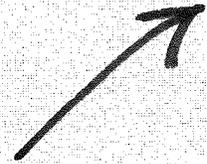


 **07hr\_SC-ENR\_CRule\_06-104\_pt04b**



(FORM UPDATED: 08/11/2010)

**WISCONSIN STATE LEGISLATURE ...  
PUBLIC HEARING - COMMITTEE RECORDS**

**2007-08**

(session year)

**Senate**

(Assembly, Senate or Joint)

**Committee on ... Environment and Natural  
Resources (SC-ENR)**

**COMMITTEE NOTICES ...**

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

**INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL**

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... **HR** ... **bills and resolutions** (w/Record of Comm. Proceedings)
  - (**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)
  - (**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

### Fiscal Estimate — 2003 Session

- Original       Updated  
 Corrected       Supplemental

LRB Number AM-03-06	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 432

**Subject**  
 NR 432 for NOx Reductions from Major Electric Generating Units in Wisconsin

**Fiscal Effect**

State:  No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- Increase Existing Appropriation       Increase Existing Revenues  
 Decrease Existing Appropriation       Decrease Existing Revenues  
 Create New Appropriation

- Increase Costs — May be possible to absorb within agency's budget.  
 Yes       No  
 Decrease Costs

Local:  No Local Government Costs

1.  Increase Costs  
 Permissive       Mandatory  
 2.  Decrease Costs  
 Permissive       Mandatory

3.  Increase Revenues  
 Permissive       Mandatory  
 4.  Decrease Revenues  
 Permissive       Mandatory

5. Types of Local Governmental Units Affected:  
 Towns       Villages       Cities  
 Counties       Others  
 School Districts       WTCS Districts

**Fund Sources Affected**

- GPR       FED       PRO       PRS       SEG       SEG-S

Affected Chapter 20 Appropriations  
 20.370 2 (bg)

**Assumptions Used in Arriving at Fiscal Estimate**

**SUMMARY OF RULE** — The Clean Air Interstate Rule (CAIR) is a federal rule promulgated by the United States Environmental Protection Agency (USEPA) to reduce the interstate transport of ozone, fine particles and the precursors to those pollutants, NO<sub>x</sub> and SO<sub>2</sub>. To reduce interstate transport of the pollutants, the USEPA established emission budgets for NO<sub>x</sub> and SO<sub>2</sub> for 28 states in the eastern US. The CAIR allows the affected states flexibility to meet the budgets in various ways. However, to aid in compliance, USEPA created a "model trading rule" that establishes emissions budgets for power plants and three separate power plant emission trading programs: an annual NO<sub>x</sub> program, an ozone season NO<sub>x</sub> program, and an annual SO<sub>2</sub> program. The department proposes that the state participate in the CAIR trading programs, but the department also proposes to make some discretionary changes to the model trading rule regarding the allocation of the NO<sub>x</sub> allowances within the state.

Creation of Chapter NR 432 will specify the process for allocation of NO<sub>x</sub> allowances for the NO<sub>x</sub> Annual Trading Program and the NO<sub>x</sub> Ozone Season Trading Program. Chapter NR 432 also specifies that the remaining elements of the NO<sub>x</sub> trading programs will be implemented and administered by the USEPA. The entirety of the SO<sub>2</sub> trading program will be implemented and administered by the USEPA.

**FISCAL IMPACT** — The Department of Natural Resources is expected to incur minimal additional cost to implement and administer the rules. There will be costs associated with the collection of operating data from the affected units as well as yearly updates to the allocations starting in 2011. The total estimated impact on Department resources is approximately one-twentieth of a FTE per year, which, assuming \$80,000 per FTE salary and fringe, will be \$4,000 annually. The reductions in NO<sub>x</sub> emissions from the rule is not expected to significantly impact the Air Program's emission fee revenues under the current fee structure.

(continued...)

**Long-Range Fiscal Implications**

Prepared By: Joseph Polasek Authorized Signature	Telephone No. 266-2794	Agency Department of Natural Resources
	Telephone No.	Date (mm/dd/ccyy)

**Fiscal Estimate — 2003 Session**

**Page 2 Assumptions Narrative  
Continued**

LRB Number AM-03-06	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 432

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**Assumptions Used in Arriving at Fiscal Estimate – Continued**

The rule is not expected to have any impact on state facilities and will impact only one local government facility operated by Manitowoc Public Utility.

The rule potentially impacts 90 electric generating units across the state. The units will receive an allocation of allowances based upon a formula in the regulation. The exact pollution controls installed at each unit are not prescribed by rule instead the units have the flexibility to decide whether to install pollution controls to reduce emissions or to obtain additional allowances from the market over the amount of allowances initially allocated to the units.

A potential cost of complying with the CAIR requirements is estimated by assuming the electric utilities will install control equipment sufficient to reduce emissions equal to allocations under the proposed state rule. However, the utilities can utilize open market trading to obtain emission allowances to achieve significantly lower costs for demonstrating compliance than projected in the analysis. This is particularly true for smaller utilities which could potentially obtain all emission allowances through the trading market. Therefore, this estimate is expected to represent a high cost and not the average anticipated cost.

The analysis is based on cost factors and parameters for control technologies as determined by USEPA for use in the Integrated Planning Model. This information represents general costs at one point in time for the electric utility sector and therefore is subject to market changes and may vary for specific applications. The program cost is determined by applying the cost information to all generating units and selecting the most cost-effective control options until each utility meets CAIR allocation levels under the proposed state program.

The analysis results are reported as an annual cost and are to run for the lifetime of the equipment. For NO<sub>x</sub> control the estimated cost is 46 million dollars per year by 2009 and is projected to rise to 71 million dollars per year by 2015. The control of SO<sub>x</sub> emissions is estimated to be 145 million dollars in 2010 and also projected to rise by 2015 to 218 million dollars per year. This yields an estimated total cost for NO<sub>x</sub> and SO<sub>x</sub> control of 191 million dollars per year in 2009 / 2010 timeframe and 289 million dollars per year by 2015. Manitowoc Public Utility (MPU) is the one government entity directly affected by the rule. MPU's total NO<sub>x</sub> and SO<sub>x</sub> control costs are estimated to be 4.5 million dollars per year for 2009 and after.

Included in the analysis cost is We-Energies compliance with the USEPA Consent Decree. These requirements result in lower emissions and are therefore beyond the potential cost of compliance with the CAIR program alone. Using the same cost factors the Consent Decree costs are estimated to be 60 million dollars per year in 2009 / 2010 and 131 million dollars per year by 2015.

The potential impact to electricity costs is estimated by allocating all control costs over the generation from the affected units. In 2009 the analysis yields a cost impact of 0.4 cents per kWh and 0.6 cents per kWh by 2015.

The potential CAIR program costs with open trading is estimated by applying controls to units identified by the Integrated Planning Model for this case. This approach resulted in significantly lower total program costs of 118 and 159 million dollars per year in 2009 and 2015, respectively. These costs relate to an electricity price impact of 0.3 to 0.4 cents per kWh.

**Fiscal Estimate Worksheet — 2003 Session**  
 Detailed Estimate of Annual Fiscal Effect

Original       Updated  
 Corrected       Supplemental

LRB Number AM-03-06	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 432

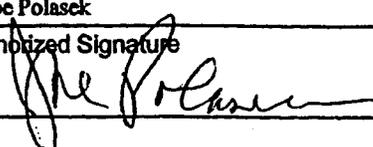
Subject  
 NR 432 for NOx Reductions from Major Electric Generating Units in Wisconsin

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

Annualized Costs:	Annualized Fiscal Impact on State Funds from:	
A. State Costs by Category	Increased Costs	Decreased Costs
State Operations — Salaries and Fringes	\$ 4,000	\$ -
(FTE Position Changes)	( 0.05 FTE )	( - FTE )
State Operations — Other Costs		-
Local Assistance		-
Aids to Individuals or Organizations		-
<b>Total State Costs by Category</b>	<b>\$ -</b>	<b>\$ -</b>
B. State Costs by Source of Funds	Increased Costs	Decreased Costs
GPR	\$ -	\$ -
FED		-
PRO/PRS		-
SEG/SEG-S		-
State Revenues	Increased Revenue	Decreased Revenue
GPR Taxes	\$ -	\$ -
GPR Earned		-
FED		-
PRO/PRS		-
SEG/SEG-S		-
<b>Total State Revenues</b>	<b>\$ -</b>	<b>\$ -</b>

**Net Annualized Fiscal Impact**

	State	Local
Net Change in Costs	\$ 4,000	\$ -
Net Change in Revenues	\$ -	\$ -

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 07-20-06

ORDER OF THE STATE OF WISCONSIN  
NATURAL RESOURCES BOARD  
CREATING RULES

The Wisconsin Natural Resources Board adopts an order to create NR 432 relating to the establishment of provisions for major electric generating units in Wisconsin to comply with the Clean Air Interstate Rule (CAIR) promulgated by the U.S. Environmental Protection Agency.

AM-03-06

Summary Prepared by the Department of Natural Resources

**1. Statute interpreted:** s. 285.11(6), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.

**2. Statutory authority:** ss. 227.11(2)(a), 227.14(1m)(b) and 285.11(1), Stats.

**3. Explanation of agency authority:**

Section 227.11(2)(a), Stats., gives state agencies general rule-making authority. Section 227.14(1m) Stats., allows state agencies to use the format of federal regulations if the proposed state rule is to be administered in a manner identical or similar to the federal rule. Section 285.11(1) Stats., gives the Department the authority to promulgate rules consistent with ch. 285, Stats. Section 285.11(6), Stats., authorizes the Department to develop and revise a state implementation plan for the prevention, abatement and control of air pollution.

**4. Related statute or rule:**

Chapter NR 428, Wis. Adm. Code, regulates the emissions of NO<sub>x</sub> from major stationary sources in ozone nonattainment areas including electric generating units. Chapters NR 417 and NR 418, Wis. Adm. Code, regulate SO<sub>2</sub> emissions from stationary sources in SO<sub>2</sub> nonattainment areas and statewide, including electric generating units.

**5. Plain language analysis:**

EPA has promulgated federal rules to reduce the interstate transport of fine particles and ozone (Clean Air Interstate Rule - CAIR) for 28 states including Wisconsin. CAIR focuses on reductions of emissions of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) from fossil-fuel-fired electric generating units (EGUs). The federal rule caps emissions from EGUs in two phases (2009 and 2015) and allows EGUs to meet their respective emissions caps through installation of controls or by trading emission allowances through a federally administered trading program. The federal rule allows states to implement the federal rule through various state-specific options including varying the structure of the allocation of NO<sub>x</sub> allowances to state utilities from the federal model rule. This proposed rule involves the NO<sub>x</sub> allocation structure for the CAIR NO<sub>x</sub> annual allowances and the CAIR NO<sub>x</sub> ozone season allowances. The structure is the same for the two programs. The SO<sub>2</sub> program is administered in its entirety by the U.S. EPA and is not addressed by this rule.

The main allocation pool consists of the allowances allocated to the state in its state budget minus allowances in the new unit set-aside. The NO<sub>x</sub> allowances are allocated from the main allocation pool to existing units based on the average of the top three years of electric generation over a five year period. The allowances are distributed to the units in the main allocation pool based upon a unit's percentage share of the total generation for all units. Initially, existing units are those units commencing operation before January 1, 2001. Units that began operating on or after January 1, 2001 receive allowances from the new unit set-aside until they have established five years of operating data. After operating five years, the unit receives allowances from the main allocation pool as an existing unit.

For new units (those units commencing operation on or after January 1, 2001), a new unit set-aside of 7% of the state budget is proposed. New units are allocated allowances from this set-aside based on the unit's NO<sub>x</sub> emissions in the previous year until the unit has operated for five years and has established a baseline. Allowances from the new unit set-aside are applied for and allocated in the compliance year starting in 2009. If the new unit set-aside is oversubscribed, the set-aside allowances are distributed to the applicants on a percentage basis. If the new unit set-aside is undersubscribed, the remaining set-aside allowances are distributed to the units in the main allocation pool.

Vintage year 2009-2014 allowances are allocated from the main allocation pool in 2007 based on generation data from 2000-2004. Starting in 2011, allowances from the main allocation pool are allocated yearly, four years in advance of the compliance year. In 2011, the unit baseline is updated every five years to reflect current operating data and the state baseline is updated every year to incorporate new units that have established a baseline into the main allocation pool.

Combined heat and power units receive allowances based on electricity generation and useful thermal energy produced.

The compliance supplement pool (CSP) consists of additional CAIR NO<sub>x</sub> annual allowances which are distributed only in calendar year 2009 to CAIR NO<sub>x</sub> units which demonstrate that they achieved early emission reductions in 2007 and 2008 at the 2009 CAIR level of compliance or which demonstrates that compliance would create extreme hardship for the unit. There are 4,989 CAIR NO<sub>x</sub> annual allowances available for distribution from the CSP. If there are excess allowances after the 2009 distribution, these allowances are retired.

#### **6. Summary of, and comparison with, existing or proposed federal regulation:**

The federal regulation that addresses interstate transport of air pollution, the Clean Air Interstate Rule (CAIR), is found at 40 CFR Part 97. Part 97 details the Federal Implementation Plan (FIP) which creates an emission trading market across the 28 eastern states for NO<sub>x</sub> and SO<sub>2</sub> emissions from major electric generating units implemented and administered by the EPA. The CAIR gives the states the discretion to adopt an allocation structure for the NO<sub>x</sub> allowances for the CAIR Annual NO<sub>x</sub> and the CAIR ozone season NO<sub>x</sub> trading programs while relying on the FIP for the implementation of the administrative, monitoring and record keeping aspects of the trading programs at the federal level. This proposed rule covers the NO<sub>x</sub> allocation structures for both the CAIR NO<sub>x</sub> annual and ozone season trading programs.

#### **7. Comparison with rules in adjacent states:**

Illinois, Indiana, Iowa, Michigan and Minnesota all are subject to the requirement to submit a CAIR State Implementation Plan or be subject to regulation under the CAIR federal implementation plan (FIP). From a review of the preliminary drafts of the states' rules and discussions with each state's rule drafter, it appears that all five states will participate in the federal trading program like proposed by the Department. Iowa has finalized and adopted its CAIR SIP which became effective July 12, 2006. None of the remaining adjacent states have finalized their rules. Iowa is the only adjacent state that has adopted the federal model rule. Minnesota has indicated that its CAIR sources will be regulated by the FIP in 2009 and is examining whether it will adopt a CAIR SIP in later years. The remaining states are adopting state specific rules that deviate from the allocation structure in the federal model rule.

#### **8. Summary of factual data and analytical methodologies:**

The proposed structure for the NO<sub>x</sub> allocations is based upon the review of several guidance documents, technical documents and modeling prepared by the United States Environmental Protection Agency, the State and Local Air Pollution Control Agencies associations (STAPPA/ ALAPCO), Lake Michigan Air Directors Consortium (LADCO) and the National Renewables Energy Lab. These documents are available through the DNR's website at [www.dnr.wi.gov/org/aw/air/hot/8hrozonestd/cairbart/](http://www.dnr.wi.gov/org/aw/air/hot/8hrozonestd/cairbart/) or available from Marney Hoefler at (608) 267-0577 or [Margaret.hoefler@wisconsin.gov](mailto:Margaret.hoefler@wisconsin.gov). In addition, the proposed structure is based in part on comments received through a series of public information meetings, presentations to the Clean Air Act Task Force and comments received through the public hearing process.

#### **9. Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report:**

The proposed rule is not expected to have a significant effect on small businesses. The major EGUs subject to the emission reduction requirements of CAIR are not small businesses. Any costs which EGUs expend to comply with the CAIR requirements are likely to be passed on to their customers, which will include small businesses. In preparing the economic impact report, staff of the Department of Natural Resources relied on modeling results from Integrated Planning Model (IPM) to determine the expected controls installed by EGUs in Wisconsin. Using the IPM results, staff determined the expected cost of controls. Additionally, staff reviewed the control costs for major EGUs associated with operating within the number of allowances the units are initially allocated under the proposed draft rule.

#### **10. Effect on small business:**

The proposed rule is not expected to have a significant effect on small businesses. Because EGUs may pass along the costs of complying with CAIR to their customers, the proposed rule may minimally increase electricity rates, resulting in small businesses having to pay more for electricity.

#### **11. Agency contact person:**

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Phone (608) 267-0577  
[Margaret.Hoefler@wisconsin.gov](mailto:Margaret.Hoefler@wisconsin.gov)

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SECTION 1. Chapter NR 432 is created to read:

CHAPTER NR 432

ALLOCATION OF CLEAN AIR INTERSTATE RULE NO<sub>x</sub> ALLOWANCES

**NR 432.01 Applicability; purpose.** (1) **APPLICABILITY.** (a) This chapter applies to the owner or operator of any source that includes a CAIR NO<sub>x</sub> unit or a CAIR renewable unit. A CAIR NO<sub>x</sub> unit is any stationary, fossil fuel-fired boiler or stationary, fossil fuel-fired combustion turbine which has served at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale, except for those units that are excluded under par. (b).

**Note:** In addition, a CAIR NO<sub>x</sub> unit is subject to the requirements of 40 CFR part 97, Subparts AA, BB, CC, FF, GG, HH, AAAA, BBBB, CCCC, FFFF, GGGG, and HHHH.

(b) The following units are not CAIR NO<sub>x</sub> units:

1. Any unit qualifying as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit and which does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with a nameplate capacity of more than 25 MWe supplying in any calendar year more than one-third of the unit's potential electrical output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

2. Any solid waste incineration unit that commenced operation before January 1, 1985 and which had an average annual fuel consumption of non-fossil fuel for 1985 to 1987 exceeding 80% of the unit's total average annual fuel consumption for the period, on a Btu basis, and an average annual fuel consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80% of the unit's total average annual fuel consumption for the same 3-year period, on a Btu basis.

3. Any solid waste incineration unit that commenced operation on or after January 1, 1985 and

which had an average annual consumption of non-fossil fuel for the first 3 calendar years of operation exceeding 80% of the unit's total fuel consumption, on a Btu basis, and an average annual consumption of non-fossil fuel for any 3 consecutive calendar years after 1990 exceeding 80% of the unit's total fuel consumption, on a Btu basis.

(c) If a stationary boiler or stationary combustion turbine, that under par. (a), is not a CAIR NO<sub>x</sub> unit, begins to combust fossil fuel or to serve a generator with a nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CAIR NO<sub>x</sub> unit on the first date on which it both combusts fossil fuel and serves the generator as provided in par. (a).

(d) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of par. (b)1. for at least one calendar year, but subsequently no longer meets the requirements, the unit shall become a CAIR NO<sub>x</sub> unit starting on the earlier of January 1 of the year immediately after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 of the year immediately after the first calendar year during which the unit no longer meets the requirements of par. (b)1.

(e) If a unit qualifies as a solid waste incineration unit and meets the requirements of par. (b)2. or 3. for at least 3 consecutive calendar years, but subsequently no longer meets all the requirements, the unit shall become a CAIR NO<sub>x</sub> unit starting on the earlier of January 1 of the year immediately after the first calendar year during which the unit first no longer qualifies as a solid waste incinerator unit or January 1 of the year immediately after the first 3 consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fossil fuel of 20% or more of the unit's total fuel consumption.

(2) PURPOSE. This chapter is adopted under s. 285.11, Stats., to allocate the NO<sub>x</sub> allowances for the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program. The purpose of this chapter is to implement only those parts of the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program that is administered by the EPA under the federal implementation plan for

the CAIR relating to the allocation of CAIR NO<sub>x</sub> allowances found in 40 CFR part 97, Subparts EE and EEEE.

(3) **PETITION FOR APPLICABILITY.** An owner or operator of any unit may petition the administrator of the EPA at any time for a determination concerning the applicability, under sub. (1), of the CAIR NO<sub>x</sub> trading program and the CAIR NO<sub>x</sub> ozone season trading program to the unit pursuant to 40 CFR 97.104(c) and 40 CFR 97.304.

**Note:** This chapter modifies the schedule and methodology for allocating CAIR nitrogen oxides (NO<sub>x</sub>) allowances that are set forth in the federal implementation plan. This chapter does not have a provision allowing any fossil fuel-fired unit that is not a CAIR NO<sub>x</sub> unit to "opt-in" to a CAIR NO<sub>x</sub> trading program. This chapter is not intended to modify in any other way the implementation or administration in Wisconsin of the federal implementation plan for CAIR. The CAIR NO<sub>x</sub> federal implementation plan is published in 40 CFR part 97.

**NR 432.02 Definitions.** The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) "Actual weighted average NO<sub>x</sub> emission rate" means, for an NO<sub>x</sub> averaging plan under s. NR 409.065(7), for a year the sum of the products of the actual annual average NO<sub>x</sub> emission rate and actual annual heat input, as determined in accordance with 40 CFR part 75 transfers, for all units in the NO<sub>x</sub> averaging plan for the year divided by the sum of the actual annual heat input, as determined in accordance with 40 CFR part 75, for all units in the NO<sub>x</sub> averaging plan for the year.

(2) "Allocate" or "allocation" means, with regard to CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances, the determination by the department of the amount of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances to be initially credited to a CAIR NO<sub>x</sub> unit, a CAIR renewable unit, or other entity.

(3) "Biomass" means a resource that derives energy from wood or plant material or residue, biological waste, crops grown for use as a resource or landfill gases. "Biomass" does not include garbage,

as defined in s. 289.01(9), Stats., or nonvegetation - based industrial, commercial or household waste, except that "biomass" includes refuse-derived fuel used for a renewable facility that was in service before January 1, 1998.

(4) "Boiler" means an enclosed fossil fuel-fired or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

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

(6) "CAIR" means the federal clean air interstate rule promulgated in 40 CFR part 97.

(7) "CAIR designated representative" means, for a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source, the natural person who is authorized by the owners and operators of the source and all units at the source, in accordance with 40 CFR part 97 Subparts BB and HH and Subparts BBBB and HHHH, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program. This person shall be the same person as the designated representative for the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program. If the CAIR NO<sub>x</sub> source is also subject to the acid rain program, this natural person shall be the same person as the designated representative under the acid rain program.

(8) "CAIR NO<sub>x</sub> allowance" means a limited authorization issued by the department under this chapter, to emit one ton of nitrogen oxides during a calendar year for which the authorization is allocated or during any calendar year thereafter under the CAIR NO<sub>x</sub> annual trading program. An authorization to emit nitrogen oxides that is not issued under this chapter, 40 CFR part 97, Subpart EE, 40 CFR 97.188, or provisions of a state implementation plan that are approved under 40 CFR 51.123(o)(1) or (2) is not a CAIR NO<sub>x</sub> allowance.

(9) "CAIR NO<sub>x</sub> annual trading program" means a multi-state nitrogen oxides air pollution control

and emission reduction program established by the administrator in accordance with 40 CFR part 97 Subparts AA to HH and 40 CFR 51.123(p) and 52.35 or approved and administered by the administrator under provisions of a state implementation plan that are approved under 40 CFR 51.123(o)(1) or (2), as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

(10) "CAIR NO<sub>x</sub> ozone season allowance" means a limited authorization issued by the department under this chapter, to emit one ton of nitrogen oxides during an ozone season for which the authorization is allocated or during an ozone season of any calendar year thereafter under the CAIR NO<sub>x</sub> ozone season trading program or a limited authorization issued by a permitting authority for a control period during 2003 through 2008 under the NO<sub>x</sub> budget trading program in accordance with 40 CFR 51.121(p) to emit one ton of nitrogen oxides during a control period, provided that the provision in 40 CFR 51.121(b)(2)(ii)(E) may not be used in applying this definition and the limited authorization may not have been used to meet the allowance-holding requirement under the NO<sub>x</sub> budget trading program. An authorization to emit nitrogen oxides that is not issued under this chapter, 40 CFR part 97 Subpart EEEE, 40 CFR 97.388, or provisions of a state implementation plan that are approved under 40 CFR 51.123(aa)(1) and (bb)(1), (aa)(2) and (bb)(1), (bb)(2) or (dd) or that meets the requirements of 40 CFR 51.121(p) is not a CAIR NO<sub>x</sub> ozone season allowance.

(11) "CAIR NO<sub>x</sub> ozone season trading program" means a multi-state nitrogen oxides air pollution control and emission reduction program established by the administrator in accordance 40 CFR part 97 Subparts AAAA to HHHH and 40 CFR 51.123(ee) and 52.35 or administered by the administrator under provisions of a state implementation plan that are approved under 40 CFR 51.123(aa)(1) and (bb)(1), (aa)(2) and (bb)(1), (bb)(2) or (dd), as a means of mitigating interstate transport of ozone and nitrogen oxides.

(12) "CAIR NO<sub>x</sub> source" means a source that includes one or more CAIR NO<sub>x</sub> units.

(13) "CAIR NO<sub>x</sub> unit" means a unit that is subject to the CAIR NO<sub>x</sub> annual trading program under

40 CFR 97.104 or the CAIR NO<sub>x</sub> ozone trading program under 40 CFR 97.304.

(14) "CAIR renewable representative" means, for a CAIR renewable unit, the natural person who is authorized by the owners and operators of the unit in accordance with s. NR 432.07, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program.

(15) "CAIR renewable unit" means an installed and operational electric generating facility, located in this state, commencing operation on or after January 1, 2001 that does either of the following:

(a) Generates renewable energy serving a generator with nameplate capacity greater than 25 MWe.

(b) Consists of units combined pursuant to s. 299.83, Stats., serving generators with combined nameplate capacity of greater than 25 MWe.

(16) "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

(17) "Cogeneration unit" means a stationary, fossil fuel-fired boiler or stationary, fossil fuel-fired combustion turbine which has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating or cooling purposes through the sequential use of energy and which during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity, does one of the following, as appropriate:

(a) For a topping-cycle cogeneration unit, produces useful thermal energy not less than 5% of total energy output and useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5% of total energy input if useful thermal energy produced is 15% or more of total energy output, or not less than 45% of total energy input if useful thermal energy produced is less than 15% of total energy output.

(b) For a bottoming-cycle cogeneration unit, produces useful power not less than 45% of total energy input.

(18) "Combustion turbine" means an enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine. If the enclosed device is combined cycle, the combustion turbine includes any associated duct burner, heat recovery steam generator, and steam turbine.

(19) "Commence commercial operation" means, with regard to a unit:

(a) To have begun to produce steam, gas or other heated medium used to generate electricity for sale or use, including test generation, except for retired units and repowered opt-in units as provided in 40 CFR 97.105, 97.184(h), 97.304 or 97.384(h).

1. For a unit that is a CAIR NO<sub>x</sub> unit under 40 CFR 97.104 or 97.304 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in par. (a)(intro.) and that subsequently undergoes a physical change other than replacement of the unit by a unit at the same source, the date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

2. For a unit that is a CAIR NO<sub>x</sub> unit under 40 CFR 97.104 or 97.304 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in par. (a) (intro.) and that is subsequently replaced by a unit at the same source, e.g., repowered, the date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in par. (a)(intro.) or (b) (intro.) as appropriate.

(b) Notwithstanding par. (a) (intro.) and except for retired units as provided in 40 CFR 97.105 or 97.305, for a unit that is not a CAIR NO<sub>x</sub> unit under 40 CFR 97.104 or 97.304 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in par. (a) (intro.), the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO<sub>x</sub> unit under 40 CFR 97.104 or 97.304.

1. For a unit with a date for commencement of commercial operation as defined in par. (b)(intro.) and that subsequently undergoes a physical change, other than replacement of the unit by a unit at the same source, the date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

2. For a unit with a date for commencement of commercial operation as defined in par. (b) (intro.) and that is subsequently replaced by a unit at the same source, e.g., repowered, the date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in par. (a) (intro.) or (b)(intro.) as appropriate.

(20) "Conventional resource" means a resource that derives energy from coal, oil, nuclear power or natural gas. A fuel cell that derives energy from natural gas is not a conventional resource.

(21) "Generator" means a device that produces electricity.

(22) "Gross electrical output" means electricity made available for use, including any electricity used in the power production process. A power production process includes any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls.

(23) "Heat input" means, with regard to a specified period of time, the product, in mmBtu/time, of the gross calorific value of the fuel, in Btu/lb, divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device, in lb of fuel/time, as measured, recorded, and reported to the administrator by the CAIR designated representative and determined by the administrator in accordance with 40 CFR part 97 Subpart HH and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(24) "Heat input rate" means the amount of heat input, in mmBtu, divided by unit operating time, in hours, or, with regard to a specific fuel, the amount of heat input attributed to the fuel, in mmBtu, divided by the unit operating time, in hours, during which the unit combusts the fuel.

(25) "MWh" means megawatt hours.

(26) "Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output, in MWe, that the generator is capable of producing on a steady state basis and during continuous operation, when not restricted by seasonal or other deratings, as of the installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output, in MWe, that the generator is capable of producing on a steady state basis and during continuous operation, when not restricted by seasonal or other deratings, the increased maximum amount as of the completion as specified by the person conducting the physical change.

(27) "Operator" means any person who operates, controls or supervises a CAIR NO<sub>x</sub> unit, a CAIR NO<sub>x</sub> source or a CAIR renewable unit and includes any holding company, utility system or plant manager of a unit or source.

(28) "Owner" means any of the following persons:

(a) Any holder of any portion of the legal or equitable title in a CAIR NO<sub>x</sub> unit at the source, a CAIR NO<sub>x</sub> unit or a CAIR renewable unit.

(b) Any holder of a leasehold interest in a CAIR NO<sub>x</sub> unit at the source, a CAIR NO<sub>x</sub> unit or a CAIR renewable unit.

(c) Any purchaser of power from a CAIR NO<sub>x</sub> unit at the source, a CAIR NO<sub>x</sub> unit or a CAIR renewable unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner may not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments are not based, either directly or indirectly, on the revenues or income from the CAIR NO<sub>x</sub> unit.

(29) "Permitting authority" means a state air pollution control agency, local agency, other state agency or other agency authorized by the administrator of the EPA to issue or revise permits to meet the

requirements of the CAIR NO<sub>x</sub> trading program or the CAIR NO<sub>x</sub> ozone season trading program in accordance with 40 CFR part 97 Subpart CC and CCCC or, if no agency has been authorized, the administrator of the EPA.

(30) "Potential electrical output capacity" means 33% of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh and multiplied by 8,760 hr/yr.

(31) "Renewable energy" means electricity derived from a renewable resource.

(32) "Renewable resource" means any of the following:

(a) A resource that derives electricity from any of the following:

1. A fuel cell that uses a renewable fuel, as determined by the public service commission.
2. Wave action.
3. Solar thermal electric or photovoltaic energy.
4. Wind power.
5. Geothermal technology.
6. Biomass.

(b) A resource that derives electricity from hydroelectric power.

(c) Any resource not described in par. (a) or (b), except a conventional resource, that the public service commission has designated as a renewable resource in rules promulgated under s. 196.378(4), Stats.

Note: The definition of a renewable resource is based on the definition in s. 196.378(1)(h), Stats.

(33) "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

- (a) Atmospheric or pressurized fluidized bed combustion.
- (b) Integrated gasification combined cycle.
- (c) Magnetohydrodynamics.

(d) Direct and indirect coal-fired turbines.

(e) Integrated gasification fuel cells.

(f) As determined by the administrator in consultation with the secretary of energy, a derivative of one or more of the technologies under pars. (a) to (e) and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

(34) "Solid waste incineration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a "solid waste incineration unit" as defined in section 129(g)(1) of the Clean Air Act (42 USC 7429(g)(1)).

(35) "Topping-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

(36) "Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to a cogeneration unit, excluding energy produced by the cogeneration unit itself.

(37) "Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

(38) "Unit" means either of the following:

(a) A stationary, fossil fuel-fired boiler or combustion turbine or other stationary, fossil fuel-fired combustion device.

(b) A CAIR renewable unit.

(39) "Useful thermal energy" means, with regard to a cogeneration unit, thermal energy that is any of the following:

(a) Made available to an industrial or commercial process, not a power production process, excluding any heat contained in condensate return or makeup water.

(b) Used in a heating application, such as space heating or hot water heating.

(c) Used in space cooling application, such as thermal energy used by an absorption chiller.

(40) "Utility power distribution system" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

**Note:** The definitions in this section are limited to use in this chapter and are substantively similar to the federal CAIR definitions found in 40 CFR part 97 except for "gross electrical output" and "useful thermal energy". The difference in the definitions for these 2 terms is necessary to implement the state allocation structure that differs from the allocation structure in the federal implementation plan.

**NR 432.03 CAIR NO<sub>x</sub> allowance allocation.** The department shall use the procedures in this section for calculating and allocating CAIR NO<sub>x</sub> allowances for CAIR NO<sub>x</sub> units and CAIR renewable units.

(1) **UNIT BASELINES.** (a) *Calculating baseline energy output.* The department shall calculate the baseline energy output of each CAIR NO<sub>x</sub> unit and each CAIR renewable unit, in MWh according to the following equations as appropriate:

1. For a CAIR NO<sub>x</sub> unit that is a cogeneration unit and that has operated for 5 or more consecutive calendar years, by using one of the following equations:

a. Use equation 1a if the unit is the only unit serving a generator or, if more than one unit serves the same generator and unit-level data for equation 1a is available for all units:

$$B = GE_{avg} + \left( \frac{TE_{avg}}{3.4} \right) \quad \text{Equation 1a}$$

where:

B is the unit baseline energy output made available by the cogeneration unit in MWh

$GE_{avg}$  is the average of the 3 highest annual amounts of the unit's annual gross electric output in MWh over the 5-year period identified in par. (b)

$TE_{avg}$  is the average of the 3 highest annual amounts of the unit's annual useful thermal energy in mmBtu over the 5-year period identified in par. (b)

3.4 is a conversion factor in mmBtu/MWh

b. Use equation 1b if more than one unit serves the same generator and unit-level data for equation 1a is not available for all units:

$$B_i = \left( GE_{Gen} + \frac{TE_T}{3.4} \right) \times \left( \frac{NC_i}{\sum_{j=1}^n NC_j} \right) \quad \text{Equation 1b}$$

where:

$B_i$  is the baseline energy output made available by cogeneration unit i in MWh

$GE_{Gen}$  is the average of the 3 highest annual amounts of the annual gross electric output in MWh for the generator served over the 5-year period identified in par. (b)

$TE_T$  is the average of the 3 highest annual amounts of annual useful thermal energy in mmBtu for the generator served over the 5-year period defined in par. (b)

3.4 is a conversion factor in mmBtu/MWh

$NC_i$  is the nameplate capacity of unit i

n is the number of units serving the same generator

2. For a CAIR NO<sub>x</sub> unit that is not a cogeneration unit and that has operated for 5 or more consecutive calendar years and for a CAIR renewable unit that has operated for 5 or more consecutive calendar years, by using one of the following equations as appropriate:

a. Use equation 2a if the unit is the only unit serving a generator or, if more than one unit serves the same generator and unit-level data for equation 2a is available for all units:

$$B = GE_{avg} \quad \text{Equation 2a}$$

where:

B is the unit baseline energy output made available by the CAIR NO<sub>x</sub> unit or the CAIR renewable unit in MWh

GE<sub>avg</sub> is the average of the 3 highest annual amounts of the unit's annual gross electric output in MWh over the 5-year period identified in par. (b)

b. Use equation 2b if more than one unit serves the same generator and unit-level data for equation 2a is not available for all units:

$$B_i = GE_{Gen} \times \left( \frac{NC_i}{\sum_{j=1}^n NC_j} \right) \quad \text{Equation 2b}$$

where:

B<sub>i</sub> is the baseline energy output made available by CAIR NO<sub>x</sub> unit i or CAIR renewable unit i in MWh

GE<sub>Gen</sub> is the average of the 3 highest annual amounts of the annual gross electric output in MWh for the generator served over the 5-year period identified in par. (b)

NC<sub>i</sub> is the nameplate capacity of unit i

n is the number of units serving the same generator

*(b) Periodic updates of baseline energy output for units with more than 5 years operating data.*

The department shall use the procedures in this paragraph for calculating the unit baseline energy output for each CAIR NO<sub>x</sub> unit or CAIR renewable unit which has more than 5 years of operating data.

1. In 2007, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit for 2009 to 2014 allowances using data for the years 2000 to 2004.

2. On or before May 1, 2011, and on or before May 1 of every fifth year thereafter, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit for the next 5 year allocation period using data from the 5 calendar year period beginning 9 years before the first year of the allocation period and ending 5 years before the first year of the allocation period.

**Note:** For example in 2021, unit baseline energy output for the calculation of allocation for 2025 to 2029 allowances will be calculated using data from the years 2016 to 2020. In 2026, unit baseline energy output for the calculation of the allocation for 2030 to 2034 will be calculated using data from 2021 to 2025.

*(c) Baseline energy output for new units and units achieving 5 years of operating data for the first time.* The department shall use the procedures in this paragraph for calculating the unit baseline energy output for each CAIR NO<sub>x</sub> unit or CAIR renewable unit which have only 5 years of operating data.

1. On or before May 1, 2011, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit that commences operation on or after January 1, 2001 and that has operating data for the years 2006 to 2010 for 2015 to 2019 allowances using data for years 2006 to 2010.

2. On or before May 1, 2012, and on or before May 1 of every year thereafter, the department shall calculate the unit baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit that has been operating for its first 5 consecutive years, using the first 5 years of operating data. Once the unit's

baseline energy output has been established, the CAIR NO<sub>x</sub> unit or CAIR renewable unit's baseline energy output shall be updated according to par. (b).

**Note:** Starting in 2011, and every year thereafter, new units that commence operation on or after January 1, 2001 will have their unit baseline energy output calculated once the unit has 5 consecutive years of operating data. The 5 years of data do not have to be full years of data. Once the unit has 5 or more years of operating data, this unit is then incorporated into the state baselines calculated in s. NR 432.03(1m) and receives allocations from the main allocation pool under s. NR 432.03(2). These new units are incorporated into the main allocation pool on a yearly basis.

(d) *Baseline energy output for retired units.* If a unit is retired in any year, the department shall calculate the baseline energy output according to par. (b). If a unit only operates a portion of the year, the data for that portion shall constitute the unit's data for that year.

**Note:** The following is an example of how a retired unit's baseline energy output is calculated. A unit is retired in 2011. In 2011, unit baselines are updated using 2006 to 2010 annual data that will be used to calculate allocations for 2015 to 2019. For 2015 to 2019 allocations, the retired unit would receive all allowances based upon its unit baseline for 2006 to 2010 operating data even though it is no longer operating. In 2016, the next unit baseline updating year, the baseline for the unit would be determined using the most recent 5 years of data, 2011 to 2015. The 2016 updated baseline would be used to determine allocations for 2020 to 2025. If the unit had some operating data in 2011, it would receive minimal allowances in 2020 to 2025 based on the amount of electrical generation in 2011. The next unit update would occur in 2021 and would use 2015 to 2019 operating data. Since the unit would have no operating data for this time period it would no longer receive allocations. Under this procedure a unit that is retired in 2011 could receive allowances until 2025.

(e) *Data used for energy generation baselines.* In performing the unit energy output baseline calculations under pars. (a) to (d), the department shall use data reported by the CAIR designated representative to EPA under 40 CFR part 97, Subpart HH and available from the EPA and data reported by the CAIR renewable representative to the department under s. NR 432.07. If the required data is unavailable from the EPA, the department shall request the required data directly from the unit's CAIR designated representative. If the representative does not provide data within 30 days of the department's request, the department shall estimate the unit's baseline energy output using best available data.

(1m) STATE BASELINE. (a) Prior to 2011, the department shall establish the state baseline by summing the unit baselines calculated according to sub. (1) for all CAIR NO<sub>x</sub> units listed in Table 1.

(b) In 2011 and annually thereafter, the department shall calculate an annual state baseline by summing the unit baselines calculated according to sub. (1) for all CAIR NO<sub>x</sub> units and all CAIR renewable units.

**Note:** The state baseline is updated starting in 2011 annually to incorporate new units that have 5 years of operating data and have established a baseline under s. NR 432.03(a) and (b). Once a new unit has established a baseline, it is eligible for allowances from the main allocation pool.

(2) ALLOWANCE ALLOCATION FOR UNITS WITH 5 OR MORE YEARS OF OPERATION DATA. (a) In 2007, and in 2011 and annually thereafter, the department shall allocate to all CAIR NO<sub>x</sub> units and CAIR renewable units for which a unit baseline has been calculated under sub. (1), a total amount of CAIR NO<sub>x</sub> allowances equal to 93% of the tons of NO<sub>x</sub> emissions in the trading budget for Wisconsin in 40 CFR 97.140.

(b) The department shall allocate CAIR NO<sub>x</sub> allowances to each unit in an amount determined by equation 3:

$$A_i = MAP \times \left( \frac{B_i}{B_s} \right) \quad \text{Equation 3}$$

where:

$A_i$  is the annual allocation of CAIR NO<sub>x</sub> allowances for unit  $i$  rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed 93% of the trading budget in 40 CFR 97.140

MAP is the main allocation pool of CAIR NO<sub>x</sub> allowances in tons which is the trading budget for Wisconsin in 40 CFR 97.140, minus the new unit set-aside established in sub. (3)

$B_i$  is the unit baseline established under sub. (1) for unit  $i$

$B_s$  is the state baseline as determined under sub. (1m)

(3) ALLOCATIONS FOR UNITS WITH LESS THAN 5 YEARS OF OPERATING DATA. In 2009 and annually thereafter, the department shall allocate CAIR NO<sub>x</sub> allowances to CAIR NO<sub>x</sub> units for which a request is received under par. (b) and that commenced operation on or after January 1, 2001 and for which a baseline energy output cannot be determined under sub. (1), in accordance with the following procedures:

(a) For 2009 and each year thereafter, the department shall establish a new unit set-aside consisting of all CAIR NO<sub>x</sub> allowances available for new units in that year. The new unit set-aside in each year shall be equal to 7% of the amount of tons of NO<sub>x</sub> emissions in the trading budget under 40 CFR 97.140 for Wisconsin.

(b) The CAIR designated representative of a CAIR NO<sub>x</sub> unit that commenced operation on or after January 1, 2001, may submit to the department a request to be allocated CAIR NO<sub>x</sub> allowances under this subsection, starting with 2009 or the first calendar year after the calendar year in which the CAIR NO<sub>x</sub> unit commences commercial operation, whichever is later, and until the first calendar year for which the unit is eligible for and is allocated CAIR NO<sub>x</sub> allowances under sub. (2). The CAIR NO<sub>x</sub> allocation request shall be submitted on or before May 1 of the calendar year for which the CAIR NO<sub>x</sub> allowances are requested and after the date on which the CAIR NO<sub>x</sub> unit commences commercial operation.

(c) In a CAIR NO<sub>x</sub> annual allocation request under par. (b), the CAIR designated representative may not request CAIR NO<sub>x</sub> allowances exceeding the CAIR NO<sub>x</sub> unit's total tons of NO<sub>x</sub> emissions during the calendar year immediately before the calendar year of the request.

(d) The department shall review each CAIR NO<sub>x</sub> annual allocation request submitted under par.

(b) and allocate CAIR NO<sub>x</sub> allowances for each calendar year as follows:

1. The department shall establish the maximum amount of new unit set-aside CAIR NO<sub>x</sub> allowances a unit is eligible for based upon a request submitted under par. (b).

2. Before June 1 of each calendar year, the department shall determine the sum of all CAIR NO<sub>x</sub> allowances established under subd. 1. for all new units in the calendar year.

3. If the amount of CAIR NO<sub>x</sub> allowances in the new unit set-aside for the calendar year under par. (a) is greater than or equal to the sum determined under subd. 2., the department shall allocate the amount of CAIR NO<sub>x</sub> allowances determined under subd. 1. to each CAIR NO<sub>x</sub> unit for which an allocation request was submitted.

4. If the amount of the CAIR NO<sub>x</sub> allowances in the new unit set-aside for the calendar year under par. (a) is less than the sum determined under subd. 2., the department shall allocate to each CAIR NO<sub>x</sub> unit for which the department established a maximum amount under subd. 1. greater than zero, an amount determined using equation 4:

$$N_i = R_i \times \left( \frac{NUSA}{\sum_{j=1}^k R_j} \right) \quad \text{Equation 4}$$

where:

$N_i$  is the annual allocation of CAIR NO<sub>x</sub> set-aside allowances for new unit  $i$  for the calendar year rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed 7% of the trading budget in 40 CFR 97.140

$R_i$  is the amount of CAIR NO<sub>x</sub> allowances the department determined unit  $i$  is eligible for under subd. 1.

NUSA is the new unit set-aside established under par. (a)

k is the number of units for which the department established an amount greater than 0 under subd. 1.

(e) The department shall notify each CAIR designated representative that submitted an allocation request under par. (b) of the amount of CAIR NO<sub>x</sub> allowances allocated for the calendar year to the CAIR NO<sub>x</sub> unit covered by the request.

(4) ALLOCATION OF REMAINING NEW UNIT SET-ASIDE ALLOWANCES. After completion of the procedures under sub. (3), any CAIR NO<sub>x</sub> allowances remaining in the new unit set-aside for the calendar year shall be allocated to the CAIR NO<sub>x</sub> units and CAIR renewable units that were allocated CAIR NO<sub>x</sub> allowances under sub. (2) for the calendar year in an amount determined using equation 5:

$$X_i = U \times \left( \frac{A_i}{MAP} \right) \quad \text{Equation 5}$$

where:

X<sub>i</sub> is the allocation of remaining CAIR NO<sub>x</sub> new unit set-aside annual allowances for unit i rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed the amount of U

U is the amount of unallocated CAIR NO<sub>x</sub> new unit set-aside allowances in tons

A<sub>i</sub> is the annual allocation of CAIR NO<sub>x</sub> allowances for unit i calculated using equation 3

MAP is the main allocation pool of CAIR NO<sub>x</sub> allowances in tons which is the trading budget for Wisconsin in 40 CFR 97.140 minus the new unit set-aside established in sub. (3)

(5) CAIR NO<sub>x</sub> ALLOCATIONS FOR 2009 TO 2014. The CAIR NO<sub>x</sub> allocations for 2009 to 2014 for individual CAIR NO<sub>x</sub> units are listed in Table 1.

**Table 1**  
**CAIR NO<sub>x</sub> Allocations for 2009 to 2014 by CAIR NO<sub>x</sub> Unit**  
(in tons of CAIR NO<sub>x</sub> allowances)

Unit Location	Unit Number	2009	2010	2011	2012	2013	2014
Alma	4	223	223	223	223	223	223
Alma	5	316	316	316	316	316	316
Bayfront	1	78	78	78	78	78	78
Bayfront	2	70	70	70	70	70	70
Bayfront	5	109	109	109	109	109	109
Blackhawk	3	9	9	9	9	9	9
Blackhawk	4	8	8	8	8	8	8
Blount Generating Station	3	5	5	5	5	5	5
Blount Generating Station	5	7	7	7	7	7	7
Blount Generating Station	6	9	9	9	9	9	9
Blount Generating Station	7	71	71	71	71	71	71
Blount Generating Station	8	167	167	167	167	167	167
Blount Generating Station	9	193	193	193	193	193	193
Blount Generating Station	11	2	2	2	2	2	2
Columbia	1	3050	3050	3050	3050	3050	3050
Columbia	2	2933	2933	2933	2933	2933	2933
Concord	1	12	12	12	12	12	12
Concord	2	14	14	14	14	14	14
Concord	3	11	11	11	11	11	11
Concord	4	11	11	11	11	11	11
Custer Energy Center	1	0	0	0	0	0	0
De Pere	ALL	124	124	124	124	124	124
Edgewater	3	337	337	337	337	337	337
Edgewater	4	1570	1570	1570	1570	1570	1570
Edgewater	5	2128	2128	2128	2128	2128	2128
Fitchburg	1	4	4	4	4	4	4
Fitchburg	2	4	4	4	4	4	4
French Island	3	4	4	4	4	4	4
French Island	4	4	4	4	4	4	4
Genoa	1	1787	1787	1787	1787	1787	1787
Germantown	38	25	25	25	25	25	25
Germantown	30, 31	4	4	4	4	4	4
Germantown	32, 33	3	3	3	3	3	3
Germantown	34, 35	5	5	5	5	5	5
Germantown	36, 37	4	4	4	4	4	4
Madgett	1	1893	1893	1893	1893	1893	1893
Manitowoc	6	84	84	84	84	84	84
Manitowoc	7	84	84	84	84	84	84
Manitowoc	8	84	84	84	84	84	84
Mirant/ Neenah	1	100	100	100	100	100	100

Mirant/ Neenah	2	100	100	100	100	100	100
Nelson Dewey	1	515	515	515	515	515	515
Nelson Dewey	2	508	508	508	508	508	508
Paris	1	17	17	17	17	17	17
Paris	2	21	21	21	21	21	21
Paris	3	22	22	22	22	22	22
Paris	4	15	15	15	15	15	15
Pleasant Prairie	20	3514	3514	3514	3514	3514	3514
Pleasant Prairie	21	3564	3564	3564	3564	3564	3564
Port Washington	1	219	219	219	219	219	219
Port Washington	2	191	191	191	191	191	191
Port Washington	3	222	222	222	222	222	222
Port Washington	4	220	220	220	220	220	220
Pulliam	3	100	100	100	100	100	100
Pulliam	4	123	123	123	123	123	123
Pulliam	5	267	267	267	267	267	267
Pulliam	6	378	378	378	378	378	378
Pulliam	7	468	468	468	468	468	468
Pulliam	8	762	762	762	762	762	762
Rock River	1	116	116	116	116	116	116
Rock River	2	95	95	95	95	95	95
Rock River	3	0	0	0	0	0	0
Rock River	5	14	14	14	14	14	14
Rock River	6	21	21	21	21	21	21
Sheepskin	1	1	1	1	1	1	1
Sheepskin	2	0	0	0	0	0	0
South Fond du Lac	1	29	29	29	29	29	29
South Fond du Lac	2	24	24	24	24	24	24
South Fond du Lac	3	18	18	18	18	18	18
South Fond du Lac	4	14	14	14	14	14	14
South Oak Creek	25	1168	1168	1168	1168	1168	1168
South Oak Creek	26	1195	1195	1195	1195	1195	1195
South Oak Creek	27	1612	1612	1612	1612	1612	1612
South Oak Creek	28	1624	1624	1624	1624	1624	1624
Stoneman	B2	19	19	19	19	19	19
Stoneman	B1	17	17	17	17	17	17
Valley Boiler 1	21	377	377	377	377	377	377
Valley Boiler 2	22	377	377	377	377	377	377
Valley Boiler 3	23	377	377	377	377	377	377
Valley Boiler 4	24	377	377	377	377	377	377
West Marinette	34	47	47	47	47	47	47
West Marinette	31	12	12	12	12	12	12
West Marinette	32	9	9	9	9	9	9
West Marinette	33	77	77	77	77	77	77
Weston	1	322	322	322	322	322	322
Weston	2	533	533	533	533	533	533

Weston	3	2010	2010	2010	2010	2010	2010
Weston	32	39	39	39	39	39	39
Wheaton	1	13	13	13	13	13	13
Wheaton	2	12	12	12	12	12	12
Wheaton	3	14	14	14	14	14	14
Wheaton	4	9	9	9	9	9	9
Wheaton	5	4	4	4	4	4	4
Wheaton	6	3	3	3	3	3	3
Whitewater Cogen Facility	CTG1	377	377	377	377	377	377
Whitewater Cogen Facility	STG1	177	177	177	177	177	177

**NR 432.04 Compliance supplement pool.** In addition to the CAIR NO<sub>x</sub> allowances allocated under s. NR 432.03, the department may allocate for calendar year 2009 only, additional allowances from the compliance supplement pool up to the amount designated by the EPA in 40 CFR 97.143 for Wisconsin for the purposes identified in this section.

(1) **EARLY REDUCTION CREDITS.** (a) The department may allocate CAIR NO<sub>x</sub> allowances from the compliance supplement pool to a CAIR NO<sub>x</sub> unit if the unit's CAIR designated representative demonstrates that it achieved early reductions of NO<sub>x</sub> emissions. To be eligible for early reduction credits, the unit's CAIR designated representative shall demonstrate all of the following:

1. The CAIR NO<sub>x</sub> unit's average annual NO<sub>x</sub> emission rate for 2007 or 2008 is less than 0.25 lb/mmBtu based on heat input.
2. If the unit is included in a NO<sub>x</sub> averaging plan under s. NR 409.065(7) for 2007 or 2008, the NO<sub>x</sub> averaging plan has an actual weighted average NO<sub>x</sub> emission rate for 2007 or 2008 equal to or less than the actual weighted average NO<sub>x</sub> emission rate for preceding year.
3. Compared to the preceding year, the CAIR NO<sub>x</sub> unit achieves NO<sub>x</sub> emission reductions in both 2007 and 2008.

(b) The CAIR designated representative of the unit may request early reduction credits, and allocation of CAIR NO<sub>x</sub> allowances from the compliance supplement pool for early reduction credits, in accordance with the following:

1. The CAIR designated representative shall monitor and report the NO<sub>x</sub> emissions rate and the heat input of the unit based on monitoring data required in accordance with 40 CFR part 97, Subpart HH in each calendar year for which early reduction credits are requested.

2. The CAIR designated representative of a CAIR NO<sub>x</sub> unit shall submit to the department by July 31, 2009 a request for allocation of an amount of CAIR NO<sub>x</sub> allowances from the compliance supplement pool. The request may not exceed the value determined using equation 6:

$$ER = \frac{(HI_{2007} \times \Delta EM_{2007}) + (HI_{2008} \times \Delta EM_{2008})}{2000} \quad \text{Equation 6}$$

where:

ER is the amount of CAIR NO<sub>x</sub> allowances a CAIR designated representative may request based on early emission reductions in 2007 and 2008 rounded to the nearest ton

HI<sub>2007</sub> is the total heat input to the unit for the calendar year 2007 in mmBtu

HI<sub>2008</sub> is the total heat input to the unit for the calendar year 2008 in mmBtu

2000 is a conversion factor in lb/ton

ΔEM<sub>2007</sub> and ΔEM<sub>2008</sub> are the differences between the actual emission rates for 2007 and 2008 respectively and the target emission rate for early reductions in lbs NO<sub>x</sub>/mmBtu. If the unit's actual average emission rate for the calendar year is greater than 0.25, ΔEM<sub>year</sub> is equal to 0. If the unit's actual average emission rate for the calendar year is equal to or less than 0.25, then ΔEM<sub>year</sub> is calculated using equation 7:

$$\Delta EM_{year} = 0.25 - Actual_{year} \quad \text{Equation 7}$$

where:

Actual<sub>year</sub> is the unit's actual average emission rate for calendar year for 2007 or 2008 in lbs NO<sub>x</sub>/mmBtu determined in accordance with 40 CFR part 97 Subpart HH

0.25 is the target emission rate for early reductions in lbs NO<sub>x</sub>/mmBtu

(2) **ELECTRIC RELIABILITY.** The department may allocate CAIR NO<sub>x</sub> allowances from the compliance supplement pool to any CAIR NO<sub>x</sub> unit for which the unit's CAIR designated representative demonstrates that compliance with the CAIR NO<sub>x</sub> allocation under s. NR 432.03, Table 1 for calendar year 2009 would create an undue risk to the reliability of electricity supply during 2009. The CAIR designated representative of the unit may request the allocation of CAIR NO<sub>x</sub> allowances from the compliance supplement pool in order to avoid an undue risk to the reliability of electricity supply during 2009 in accordance with the following requirements:

(a) The CAIR designated representative of the CAIR NO<sub>x</sub> unit shall submit to the department by July 31, 2009 a request for allocation of an amount of CAIR NO<sub>x</sub> allowances from the compliance supplement pool not exceeding the minimum amount of CAIR NO<sub>x</sub> allowances necessary to remove the undue risk to the reliability of electricity supply.

(b) In the request under par. (a), the CAIR designated representative of the CAIR NO<sub>x</sub> unit shall demonstrate that, in the absence of an allocation to the unit in the amount of CAIR NO<sub>x</sub> allowances requested, the unit's compliance with CAIR NO<sub>x</sub> allocation under s. NR 432.03, Table 1 for calendar year 2009 would create an undue risk to the reliability of electricity supply during that year. This demonstration shall include a showing by the unit's CAIR designated representative that it would not be feasible to do both of the following:

1. Obtain a sufficient amount of electricity from other electricity generation facilities for compliance with the CAIR NO<sub>x</sub> allocations under s. NR 432.03, Table 1 to prevent the undue risk.

2. Obtain under subs. (1) and (3), or otherwise obtain, a sufficient amount of CAIR NO<sub>x</sub> allowances to prevent the undue risk.

(3) ALLOCATION PROCEDURE. The department shall review each request submitted under subs. (1) and (2) and shall allocate CAIR NO<sub>x</sub> allowances for calendar year 2009 to CAIR NO<sub>x</sub> units covered by the requests as follows:

(a) Upon receipt of each request, the department shall determine whether the amount of the CAIR NO<sub>x</sub> allowances requested from the compliance supplement pool meets the requirements of sub. (1) or (2).

(b) If the amount of CAIR NO<sub>x</sub> allowances in the compliance supplement pool is greater than or equal to the total amount of CAIR NO<sub>x</sub> allowances in all requests submitted under subs. (1) and (2), the department shall allocate to each CAIR NO<sub>x</sub> unit covered by the requests the amount of CAIR NO<sub>x</sub> allowances requested, and determined eligible for under par. (a).

(c) If the state's compliance supplement pool has a smaller amount of CAIR NO<sub>x</sub> allowances than the total amount of CAIR NO<sub>x</sub> allowances in all requests submitted under subs. (1) and (2), as adjusted under par. (a), the department shall allocate CAIR NO<sub>x</sub> allowances to each CAIR NO<sub>x</sub> unit covered by the requests according to equation 8:

$$Z_i = Y_i \times \left( \frac{CSP}{\sum_{j=1}^k Y_j} \right) \quad \text{Equation 8}$$

where:

$Z_i$  is the amount of CAIR NO<sub>x</sub> allowances allocated to unit  $i$  from the state's compliance supplement pool rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed the CSP

$Y_i$  is the amount of CAIR  $\text{NO}_x$  allowances requested for unit  $i$  under subs. (1) and (2), as determined eligible under par. (a)

CSP is the amount of CAIR  $\text{NO}_x$  allowances in the state's compliance supplement pool as provided in 40 CFR 97.143

$k$  is the number of units which the department deemed eligible for requests made under subs. (1) and (2)

(d) By November 15, 2009, the department shall determine the allocations under par. (b) or (c), as applicable. The department shall make available to the public each determination of CAIR  $\text{NO}_x$  allowances under par. (c) and shall provide an opportunity for submission of objections to the determination. Objections shall be limited to addressing whether the determination is in accordance with sub. (1) or (2) and par. (b) or (c) and data correction. Based on any objections, the department may adjust each determination to the extent necessary to ensure that it is in accordance with sub. (1) or (2) and par. (b) or (c) and the data is correct.

(e) By December 15, 2009, the department shall notify the administrator of the allocations made under par. (d).

**NR 432.05 CAIR  $\text{NO}_x$  ozone season allowance allocation.** The department shall use the procedures in this section for calculating and allocating CAIR  $\text{NO}_x$  ozone season allowances for CAIR  $\text{NO}_x$  units and CAIR renewable units.

(1) UNIT BASELINES. (a) *Calculating baseline energy output.* The department shall calculate the baseline energy output of each CAIR  $\text{NO}_x$  unit and each CAIR renewable unit, in MWh according to the following equations as appropriate:

1. For a CAIR NO<sub>x</sub> unit that is a cogeneration unit and that has operated for 5 or more consecutive calendar years, by using one of the following equations:

a. Use equation 1a if the unit is the only unit serving a generator or, if more than one unit serves the same generator and unit-level data for equation 9a is available for all units:

$$B = GE_{avg} + \left( \frac{TE_{avg}}{3.4} \right) \quad \text{Equation 9a}$$

where:

B is the unit baseline energy output made available by the cogeneration unit in MWh

GE<sub>avg</sub> is the average of the 3 highest annual amounts of the unit's ozone season gross electric output in MWh over the 5-year period identified in par. (b)

TE<sub>avg</sub> is the average of the 3 highest annual amounts of the unit's ozone season useful thermal energy in mmBtu over the 5-year period identified in par. (b)

3.4 is a conversion factor in mmBtu/MWh

b. Use equation 9b if more than one unit serves the same generator and unit-level data for equation 9a is not available for all units:

$$B_i = \left( GE_{Gen} + \frac{TE_T}{3.4} \right) \times \left( \frac{NC_i}{\sum_{j=1}^n NC_j} \right) \quad \text{Equation 9b}$$

where:

B<sub>i</sub> is the baseline energy output made available by cogeneration unit i in MWh

GE<sub>Gen</sub> is the average of the 3 highest annual amounts of the ozone season gross electric output in MWh for the generator served over the 5-year period identified in par. (b)

$TE_T$  is the average of the 3 highest annual amounts of ozone season useful thermal energy in mmBtu for the generator served over the 5-year period defined in par. (b)

3.4 is a conversion factor in mmBtu/MWh

$NC_i$  is the nameplate capacity of unit  $i$

$n$  is the number of units serving the same generator

2. For a CAIR  $NO_x$  unit that is not a cogeneration unit and that has operated for 5 or more consecutive calendar years and for a CAIR renewable unit that has operated for 5 or more consecutive calendar years, by using one of the following equations as appropriate:

a. Use equation 10a if the unit is the only unit serving a generator or, if more than one unit serves the same generator and unit-level data for equation 10a is available for all units:

$$B = GE_{avg} \quad \text{Equation 10a}$$

where:

$B$  is the unit baseline energy output made available by the CAIR  $NO_x$  unit or the CAIR renewable unit in MWh

$GE_{avg}$  is the average of the 3 highest annual amounts of the unit's ozone season gross electric output in MWh over the 5-year period identified in par. (b)

b. Use equation 10b if more than one unit serves the same generator and unit-level data for equation 10a is not available for all units:

$$B_i = GE_{Gen} \times \left( \frac{NC_i}{\sum_{j=1}^n NC_j} \right) \quad \text{Equation 10b}$$

where:

$B_i$  is the baseline energy output made available by CAIR NO<sub>x</sub> unit  $i$  or CAIR renewable unit  $i$  in MWh

$GE_{Gen}$  is the average of the 3 highest annual amounts of the ozone season gross electric output in MWh for the generator served over the 5-year period identified in par. (b)

$NC_i$  is the nameplate capacity of unit  $i$

$n$  is the number of units serving the same generator

*(b) Periodic updates of baseline energy output for units with more than 5 years operating data.*

The department shall use the procedures in this paragraph for calculating the unit baseline energy output for each CAIR NO<sub>x</sub> unit or CAIR renewable unit which has more than 5 years of operating data.

1. In 2007, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit for 2009 to 2014 allowances using data for the ozone seasons 2000 to 2004.

2. On or before May 1, 2011, and on or before May 1 of every fifth year thereafter, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit for the next 5-year allocation period using data from the 5 ozone season period beginning 9 years before the first year of the allocation period and ending 5 years before the first year of the allocation period.

**Note:** For example in 2021, unit baseline energy output for the calculation of allocation for 2025 to 2029 allowances will be calculated using ozone season data from the years 2016 to 2020. In 2026, unit baseline energy output for the calculation of the allocation for 2030 to 2034 will be calculated using ozone season data from 2021 to 2025.

*(c) Baseline energy output for new units and units achieving 5 years of operating data for the first time.* The department shall use the procedures in this paragraph for calculating the unit baseline energy output for each CAIR NO<sub>x</sub> unit or CAIR renewable unit which have only 5 years of operating data.

1. On or before May 1, 2011, the department shall calculate the baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit that commences operation on or after January 1, 2001 and that has operating data for the years 2006 to 2010 for 2015 to 2019 allowances using data for ozone seasons 2006 to 2010.

2. On or before May 1, 2012, and on or before May 1 of every year thereafter, the department shall calculate the unit baseline energy output for each CAIR NO<sub>x</sub> unit and each CAIR renewable unit that has been operating for its first 5 consecutive years, using the first 5 ozone seasons of operating data. Once the unit's baseline energy output has been established, the CAIR NO<sub>x</sub> unit or CAIR renewable unit's baseline energy output shall be updated according to par. (b).

**Note:** Starting in 2011, and every year thereafter, new units that commence operation on or after January 1, 2001 will have their unit baseline energy output calculated once the unit has 5 consecutive years of operating data. The 5 years of data do not have to be full years of data. Once the unit has 5 or more years of operating data, this unit is then incorporated into the state baselines calculated in s. NR 432.03(1m) and receives allocations from the main allocation pool under s. NR 432.03(2). These new units are incorporated into the main allocation pool on a yearly basis.

(d) *Baseline energy output for retired units.* If a unit is retired in any year, the department shall calculate the baseline energy output according to par. (b). If a unit only operates a portion of the year, the data for that portion shall constitute the unit's data for that year.

**Note:** The following is an example of how a retired unit's baseline energy output is calculated. A unit is retired in 2011. In 2011, unit baselines are updated using 2006 to 2010 ozone season data that will be used to calculate allocations for 2015 to 2019. For 2015 to 2019 allocations, the retired unit would receive all allowances based upon its unit baseline for 2006 to 2010 ozone season operating data even though it is no longer operating. In 2016, the next unit baseline updating year, the baseline for the unit would be determined using the most recent 5 years of ozone season data, 2011 to 2015. The 2016 updated baseline would be used to determine allocations for 2020 to 2025. If the unit had some operating data in 2011, it would receive minimal allowances in 2020 to 2025 based on the amount of electrical generation in the ozone season in 2011. The next unit update would occur in 2021 and would use 2015 to 2019 ozone season operating data. Since the unit would have no operating data for this time period it would no longer receive allocations. Under this procedure a unit that is retired in 2011 could receive

allowances until 2025.

(e) *Data used for energy generation baselines.* In performing the unit energy output baseline calculations under pars. (a) to (d), the department shall use data reported by the CAIR designated representative to EPA under 40 CFR part 97, Subpart HH and available from the EPA and data reported by the CAIR renewable representative to the department under s. NR 432.07. If the required data is unavailable from the EPA, the department shall request the required data directly from the unit's CAIR designated representative. If the representative does not provide data within 30 days of the department's request, the department shall estimate the unit's baseline energy output using best available data.

(1m) STATE BASELINE. (a) Prior to 2011, the department shall establish the state baseline by summing the unit baselines calculated according to sub. (1) for all CAIR NO<sub>x</sub> units listed in Table 2.

(b) In 2011 and annually thereafter, the department shall calculate an ozone season state baseline by summing the unit baselines calculated according to sub. (1) for all CAIR NO<sub>x</sub> units and all CAIR renewable units.

**Note:** The state baseline is updated starting in 2011 annually to incorporate new units that have 5 years of operating data and have established a baseline under s. NR 432.03(a) and (b). Once a new unit has established a baseline, it is eligible for allowances from the main allocation pool.

(2) ALLOWANCE ALLOCATION FOR UNITS WITH 5 OR MORE YEARS OF OPERATION DATA. (a) In 2007, and in 2011 and annually thereafter, the department shall allocate to all CAIR NO<sub>x</sub> units and CAIR renewable units for which a unit baseline has been calculated under sub. (1), a total amount of CAIR NO<sub>x</sub> ozone season allowances equal to 93% of the tons of NO<sub>x</sub> emissions in the trading budget for Wisconsin in 40 CFR 97.340.

(b) The department shall allocate CAIR NO<sub>x</sub> ozone season allowances to each unit in an amount determined by equation 11:

$$A_i = MAP \times \left( \frac{B_i}{B_s} \right)$$

Equation 11

where:

$A_i$  is the annual allocation of CAIR NO<sub>x</sub> ozone season allowances for unit  $i$  rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed 93% of the trading budget in 40 CFR 97.340

MAP is the main allocation pool of CAIR NO<sub>x</sub> ozone season allowances in tons which is the trading budget for Wisconsin in 40 CFR 97.340, minus the new unit set-aside established in sub. (3)

$B_i$  is the unit baseline established under sub. (1) for unit  $i$

$B_s$  is the state baseline as determined under sub. (1m)

(3) ALLOCATIONS FOR UNITS WITH LESS THAN 5 YEARS OF OPERATING DATA. In 2009 and annually thereafter, the department shall allocate CAIR NO<sub>x</sub> ozone season allowances to CAIR NO<sub>x</sub> units for which a request is received under par. (b) and that commenced operation on or after January 1, 2001 and for which a baseline energy output cannot be determined under sub. (1), in accordance with the following procedures:

(a) For 2009 and each year thereafter, the department shall establish a new unit set-aside consisting of all CAIR NO<sub>x</sub> ozone season allowances available for new units in that year. The new unit set-aside in each year shall be equal to 7% of the amount of tons of NO<sub>x</sub> emissions in the trading budget under 40 CFR 97.340 for Wisconsin.

(b) The CAIR designated representative of a CAIR NO<sub>x</sub> unit that commenced operation on or after January 1, 2001, may submit to the department a request to be allocated CAIR NO<sub>x</sub> ozone season allowances under this subsection, starting with 2009 or the first calendar year after the calendar year in which the CAIR NO<sub>x</sub> unit commences commercial operation, whichever is later, and until the first calendar year for which the unit is eligible for and is allocated CAIR NO<sub>x</sub> ozone season allowances under sub. (2). The CAIR NO<sub>x</sub> ozone season allocation request shall be submitted on or before May 1 of the calendar year

for which the CAIR NO<sub>x</sub> ozone season allowances are requested and after the date on which the CAIR NO<sub>x</sub> unit commences commercial operation.

(c) In a CAIR NO<sub>x</sub> ozone season allocation request under par. (b), the CAIR designated representative may not request CAIR NO<sub>x</sub> ozone season allowances exceeding the CAIR NO<sub>x</sub> unit's total tons of NO<sub>x</sub> emissions during the calendar year immediately before the calendar year of the request.

(d) The department shall review each CAIR NO<sub>x</sub> ozone season allocation request submitted under par. (b) and allocate CAIR NO<sub>x</sub> ozone season allowances for each calendar year as follows:

1. The department shall establish the maximum amount of new unit set-aside CAIR NO<sub>x</sub> ozone season allowances a unit is eligible for based upon a request submitted under par. (b).

2. Before June 1 of each calendar year, the department shall determine the sum of all CAIR NO<sub>x</sub> ozone season allowances established under subd. 1. for all new units in the calendar year.

3. If the amount of CAIR NO<sub>x</sub> ozone season allowances in the new unit set-aside for the calendar year under par. (a) is greater than or equal to the sum determined under subd. 2., the department shall allocate the amount of CAIR NO<sub>x</sub> ozone season allowances determined under subd. 1. to each CAIR NO<sub>x</sub> unit for which an allocation request was submitted.

4. If the amount of the CAIR NO<sub>x</sub> ozone season allowances in the new unit set-aside for the calendar year under par. (a) is less than the sum determined under subd. 2., the department shall allocate to each CAIR NO<sub>x</sub> unit for which the department established a maximum amount under subd. 1. greater than zero, an amount determined using equation 12:

$$N_i = R_i \times \left( \frac{NUSA}{\sum_{j=1}^k R_j} \right)$$

Equation 12

where:

$N_i$  is the annual allocation of CAIR NO<sub>x</sub> ozone season set-aside allowances for new unit  $i$  for the calendar year rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed 7% of the trading budget in 40 CFR 97.340

$R_i$  is the amount of CAIR NO<sub>x</sub> ozone season allowances the department determined unit  $i$  is eligible for under subd. 1.

NUSA is the new unit set-aside established under par. (a)

$k$  is the number of units for which the department established an amount greater than 0 under subd. 1.

(e) The department shall notify each CAIR designated representative that submitted an allocation request under par. (b) of the amount of CAIR NO<sub>x</sub> ozone season allowances allocated for the calendar year to the CAIR NO<sub>x</sub> unit covered by the request.

(4) ALLOCATION OF REMAINING NEW UNIT SET-ASIDE ALLOWANCES. After completion of the procedures under sub. (3), any CAIR NO<sub>x</sub> ozone season allowances remaining in the new unit set-aside for the calendar year shall be allocated to the CAIR NO<sub>x</sub> units and CAIR renewable units that were allocated CAIR NO<sub>x</sub> ozone season allowances under sub. (2) for the calendar year in an amount determined using equation 13:

$$X_i = U \times \left( \frac{A_i}{MAP} \right) \quad \text{Equation 13}$$

where:

$X_i$  is the allocation of remaining CAIR NO<sub>x</sub> ozone season new unit set-aside ozone season allowances for unit  $i$  rounded to the nearest whole ton, adjusted by the department as needed to ensure that the sum of the allowances to all units does not exceed the amount of  $U$

$U$  is the amount of unallocated CAIR NO<sub>x</sub> ozone season new unit set-aside allowances in tons

$A_i$  is the annual allocation of CAIR NO<sub>x</sub> ozone season allowances for unit i calculated using equation 11

MAP is the main allocation pool of CAIR NO<sub>x</sub> ozone season allowances in tons which is the trading budget for Wisconsin in 40 CFR 97.340 minus the new unit set-aside established in sub. (3)

(5) CAIR NO<sub>x</sub> OZONE SEASON ALLOCATIONS FOR 2009 TO 2014. The CAIR NO<sub>x</sub> ozone season allocations for 2009 to 2014 for individual CAIR NO<sub>x</sub> units are listed in Table 2.

**Table 2**  
**CAIR NO<sub>x</sub> Ozone Season Allocations for 2009 to 2014 by CAIR NO<sub>x</sub> Unit**  
(in tons of CAIR NO<sub>x</sub> ozone season allowances)

Unit Location	Unit Number	2009	2010	2011	2012	2013	2014
Alma	4	94	94	94	94	94	94
Alma	5	129	129	129	129	129	129
Bayfront	1	33	33	33	33	33	33
Bayfront	2	31	31	31	31	31	31
Bayfront	5	47	47	47	47	47	47
Blackhawk	3	7	7	7	7	7	7
Blackhawk	4	7	7	7	7	7	7
Blount Generating Station	3	3	3	3	3	3	3
Blount Generating Station	5	4	4	4	4	4	4
Blount Generating Station	6	6	6	6	6	6	6
Blount Generating Station	7	31	31	31	31	31	31
Blount Generating Station	8	76	76	76	76	76	76
Blount Generating Station	9	91	91	91	91	91	91
Blount Generating Station	11	1	1	1	1	1	1
Columbia	1	1413	1413	1413	1413	1413	1413
Columbia	2	1391	1391	1391	1391	1391	1391
Concord	1	8	8	8	8	8	8
Concord	2	10	10	10	10	10	10
Concord	3	7	7	7	7	7	7
Concord	4	8	8	8	8	8	8
Custer Energy Center	1	0	0	0	0	0	0
De Pere	ALL	62	62	62	62	62	62
Edgewater	3	149	149	149	149	149	149
Edgewater	4	743	743	743	743	743	743
Edgewater	5	967	967	967	967	967	967
Fitchburg	1	2	2	2	2	2	2
Fitchburg	2	2	2	2	2	2	2

French Island	3	2	2	2	2	2	2
French Island	4	2	2	2	2	2	2
Genoa	1	760	760	760	760	760	760
Germantown	38	16	16	16	16	16	16
Germantown	30, 31	1	1	1	1	1	1
Germantown	32, 33	1	1	1	1	1	1
Germantown	34, 35	1	1	1	1	1	1
Germantown	36, 37	0	0	0	0	0	0
Madgett	1	828	828	828	828	828	828
Manitowoc	6	38	38	38	38	38	38
Manitowoc	7	38	38	38	38	38	38
Manitowoc	8	38	38	38	38	38	38
Mirant/ Neenah	1	62	62	62	62	62	62
Mirant/ Neenah	2	60	60	60	60	60	60
Nelson Dewey	1	235	235	235	235	235	235
Nelson Dewey	2	229	229	229	229	229	229
Paris	1	12	12	12	12	12	12
Paris	2	14	14	14	14	14	14
Paris	3	15	15	15	15	15	15
Paris	4	10	10	10	10	10	10
Pleasant Prairie	20	1549	1549	1549	1549	1549	1549
Pleasant Prairie	21	1600	1600	1600	1600	1600	1600
Port Washington	1	108	108	108	108	108	108
Port Washington	2	104	104	104	104	104	104
Port Washington	3	111	111	111	111	111	111
Port Washington	4	95	95	95	95	95	95
Pulliam	3	45	45	45	45	45	45
Pulliam	4	54	54	54	54	54	54
Pulliam	5	114	114	114	114	114	114
Pulliam	6	154	154	154	154	154	154
Pulliam	7	222	222	222	222	222	222
Pulliam	8	315	315	315	315	315	315
Rock River	1	52	52	52	52	52	52
Rock River	2	54	54	54	54	54	54
Rock River	3	0	0	0	0	0	0
Rock River	5	6	6	6	6	6	6
Rock River	6	8	8	8	8	8	8
Sheepskin	1	1	1	1	1	1	1
Sheepskin	2	0	0	0	0	0	0
South Fond du Lac	1	16	16	16	16	16	16
South Fond du Lac	2	14	14	14	14	14	14
South Fond du Lac	3	10	10	10	10	10	10
South Fond du Lac	4	7	7	7	7	7	7
South Oak Creek	25	550	550	550	550	550	550
South Oak Creek	26	515	515	515	515	515	515

South Oak Creek	27	689	689	689	689	689	689
South Oak Creek	28	739	739	739	739	739	739
Stoneman	B2	9	9	9	9	9	9
Stoneman	B1	8	8	8	8	8	8
Valley Boiler 1	21	84	84	84	84	84	84
Valley Boiler 2	22	84	84	84	84	84	84
Valley Boiler 3	23	84	84	84	84	84	84
Valley Boiler 4	24	84	84	84	84	84	84
West Marinette	34	20	20	20	20	20	20
West Marinette	31	5	5	5	5	5	5
West Marinette	32	3	3	3	3	3	3
West Marinette	33	33	33	33	33	33	33
Weston	1	137	137	137	137	137	137
Weston	2	234	234	234	234	234	234
Weston	3	852	852	852	852	852	852
Weston	32	21	21	21	21	21	21
Wheaton	1	5	5	5	5	5	5
Wheaton	2	5	5	5	5	5	5
Wheaton	3	6	6	6	6	6	6
Wheaton	4	4	4	4	4	4	4
Wheaton	5	2	2	2	2	2	2
Wheaton	6	2	2	2	2	2	2
Whitewater Cogen Facility	CTG1	155	155	155	155	155	155
Whitewater Cogen Facility	STG1	74	74	74	74	74	74

**NR 432.06 Timing requirements for allocations of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances.** (1) ALLOCATIONS FOR 2009 to 2014. By April 30, 2007 or within 30 days after the effective date of this chapter ... [revisor insert date], the department shall notify the administrator of the allocations of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances for 2009 to 2014 for the units listed in Tables 1 and 2.

(2) ALLOCATIONS FOR 2015 AND LATER YEARS FOR UNITS WITH 5 OR MORE YEARS OF OPERATING DATA. (a) By June 1, 2011 and June 1 of each year thereafter, the department shall determine the allocations of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances, in accordance with ss. NR 432.03(1) and (2) and 432.05(1) and (2), which shall apply to CAIR NO<sub>x</sub> units and CAIR renewable units in the 4th year after the determination.

Note: For example, in 2011, the department shall determine the allocations applicable in 2015 and in 2012, allocations for 2016.

(b) By July 31, 2011 and July 31 of each year thereafter, the department shall notify the administrator of each unit's allocation of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances under par. (a) for the fourth year after the year of the notification.

**(3) ALLOCATIONS FOR UNITS WITH LESS THAN 5 YEARS OF OPERATING DATA.** (a) By June 1, 2009 and June 1 of each year thereafter, the department shall determine the allocations of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances, in accordance with ss. NR 432.03(1), (3) and (4) and 432.05(1), (3) and (4), for the year of the applicable determination under this section.

(b) By July 31, 2009 and July 31 of each year thereafter, the department shall notify the administrator of each unit's allocation of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances under par. (a) for the year of the notification.

**(4) PUBLIC COMMENTS.** On or before June 15, 2009 and on or before June 15 of each year thereafter, the department shall make available to the public each determination of CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances under sub. (1), (2) or (3) and shall provide an opportunity for submission of objections to the determination within 20 days. Objections shall be limited to addressing whether the determination is in accordance with ss. NR 432.03 and 432.05. Based on any objections, the department may adjust the determination to the extent necessary to ensure that it is in accordance with ss. NR 432.03 and 432.05.

**NR 432.07 CAIR renewable units.** (1) **CAIR RENEWABLE REPRESENTATIVE.** (a) The owner and operator of each CAIR renewable unit shall select one and only one CAIR renewable representative who shall represent the CAIR renewable unit with regards to all matters concerning the unit under the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program.

(b) The CAIR renewable representative of the CAIR renewable unit shall be selected by an agreement binding on the owners and operators of the unit and shall act in accordance with the certifying statements found in par. (c).

(c) The CAIR renewable representative for the CAIR renewable unit shall submit to the department a certificate of representation. The certificate of representation shall include all of the following:

1. Identification of CAIR renewable unit for which the certificate of representation is being submitted, including identification and nameplate capacity of each generator served by the unit.

2. The name, address, e-mail address, telephone number and facsimile transmission number of the CAIR renewable representative.

3. A list of the owners and operators of the CAIR renewable unit.

4. The following certificate statements by the CAIR renewable representative:

a. "I certify that I was selected as the CAIR renewable representative, by an agreement binding on the owners and operators of the CAIR renewable unit."

b. "I certify that I have all the necessary authority to carry out my duties and responsibilities under the CAIR NO<sub>x</sub> annual trading program and the CAIR NO<sub>x</sub> ozone season trading program on behalf of the owners and operators of the CAIR renewable unit and that each owner and operator shall be fully bound by my representations, actions, inactions or submissions."

c. "I certify that the owners and operators of the CAIR renewable unit shall be bound by any order issued to me by the administrator, the department or a court regarding the CAIR renewable unit."

d. Where there are multiple holders of legal or equitable title to, or a leasehold interest in, a CAIR renewable unit, or where a utility or industrial customer purchases power from a CAIR renewable unit under a life-of-the-unit, firm power contractual arrangement, "I certify that: I have given a written notice of my selection as the CAIR renewable representative, and of the agreement by which I was selected to each

owner and operator of the CAIR renewable unit; and any CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances and the proceeds of transactions involving CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances by contract, the CAIR NO<sub>x</sub> allowances, CAIR NO<sub>x</sub> ozone season allowances and the proceeds of transactions involving CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances will be deemed to be held or distributed in accordance with the contract."

5. The signature of the CAIR renewable representative and the date signed.

(d) Upon receipt by the department of a complete certificate of representation under par. (c), the CAIR renewable representative of the CAIR renewable unit shall represent and by his or her representations, actions, inactions or submissions, legally bind each owner and operator of the CAIR renewable unit in all matters pertaining to the CAIR NO<sub>x</sub> trading program and the CAIR NO<sub>x</sub> ozone season trading program, notwithstanding any agreement between the CAIR renewable representative and owners and operators of the CAIR renewable unit.

(2) ESTABLISHMENT OF GENERAL ACCOUNT. The CAIR renewable representative shall establish a general account, for CAIR NO<sub>x</sub> allowances pursuant to 40 CFR 97.151(b) and for CAIR NO<sub>x</sub> ozone season allowances pursuant to 40 CFR 97.351(b) prior to submitting a request under s. NR 432.03 or 432.05 for CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances.

(3) AGGREGATION OF RENEWABLE UNITS. If renewable units are aggregated pursuant to s. 299.83, Stats., the aggregated renewable units shall have only one CAIR renewable representative.

(4) REQUESTS FOR CAIR NO<sub>x</sub> ALLOWANCES AND CAIR NO<sub>x</sub> OZONE SEASON ALLOWANCES. On or before May 1, 2011, or on or before May 1 of each year for which CAIR NO<sub>x</sub> allowances and CAIR NO<sub>x</sub> ozone season allowances are being requested, the CAIR renewable

representative shall submit a request to the department for the allowances. The request shall contain specific unit information, including the monthly gross electrical output data to be used to calculate the unit's baseline energy output in ss. NR 432.03 and 432.05.

(5) **MULTIPLE SUBMISSIONS.** The department may not act as a mediator in situations where more than one entity submits a request for CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances based upon its ownership or operation interest in a CAIR renewable unit. If more than one entity submits an application for allowances for the same CAIR renewable unit for the same control period and the competing applications are not withdrawn, the department shall reject all the applications.

**NR 432.08 Superior environmental performance.** (1) The owner or operator of a CAIR NO<sub>x</sub> unit or a CAIR renewable unit may voluntarily perform activities that constitute superior environmental performance as defined in s. 299.83(1)(g), Stats., for participation in Tier II of the environmental results program under ss. 299.80 and 299.83, Stats. These voluntary activities may include any of the following:

(a) Agreeing never to use a specified amount of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances.

(b) Agreeing not to use a specified amount of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances prior to a specified future year.

(c) Agreeing to reduce emissions of other pollutants such as sulfur dioxides, mercury, carbon dioxide or heavy metals beyond levels required by federal and state laws.

(2) The level of environmental benefit provided by an entity that agrees to never use or to defer the use of a specified amount of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances shall be based on the number of CAIR NO<sub>x</sub> allowances or CAIR NO<sub>x</sub> ozone season allowances involved and the number of years in which the allowances may not be used.

(3) The environmental benefit provided by the reduction of emissions of pollutants other than NO<sub>x</sub>

shall be based on the types of pollutants reduced and the amount of reduction beyond federal and state requirements.

(4) In the context of a participation contract negotiated under the authority of s. 299.83(6), Stats., or cooperative agreements negotiated under the authority of s. 299.80, Stats., reductions in recordkeeping, reporting or other administrative requirements related to state environmental regulations may be appropriate incentives for the activities described in sub. (1). The amount of flexibility provided shall be proportional to the environmental benefits provided by the participant.

SECTION 2. EFFECTIVE DATE. This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats.

SECTION 3. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on \_\_\_\_\_.

Dated at Madison, Wisconsin \_\_\_\_\_.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Scott Hassett, Secretary

(SEAL)