressor, combustor, and turbine.

(3) for the control period beginning January 1, 2018, [2016,] and for the control period beginning every five years thereafter, for units operating each calendar year during a period of five or more consecutive years, the baseline heat input must [shall] be adjusted to reflect the average of the three highest amounts of the unit's converted control period heat input from control periods one through five of the preceding nine [seven] control periods. The converted control period heat input for each year is calculated as follows:

(A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 Btu/kWh, if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu, provided that if a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

(B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input equals the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu; or

(C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(3)(C) (no change)

$$HI = \frac{(O \times 3,414 \text{ Btu/kWh}) + \frac{HE}{0.8}}{1,000,000 \text{ Btu/MMBtu}}$$

Where:

- Btu = British thermal units
- HE = the total heat energy, in Btu, of the steam produced by any associated heat recovery steam generator during the control period.
- HI = the converted heat input, in MMBtu, of the combustion turbine cogeneration unit.
- kWh = kilowatt-hour
- MMBtu= million British thermal units
- O = the gross electrical output during the control period of the enclosed device comprising the compressor, combustor, and turbine.

(c) For units with a baseline heat input calculated under subsection (a) or (b)(2) or (3) of this section, CAIR NO_x allowances must be allocated according to the equation in the following figure.

Figure: 30 TAC §101.506(c) (no change)

$$A = \frac{HI}{\sum_{i=1}^n HI_i} \times B$$

Where:

- A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances allocated to a CAIR NO_x unit rounded to the nearest whole allowance.
- i* = each CAIR NO_x unit qualifying for an allocation under this subsection.

- n = the total number of CAIR NO_x units qualifying for an allocation under this subsection.
- HI = the baseline heat input for a CAIR NO_x unit qualifying for an allocation under this section as calculated under subsection (a) or (b)(2) or (3) of this section.
- B = a total amount of CAIR NO_x allowances equal to 90.5% of the NO_x trading budget identified in subsection (a) of this section, except as provided in subsection (e) of this section.

(d) For units commencing operation on or after January 1, 2001, and that have not established a baseline heat input in accordance with subsection (b)(2) or (3) of this section, CAIR NO_x allowances must be allocated according to the following.

(1) Beginning with the later of the control period in 2009 or the first control period after the control period in which the CAIR NO_x unit commences commercial operation and until the first control period for which the unit is allocated CAIR NO_x allowances under subsection (c) of this section, CAIR NO_x allowances must be allocated from the new unit set-aside identified under §101.503(b) of this title. For the first control period in which a CAIR NO_x unit commences commercial operation, such CAIR NO_x unit will not receive a CAIR NO_x allocation from the new unit set-aside.

(2) To receive a CAIR NO_x allowance allocation from the new unit set-aside, the CAIR designated representative shall submit to the executive director a written request on or before May 1 [July 1] of the first control period for which the CAIR NO_x allowance allocation is requested and after the date that the CAIR NO_x unit commences commercial operation.

(3) In a CAIR NO_x allowance allocation request under paragraph (2) of this subsection, the amount of CAIR NO_x allowances requested for a control period must not exceed the CAIR NO_x unit's

total tons of NO_x emissions reported to EPA for the calendar year immediately preceding such control period.

(4) The executive director shall review each CAIR NO_x allowance allocation request submitted in accordance with this subsection and shall allocate CAIR NO_x allowances for each control period as follows.

(A) The executive director shall accept a CAIR NO_x allowance allocation request only if the request meets, or is adjusted as necessary to meet, the requirements of this subsection.

(B) On or after May 1 [July 1] of the control period, the executive director shall determine the sum of all accepted CAIR NO_x allowance allocation requests for the control period.

(C) If the amount of CAIR NO_x allowances in the new unit set-aside for the control period is greater than or equal to the sum under subparagraph (B) of this paragraph, then the executive director shall allocate the full amount of CAIR NO_x allowances requested to each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request that was accepted by the executive director.

(D) If the amount of CAIR NO_x allowances in the new unit set-aside for the control period is less than the sum under subparagraph (B) of this paragraph, then the executive director shall allocate CAIR NO_x allowances to each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request accepted by the executive director according to the equation in the following figure.

Figure: 30 TAC §101.506(d)(4)(D) (no change)

$$A = \frac{RQ}{\sum_{i=1}^n RQ_i} \times SA$$

Where:

- A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances, rounded to the nearest whole allowance, allocated to each CAIR NO_x unit under a CAIR NO_x unit allocation request accepted by the executive director.
- i* = each CAIR NO_x allowance allocation request accepted by the executive director.
- n* = the total number of CAIR NO_x allowance allocation requests accepted by the executive director.
- RQ = the amount of the CAIR NO_x allowances requested, as adjusted under subparagraph (A) of this paragraph, for each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request accepted by the executive director.
- SA = the total amount of CAIR NO_x allowances in the new unit set-aside identified under §101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget).

(E) The executive director shall notify each CAIR designated representative who submitted a CAIR NO_x allowance allocation request of the amount of CAIR NO_x allowances, if any, allocated for the control period to the CAIR NO_x unit covered under the request.

(e) If, after completion of the procedures under subsection (d) of this section for a control period, any unallocated CAIR NO_x allowances remain in the new unit set-aside for the control period, the executive director shall allocate to each CAIR NO_x unit receiving an allocation under subsection (c) of

this section an amount of CAIR NO_x allowances equal to the total amount of such remaining unallocated CAIR NO_x allowances, multiplied by the unit's allocation under subsection (c) of this section, divided by 90.5% of the NO_x trading budget identified in subsection (a) of this section, and rounded to the nearest whole allowance as appropriate.

(f) A unit's control period heat input, and a unit's status as coal-fired or natural gas-fired, for a calendar year under subsection (a) of this section, and a unit's total tons of NO_x emissions during a calendar year under subsection (d) of this section, must be determined in accordance with 40 Code of Federal Regulations (CFR) Part 75, to the extent the unit was otherwise subject to the requirements of 40 CFR Part 75 for the year, or must be based on the best available data reported to the executive director for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

(g) On or before the latter of May 1, 2011, [July 1, 2011,] or May 1 [July 1] of the control period immediately following a unit's fifth complete, consecutive year of commercial operation, the CAIR designated representative of a unit establishing a baseline heat input in accordance with subsection (b)(2) or (3) of this section shall submit, on a form specified by the executive director, written certification of the gross electrical output of the generator or generators served by the unit and the total heat energy of any steam produced by the unit during the first five years of commercial operation.

§101.508. Compliance Supplement Pool.

(a) In addition to the Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances allocated under §101.506 of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations), the executive director may allocate for the control period in 2009 up to the amount of CAIR NO_x allowances listed as the compliance supplement pool for Texas under 40 Code of Federal Regulations (CFR) §96.143.

(b) For any CAIR NO_x unit that achieves NO_x emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during such years, the CAIR designated representative of the unit may request early reduction credits and allocation of CAIR NO_x allowances from the compliance supplement pool under subsection (a) of this section for such early reduction credits, in accordance with the following.

(1) The owners and operators of such CAIR NO_x unit shall monitor and report the NO_x emissions rate and the heat input of the unit in accordance with 40 CFR Part 96, Subpart HH for the entire control period for which early reduction credit is requested.

(2) The CAIR designated representative of such CAIR NO_x unit shall submit to the executive director by May 1, 2009, [July 1, 2009,] a written request for allocation of an amount of CAIR NO_x allowances from the compliance supplement pool not exceeding the sum of the amounts, in tons, of the unit's NO_x emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during such years, determined in accordance with 40 CFR Part 96, Subpart HH.

(c) For any CAIR NO_x unit of which [whose] compliance with the CAIR NO_x emissions limitation for the control period in 2009 would create an undue risk to the reliability of electricity supply during such control period, the CAIR designated representative of the unit may request the allocation of CAIR NO_x allowances from the compliance supplement pool under subsection (a) of this section, in accordance with the following.

(1) The CAIR designated representative of such CAIR NO_x unit shall submit to the executive director by May 1, 2009, [July 1, 2009,] a written request for allocation of an amount of CAIR NO_x allowances from the compliance supplement pool not exceeding the minimum amount of CAIR NO_x allowances necessary to remove such undue risk to the reliability of electricity supply.

(2) In the request under paragraph (1) [subsection (c)(1)] of this subsection [section], the CAIR designated representative of such CAIR NO_x unit shall demonstrate that, in the absence of allocation to the unit of the amount of CAIR NO_x allowances requested, the unit's compliance with CAIR NO_x emissions limitation for the control period in 2009 would create an undue risk to the reliability of electricity supply during such control period. This demonstration must include a showing that it would not be feasible for the owners and operators of the unit to:

(A) obtain a sufficient amount of electricity from other electricity generation facilities, during the installation of control technology at the unit for compliance with the CAIR NO_x emissions limitation, to prevent such undue risk; or

(B) obtain under subsections (b) and (d) of this section, or otherwise obtain, a sufficient amount of CAIR NO_x allowances to prevent such undue risk.

(d) The executive director shall review each request under subsections (b) or (c) of this section submitted by May 1, 2009, [July 1, 2009,] and shall allocate CAIR NO_x allowances for the control period in 2009 to CAIR NO_x units covered by such request as follows.

(1) The executive director shall make any necessary adjustments to the request to ensure that the amount of the CAIR NO_x allowances requested meets the requirements of subsections (b) or (c) of this section.

(2) If the total amount of CAIR NO_x allowances in all requests, as adjusted under paragraph (1) of this subsection, is less than the amount of allowances in the compliance supplement pool under subsection (a) of this section, the executive director shall allocate to each CAIR NO_x unit covered by a request the amount of CAIR NO_x allowances requested, as adjusted under paragraph (1) of this subsection.

(3) If the total amount of CAIR NO_x allowances in all requests, as adjusted under paragraph (1) of this subsection, is more than the amount of allowances in the compliance supplement pool under subsection (a) of this section, the executive director shall allocate CAIR NO_x allowances to each CAIR NO_x unit covered by a request according to the equation in the following figure.

Figure: 30 TAC §101.508(d)(3) (no change)

$$A = \frac{RQ}{\sum_{i=1}^n RQ_i} \times SP$$

Where:

- A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances, rounded to the nearest whole allowance, allocated from the compliance supplemental pool to a unit covered under a compliance supplement pool allocation request accepted by the executive director.
- i* = each compliance supplement pool allocation request accepted by the executive director.
- n* = the total number of compliance supplement pool allocation requests accepted by the executive director.
- RQ = the amount of the CAIR NO_x allowances requested for the unit under subsection (b) or (c) of this section, as adjusted under subparagraph (1) of this subsection.
- SP = the amount of CAIR NO_x allowances in the compliance supplement pool.

(4) By November 30, 2009, the executive director shall determine, and submit to the EPA, the allocations under paragraph (2) or (3) of this subsection.